Healthy Blue

It is the Proposer's position that the data contained in pages 1-2, 4, 12-15, 17-39, 41-44, 47-62, 64, 66-67, 69-72, 76, 78, 80-81, 86, 90-93, 97-98, 100-103, 107-108, 110-114, 129, 131, 139,144-146,148-150, 152, 155-189, 191-195, 198, 201, 204-208, 211-212, and exempt pages 7-100, 959-1100, 1947-2012, 2411-2432, 2823-2877, 3565, 3571-3626, 2-3, 5,7, 9-17, 19-21, 23, 1-1478, 1505-1506, and 1507-1508 of the proposal has been submitted in confidence and contains trade secrets and/or privileged or confidential information and such data shall only be disclosed for evaluation purposes, provided that if a contract is awarded to this Proposer as a result of or in connection with the submission of this proposal, the State of Louisiana shall have the right to use or disclose the data therein to the extent provided in the contract. This restriction does not limit the State of Louisiana's right to use or disclose data obtained from any source, including the Proposer, without restrictions.

This page is intentionally left blank

2.2.1 TABLE OF CONTENTS

2.2.2 COVER LETTER

April 29, 2019

Teresa Bravo
Louisiana Department of Health
Bureau of Health Services Financing
628 N 4th Street, 6th Floor
Baton Rouge, LA 70802

RE: Proposal Response to Louisiana Department of Health's Request for Proposals (RFP) #3000011953 for Louisiana Medicaid Managed Care Organizations

Dear Ms. Bravo:

Community Care Health Plan of Louisiana, Inc., dba Healthy Blue (Healthy Blue) is pleased to submit our response to the RFP# 3000011953 for Louisiana Medicaid Managed Care Organizations (MCOs). As a current MCO administering services for Healthy Louisiana enrollees, we appreciate the opportunity to continue our long-standing partnership with Louisiana Department of Health (LDH). As you will see in our proposal response, we have continued to bring the highest quality services, latest innovations, and best practices to Louisiana, and we look forward to assisting LDH in the Institute for Health Improvement's Triple Aim framework of better health, better care, and lower costs. In accordance with the requirements of the RFP, Section 2.2.2, Healthy Blue provides the following statements and certifications:

2.2.2.1 Healthy Blue currently has over 230 full-time personnel located across the state. Our headquarters are located at 3850 N. Causeway Blvd., Ste. 600, Metairie, LA 70002. We also have administrative offices located at 10000 Perkins Rowe, Ste. G-510, Baton Rouge, LA 70810, and a satellite office at 1500 N. 19th Street, Ste.10, Monroe, LA 71201.

2.2.2.2 Our corporate principal office registered with the Louisiana Secretary of State is 3850 N. Causeway Blvd. Ste. 600, Metairie, LA 70002. Healthy Blue's website URL is healthybluela.com. Our CEO and principal officer's, Aaron Lambert, contact information is 504-836-8854 or aaron.lambert@healthybluela.com.

2.2.2.3 Community Care Health Plan of Louisiana, Inc., dba Healthy Blue issues checks from our administrative office at 3850 N. Causeway Blvd., Ste. 600, Metairie, LA 70002.

2.2.2.4 Healthy Blue has previously conducted business previously as Amerigroup Louisiana, Inc.

2.2.2.5 Healthy Blue is privately held, with the following entities holding 5% interest or more in the organization: Anthem Partnership Holding Company, LLC (80%) and Louisiana Health Service and Indemnity Company dba Blue Cross and Blue Shield Louisiana (BCBSLA) (20%).

2.2.2.6 Healthy Blue operates as a domestic, for-profit corporation organized in the State of Louisiana. Our ultimate parent organization, Anthem, Inc., is a for-profit, publicly traded organization organized in the State of Indiana. Through a joint venture with Anthem, BCBSLA is also an equity owner in Healthy Blue. BCBSLA is a Louisiana non-profit corporation.

2.2.2.7 Healthy Blue operates from the State of Louisiana. We are not an out-of-state Proposer.

2.2.2.8 Table 2.2.2.8-1 identifies three current Healthy Blue employees who were previously employed with State agencies during the last two years.

Table 2.2.2.8-1. Healthy Blue Employees Who Were Previously Employed with State Agencies

Name	State Agency	Termination Date
Jessica S. Canning	Tangipahoa Service District Hospital, North Oaks	April 2018
Zhe Hu	Louisiana Legislative Auditor's Office	August 2017
Ross Hebert	State of Louisiana, Department of Justice, Attorney General's Office	April 2018

[redacted]. Our [redacted] and our [redacted]

2.2.2.10 Healthy Blue meets the mandatory and preferred qualifications outlined in this RFP. Together, Healthy Blue and affiliates serve more than seven million members across 22 states in Medicaid and other state-sponsored programs. The graphical summary (Figure 2.2.2.10-1) shows we meet each of the RFP qualifications specified, and are poised to continue as a thought leader serving Healthy Louisiana program members.

Figure 2.2.2.10-1. Healthy Blue Meets All RFP Mandatory and Preferred Qualifications

Section	Requirements	Meets
2.9.1.1	Meet the federal definition of an MCO, as defined in 42 C.F.R. §438.2;	✓
2.9.1.2	Have the capacity and willingness to perform all functions in this RFP and in the Model Contract;	✓
2.9.1.3	Not be an excluded individual or entity as described in 42 C.F.R. §438.808(b);	✓
2.9.1.4	Have a license or certificate of authority issued by the Louisiana Department of Insurance (LDI) to operate as a Medicaid risk bearing "prepaid entity" pursuant to La. R.S. 22:1016 and submit with the proposal response;	✓
2.9.1.5	Comply with all Louisiana Department of Insurance applicable standards. Information can be found at LDI's website: www.ldi.louisiana.gov. The MCO must meet solvency standards as specified in 42 C.F.R. §438.116 and Title 22 of the Louisiana Revised Statutes;	✓
2.9.1.6	Have a minimum of five (5) years of experience as an MCO for a Medicaid managed care program prior to the deadline for receipt of proposals;	✓
2.9.1.7	Have, within the last thirty-six (36) months, been engaged in a contract or awarded a new contract as a Medicaid MCO in a state with a Medicaid population equal to or greater than that of Louisiana;	✓
2.9.1.8	Have its principal place of business be located inside the continental United States; and	✓
2.10.2.1.2.1	Have a minimum of seven (7) years of experience in providing health care services for a Medicaid managed care program prior to the deadline for receipt of proposals; and	✓
2.10.2.1.2.2	Have, within the last twelve (12) months, been engaged in a contract or awarded a new contract as a Medicaid MCO in a state with a Medicaid population equal to or greater than that of Louisiana.	✓
2.10.2.5.1	The Proposer should provide a copy of its certificate of accreditation by the National Committee for Quality Assurance (NCQA) for each of its Medicaid managed care contracts. If the Proposer is not accredited in Louisiana, the Proposer should provide a specific timeline outlining the Proposer's plan to achieve full accreditation in Louisiana as soon as possible after the execution of a contract. It is preferred, though not mandatory, that Proposers be accredited by NCQA as a Medicaid managed care organization in Louisiana or in another state prior to the deadline for receipt of proposals.	✓

[redacted]

2.2.2.12 Healthy Blue has never had a contract terminated or not renewed for performance or poor performance, nor have we had a contract terminated on a voluntary basis prior to the contract end date.

2.2.2.13 Healthy Blue confirms the enclosed proposal is valid for a period of 90 days from the date of submission.

2.2.2.14 Healthy Blue will comply with all contract terms defined in the Model Contract.

Thank you for considering our proposal. Should you have questions, please contact me by phone at 504-836-8854 or email me at aaron.lambert@healthybluela.com. We look forward to speaking with you.

Sincerely,

Aaron Lambert, MPH, MBA
Healthy Blue President and CEO

SECRETARY'S CERTIFICATE

I, the undersigned, certify that I am the duly elected and acting Secretary of Community Care Health Plan of Louisiana, Inc., a Louisiana corporation (the "Corporation"), and that, as such, I am authorized to execute and deliver this Certification on behalf of the Corporation.

I further certify that Aaron A. Lambert is the duly elected President and Chief Executive Officer of the Corporation and that as President and Chief Executive Officer, and consistent with the Corporation's policies and bylaws, has the signatory authority to bind the Corporation.

IN WITNESS WHEREOF, the undersigned has duly executed and delivered this Certificate as of the 30th day of January, 2018.

Kathleen S. Kiefer, Secretary
Community Care Health Plan of Louisiana, Inc.

This page is intentionally left blank

2.9 BUSINESS PROPOSAL REQUIREMENTS

2.9.1 MANDATORY QUALIFICATIONS

Community Care Health Plan of Louisiana, Inc., dba Healthy Blue (Healthy Blue) meets all Mandatory Qualifications, as demonstrated in this section. Where applicable, we have provided the appropriate documentation to support our compliance.

2.9.1.1 Meets the Federal Definition of an MCO

Healthy Blue affirms that we meet the federal definition of an MCO, as defined in 42 C.F.R. §438.2. Additionally, we have been continuously licensed as an MCO in Louisiana since 2011 and operational since 2012.

2.9.1.2 Healthy Blue Has the Capacity to Perform All Functions

Healthy Blue has the capacity and willingness to perform all functions in this RFP and in the Model Contract. We have successfully served Louisiana enrollees (members) and families since 2012 and will continue to meet and exceed applicable Contract requirements. We are a health plan of more than 230 employees solely dedicated to Medicaid and have made Healthy Louisiana's goals central to our organizational mission.

We demonstrate our value and commitment to serving our members and performing all functions in the RFP and Model Contract throughout our proposal response. As a partner to Louisiana Department of Health (LDH), Healthy Blue fully understands the requirements and obligations of our Contract and the operational commitment necessary to meet it. Compliance is an essential part of our culture, and we work continuously to meet federal and State regulations as well as LDH's Contract requirements.

We value our relationship with LDH, and we remain diligent in our efforts to continually meet LDH's expectations, requirements, and standards. Our capacity to serve Louisiana goes beyond performing the functions of the RFP — we bring a powerful local alliance with our ultimate parent organization, Anthem, Inc. (Anthem), and Blue Cross and Blue Shield of Louisiana (BCBSLA) that offers a premier health solution to Medicaid members and a well-established local presence that members recognize and trust. Our local, community-based approach to administering services coupled with the support and knowledge of our affiliates enables us to bring lessons learned, best practices, and innovative solutions tailored to meet the needs of Healthy Louisiana enrollees, and is designed to assist LDH in their goals and objectives that support the Institute for Health Improvement's Triple Aim framework of better health, better care, and lower costs.

2.9.1.3 Healthy Blue Is Not an Excluded Entity

Healthy Blue operates as an MCO, and is not an excluded entity as described in 42 C.F.R. §438.808(b).

2.9.1.4 License or Certificate of Authority Issued by LDI

Healthy Blue has been a licensed MCO in Louisiana since 2011 and operational since 2012 as a Medicaid risk-bearing "prepaid entity" pursuant to La. R.S. 22:1016. Attachment 2.9.1.4-1 contains a copy of our Certificate of Authority issued by the Louisiana Department of Insurance (LDI).

2.9.1.5 Compliance with All LDI Applicable Standards

Healthy Blue complies with all LDI applicable standards, and meets solvency standards as specified in 42 C.F.R. §438.116 and Title 22 of the Louisiana Revised Statutes.

[redacted] We provide three years of Healthy Blue's audited financial statements in Attachment 2.9.5.1-1a of our electronic submission.

2.9.1.6 Healthy Blue Has Seven Years of Experience as an MCO

For the last seven years since the inception of Medicaid in the state, Healthy Blue has operated as an MCO serving Louisiana's Medicaid managed care program. In addition to our experience as an MCO in Louisiana, our ultimate parent organization, Anthem, and our affiliate health plans have served Medicaid managed care programs since 1991. Together, we currently serve more than seven million Medicaid members across 21 states and the District of Columbia.

2.9.1.7 Recent Contract Awards (Within the Last 36 Months)

Since the inception of Louisiana managed care in 2012, Healthy Blue has been solely dedicated to serving Medicaid members in in the state. We are part of an organization that is one of the nation's largest providers of health care for publicly funded programs. Many of our affiliates' programs have an equal or greater number of members compared to Louisiana. Over the last 36 months, our affiliates in Colorado and the District of Columbia were awarded contracts with a scope of services similar to Louisiana. In addition, our affiliates in Florida, Georgia, Nevada, Virginia, and Washington recently earned renewals on their contracts and expansions in service areas and/or programs. Beginning in

November 2019, our organization will also be collaborating with Blue Cross and Blue Shield of North Carolina, who was recently awarded a contract to administer Medicaid benefits in all regions in the state.

2.9.1.8 Principal Place of Business Inside the U.S.

Healthy Blue's principal place of business and headquarters are located in the State of Louisiana, and our more than 230 employees live and work across the state. Our headquarters are located at 3850 N. Causeway Blvd., Ste. 600, Metairie, LA 70002. We also have administrative offices located at 10000 Perkins Rowe, Ste. G-510, Baton Rouge, LA 70810 and a satellite office at 1500 N. 19th Street, Ste.10, Monroe, LA 71201.

State of Louisiana

UNION JUSTICE AND CONFIDENCE

JAMES J. DONELON

COMMISSIONER OF INSURANCE

I, THE UNDERSIGNED COMMISSIONER OF INSURANCE OF THE STATE OF LOUISIANA,

DO HEREBY CERTIFY THAT

Community Care Health Plan of Louisiana, Inc.
(f/k/a AMERIGROUP Louisiana, Inc.)

has complied with all requirements and is hereby licensed to act as a

HEALTH MAINTENACE ORGANIZATION

in the State of Louisiana
This license shall remain in effect until canceled, suspended, revoked.
This license restricted to use in Coordinated Care Network Medicaid Programs

Amended 12-16-2016
Original License Issued 5-12-2011

Given Under my signature, authenticated with the impress of my Seal of office, at the City of Baton Rouge, this, 16th day of December A.D. 2016

James J. Donelon
Commissioner of Insurance

FILE COPY

This page is intentionally left blank

2.9.2 CONFLICT OF INTERESTS

Healthy Blue recognizes and complies with LDH's requirements around conflict of interests, including Section 6.67 (Warranty of Removal of Conflict of Interest) of the Model Contract. We comply with all applicable federal, State, and Contract requirements related to conflicts of interest, and will continue to do so. Neither Healthy Blue nor any of our subcontractors have any interest that will conflict with the performance of services required under this RFP.

Healthy Blue fully understands the necessity of avoiding, identifying, and effectively mitigating potential conflicts of interest related to our operations. We use well-established conflict of interest safeguards applicable to all employees across the organization, subcontractors, and other business partners. Our strict Code of Business Conduct and Ethics obligates our employees to comply with all applicable laws, rules, and regulations related to operations and to act in an honest manner at all times; report any suspected or observed misconduct, including violations of law, policy, or procedure; make a full and timely disclosure of any situation that may result in a conflict of interest or the appearance of a conflict; conduct themselves in a manner that avoids actual or apparent conflict of interests to protect our business reputation; and not accept gifts, payments, fee services, discounts, valuable privileges, or other favors which would or might appear to improperly influence performance of their duties.

2.9.2.1, 2.9.2.2 and 2.9.2.5 Healthy Blue's Signed Proposer's Certification

Healthy Blue has included a signed Proposer's certification with the attestations requested in Sections 2.9.2.1, 2.9.2.2, and 2.9.2.5. As clarified in Addendum #2, Question #126, we provide a combined Proposer's Certification for attestations in Sections 2.9.2 and 2.9.4, located after our response to Section 2.9.4. Our certification attests that no interest will conflict in any manner or degree with the performance required under the Contract, and that Healthy Blue does not have, nor do our material subcontractors have, any financial, legal, contractual, or other business interest in LDH's Enrollment Broker or Contractor, or in such vendors' subcontractors.

2.9.2.3 Statement on Financial, Legal Contractual, and Other Business Interests

Healthy Blue does not have any financial, legal, contractual, or other business interests, nor do our subcontractors, affiliates, partners, parent, or related entities, that would affect or impact our performance under the Contract. Healthy Blue does rely on affiliated companies for certain specialized services (e.g., IngenioRx for PBM); however, our shared ultimate parent company, Anthem, Inc., ensures these arrangements are structured, and numerous safeguards are in place, to prevent any potential conflict of interest.

Through our strict Code of Business Conduct and Ethics, we promote a culture of trust and accountability. The Code's section on conflict of interest covers disclosure procedures, personal financial interests, family and personal relationships, outside employment and other activities, and friends or family working in the industry.

We maintain a conflict of interest policy and procedure to make sure that all employees act in the best interest of our organization and to avoid conflicts. New and rehired employees must complete a conflict of interest attestation to certify there are no potential conflicts. If any employees have a change in status, they must complete the attestation again within 30 days of the change. Management-level staff and board members must also complete the attestation once a year.

Through our Supplier Code of Conduct, we also mandate that our vendors, contractors, and subcontractors comply with these standards, business practices, and regulatory requirements while conducting business on our behalf. Within our Supplier Code of Conduct, we outline and require subcontractors to confirm they will avoid the appearance of and actual conflicts of interest.

Our national Ethics and Compliance team researches and investigates potential conflicts to determine if a conflict exists, and takes appropriate steps to resolve them. If we learn of any potential conflict of interest or appearance of a potential conflict of interest — whether identified by us, LDH, providers, or another party — we will investigate the root cause and take action to mitigate the conflict and prevent recurrence. We will immediately report any identified conflicts to LDH. We embrace transparency, open communication, and continued dialogue across our health plan and with LDH, so that we can continue to meet the expectations of LDH, providers, and the individuals we serve. Additionally, in response to Section 2.2.2.8 of the cover letter, we identify and disclose three employees who previously worked for the State within the last two years. These employees were not involved in drafting the RFP while working for the State.

2.9.2.4 Other Relevant Information Related to Interests

Neither Healthy Blue nor our material subcontractors have any additional information relevant to our financial, legal, contractual, or other business interests as they relate to the RFP and Contract.

This page is intentionally left blank

2.9.3 MORAL OR RELIGIOUS OBJECTIONS

2.9.3.1 Statement of Attestation

Healthy Blue is dedicated to offering a comprehensive array of services and supports that improve health care access and quality for our members. We have reviewed the provisions in the Model Contract Part 2, Services, and do not have any objections on the basis of moral or religious grounds to providing MCO covered services.

This page is intentionally left blank

2.9.4 MATERIAL SUBCONTRACTORS

2.9.4.1 Use of Material Subcontractors

Healthy Blue will use material subcontractors to support our delivery of or payment for covered services under the Healthy Louisiana Contract. Table 2.9.4.1-1 identifies the legal name, program area or function, address, and telephone number of each material subcontractor. As requested, we provide additional information about our material subcontractors in Section 2.10.2.3, Material Subcontractors, of the technical proposal.

Table 2.9.4.1-1. Healthy Blue Will Use Material Subcontractors to Support Our Contract

Name	Program Area/Function	Address and Telephone Number	
Anthem, Inc. (Anthem)	Administrative services, including claims processing and payment	220 Virginia Avenue Indianapolis, IN 46204	(732) 452-6001
IngenioRx, Inc. (IngenioRx), with its subcontractor CaremarkPCS Health, LLC, dba CVS Health (CVS Health)	Pharmacy services	IngenioRx 220 Virginia Avenue Indianapolis, IN 46204 CVS Health 9501 E. Shea Boulevard Scottsdale, AZ 85260	(833) 822-0261 (480) 391-4600
Superior Vision Benefit Management, Inc. (Superior Vision)	Vision services	939 Elkridge Landing Road Linthicum, MD 21090	(800) 243-1401
LogistiCare Solutions, LLC (LogistiCare)	Non-Emergency Medical Transportation services	1275 Peachtree Street NE Atlanta, GA 30309	(800) 486-7647
AIM Specialty Health (AIM)	Utilization management for some services, including high-tech radiology, nuclear stress testing, and therapy (OT, PT, and speech) services	8600 West Bryn Mawr Avenue Chicago, IL 60631	(847) 564-8500
Conduent Credit Balance Solutions (Conduent)	Credit balance recovery	307 International Circle, #300 Cockeysville, MD 21030	(410) 560-6700
CVS Specialty	Specialty pharmacy	2211 Sanders Road Northbrook, IL 60062	(847) 559-4700
Equian	Overpayment recovery	9390 Bunsen Parkway Louisville, KY 40220	(502) 214-5064
Health Management Systems (HMS)	Identification of other health insurance, COB, overpayment data mining, and credit balance recoveries	5615 High Point Drive Irving, TX 75038	(972) 916-2610
Lamont, Hanley & Associates, Inc. (LHA)	Collections	1138 Elm Street Manchester, NH 03101	(603) 625-5547
OptumInsight, Inc. (OptumInsight)	Credit balance recovery, overpayment recovery, and subrogation	11000 Optum Circle Eden Prairie, MN 55344	(205) 608-4296
Outcomes Incorporated (OutcomesMTM)	Medication therapy management services	505 Market Street, Ste. 200 West Des Moines, IA 50266	(515) 237-0001

2.9.4.2 Signed Proposer's Certification

We include the requested signed attestations for Sections 2.9.2 and 2.9.4 below.

The Proposer, Community Care Health Plan of Louisiana, Inc., dba Healthy Blue (Healthy Blue), certifies that it acknowledges and complies with the statements as written in the Conflict of Interest section as noted in 2.9.2.1, 2.9.2.2, and 2.9.2.5. Additionally, Healthy Blue certifies that it acknowledges and complies with the statements as written in the Material Subcontractors section as noted in 2.9.4.2.1 and 2.9.4.2.2. More specifically,

- 2.9.2.1 No interest will conflict in any manner or degree with the performance required under the Contract.
- 2.9.2.2 Healthy Blue does not have, nor do any of Healthy Blue's subcontractors have, any financial, legal, contractual or other business interest in LDH's Enrollment Broker Contractor, or in such vendor's subcontractors, if any;
- 2.9.2.5 Healthy Blue agrees to submit any additional information requested by LDH that, in LDH's judgment, may be relevant to Healthy Blue's financial, legal, contractual, or other business interests as they relate to the RFP and Contract
- 2.9.4.2.1 Healthy Blue acknowledges that it will not be relieved of any legal obligations under any Contract resulting from this RFP as a result of any contracts with subcontractors, that it shall be fully responsible for the subcontractor's performance, and that all partnership agreements, subcontracts, and other agreements or arrangements for reimbursement will be in writing and will contain terms consistent with all terms and conditions of the Contract; and
- 2.9.4.2.2 Healthy Blue acknowledges that proposals to use subcontractors shall not cause any additional administrative burden on LDH as a result of the use of multiple entities.

April 11, 2019

Signature | Date

Aaron Lambert, President and Chief Executive Officer

Printed Name and Title

2.9.5 FINANCIAL CONDITION

2.9.5.1 Demonstrating Sound Financial Condition

Healthy Blue has shown exceptional capacity for growth and the financial stability necessary to successfully partner with LDH since we began serving Louisiana members in 2012. Healthy Blue has remained well-funded throughout our time serving Louisiana members. Healthy Blue anticipates funding increases in capital requirements through income from operations. In the event that is not possible, we have additional support and backing from Anthem as well as from BCBSLA through its joint venture with Anthem, which puts us in an extremely strong position to continue to support the Healthy Louisiana program.

As of December 31, 2018, Healthy Blue's cash and investments totaled more than $280 million. Our statutory net worth was $175 million, which demonstrates a strong financial position with a risk-based capital (RBC) ratio of 446%, significantly exceeding the LDI requirement of $117 million.

Anthem provides Healthy Blue with any necessary financial backing through access to capital markets, and we are able to leverage Anthem's financial strength and resources. In 2018, Anthem's combined authorized control level risk-based capital (ACL RBC) ratio across its insurance and HMO operating subsidiaries was on average approximately 523%, 2.6 times the federal and State requirements. As of December 31, 2018, Anthem held $1.9 billion in cash and investments.

In 2017, Anthem formed a joint venture with Louisiana Health Service & Indemnity Company dba Blue Cross and Blue Shield of Louisiana (BCBSLA). In 2018, BCBSLA's RBC ratio was 1065%, or approximately five times the federal and State requirements. As of December 31, 2018, BCBSLA held over $1.6 billion in cash and invested assets. BCBSLA recently received its 22nd consecutive "A" rating from Standard and Poor's, the world's foremost provider of benchmarks for measuring corporate financial health.

Healthy Blue includes requested audited financial statements in Attachment 2.9.5.1-1, Audited Financial Statements. As indicated in Addendum #2, Question #8, we provide this attachment as part our electronic submission.

We include financial information for the Proposer, parent organizations, and material subcontractors. Regarding these financial statements, please note that:

- The Proposer, Community Care Health Plan of Louisiana, Inc. dba Healthy Blue, underwent a legal name change in November of 2016 and was previously Amerigroup Louisiana, Inc. The 2015 audited financial statements for Healthy Blue were filed under the prior legal name.
- Since IngenioRx is a wholly owned subsidiary of Anthem, please see the 10-K filings provided for Anthem. As with Healthy Blue, IngenioRx has the full financial backing and support of the ultimate parent organization Anthem. We do provide the 10-K filings for IngenioRx's subcontractor, CVS Health.
- Financial statements for BCBSLA are filed under Louisiana Health Service & Indemnity Company.
- The 10-Ks we provide for LogistiCare are filed under Providence Service Corporation.
- AIM is also a wholly owned subsidiary of Anthem, so please see the 10-K filings provided for Anthem.
- CVS Specialty is a wholly owned subsidiary of CVS Health, so please see the 10-K filings provided for CVS Health.
- The 10-Ks we provide for OptumInsight are filed under UnitedHealth Group.
- The 10-Ks we provide for OutcomesMTM are filed under Cardinal Health, Inc.

Table 2.9.5.1-1 provides the name and type of each entity and the name of the attachment containing the financial statements.

Table 2.9.5.1-1. We Provide Financial Statements for All Requested Entities

Entity Name	Entity Type	Attachment Name
Healthy Blue	Proposer	Attachment 2.9.5.1-1a: Healthy Blue Audited Financial Statements
Anthem	Proposer's Ultimate Parent Organization, Substantial Owner (Indirect), and Material Subcontractor	Attachment 2.9.5.1-1b: Anthem Audited Financial Statements
BCBSLA	Proposer's Substantial Owner (Direct)	Attachment 2.9.5.1-1c: BCBSLA Audited Financial Statements
IngenioRx, with its subcontractor CVS Health	Material Subcontractor	Attachment 2.9.5.1-1d: CVS Health Audited Financial Statements
Superior Vision	Material Subcontractor	Attachment 2.9.5.1-1e: Superior Vision Audited Financial Statements
LogistiCare	Material Subcontractor	Attachment 2.9.5.1-1f: LogistiCare Audited Financial Statements

Entity Name	Entity Type	Attachment Name
AIM	Material Subcontractor	See Attachment 2.9.5.1-1b: Anthem Audited Financial Statements
Conduent Credit Balance Solutions, LLC. (Conduent)	Material Subcontractor	Attachment 2.9.5.1-1g: Conduent Audited Financial Statements
CVS Specialty	Material Subcontractor	See Attachment 2.9.5.1-1d: CVS Audited Health Financial Statements
Equian	Material Subcontractor	Attachment 2.9.5.1-1h: Equian Audited Financial Statements
HMS	Material Subcontractor	Attachment 2.9.5.1-1i: HMS Audited Financial Statements
LHA	Material Subcontractor	Attachment 2.9.5.1-1j: LHA Audited Financial Statements
OptumInsight	Material Subcontractor	Attachment 2.9.5.1-1k: OptumInsight Audited Financial Statements
OutcomesMTM	Material Subcontractor	Attachment 2.9.5.1-1l: OutcomesMTM Audited Financial Statements

Certificate from Taxing Authority

Attachment 2.9.5.1-2, Taxing Authority Certificate, includes a document from the Louisiana Department of Revenue attesting that Healthy Blue is in good standing for business taxes.

2.9.5.2 Monitoring the Financial Condition of Our Material Subcontractors

Healthy Blue understands that we need to ensure our material subcontractors maintain a strong and sound financial condition in order to avoid member disruption in accessing services. Through our Subcontractor Oversight Program, day-to-day interactions and monitoring activities give us insight into our subcontractors' financial health. We pay careful attention to signs that may indicate problems, such as a drop in claims payment timeliness, changes in encounter completeness or accuracy, or an increase in member complaints. We discuss any concerns at our internal Vendor Oversight Workgroup and Compliance team meetings.

In addition, Healthy Blue requires material subcontractors providing transportation, vision, or dental services to submit unaudited financial statements on a quarterly basis as well as audited financial statements annually. These financial statements include an income statement, balance sheet, and statement of cash flows. As part of our continuous monitoring process, our CFO, Regional Vice President of Finance, and our Medicaid Financial Analysis team holds a quarterly review of the entity's financial statements to assess the financial condition of each subcontractor.

During the review, our Financial team carefully reviews the entire financial package, looking at strengths and weaknesses and identifying if the subcontractor's financial position shows signs of deterioration. Based on this, we determine whether the subcontractor has any potential solvency issues. We assign a status to each subcontractor, taking into consideration the results of the current and prior quarter's review. We assign green for passed solvency, yellow for failed solvency for one quarter, and red for two consecutive quarters failing, at which point we require a financial guarantee. For subcontractors that have failed our solvency analysis but have a financial guarantee in place, we assign an orange status. The review process focuses on identifying any potential issues as early as possible and implementing necessary actions in order to avoid member service disruptions. The team will reach out to subcontractors at any time to obtain additional information or clarification regarding financial stability and the entity's ability to continue serving Healthy Blue's members. If necessary, the team will request a mid-quarter financial statement from the subcontractor.

The Financial team maintains a Financial Summary that documents the results of each quarterly review and contains a rolling two years of information. The Financial Summary is a key tool that allows the team to review information quarter over quarter and identify trends that may indicate an emerging issue.

2.9.6 REQUIRED FORMS AND CERTIFICATIONS

Healthy Blue includes the following required forms and certifications with our submission:

- 2.9.6.1: Appendix C — Proposal Compliance Matrix
- 2.9.6.2: Appendix D — Certification Statement
- 2.9.6.3: Appendix E — Medicaid Ownership and Disclosure Form

This page is intentionally left blank

Attachment 2.9.5.1-1: Audited Financial Statements

Audited Financial Statements include the following attachments:

- Attachment 2.9.5.1-1a: Healthy Blue Audited Financial Statements
- Attachment 2.9.5.1-1b: Anthem Audited Financial Statements
- Attachment 2.9.5.1-1c: BCBSLA Audited Financial Statements
- Attachment 2.9.5.1-1d: CVS Audited Financial Statements
- Attachment 2.9.5.1-1e: Logisticare Audited Financial Statements
- Attachment 2.9.5.1-1f: Superior Vision Audited Financial Statements
- Attachment 2.9.5.1-1g: Conduent Audited Financial Statements
- Attachment 2.9.5.1-1h: Equian Audited Financial Statements
- Attachment 2.9.5.1-1i: HMS Audited Financial Statements
- Attachment 2.9.5.1-1j: LHA Audited Financial Statements
- Attachment 2.9.5.1-1k: OptumInsight Audited Financial Statements
- Attachment 2.9.5.1-1l: OutcomesMTM Audited Financial Statements

This page is intentionally left blank

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2018
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from to
Commission file number: 001-16751

ANTHEM, INC.
(Exact name of registrant as specified in its charter)

INDIANA	**35-2145715**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**
220 VIRGINIA AVENUE INDIANAPOLIS, INDIANA	**46204**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: **(800) 331-1476**
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Name of each exchange on which registered**
Common Stock, Par Value $0.01	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: NONE

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant (assuming solely for the purposes of this calculation that all Directors and executive officers of the registrant are "affiliates") as of June 29, 2018 was approximately $61,871,738,688.

As of February 7, 2019, 257,011,928 shares of the Registrant's Common Stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Part III of this Annual Report on Form 10-K incorporates by reference information from the registrant's Definitive Proxy Statement for the Annual Meeting of Shareholders to be held May 15, 2019.

Anthem, Inc.

Annual Report on Form 10-K
For the Year Ended December 31, 2018

Table of Contents

References in this Annual Report on Form 10-K to the terms "we," "our," "us," "Anthem" or the "Company" refer to Anthem, Inc., an Indiana corporation, and, unless the context otherwise requires, its direct and indirect subsidiaries. References to the term "states" include the District of Columbia, unless the context otherwise requires.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, including Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations," contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements reflect our views about future events and financial performance and are generally not historical facts. Words such as "expect," "feel," "believe," "will," "may," "should," "anticipate," "intend," "estimate," "project," "forecast," "plan" and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to: financial projections and estimates and their underlying assumptions; statements regarding plans, objectives and expectations with respect to future operations, products and services; and statements regarding future performance. Such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond our control, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking statements. You are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof. You are also urged to carefully review and consider the various risks and other disclosures discussed in our reports filed with the U.S. Securities and Exchange Commission from time to time, which attempt to advise interested parties of the factors that affect our business. Except to the extent otherwise required by federal securities laws, we do not undertake any obligation to republish revised forward-looking statements to reflect events or circumstances after the date hereof. These risks and uncertainties include, but are not limited to: the impact of federal and state regulation, including ongoing changes in the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, as amended, or collectively, the ACA, and the ultimate outcome of legal challenges to the ACA; trends in healthcare costs and utilization rates; our ability to contract with providers on cost-effective and competitive terms; our ability to secure sufficient premium rates, including regulatory approval for and implementation of such rates; competitive pressures and our ability to adapt to changes in the industry and develop and implement strategic growth opportunities; reduced enrollment; unauthorized disclosure of member or employee sensitive or confidential information, including the impact and outcome of any investigations, inquiries, claims and litigation related thereto; risks and uncertainties regarding Medicare and Medicaid programs, including those related to non-compliance with the complex regulations imposed thereon; our ability to maintain and achieve improvement in Centers for Medicare and Medicaid Services, or CMS, Star ratings and other quality scores and funding risks with respect to revenue received from participation therein; a negative change in our healthcare product mix; costs and other liabilities associated with litigation, government investigations, audits or reviews; the ultimate outcome of litigation between Cigna Corporation, or Cigna, and us related to the merger agreement between the parties, including our claim for damages against Cigna, Cigna's claim for payment of a termination fee and other damages against us, and the potential for such litigation to cause us to incur substantial costs, materially distract management and negatively impact our reputation and financial condition; non-compliance by any party with the pharmacy benefit management services agreement between Express Scripts, Inc., or Express Scripts, and us, as well as any agreements governing the transition of pharmacy benefit management services provided to us from Express Scripts to CaremarkPCS Health, L.L.C., a subsidiary of CVS Health Corporation, which could result in financial penalties, our inability to meet customer demands, and sanctions imposed by governmental entities, including CMS; medical malpractice or professional liability claims or other risks related to healthcare services and pharmacy benefit management services provided by our subsidiaries; possible restrictions in the payment of dividends from our subsidiaries and increases in required minimum levels of capital; the potential negative effect from our substantial amount of outstanding indebtedness; a downgrade in our financial strength ratings; the effects of any negative publicity related to the health benefits industry in general or us in particular; failure to effectively maintain and modernize our information systems; events that may negatively affect our licenses with the Blue Cross and Blue Shield Association; large scale medical emergencies, such as future public health epidemics and catastrophes; general risks associated with mergers, acquisitions, joint ventures and strategic alliances; possible impairment of the value of our intangible assets if future results do not adequately support goodwill and other intangible assets; changes in economic and market conditions, as well as regulations that may negatively affect our liquidity and investment portfolios; changes in U.S. tax laws; intense competition to attract and retain employees; and, various laws and provisions in our governing documents that may prevent or discourage takeovers and business combinations.

PART I

ITEM 1. BUSINESS.

General

We are one of the largest health benefits companies in the United States in terms of medical membership, serving approximately 40 million medical members through our affiliated health plans as of December 31, 2018. We are an independent licensee of the Blue Cross and Blue Shield Association, or BCBSA, an association of independent health benefit plans. We serve our members as the Blue Cross licensee for California and as the Blue Cross and Blue Shield, or BCBS, licensee for Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri (excluding 30 counties in the Kansas City area), Nevada, New Hampshire, New York (in the New York City metropolitan area and upstate New York), Ohio, Virginia (excluding the Northern Virginia suburbs of Washington, D.C.) and Wisconsin. In a majority of these service areas, we do business as Anthem Blue Cross, Anthem Blue Cross and Blue Shield, Blue Cross and Blue Shield of Georgia, and Empire Blue Cross Blue Shield or Empire Blue Cross. We also conduct business through arrangements with other BCBS licensees in Louisiana, South Carolina and western New York. Through our subsidiaries, we also serve customers in over 25 states across the country as America's 1st Choice, Amerigroup, Aspire Health, CareMore, Freedom Health, HealthLink, HealthSun, Optimum HealthCare, Simply Healthcare, and/or UniCare. We are licensed to conduct insurance operations in all 50 states and the District of Columbia through our subsidiaries.

On February 15, 2018, we completed our acquisition of Freedom Health, Inc., Optimum HealthCare, Inc., America's 1st Choice of South Carolina, Inc. and related entities, or collectively, America's 1st Choice, a Medicare Advantage organization that offers health maintenance organization, or HMO, products, including Chronic Special Needs Plans and Dual-Eligible Special Needs Plans under its Freedom Health and Optimum HealthCare brands in Florida and its America's 1st Choice of South Carolina brand in South Carolina. At the time of acquisition, through its Medicare Advantage Plans, America's 1st Choice served approximately one hundred and thirty-five thousand members in 25 Florida and 3 South Carolina counties. This acquisition aligned with our plans for continued growth in the Medicare Advantage and Special Needs populations.

In October 2017, we established a new pharmacy benefits manager, or PBM, called IngenioRx, and entered into a five-year agreement with CaremarkPCS Health, L.L.C., or CVS Health, which is a subsidiary of CVS Health Corporation, to begin offering PBM solutions (the "CVS PBM Agreement"), which coincides with the conclusion of our current PBM agreement with Express Scripts, Inc. or Express Scripts, (the "ESI PBM Agreement"). In January 2019, we exercised our contractual right to terminate the ESI PBM Agreement earlier than the original expiration date of December 31, 2019 due to the recent acquisition of Express Scripts by Cigna Corporation, or Cigna. As a result of exercising our early termination right, the ESI PBM Agreement will now terminate on March 1, 2019, and the twelve-month transition period to migrate the business begins on March 2, 2019. At that time CVS Health is able to begin providing certain PBM services to IngenioRx pursuant to the CVS PBM Agreement. Notwithstanding our termination of the ESI PBM Agreement, the litigation between us and Express Scripts regarding the ESI PBM Agreement continues. In March 2016, we filed a lawsuit against Express Scripts seeking to recover damages for pharmacy pricing that is higher than competitive benchmark pricing and damages related to operational breaches. Express Scripts filed an answer to the lawsuit disputing our contractual claims and alleging various defenses and counterclaims. For additional information regarding this lawsuit, see Note 13, "Commitments and Contingencies - *Litigation and Regulatory Proceedings - Express Scripts, Inc. Pharmacy Benefit Management Litigation,*" of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

In May 2017, we announced that we were terminating the Agreement and Plan of Merger, or Cigna Merger Agreement, between us and Cigna. Both we and Cigna have commenced litigation against the other seeking various actions and damages, including Cigna's damage claim for a $1.850 billion termination fee pursuant to the terms of the Cigna Merger Agreement. For additional information about the ongoing litigation related to the Cigna Merger Agreement, see Note 13, "Commitments and Contingencies - *Litigation and Regulatory Proceedings - Cigna Corporation Merger Litigation,*" of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

At Anthem, we believe in working together to achieve our mission of improving lives and communities, simplifying healthcare and expecting more. As we seek to accomplish these goals through a collaborative focus on execution and delivering for those we serve, our vision is to be the most innovative, valuable and inclusive health partner. We focus on ensuring quality products and services that give members access to the care they need. With an unyielding commitment to meeting the needs of our diverse customers, we are guided by the following values:

- Leadership – Redefine what is possible
- Community – Committed, connected, invested
- Integrity – Do the right thing, with a spirit of excellence
- Agility – Delivery today, transform tomorrow
- Diversity – Open your hearts and minds

By striving to live our values each day and in every interaction, we are committed to simplifying as well as radically reinventing the healthcare experience for all Americans.

We offer a broad spectrum of network-based managed care plans to Large Group, Small Group, Individual, Medicaid and Medicare markets. Our managed care plans include: Preferred Provider Organizations, or PPOs; HMOs; Point-of-Service, or POS, plans; traditional indemnity plans and other hybrid plans, including Consumer-Driven Health Plans, or CDHPs; and hospital only and limited benefit products. In addition, we provide a broad array of managed care services to self-funded customers, including claims processing, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services. We provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits, radiology benefit management and analytics-driven personal healthcare. We also provide services to the federal government in connection with the Federal Employee Program®, or FEP®.

The increased focus on healthcare costs by employers, the government and consumers has continued to drive the growth of alternatives to traditional indemnity health insurance. HMO, PPO and hybrid plans are among the various forms of managed care products that have been developed. Through these types of products, insurers attempt to contain the cost of healthcare by negotiating contracts with hospitals, physicians and other providers to deliver high-quality healthcare to members at favorable rates. These products usually feature medical management and other quality and cost optimization measures such as pre-admission review and approval for certain non-emergency services, pre-authorization of outpatient surgical procedures, network credentialing to determine that network physicians and hospitals have the required certifications and expertise, and various levels of care management programs to help members better understand and navigate the healthcare system. In addition, providers may have incentives to achieve certain quality measures, may share medical cost risk or may have other incentives to deliver quality medical services in a cost-effective manner. Also, certain plans offer members incentives for healthy behaviors, such as smoking cessation and weight management. Members are charged periodic, prepaid premiums and generally pay co-payments, coinsurance and/or deductibles when they receive services. While the distinctions between the various types of plans have lessened over recent years, PPO, POS and CDHP products generally provide reduced benefits for out-of-network services, while traditional HMO products generally provide little to no reimbursement for non-emergency out-of-network utilization, but often offer more generous benefit coverage. An HMO plan may also require members to select one of the network primary care physicians, or PCPs, to coordinate their care and approve any specialist or other services.

Economic factors, greater consumer and employer sophistication and accountability have resulted in an increased demand for choice in both product/benefit designs and provider network configurations. As a result we continue to offer our broad access PPO networks with multiple benefit designs, but are also focused on leveraging our provider collaboration initiatives with our Accountable Care Organization, or ACO, partnerships to develop both narrow and tiered network offerings. This array of network and product configurations allows both the employer and the employee to design and select the combination of benefit designs (e.g., traditional PPOs, high deductibles, health reimbursement accounts, health savings accounts, PCP based products, tiered copays) and networks (e.g., broad, narrow, tiered, closed or exclusive provider, and open) that optimize choice, quality and price at the consumer, employer and market level. We believe we are well-positioned in each of our states to respond to these market preferences.

For our fully-insured products, we charge a premium and assume the risk for the cost of covered healthcare services. Under self-funded products, we charge a fee for services and the employer or plan sponsor reimburses us for the healthcare costs. In addition, we charge a premium to underwrite stop loss insurance for Local Group and National Account employers that maintain self-funded health plans.

Our medical membership includes seven different customer types: Local Group, Individual, National Accounts, BlueCard®, Medicare, Medicaid and FEP®. BCBS-branded business generally refers to members in our service areas licensed by the BCBSA. Non-BCBS-branded business refers to members in our non-BCBS-branded America's 1st Choice, Amerigroup, CareMore, HealthSun, and Simply Healthcare plans, as well as HealthLink and UniCare members. In addition to the above medical membership, we also serve customers who purchase one or more of our other products or services that are often ancillary to our health business.

Our products are generally developed and marketed with an emphasis on the differing needs of our customers. In particular, our product development and marketing efforts take into account the differing characteristics between the various customers served by us, as well as the unique needs of educational and public entities, labor groups, federal employee health and benefit programs, national employers and state-run programs servicing low-income, high-risk and underserved markets. Overall, we seek to establish pricing and product designs to provide value for our customers while achieving an appropriate level of profitability for each of our customer categories balanced with the competitive objective to grow market share. We believe that one of the keys to our success has been our focus on these distinct customer types, which better enables us to develop benefit plans and services that meet our customers' unique needs.

We market our products through direct marketing activities and an extensive network of independent agents, brokers and retail partnerships for Individual and Medicare customers, and for certain Local Group customers with a smaller employee base. Products for National Accounts and Local Group customers with a larger employee base are generally sold through independent brokers or consultants retained by the customer and working with industry specialists from our in-house sales force. In the Individual and Small Group markets, we offer on-exchange products through state- or federally-facilitated marketplaces, referred to as public exchanges, and off-exchange products. Federal subsidies are available for certain members, subject to income and family size, who purchase public exchange products.

Being a licensee of the BCBS association of companies, of which there were 36 independent primary licensees as of December 31, 2018, provides significant market value, especially when competing for very large multi-state employer groups. For example, each BCBS member company is able to utilize other BCBS licensees' substantial provider networks and discounts when any BCBS member works or travels outside of the state in which their policy is written. This program is referred to as BlueCard® and is a source of revenue when we provide member services in the states where we are the BCBS licensee to individuals who are customers of BCBS plans not affiliated with us. This program also provides a national provider network for our members when they travel to other states.

For additional information describing each of our customer types, detailed marketing efforts and changes in medical membership over the last three years, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Part II, Item 7 of this Annual Report on Form 10-K.

Our results of operations depend in large part on accurately predicting healthcare costs and our ability to manage future healthcare costs through adequate product pricing, medical management, product design and negotiation of favorable provider contracts.

Advances in medical technology, increases in specialty drug costs, increases in hospital expenditures and other provider costs, the aging of the population and other demographic characteristics continue to contribute to rising healthcare costs. Our managed care plans and products are designed to encourage providers and members to participate in quality, cost-effective health benefit programs by using the full range of our innovative medical management services, quality initiatives and financial incentives. Our market share and high business retention rates enable us to realize the long-term benefits of investing in preventive and early detection programs. Our ability to provide cost-effective health benefits products and services is enhanced through a disciplined approach to internal cost containment, prudent management of our risk exposure and successful integration of acquired businesses. In addition, our ability to manage selling, general and administrative costs continues to be a driver of our overall profitability.

The future results of our operations will also be impacted by certain external forces and resulting changes in our business model and strategy. The Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, as amended, or collectively, the ACA, has changed and may continue to make broad-based changes to the U.S. healthcare system. The ACA presented us with new growth opportunities, but also introduced new risks, regulatory challenges and uncertainties, and required changes in the way products are designed, underwritten, priced, distributed and administered. Changes to our business environment are likely to continue for the next several years as elected officials at the national and state levels continue to propose and enact significant modifications to existing laws and regulations, including the reduction of the individual mandate penalty to zero effective January 1, 2019, elimination of funding for cost-sharing subsidies made available for qualified individuals, and changes to taxes and fees. In addition, the legal challenges regarding the ACA, including the December 2018 decision of the U.S. District Court for the Northern District of Texas, Fort Worth Division invalidating the ACA (the "2018 Texas District Court ACA Decision"), which judgment has been stayed pending appeal, continue to contribute to this uncertainty. We will continue to evaluate the impact of the ACA as additional guidance is made available and any further developments or judicial rulings occur. For additional discussion, see "Regulation," herein and Part I, Item 1A "Risk Factors" in this Annual Report on Form 10-K.

In addition to the external forces discussed in the preceding paragraph, our results of operations are impacted by levels and mix of membership which can change as a result of the quality and pricing of our health benefits products and services, economic conditions, changes in unemployment, acquisitions, entry into new markets and expansions in or exits from existing markets. Our reduced participation in the Individual ACA-compliant market in 2018 led to a decrease in our fully-insured membership which was partially offset by an increase in our self-funded membership. We believe the self-funded portion of our group membership base will continue to increase as a percentage of total group membership. These membership trends could be negatively impacted by various factors that could have a material adverse effect on our future results of operations such as general economic downturns that result in business failures, failure to obtain new customers or retain existing customers, premium increases, benefit changes or our exit from a specific market. See Part I, Item 1A "Risk Factors" and Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in this Annual Report on Form 10-K.

Private exchanges have gained visibility in the market based on the promise of helping employers reduce costs, increase consumer engagement and manage the complexities created by the ACA and other market forces. While private exchanges have been a distribution channel in the Medicare and Individual markets for some time, in more recent years the Commercial market has received an increased level of attention from the consulting and broker communities as well as health insurance carriers. In response, we have continued our broad-based strategy of offering our own private exchange, Anthem Health Marketplace, a consumer experience platform, to groups, while also participating in four large national consultant-led exchanges, several regional broker-led exchanges and various Individual, Commercial and Medicare exchanges. To date, adoption levels in the Commercial market overall have been lower than analyst predictions. While the ultimate volume, pace of growth and winning business models remain highly uncertain in this space, we continue to believe we are well positioned to adapt with the market as it evolves.

During 2018, we strategically reduced our participation in the Individual ACA-compliant market. Our strategy has been, and will continue to be, to only participate in rating regions where we have an appropriate level of confidence that these markets are on a path toward sustainability, including, but not limited to, factors such as expected financial performance, regulatory environment, and underlying market characteristics. We currently offer Individual ACA-compliant products in 73 of the 143 rating regions in which we operate.

We believe healthcare is local and that we have the strong local presence required to understand and meet local customer needs. Further, we believe we are well-positioned to deliver what customers want: innovative, choice-based and affordable products; distinctive service; simplified transactions; and better access to information for quality care. Our local presence, combined with our national expertise, has created opportunities for collaborative programs that reward physicians and hospitals for clinical quality and excellence. We feel that our commitment to health improvement and care management provides added value to customers and healthcare professionals. Ultimately, we believe that practical and sustainable improvements in healthcare must focus on improving healthcare quality while managing costs for total affordability. We have implemented initiatives driving payment innovation and partnering with providers to lower cost and improve the quality of healthcare for our members and we continue to develop new and innovative ways to effectively manage risk and engage our members. In addition, we are focused on achieving efficiencies from our national scale while optimizing service performance for our customers. Finally, we expect to continue to rationalize our portfolio of businesses and products and align our

investments to capitalize on new opportunities to drive growth in our existing markets and expand into new markets in the future.

We continue to enhance interactions with customers, providers, brokers, agents, employees and other stakeholders through web-enabled technology and improving internal operations. Our approach includes not only sales and distribution of health benefits products on the Internet, but also implementing advanced capabilities that improve services benefiting customers, agents, brokers, and providers while optimizing administrative costs. These enhancements can also help improve the quality, coordination and safety of healthcare through increased communications between patients and their physicians.

In pursuing our vision of being the most innovative, valuable and inclusive partner, we intend to transform healthcare by providing trusted and caring solutions and delivering quality products and services that give customers access to the care they need. At the same time, we will focus on earnings, organic membership growth, improvements in our operating cost structure, strategic acquisitions and the efficient use of capital.

Significant Transactions

The significant transactions that have occurred over the last five years that have impacted or will impact our capital structure or that have influenced or will influence how we conduct our business operations include:

- Acquisition of America's 1st Choice (2018);
- Acquisition of HealthSun Health Plans, Inc., or HealthSun (2017);
- Acquisition of Simply Healthcare Holdings, Inc., or Simply Healthcare (2015);
- Use of Capital—Board of Directors declarations of dividends on our common stock (2013 through January 2019); repurchases of our common stock (2019 and prior); and debt repurchases and new debt issuances (2018 and prior); and
- Divestiture of 1-800 CONTACTS, Inc. (2014).

For additional information regarding certain of these transactions, see Note 3, "Business Acquisitions," Note 12, "Debt," and Note 14, "Capital Stock," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Competition

The managed care industry is highly competitive, both nationally and in our local markets. Competition continues to be intense due to aggressive marketing and pricing, business consolidations, new competitors in the market, a proliferation of new products, the impact of the ACA, and increased quality awareness and price sensitivity among customers.

We believe that participants in the managed care industry compete for customers based on quality of service, price, access to provider networks, access to care management and wellness programs (including health information), innovation, breadth and flexibility of products and benefits, reputation (including National Committee on Quality Assurance, or NCQA, accreditation status), brand recognition and financial stability. Our ability to attract and retain customers is substantially tied to our ability to distinguish ourselves from our competitors in these areas.

Also, a health plan's ability to interact with employers, customers and other third parties (including healthcare professionals) through electronic data transfer has become a more important competitive factor, and we have made significant investments in technology to enhance our electronic interaction with providers, employers, customers and third parties.

We believe our exclusive right to market products under the most recognized brand in the industry, BCBS, in our most significant markets provides us with greater brand recognition over competitive product offerings. Our provider networks in our markets enable us to achieve efficiencies and distinctive service levels by allowing us to offer a broad range of health benefits to our customers on a more cost-effective basis than many of our competitors. We strive to distinguish our products through provider access, service, care management, product value and brand recognition.

Product pricing remains competitive and we strive to price our healthcare benefit products consistent with anticipated underlying medical trends. We believe our pricing strategy, based on predictive modeling, proprietary research and data-driven processes has positioned us to benefit from the potential growth opportunities available through entry into new markets, expansions in existing markets and as a result of any subsequent changes to the current regulatory scheme. We believe that our pricing strategy, brand name and network quality will provide a strong foundation for membership growth opportunities in the future.

To build our provider networks, we compete with other health benefits plans for the best contracts with hospitals, physicians and other providers. We believe that physicians and other providers primarily consider customer volume, reimbursement rates, timeliness of reimbursement and administrative service capabilities along with the reduction of non-value added administrative tasks when deciding whether to contract with a health benefits plan.

At the sales and distribution level, we compete for qualified agents and brokers to recommend and distribute our products. Strong competition exists among insurance companies and health benefits plans for agents and brokers with demonstrated ability to secure new business and maintain existing accounts. We believe that the quality and price of our products, support services, reputation and prior relationships, along with a reasonable commission structure are the factors agents and brokers consider in choosing whether to market our products. We believe that we have good relationships with our agents and brokers, and that our products, support services and commission structure compare favorably to those of our competitors in all of our markets. Typically, we are the largest competitor in each of our BCBS branded markets and, thus, are a closely-watched target by other insurance competitors.

Reportable Segments

We manage our operations through three reportable segments: Commercial & Specialty Business, Government Business and Other. We regularly evaluate the appropriateness of our reportable segments, particularly in light of organizational changes, merger and acquisition activity and changing laws and regulations. During the fourth quarter of 2018, we reclassified certain ancillary businesses to align how our segments are currently being managed. Prior year amounts have been reclassified for comparability. Current reportable segments may change in the future.

Our Commercial & Specialty Business and Government Business segments both offer a diversified mix of managed care products, including PPOs, HMOs, traditional indemnity benefits and POS plans, as well as a variety of hybrid benefit plans including CDHPs, hospital only and limited benefit products.

Our Commercial & Specialty Business segment includes our Local Group, National Accounts, Individual and Specialty businesses. Business units in the Commercial & Specialty Business segment offer fully-insured health products; provide a broad array of managed care services to self-funded customers including claims processing, underwriting, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services; and provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits.

Our Government Business segment includes our Medicare and Medicaid businesses, National Government Services, or NGS, and services provided to the federal government in connection with FEP®. Medicaid makes federal matching funds available to all states for the delivery of healthcare benefits to eligible individuals, principally those with incomes below specified levels who meet other state-specified requirements. Medicaid is structured to allow each state to establish its own eligibility standards, benefits package, payment rates and program administration under broad federal guidelines. Our Medicare customers are Medicare-eligible individual members age 65 and over who have enrolled in Medicare Advantage, a managed care alternative for the Medicare program, or who have purchased Medicare Supplement benefit coverage, some disabled members under age 65, or members of all ages with end stage renal disease. Medicare Supplement policies are sold to Medicare recipients as supplements to the benefits they receive from the Medicare program. Rates are filed with, and in some cases approved by, state insurance departments. Most of the premium for Medicare Advantage is paid directly by the federal government on behalf of the participant who may also be charged a small premium. Additionally, through our alliance partnership engagements with larger provider groups and BCBS plans, we offer a variety of Medicaid services that include joint ventures, administrative service offerings, and full-risk arrangements. NGS acts as a Medicare contractor for the federal government in several regions across the nation.

Our Other segment includes certain eliminations and corporate expenses not allocated to either of our other reportable segments.

Through our participation in various federal government programs, we generated approximately 19.8%, 17.8% and 18.2% of our total consolidated revenues from agencies of the U.S. government for the years ended December 31, 2018, 2017 and 2016, respectively. These revenues are contained in the Government Business segment. An immaterial amount of our total consolidated revenues is derived from activities outside of the U.S.

Products and Services

A general description of our products and services is provided below:

Preferred Provider Organization: PPO products offer the member an option to select any healthcare provider, with benefits reimbursed by us at a higher level when care is received from a participating network provider. Increasingly, customers are choosing our PPO products offered with an exclusive provider organization which eliminates coverage out of network. Coverage is subject to co-payments or deductibles and coinsurance, with member cost sharing usually limited by out-of-pocket maximums.

Consumer-Driven Health Plans: CDHPs provide consumers with increased financial responsibility, choice and control regarding how their healthcare dollars are spent. Generally, CDHPs combine a high-deductible PPO plan with an employer-funded and/or employee-funded personal care account, which may result in tax benefits to the employee. Some or all of the dollars remaining in the personal care account at year-end can be rolled over to the next year for future healthcare needs.

Traditional Indemnity: Indemnity products offer the member an option to select any healthcare provider for covered services. Coverage is subject to deductibles and coinsurance, with member cost sharing usually limited by out-of-pocket maximums.

Health Maintenance Organization: HMO products include comprehensive managed care benefits, generally through a participating network of physicians, hospitals and other providers. A member in one of our HMOs must typically select a PCP from our network. PCPs generally are family practitioners, internists or pediatricians who provide necessary preventive and primary medical care, and are generally responsible for coordinating other necessary healthcare services. We offer HMO plans with varying levels of co-payments, which result in different levels of premium rates.

Point-of-Service: POS products blend the characteristics of HMO, PPO and indemnity plans. Members can have comprehensive HMO-style benefits through participating network providers with minimum out-of-pocket expenses (co-payments) and also can go directly, without a referral, to any provider they choose, subject to, among other things, certain deductibles and coinsurance. Member cost sharing is limited by out-of-pocket maximums.

ACA Public Exchange and Off-Exchange Products: The ACA required the modification of existing products and development of new products to meet the requirements of the legislation, subject to certain transitional relief. Individual and Small Group products cover essential health benefits as defined in the ACA along with many other requirements and cost sharing features. Individual and Small Group products offered on and off the public exchanges meet the definition of the "metal" product requirements (bronze, silver, gold and platinum) and each metal product must satisfy a specific actuarial value. Health insurers participating on the public exchanges must offer at least one silver and one gold product.

Administrative Services: In addition to fully-insured products, we provide administrative services to Large Group, Small Group and National Account employers that maintain self-funded health plans. These administrative services include underwriting, actuarial services, medical cost management, disease management, wellness programs, claims processing and other administrative services for self-funded employers. Self-funded health plans are also able to use our provider networks and to realize savings through our negotiated provider arrangements, while allowing employers the ability to design certain health benefit plans in accordance with their own requirements and objectives. We also underwrite stop loss insurance for self-funded plans.

BlueCard®: BlueCard® is a national program that links participating healthcare providers and independent BCBS plans. BlueCard® host members are generally members who reside in or travel to a state in which an Anthem subsidiary is the Blue Cross and/or Blue Shield licensee and who are covered under an employer sponsored health plan serviced by a non-Anthem controlled BCBS licensee, which is the "home" plan. We perform certain administrative functions for BlueCard®

host members, for which we receive administrative fees from the BlueCard® members' home plans. Other administrative functions, including maintenance of enrollment information and customer service, are performed by the home plan.

Medicare Plans: We offer a wide variety of plans, products and options to individuals age 65 and older such as Medicare Supplement plans; Medicare Advantage, including Special Needs Plans; Medicare Part D Prescription Drug Plans, or Medicare Part D; and dual-eligible programs through Medicare-Medicaid Plans, or MMPs. Medicare Supplement plans typically pay the difference between healthcare costs incurred by a beneficiary and amounts paid by Medicare. Medicare Advantage plans provide Medicare beneficiaries with a managed care alternative to traditional Medicare and often include a Medicare Part D benefit. In addition, our Medicare Advantage Special Needs Plans provide tailored benefits to Medicare beneficiaries who have chronic diseases and also cover certain dual-eligible customers, who are low-income seniors and persons under age 65 with disabilities. Medicare Part D offers a prescription drug plan to Medicare and MMP beneficiaries. MMP is a demonstration program focused on serving members who are dually eligible for Medicaid and Medicare, which was established as a result of the passage of the ACA. We offer these plans to customers through our health benefit subsidiaries throughout the country, including America's 1st Choice, Amerigroup, CareMore, HealthSun and Simply Healthcare.

Individual Plans: We offer a full range of health insurance plans with a variety of options and deductibles for individuals who are not covered by employer-sponsored coverage and are not eligible for government sponsored plans, such as Medicare and/or Medicaid. Individual policies are generally sold through independent agents and brokers, retail partnerships, our in-house sales force or via the exchanges. Individual business is sold on a fully-insured basis. We offer on-exchange products through public exchanges and off-exchange products. Federal premium subsidies are available only for certain public exchange Individual products. Unsubsidized Individual customers are generally more sensitive to product pricing and, to a lesser extent, the configuration of the network and the efficiency of administration. Instability in the Individual market has resulted in a targeted approach where we offer products in select geographies.

Medicaid Plans and Other State-Sponsored Programs: We have contracts to serve members enrolled in publicly funded healthcare programs, including Medicaid; ACA-related Medicaid expansion programs; Temporary Assistance for Needy Families, or TANF; programs for seniors and people with disabilities, or SPD; Children's Health Insurance Programs, or CHIP; and specialty programs such as those focused on long-term services and support, or LTSS, HIV/AIDS, children living in foster care, behavioral health and/or substance abuse disorders, and intellectual disabilities and/or developmental disabilities, or ID/DD programs. The Medicaid program makes federal matching funds available to all states for the delivery of healthcare benefits for low income and/or high medical risk individuals. These programs are managed by the individual states based on broad federal guidelines. TANF is a state and federally funded program designed for the population consisting primarily of low-income children and their guardians. SPD is a federal income supplement program designed for Supplemental Security Income recipients; however, states can broaden eligibility criteria. This population consists of low-income seniors and people with disabilities. CHIP is a state and federally funded program that provides healthcare coverage to children not otherwise covered by Medicaid or other insurance programs. LTSS is a state and federally funded program that offers states a broad and flexible set of program design options and refers to the delivery of long-term services and support for our members who receive home and community- or institution-based services for long-term care. Our HIV/AIDS program is a state and federally sponsored program that provides services to those living with HIV/AIDS. Our Foster Care program is a state and federally sponsored program serving children with complex needs within the foster care system. Our Behavioral Health program is a state and federally sponsored program providing services to those with mental health and/or substance abuse disorders. ID/DD is a state and federally sponsored program serving those living with limitations in intellectual functioning and adaptive behavior learning disabilities. Our Medicaid plans also cover certain dual-eligible customers, as previously described above, who also receive Medicare benefits. We provide Medicaid and other state sponsored services, such as administrative services, in Arkansas, California, Colorado, Florida, Georgia, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Nevada, New Jersey, New York, South Carolina, Tennessee, Texas, Virginia, Washington, West Virginia, Wisconsin and Washington D.C.

Pharmacy Products: We market and sell an integrated prescription drug product to both fully-insured and self-funded customers through our health benefit subsidiaries throughout the country. This comprehensive product includes features such as drug formularies, a pharmacy network, prescription drug database and mail order capabilities. Since December 1, 2009, we have delegated certain functions and administrative services related to our integrated prescription drug products to Express Scripts under a ten-year contract, excluding our HealthSun and America's 1st Choice subsidiaries, our CareMore operations in the state of Arizona and certain self-insured members who have exclusive agreements with different PBM service

providers. Express Scripts manages the network of pharmacy providers, operates mail order pharmacies and processes prescription drug claims on our behalf, while we sell and support the product for clients, make formulary decisions, set drug benefit design strategy and provide front line member support. In October 2017, we established a new PBM, called IngenioRx, and entered into a five-year agreement with CVS Health to begin offering PBM solutions upon the conclusion of the current ESI PBM Agreement. As part of the CVS PBM Agreement, and consistent with our strong reputation as a leader in healthcare delivery, we will drive clinical and formulary strategy and development, member and employer experiences, operations, sales, marketing, account management, and retail network strategy. We will delegate certain administrative services, including claims processing and prescription fulfillment, to CVS Health. Our current ESI PBM Agreement will terminate on March 1, 2019, and the twelve-month transition provided for in the ESI PBM Agreement to migrate the services begins on March 2, 2019. At that time CVS Health is able to begin providing certain PBM services to IngenioRx. Notwithstanding our termination of the ESI PBM Agreement, the litigation between us and Express Scripts regarding the ESI PBM Agreement continues. In March 2016, we filed a lawsuit against Express Scripts seeking to recover damages for pharmacy pricing that is higher than competitive benchmark pricing. For additional information, see Note 13, "Commitments and Contingencies - *Litigation and Regulatory Proceedings - Express Scripts, Inc. Pharmacy Benefit Management Litigation*," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Life Insurance: We offer an array of competitive individual and group life insurance benefit products to both Large Group and Small Group customers in conjunction with our health plans. The life products include term life and accidental death and dismemberment.

Disability: We offer short-term and long-term disability products, usually in conjunction with our health plans.

Radiology Benefit Management: We offer outpatient diagnostic imaging management services to health plans which promote the most appropriate use of clinical services to improve the quality of care delivered to members. These services include utilization management for advanced diagnostic imaging procedures, network development and optimization, patient safety, claims adjudication and provider payment.

Personal Health Care Guidance: We offer evidence-based and analytics-driven personal healthcare guidance. These services help improve the quality, coordination and safety of healthcare, enhance communications between patients and their physicians, and reduce medical costs.

Dental: Our dental plans include networks in certain states in which we operate. Many of the dental benefits are provided to customers enrolled in our health plans and are offered on both a fully-insured and self-funded basis. Our members also have access to additional dental providers through our participation in the National Dental GRID, a national dental network developed by and for BCBS plans. The National Dental GRID includes dentists in all 50 states and the District of Columbia and provides multi-state customers with a national solution providing in-network discounts across the country. Additionally, we offer managed dental services to other healthcare plans to assist those plans in providing dental benefits to their customers.

Vision Services and Products: Our vision plans include networks within the states in which we operate. Many of the vision benefits are provided to customers enrolled in our health plans and are offered on both a fully-insured and self-funded basis.

Medicare Administrative Operations: Through our subsidiary, NGS, we serve as a fiscal intermediary, carrier and Medicare administrative contractor for the federal government providing administrative services for the Medicare program, Parts A and B, which generally provides coverage for persons who are 65 or older and for persons who are under 65 and disabled or with end-stage renal disease. Part A of the Medicare program provides coverage for services provided by hospitals, skilled nursing facilities and other healthcare facilities. Part B of the Medicare program provides coverage for services provided by physicians, physical and occupational therapists and other professional providers, as well as certain durable medical equipment and medical supplies.

Networks and Provider Relations

Our relationships with physicians, hospitals and professionals that render healthcare services to our members are guided by local, regional and national standards for network development, reimbursement and contract methodologies. While

following industry standards, we are simultaneously seeking to lead transformation efforts within our healthcare system, moving from a fragmented model premised on episodic intervention to one based on proactive, coordinated care built around the needs of the patient. A key element of this transformation involves a transition from traditional fee-for-service payment models to models where providers are paid based on the value, both in quality and affordability, of the care they deliver.

We establish "market-based" hospital reimbursement payments that we believe are fair, but aggressive, and among the most competitive in the market. We also seek to ensure that physicians in our network are paid in a timely manner at appropriate rates. In many instances, we deploy multi-year contracting strategies, including case rates or fixed rates, to limit our exposure to medical cost inflation and to increase cost predictability. We maintain both broad and narrow provider networks to ensure member choice, based on both price and access needs, while implementing programs designed to improve the quality of care our members receive. Increasingly, we are supplementing our broad-based networks with smaller or more cost-effective networks that are designed to be attractive to a more price-sensitive customer segment, such as public exchange customers.

Our reimbursement strategies vary across markets and depend on the degree of consolidation and integration of physician groups and hospitals. Under a fee-for-service reimbursement methodology for physicians, fee schedules are developed at the state level based on an assessment of several factors and conditions, including the CMS resource-based relative value system, or RBRVS, medical practice cost inflation and physician supply. We utilize CMS RBRVS fee schedules as a reference point for fee schedule development and analysis. The RBRVS structure was developed, maintained, and updated by CMS and is used by the Medicare program and other major payers. In addition, we have implemented and continue to expand physician incentive contracting, or "pay-for-performance," which ties physician payment levels to performance on clinical measures.

While we generally do not delegate full financial responsibility to our physician providers in the form of capitation-based reimbursement, we maintain capitation-based arrangements in certain markets where we determine that market dynamics result in it being a useful method to lower costs and reduce underwriting risk.

Our hospital contracts provide for a variety of reimbursement arrangements depending on local market dynamics and current hospital utilization efficiency. Most hospitals are reimbursed a fixed amount per day or reimbursed a per-case amount, per admission, for inpatient covered services. A small percentage of hospitals, primarily rural, sole community hospitals, are reimbursed on a discount from approved charge basis for covered services. Our "per-case" reimbursement methods utilize many of the same attributes contained in Medicare's Diagnosis Related Groups, or DRG, methodology. Hospital outpatient services are reimbursed by fixed case rates, fee schedules or percent of approved charges. Our hospital contracts recognize unique hospital attributes, such as academic medical centers or community hospitals, and the volume of care performed for our members. To improve predictability of expected costs, we frequently use a multi-year contracting approach with providers. In addition, the majority of our hospital contracts include a pay-for-performance component where reimbursement levels are linked to improved clinical performance, patient safety and medical error reduction.

Our provider engagement and contracting strategies are moving away from "unit price" or volume-based payment models to payment models that align compensation with the value delivered as measured by healthcare outcomes, quality and cost. Our Enhanced Personal Health Care program augments traditional fee-for-service with shared savings opportunities for providers when actual healthcare costs are below projected costs, and providers meet specific quality measures. The quality measures are based on nationally accepted, credible standards (e.g., NCQA, the American Diabetes Association and the American Academy of Pediatrics) and span preventive, acute and chronic care. We understand, however, that payment incentives alone are insufficient to create the large-scale, system-wide transformation required to achieve meaningful impacts on cost, quality and member experience. Accordingly, we invested in care delivery transformation and population health management support structures to help providers succeed under value-based payment models. This support includes our web-based population health management technology and teams of dedicated practice consultants who work alongside providers, sharing best practices, and helping them leverage our data to the benefit of their patients. In some of these arrangements, participating physician practices receive a per-member, per-month clinical coordination fee to compensate them for important care management activities that occur outside of the patient visit (e.g., purchasing an electronic health record or hiring care management nurses), all of which have been shown to reduce healthcare costs and improve care outcomes. Since the launch of Enhanced Personal Health Care, we now have arrangements with provider organizations covering 52% of our PCPs and have rolled this program out in each of the fourteen states where we operate as a licensee of the BCBSA.

Medical Management Programs

Our medical management programs include a broad array of activities that facilitate improvements in the quality of care provided to our members and promote cost-effective medical care. These medical management activities and programs are administered and directed by physicians and nurses. The goals of our medical management strategies are to ensure that the care delivered to our members is supported by appropriate medical and scientific evidence, is received on a timely basis and occurs in the most appropriate setting. The following is a general description of our medical management programs, which are available to our members depending on the particular plan or product in which they participate:

Precertification: A traditional medical management program involves assessment of the appropriateness of certain hospitalizations and other medical services prior to the services being rendered. For example, precertification is used to determine whether a set of hospital and medical services is being appropriately applied to the member's clinical condition, in accordance with criteria for medical necessity as that term is defined in the member's benefits contract. All of our health plans have implemented precertification programs for common high-tech radiology studies, including cardiac diagnostic testing, addressing an area of historically significant cost trends. Through our American Imaging Management, Inc. subsidiary, doing business as AIM Specialty Health, or AIM, we promote appropriate, safe and affordable member care in imaging, as well as oncology and sleep management. These expanded specialty benefit management solutions leverage clinical expertise and technology to engage our provider communities and members in more effective and efficient use of outpatient services.

Care Coordination: Another traditional medical management strategy we use is care coordination, which is based on nationally recognized criteria developed by third-party medical specialists. With inpatient care coordination, the requirements and intensity of services during a patient's hospital stay are reviewed, at times by an onsite skilled nurse professional in collaboration with the hospital's medical and nursing staff, in order to coordinate care and determine the most effective transition of care from the hospital setting. In addition, guidance for many continued stay cases is reviewed with physician medical directors to ensure appropriate utilization of medical services. We also coordinate care for outpatient services to help ensure that patients with chronic conditions who receive care from multiple physicians are able to manage the exchange of information between physicians and coordinate office visits to their physicians.

Case Management: We have implemented a medical management strategy focused on identifying the small percentage of the membership that will require a high level of intervention to manage their healthcare needs. The registered nurses and medical directors focus on members likely to be readmitted to the hospital and help them coordinate their care through pharmacy compliance, post-hospital care, follow-up visits to see their physician and support in their home. We are also working to move increasing aspects of this work to the providers we work with via our provider collaboration efforts, a set of capabilities, offerings, programs and products that help us partner with providers to leverage data, insights and technology to deliver the right care, at the right time, in the right place.

Formulary management: We have developed formularies, which are selections of drugs based on clinical quality and effectiveness. A pharmacy and therapeutics committee of physicians uses scientific and clinical evidence to ensure that our members have access to the appropriate drug therapies.

Medical policy: A medical policy group determines our national policy for the application of new medical technologies and treatments. This group is comprised of internal and external physician leaders from various specialties and areas of the country, working in cooperation with academic medical centers, practicing community physicians and medical specialty organizations such as the American College of Radiology and national organizations such as the Centers for Disease Control and Prevention and the American Cancer Society.

Quality programs: We are actively engaged with our hospital and physician networks to enable them to improve medical and surgical care and achieve better outcomes for our members. We endorse, encourage and incentivize hospitals and physicians to support national initiatives to improve the quality of clinical care and patient outcomes and to reduce medication errors and hospital infections.

External review procedures: We work with outside experts through a process of external review to provide our members scientifically and clinically, evidence-based medical care. When we receive member concerns, we have formal appeals procedures that ultimately allow coverage disputes related to medical necessity decisions under the benefits contract to be settled by independent expert physicians.

Service management: In HMO and POS networks, PCPs serve as the overall coordinators of members' healthcare needs by providing an array of preventive health services and overseeing referrals to specialists for appropriate medical care. In PPO networks, members have access to network physicians without a PCP serving as the coordinator of care.

Provider Cost Comparison Tools: Through Estimate Your Cost, Anthem Care Comparison and other tools, our members can compare cost estimates and quality data for common services at contracted providers, with cost estimates for facility, professional and ancillary services. These cost estimates bundle related services typically performed at the time of the procedure, not just for the procedure itself. Users can review cost data for over 400 procedures in 50 states. Members can also estimate out-of-pocket costs based on a member's own benefit coverage, deductible, and out-of-pocket maximum. We also offer information on overall facility ratings and patient experience using trusted third-party data. We continue to work on enhancing and evolving our tools to assist members in making informed and value-based healthcare decisions. In addition, we collaborate with an external independent vendor to support employers wanting to purchase a consumer engagement web solution with certain additional functionality.

Personal Health Care Guidance: These services help improve the quality, coordination and safety of healthcare, enhance communications between patients and their physicians, and reduce medical costs. Examples of services include member and physician messaging, providing access to evidence-based medical guidelines, physician quality assessment, and other consulting services.

Anthem Health Guide: Anthem Health Guide integrates customer service with clinical and wellness coaching to provide easier navigation of healthcare services for our members. Members are supported by a team of nurses, coaches, educators, and social workers using voice, click-to-chat, secure email and mobile technology. Our Smart Engagement Platform supports this integrated team using our smart engagement triggers for speech recognition, preventative and clinical gaps in care and highlighting when we have members who are identified for current healthcare support. Anthem Health Guide is fully integrated with our specialty products, such as dental, vision and other supplemental products, to ensure members can optimize their benefits.

Anthem Whole Health Connection: Anthem Whole Health Connection is focused on whole person health and connects medical, pharmacy, dental, vision, disability and supplemental health clinical and claims data to proactively identify health issues and engage our members with their health providers in new ways to deliver better healthcare experience and lower cost. Anthem Whole Health Connection is included with Anthem health benefits and one or more of the pharmacy, dental, vision, life, disability or supplemental health coverage plans.

Care Management Programs

We continue to expand our *360º Health* suite of integrated care management programs and tools. *360º Health* offers the following programs, among others, which are available to our members depending on the particular plan or product in which they participate, and have been proven to increase quality and reduce medical costs for our members:

ConditionCare and *FutureMoms* are care management and maternity management programs that serve as adjuncts to physician care. Skilled nurse professionals with added support from our team of dietitians, social workers, pharmacists, health educators and other health professionals help participants understand their condition, their doctor's orders and how to become a better self-manager of their condition. We also offer members infertility consultation through our SpecialOffers@Anthem program, a comprehensive and integrated assembly of discounted health and wellness products and services from a variety of the nation's leading retailers.

24/7 NurseLine offers access to qualified, registered nurses anytime. This allows our members to make informed decisions about the appropriate level of care and avoid unnecessary worry. This program also includes a referral process to the nearest urgent care facility, a robust audio library, accessible by phone, with more than 600 health and wellness topics, as well as on-line health education topics designed to educate members about symptoms and treatment of many common health concerns.

Case Management is an advanced care management program that reaches out to participants with multiple healthcare issues who are at risk for frequent and high levels of medical care in order to offer support and assistance in managing their healthcare needs. *Case Management* identifies candidates through claims analysis using predictive modeling techniques, the

use of health risk assessment data, utilization management reports and referrals from a physician or one of our other programs, such as the *24/7 NurseLine*.

MyHealth Advantage utilizes integrated information systems and sophisticated data analytics to help our members improve their compliance with evidence-based care guidelines, providing personal care notes that alert members to potential gaps in care, enable more prudent healthcare choices, and assist in the realization of member out-of-pocket cost savings. Key opportunities are also shared with physicians through Availity® at the time of membership eligibility verification. Availity® is an electronic data interchange system that allows for the exchange of health information among providers over a secure network.

MyHealth Coach provides our members with a professional guide who helps them navigate the healthcare system and make better decisions about their well-being. *MyHealth Coach* proactively reaches out to people who are at risk for potentially serious health issues or have complex healthcare needs. Our health coaches help participants understand and manage chronic conditions, handle any health and wellness related services they need and make smart lifestyle choices.

HealthyLifestyles helps employees transform unhealthy habits into positive ones by focusing on behaviors that can have a positive effect on their health and their employer's financial well-being. *HealthyLifestyles* programs include smoking cessation, weight management, stress management, physical activity, and diet and nutrition.

Behavioral Health Case Management is an integrated component of the health plan, supporting a wide range of members who are impacted by their behavioral health condition including specialty areas such as eating disorders, anxiety, depression and substance use. The program assists members and their families with obtaining appropriate behavioral health treatment, offering community resources, providing education and telephonic support, and promoting provider collaboration.

Autism Spectrum Disorder is a specialized case management program staffed by a dedicated team of clinicians who have been trained on the unique challenges and needs of families with a member who has a diagnosis of autism spectrum disorder. These clinicians provide education, information on community resources to help with care and support, guidance on the appropriate usage of benefits, and assistance in exploring effective treatments, such as medical services, that may help the member and their families.

Employee Assistance Programs provide 24/7 telephonic support for personal and crisis events. Members also gain access to many resources that allow support within work and personal life by providing quick and easy access to confidential resources to help meet the challenges of daily life. Examples of services available include counseling, referral assistance with child care, health and wellness, financial issues, legal issues, adoption and daily living.

Healthcare Quality Initiatives

Increasingly, the healthcare industry is able to define quality healthcare based on preventive health measurements, outcomes of care and optimal care management for chronic disease. A key to our success has been our ability to work with our network physicians and hospitals to improve the quality and outcomes of the healthcare services provided to our members. Our ability to promote quality medical care has been recognized by NCQA, the largest and most respected national accreditation program for managed care health plans.

Several quality healthcare measures, including the Healthcare Effectiveness Data and Information Set, or HEDIS®, have been incorporated into NCQA's accreditation processes. HEDIS® measures range from preventive services, such as screening mammography and pediatric immunization, to elements of care, including decreasing the complications of diabetes and improving treatment for patients with heart disease. For health plans, NCQA's highest accreditation status of Excellent is granted only to those plans that demonstrate levels of service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement. Plans earning this accreditation level must also achieve HEDIS® results that are in the highest range of national or regional performance. Details for each of our plans' accreditation levels can be found at www.ncqa.org.

Our wholly-owned health outcomes research subsidiary, HealthCore, Inc., or HealthCore, generates consistent and actionable evidence to support decision making while helping to guide fresh initiatives for a range of stakeholders in the healthcare industry. By leveraging a rich array of medical and pharmacy utilization data queried from administrative claims, patient surveys, medical charts and laboratory diagnostics, among other health records, HealthCore's multi-disciplinary

research teams uncover a broad spectrum of safety, effectiveness, pharmacoepidemiology, and health economics evidence. HealthCore's real world evidence and comparative effectiveness research, among other data, has played roles in the product planning and development campaigns of biotechnology and pharmaceutical companies and today it lists most of the leading biologics and drug manufacturers as clients or alliance partners. Its health plan research has led to better insights into evidence-based treatment approaches, the development of value-based initiatives to drive access and adherence to treatment, and the crafting of incentives to modify patient and provider behavior. One of HealthCore's predominant initiatives is its governmental and academic collaborations that include cooperation with some of the country's top institutions and federal agencies, including the Food and Drug Administration, or FDA, Patient-Centered Outcomes Research Institute and the National Institutes of Health. HealthCore is also an active contributor to the FDA's medical product safety surveillance Sentinel program. Additionally, HealthCore has taken a thought-leadership position in the development of pragmatic clinical trials. As a notable contributor to the health outcomes evidence base, HealthCore's research findings are broadly disseminated during presentations at national and international medical meetings and are published in a variety of respected peer-reviewed medical and health services journals.

Our AIM subsidiary supports quality by implementing clinical appropriateness and patient safety solutions for advanced imaging procedures, cardiology, sleep medicine, specialty pharmaceuticals, medical oncology, radiation therapy and musculoskeletal services. These programs, based on widely accepted and evidence-based clinical guidelines, promote the most appropriate use of clinical services to improve the quality of overall healthcare delivered to our members and members of other health plans that are covered under AIM's programs. To provide additional impact to its clinical appropriateness program, AIM has also implemented a provider assessment program, OptiNet®, which promotes more informed selection of diagnostic imaging and testing facilities by providing cost and facility information to physician offices at the point that a procedure is ordered. We have also leveraged AIM's provider network assessment information to proactively engage and educate our members about imaging providers and sleep testing choices based on site capabilities and cost differences. This program is another example of how we facilitate improvements in the quality of care provided to our members and promote cost-effective medical care.

Pricing and Underwriting of Our Products

We price our products based on our assessment of current healthcare claim costs and emerging healthcare cost trends, combined with charges for administrative expenses, risk and profit, including charges for the ACA taxes and fees, where applicable. We continually review our product designs and pricing guidelines on a national and regional basis so that our products remain competitive and consistent with our profitability goals and strategies.

In applying our pricing to each employer group and customer, we maintain consistent, competitive, disciplined underwriting standards. We employ our proprietary accumulated actuarial and financial data in determining underwriting and pricing parameters for both our fully-insured and self-funded businesses.

In most circumstances, our pricing and underwriting decisions follow a prospective rating process in which a fixed premium is determined at the beginning of the contract period. For fully-insured business, any deviation, favorable or unfavorable, from the medical costs assumed in determining the premium is our responsibility. Some of our larger groups employ retrospective rating reviews, where positive experience is partially refunded to the group, and negative experience is charged against a rate stabilization fund established from the group's favorable experience or charged against future favorable experience.

BCBSA Licenses

We are a party to license agreements with the BCBSA that entitle us to the exclusive, and in certain areas, non-exclusive use of the Blue Cross and Blue Shield names and marks in assigned geographic territories. BCBSA is a national trade association of Blue Cross and Blue Shield licensees, the primary function of which is to promote and preserve the integrity of the BCBS names and marks, as well as provide certain coordination among the member companies. Each BCBSA licensee is an independent legal organization and is not responsible for obligations of other BCBSA member organizations. We have no right to market products and services using the BCBS names and marks outside of the states in which we are licensed to sell BCBS products. We are required to pay an annual license fee to the BCBSA based on enrollment and also to comply with various operational, governance and financial standards set forth in the licenses.

We believe that we and our licensed affiliates are currently in compliance with these standards. The standards under the license agreements may be modified in certain instances by the BCBSA. See Part I, Item 1A "Risk Factors" in this Annual Report on Form 10-K for additional details of our licensing requirements and the impact if we were not to comply with these license agreements.

Regulation

General

Our operations are subject to comprehensive and detailed state, federal and international regulation throughout the jurisdictions in which we do business. As discussed below, the regulatory aspects of the U.S. healthcare system have been and will continue to be significantly affected by the ACA and subsequent legislative and regulatory changes at the federal and state levels. Supervisory agencies, including state health, insurance and corporation departments, have broad authority to:

- grant, suspend and revoke licenses to transact business;
- regulate our products and services in great detail;
- regulate, limit, or suspend our ability to market products, including the exclusion of our plans from participating on public exchanges;
- retroactively adjust premium rates;
- monitor our solvency and reserve adequacy;
- scrutinize our investment activities on the basis of quality, diversification and other quantitative criteria; and
- impose monetary and criminal sanctions for non-compliance with regulatory requirements.

To carry out these tasks, these regulators periodically examine our operations and accounts.

Regulation of Insurance Company and HMO Business Activity

The governments of the states in which we conduct business, as well as the federal government, have adopted laws and regulations that govern our business activities in various ways. Further, the ACA has resulted in increased federal regulation that significantly impacts our business. These laws and regulations, which vary significantly from state to state, restrict how we conduct our businesses and result in additional burdens and costs to us. These federal and state laws and regulations are subject to amendments and changing interpretations in each jurisdiction.

States generally require health insurers and HMOs to obtain a certificate of authority prior to commencing operations. If we were to establish a health insurance company or an HMO in any jurisdiction, we generally would have to obtain such a certificate or authorization to expand the operations permitted under an existing certificate if we already operate in the state. The time necessary to obtain such a certificate varies from jurisdiction to jurisdiction. Each health insurer and HMO must file periodic financial and operating reports with the states in which it does business. In addition, health insurers and HMOs are subject to state examination and periodic license renewal. The health benefits business also may be adversely impacted by court and regulatory decisions that expand or invalidate the interpretations of existing statutes and regulations. It is uncertain whether we can recoup, through higher premiums or other measures, the increased costs of mandated benefits or other increased costs caused by potential legislation, regulation or court rulings. See Part I, Item 1A "Risk Factors" in this Annual Report on Form 10-K.

Ongoing Requirements and Changes Stemming from the ACA

The ACA significantly changed health insurance markets by prohibiting lifetime limits, certain annual limits, member cost-sharing on specified preventive benefits and pre-existing condition exclusions. Further, the ACA implemented certain requirements for insurers, including changes to Medicare Advantage payments and the minimum medical loss ratio, or MLR, provision that requires insurers to pay rebates to customers when insurers do not meet or exceed the specified MLR thresholds. In addition, the ACA also required a number of other changes with significant effects on both federal and state health insurance markets, including strict rules on how health insurance is rated, what benefits must be offered, the assessment of new taxes and fees (including annual fees on health insurance companies), the creation of public exchanges for

Individuals and Small Groups, the availability of premium and cost-sharing subsidies for qualified individuals, and expansions in eligibility for Medicaid. Changes to our business environment are likely to continue for the next several years as elected officials at the national and state levels continue to propose and enact significant modifications to existing laws and regulations, including the reduction of the individual mandate penalty to zero effective January 1, 2019, elimination of funding for cost-sharing subsidies made available for qualified individuals, and changes to taxes and fees. Also, the legal challenges regarding the ACA, including the ultimate outcome of the 2018 Texas District Court ACA Decision, could have a material adverse effect on our business, cash flows, financial condition and results of operations.

In general, the Individual market risk pool that includes public exchange markets has become less healthy since its inception in 2014. The reduction of the individual mandate penalty to zero, effective in 2019, is also expected to result in further deterioration of the overall Individual market risk pool. In June 2018, the U.S. Department of Labor, or DOL, released a final rule on association health plans, and in August 2018, the DOL, the U.S. Department of Treasury, or TRE, and the U.S. Department of Health and Human Services, or HHS, issued a final rule on short-term limited duration insurance. In October 2018, the DOL, TRE and HHS issued a proposed rule on health reimbursement accounts, and in January 2019, HHS issued a proposed rule for the Notice of Benefit and Payment Parameters for 2020. Additionally, in October 2018 HHS issued guidance on waivers pursuant to Section 1332 of the ACA, which aims to allow states to create waiver programs allowing premium subsidies to be used for non-ACA products. These regulations and guidance may provide additional opportunities for individuals, sole proprietors and small employers to access more affordable health coverage options, but may also result in additional adverse risk selection. Based on our experience in public exchange markets to date, we have made adjustments to our premium rates and strategically reduced our participation footprint, and we will continue to evaluate the performance of our public exchange plans going forward. In addition, insurers have faced uncertainties related to federal government funding for various ACA programs. These factors may have a material adverse effect on our results of operations if premiums are not adequate or do not appropriately reflect the acuity of these individuals. Any variation from our expectations regarding acuity, enrollment levels, adverse selection, or other assumptions utilized in setting premium rates could have a material adverse effect on our results of operations, financial position, and cash flows.

Further, implementation of the ACA brings with it significant oversight responsibilities by health insurers that may result in increased governmental audits, increased assertions of False Claims Act violations, and an increased risk of other litigation.

Federal regulatory agencies continue to modify regulations and guidance related to the ACA and markets more broadly. Some of the more significant ACA rules are described below:

- The minimum MLR thresholds by line of business for the Commercial market, as defined by HHS, are as follows:

Line of Business	%
Large Group	85
Small Group	80
Individual	80

New York state regulations require us to meet a more restrictive MLR threshold of 82% for both Small Group and Individual lines of business. The minimum MLR thresholds disclosed above are based on definitions of an MLR calculation provided by HHS, or specific states, as applicable, and differ from our calculation of "benefit expense ratio" based on premium revenue and benefit expense as reported in accordance with U.S. generally accepted accounting principles, or GAAP. Furthermore, the definitions of the lines of business differ under the various federal and state regulations and may not correspond to our lines of business. Definitions under the MLR regulation also impact insurers differently depending upon their organizational structure or tax status, which could result in a competitive advantage to some insurance providers that may not be available to us, resulting in an uneven playing field in the industry.

The ACA also imposed a separate minimum MLR threshold of 85% for Medicare Advantage and Medicare Part D prescription drug plans or Medicare Part D plans. Medicare Advantage or Medicare Part D plans that do not meet this threshold will have to pay a minimum MLR rebate. If a plan's MLR is below 85% for three consecutive years beginning with 2014, enrollment will be restricted. A Medicare Advantage or Medicare Part D plan contract will be terminated if the plan's MLR is below 85% for five consecutive years.

HHS also finalized a rule in April 2016 that requires state Medicaid programs to set managed care capitation rates such that a minimum 85% MLR is projected to be achieved. However, this rule does not require states to collect remittances if the minimum MLR is not achieved.

Approximately 58.7% and 22.0% of our premium revenue and medical membership, respectively, were subject to the minimum MLR regulations as of and for the year ended December 31, 2018. Approximately 61.3% and 21.5% of our premium revenue and medical membership, respectively, were subject to the minimum MLR regulations as of and for the year ended December 31, 2017.

- The ACA created an incentive payment program for Medicare Advantage plans. CMS developed the Medicare Advantage Star Ratings System, which awards between 1.0 and 5.0 stars to Medicare Advantage plans based on performance in several categories, including quality of care and customer service. The star ratings are used by CMS to award quality-based bonus payments to plans that receive a rating of 4.0 or higher. The methodology and measures included in the star ratings system can be modified by CMS annually. As of December 31, 2018, all of our Medicare Advantage plans have received a rating of 3.0 or higher.

- Regulations require premium rate increases to be reviewed for Small Group and Individual products above specified thresholds, 10% for 2018 and 15% for 2019, and may be adjusted from time to time. The regulations provide for state insurance regulators to conduct the reviews, except for cases where a state does not have an "effective" rate review program or in federal enforcement states, in which cases HHS will conduct the reviews for any rate increase.

- Prior to the implementation of the ACA, health insurers were permitted to use differential pricing, commonly referred to as "rating bands," based on factors such as health status, gender and age. The ACA precludes health insurers from using health status and gender in the determination of the insurance premium. In addition, rating bands for age cannot vary by more than 3 to 1 and rating bands for tobacco use cannot vary by more than 1.5 to 1. The ongoing use of the 3 to 1 rating bands may have a significant impact on the majority of Individual and Small Group customers and could lead to adverse selection in the market as well as increased variability in projecting future premiums for those customer markets.

- In 2014 significant new taxes and fees became effective for health insurers, some of which may or may not be passed through to customers. The most significant of the taxes and fees is the annual Health Insurance Provider Fee, or HIP Fee, on health insurers that write certain types of health insurance on U.S. risks. The annual HIP Fee is allocated to health insurers based on the ratio of the amount of an insurer's net premium revenues written during the preceding calendar year to the amount of health insurance premium for all U.S. health risk for those certain lines of business written during the preceding calendar year. We record our estimated liability for the HIP Fee in full at the beginning of the year with a corresponding deferred asset that is amortized on a straight-line basis to selling, general and administrative expense. The final calculation and payment of the annual HIP Fee is due by September 30th of each fee year. The HIP Fee is non-deductible for federal income tax purposes. We price our affected products to cover the increased selling, general and administrative and income tax expenses associated with the HIP Fee. The total amount due from allocations to health insurers was $11.3 billion for 2016, was suspended for 2017, had resumed and increased to $14.3 billion for 2018 and is suspended for 2019. The HIP Fee is scheduled to go back into effect for 2020.

- Medicare Advantage reimbursement rates will not increase as much as they would otherwise due to the payment formula promulgated by the ACA that continues to impact reimbursements. We also expect further and ongoing regulatory guidance on a number of issues related to Medicare, including evolving methodology for ratings and quality bonus payments. CMS is also proposing changes to its program that audits data submitted under the risk adjustment programs in a way that could increase financial recoveries from plans.

Pharmacy Benefit Manager Regulation

A number of proposals are being considered at the federal and state levels that would increase regulation of pharmacy benefit managers. Such proposals under consideration include (1) proposed federal regulation of drug rebates that would narrow the types of rebates that are allowed in public programs and require rebates to be reflected at the point-of-sale, (2) proposed federal regulation that would tie Medicare reimbursement for physician-administered drugs to prices paid in other countries, and (3) proposed reforms to the Medicare drug benefit, such as reducing the number of drugs that must be covered

in protected classes and beneficiary cost-sharing changes that aim to lower out-of-pocket costs. These reforms have the potential to have broad impacts on our pharmacy benefit business.

Dodd-Frank Wall Street Reform and Consumer Protection Act

The Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, includes a number of financial reforms and regulations that affect our business and financial reporting, including margin requirements and reporting and clearing transactions for our investments in derivative instruments. In addition, the Dodd-Frank Act creates a Federal Insurance Office with limited powers that include information-gathering and subpoena authority for certain parts of our business, including life insurance, but excluding health insurance. There remains uncertainty surrounding the manner in which the provisions of the Dodd-Frank Act will ultimately be implemented by the various regulatory agencies, and the full extent of the impact of the requirements on our operations is unclear, especially in light of the Trump administration's January 2017 executive order calling for a full review of the Dodd-Frank Act and the regulations promulgated thereunder.

HIPAA and Gramm-Leach-Bliley Act

The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes obligations for issuers of health insurance coverage and health benefit plan sponsors. This law requires guaranteed renewability of healthcare coverage for most group health plans and certain individuals. Also, the law limited exclusions based on preexisting medical conditions.

The administrative simplification provisions of HIPAA imposed a number of requirements on covered entities (including insurers, HMOs, group health plans, providers and clearinghouses). These requirements include uniform standards of common electronic healthcare transactions; privacy and security regulations; and unique identifier rules for employers, health plans and providers. Additional federal privacy and security requirements, including breach notification, improved enforcement, and additional limitations on use and disclosure of protected health information were passed through the Health Information Technology for Economic and Clinical Health, or HITECH, Act provisions of the American Recovery and Reinvestment Act of 2009 and corresponding implementing regulations. States are also passing privacy and security requirements, such as the California Consumer Privacy Act, which may limit our use and disclosure of member data and impose additional breach notification requirements.

The federal Gramm-Leach-Bliley Act generally places restrictions on the disclosure of non-public information to non-affiliated third parties, and requires financial institutions, including insurers, to provide customers with notice regarding how their non-public personal information is used, including an opportunity to "opt out" of certain disclosures. State departments of insurance and certain federal agencies adopted implementing regulations as required by federal law. In addition, a number of states have adopted data security laws and/or regulations governing data security and/or requiring security breach notification, which may apply to us in certain circumstances.

Employee Retirement Income Security Act of 1974

The provision of services to certain employee welfare benefit plans is subject to the Employee Retirement Income Security Act of 1974, as amended, or ERISA, a complex set of laws and regulations subject to interpretation and enforcement by the Internal Revenue Service and the DOL. ERISA regulates certain aspects of the relationships between us, the employers that maintain employee welfare benefit plans subject to ERISA and participants in such plans. Some of our administrative services and other activities may also be subject to regulation under ERISA. In addition, certain states require licensure or registration of companies providing third-party claims administration services for benefit plans. We provide a variety of products and services to employee welfare benefit plans that are covered by ERISA. Plans subject to ERISA can also be subject to state laws and the question of whether and to what extent ERISA preempts a state law has been, and will continue to be, interpreted by many courts.

HMO and Insurance Holding Company Laws, including Risk-Based Capital Requirements

We are regulated as an insurance holding company and are subject to the insurance holding company acts of the states in which our insurance company and HMO subsidiaries are domiciled. These acts contain certain reporting requirements as well as restrictions on transactions between an insurer or HMO and its affiliates. These holding company laws and regulations generally require insurance companies and HMOs within an insurance holding company system to register with the insurance

department of each state where they are domiciled and to file with those states' insurance departments certain reports describing capital structure, ownership, financial condition, certain intercompany transactions, enterprise risks, corporate governance and general business operations. In addition, various notice and reporting requirements generally apply to transactions between insurance companies and HMOs and their affiliates within an insurance holding company system, depending on the size and nature of the transactions. Some insurance holding company laws and regulations require prior regulatory approval or, in certain circumstances, prior notice of certain material intercompany transfers of assets as well as certain transactions between insurance companies, HMOs, their parent holding companies and affiliates. Among other provisions, state insurance and HMO laws may restrict the ability of our regulated subsidiaries to pay dividends.

Additionally, the holding company acts of the states in which our subsidiaries are domiciled restrict the ability of any person to obtain control of an insurance company or HMO without prior regulatory approval. Under those statutes, without such approval (or an exemption), no person may acquire any voting security of an insurance holding company, which controls an insurance company or HMO, or merge with such a holding company, if as a result of such transaction such person would "control" the insurance holding company. "Control" is generally defined as the direct or indirect power to direct or cause the direction of the management and policies of a person and is presumed to exist if a person directly or indirectly owns or controls 10% or more of the voting securities of another person. Dispositions of control generally are also regulated under the state holding company acts.

The states of domicile of our regulated subsidiaries have statutory risk-based capital, or RBC, requirements for health and other insurance companies and HMOs based on the Risk-Based Capital (RBC) For Health Organizations Model Act, or RBC Model Act. These RBC requirements are intended to assess the capital adequacy of life and health insurers and HMOs, taking into account the risk characteristics of a company's investments and products. In general, under these laws, an insurance company or HMO must submit a report of its RBC level to the insurance department or insurance commissioner of its state of domicile for each calendar year. The law requires increasing degrees of regulatory oversight and intervention as a company's RBC declines. As of December 31, 2018, the RBC levels of our insurance and HMO subsidiaries exceeded all RBC requirements.

Guaranty Fund Assessments

Under insolvency or guaranty association laws in most states, insurance companies can be assessed for amounts paid by guaranty funds for policyholder losses incurred when an insurance company becomes insolvent. Most state insolvency or guaranty association laws currently provide for assessments based upon the amount of premiums received on insurance underwritten within such state (with a minimum amount payable even if no premium is received). Under many of these guaranty association laws, assessments against insurance companies that issue policies of accident or sickness insurance are made retrospectively. Some states permit insurers to recover assessments paid through full or partial premium tax offsets or through future policyholder surcharges. The amount and timing of any future assessments cannot be predicted with certainty; however, future assessments are likely to occur.

Employees

At December 31, 2018, we had approximately 63,900 full-time employees. Our employees are an important asset, and we seek to develop them to their full potential. We believe that our relationship with our employees is good.

Available Information

We are a large accelerated filer (as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended, or the Exchange Act) and are required, pursuant to Item 101 of Regulation S-K, to provide certain information regarding our website and the availability of certain documents filed with or furnished to the U.S. Securities and Exchange Commission, or SEC. Our Internet website is www.antheminc.com. We have included our Internet website address throughout this Annual Report on Form 10-K as a textual reference only. The information contained on, or accessible through, our Internet website is not incorporated into this Annual Report on Form 10-K. We make available, free of charge, by mail or through our Internet website, our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with or furnish it to the SEC. We also include on our Internet website our Corporate Governance Guidelines, our Standards of Ethical Business Conduct and the charter of each standing committee of our Board

of Directors. In addition, we intend to disclose on our Internet website any amendments to, or waivers from, our Standards of Ethical Business Conduct that are required to be publicly disclosed pursuant to rules of the SEC and the New York Stock Exchange, or NYSE. Anthem, Inc. is an Indiana corporation incorporated on July 17, 2001.

ITEM 1A. RISK FACTORS.

The following is a description of significant factors that could cause our actual results to differ materially from those contained in forward-looking statements made in this Annual Report on Form 10-K and presented elsewhere by management from time to time. Such factors may have a material adverse effect on our business, financial condition, and results of operations, and you should carefully consider them and not place undue reliance on any forward-looking statements. It is not possible to predict or identify all such factors. Consequently, you should not consider any such list to be a complete statement of all our potential risks or uncertainties. Because of these and other factors, past performance should not be considered an indication of future performance.

If we fail to appropriately predict, price for and manage healthcare costs, the profitability of our products could decline, which could materially adversely affect our business, cash flows, financial condition and results of operations.

Our profitability depends in large part on accurately predicting healthcare costs and on our ability to manage future healthcare costs through medical management, product design, negotiation of favorable provider contracts and underwriting criteria. Government-imposed limitations on Medicare and Medicaid reimbursement have also caused the private sector to bear a greater share of increasing healthcare costs. Changes in healthcare practices, demographic characteristics including the aging population, inflation, new technologies and therapies, increases in the cost and number of prescription drugs, clusters of high cost cases, changes in the regulatory environment and numerous other factors affecting the cost of healthcare may adversely affect our ability to predict and manage healthcare costs, as well as our business, cash flows, financial condition and results of operations. Future modifications to, or enactment of, laws and regulations that impact our product pricing and required product benefits may also impact our profitability in future periods.

Relatively small differences between predicted and actual healthcare costs as a percentage of premium revenues can result in significant changes in our results of operations. In general, healthcare benefit costs in excess of our cost projections reflected in our fully insured product pricing cannot be recovered in the current premium period through higher premiums. Although federal and state premium and risk adjustment mechanisms could help offset healthcare benefit costs in excess of our projections if our assumptions (including assumptions for government premium and risk adjustment payments) utilized in setting our premium rates are significantly different than actual results, our income statement and financial condition could still be adversely affected.

In addition to the challenge of managing healthcare costs, we face pressure to contain premium rates. Our customers may renegotiate their contracts to seek to contain their costs or may move to a competitor to obtain more favorable premiums. Further, federal and state regulatory agencies may restrict our ability to implement changes in premium rates. For example, we must submit data on all proposed rate increases to HHS for monitoring purposes on many of our products. In addition, the ACA includes an annual rate review requirement to prohibit unreasonable rate increases, and our plans may be excluded from participating in the public exchanges if they are deemed to have a history of "unreasonable" rate increases. Fiscal concerns regarding the continued viability of programs such as Medicare and Medicaid may cause decreasing reimbursement rates, including retroactive decreases in Medicaid reimbursement rates, delays in premium payments or reimbursement rate increases for government-sponsored programs that are lower than the increase in cost of care trends. A limitation on our ability to increase or maintain our premium or reimbursement levels or a significant loss of membership resulting from our need to increase or maintain premium or reimbursement levels could adversely affect our business, cash flows, financial condition and results of operations.

The reserves that we establish for health insurance policy benefits and other contractual rights and benefits are based upon assumptions concerning a number of factors, including trends in healthcare costs, expenses, general economic conditions and other factors. To the extent the actual claims experience is unfavorable as compared to our underlying assumptions, our incurred losses would increase and future earnings could be adversely affected.

Our profitability is also dependent in part upon our ability to contract on favorable terms with hospitals, physicians, PBM service providers and other healthcare providers. Physicians, hospitals and other healthcare providers may elect not to

contract with us, and the failure to secure or maintain cost-effective healthcare provider contracts on competitive terms may result in a loss of membership or higher medical costs, which could adversely affect our business. In addition, consolidation among healthcare providers, ACO practice management companies, which aggregate physician practices for administrative efficiency and marketing leverage, and other organizational structures that physicians, hospitals and other care providers choose, as well as the ability of larger employers to contract directly with providers, may change the way that these providers interact with us and may change the competitive landscape. Such organizations or groups of physicians may compete directly with us, which may impact our relationship with these providers or affect the way that we price our products and estimate our costs and may require us to incur costs to change our operations, which could adversely affect our business, cash flows, financial condition and results of operations.

Our inability to contract with providers, or if providers attempt to use their market position to negotiate more favorable contracts or place us at a competitive disadvantage, or the inability of providers to provide adequate care, could adversely affect our business. In addition, we do not have contracts with all providers that render services to our members and, as a result, may not have a pre-established agreement about the amount of compensation those out-of-network providers will accept for the services they render, which can result in significant litigation or arbitration proceedings, or provider attempts to obtain payment from our members for the difference between the amount we have paid and the amount they have charged.

The ongoing changes to the ACA and related laws and regulations could adversely affect our business, cash flows, financial condition and results of operations.

The ongoing changes in federal and state laws and regulations stemming from the ACA, including the steps that have been taken to amend, repeal and limit the scope and application of the ACA, continue to represent significant challenges to the U.S. healthcare system. We are unable to predict how these events will ultimately be resolved and what the potential impact may be on our business, including, but not limited to, our products, services, processes and technology, and on our relationships with current and future customers and healthcare providers. The legal challenges regarding the ACA, including the 2018 Texas District Court ACA Decision invalidating the ACA, which judgment has been stayed pending appeals, continue to contribute to this uncertainty, which could significantly impact the market for our products, the regulations applicable to us and the fees and taxes payable by us. In addition, the ACA imposes significant fees, assessments and taxes on us and other health insurers, health plans and other industry participants, including the annual non-tax deductible HIP Fee. Further regulations and modifications to the ACA at the federal or state level, including a judicial invalidation of the ACA, will likely have significant effects on our business and future operations, some of which may adversely affect our results of operations and financial condition.

In general, the risk pool for the Individual market, which includes public exchange markets, has become less healthy since its inception in 2014. The reduction of the individual mandate penalty to zero, effective in 2019, is also expected to result in further deterioration of the overall Individual market risk pool. Based on our experience in public exchange markets to date, we have made adjustments to our premium rates and geographic participation, and we will continue to evaluate the performance of our public exchange plans, the future viability of the public exchanges and availability of federal subsidies, and may make further adjustments to our rates and participation going forward. In addition, insurers have faced uncertainties related to federal government funding for various ACA programs. These factors may have a material adverse effect on our results of operations if premiums are not adequate or do not appropriately reflect the acuity of these individuals. Any variation from our expectations regarding acuity, enrollment levels, adverse selection, or other assumptions utilized in setting premium rates could have a material adverse effect on our results of operations, financial position, and cash flows.

For additional information related to the ACA, see Part I, Item 1 “Business” and Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” of this Annual Report on Form 10-K.

We are subject to significant government regulation, and changes in the regulation of our business by federal and state regulators may adversely affect our business, cash flows, financial condition and results of operations.

In addition to the ACA and efforts to modify the ACA, we face state and federal regulation associated with many aspects of our business, including, but not limited to, licensing, premiums, marketing activities, provider contracting, access and payment standards, and corporate governance and financial reporting matters. In addition, our PBM is also subject to an increasing number of licensure, registration and other laws and accreditation standards that impact the business practices of a pharmacy benefit manager. We must identify, assess and respond to new laws and regulations, as well as comply with the

various existing laws and regulations applicable to our business. Changes in existing laws, rules and regulatory interpretation or future laws, rules, regulatory interpretations or judgments could force us to change how we conduct our business, affect the products we offer, restrict revenue and enrollment growth, increase our costs, including operating, healthcare technology and administrative costs, restrict our ability to obtain new product approvals and implement changes in premium rates and require enhancements to our compliance infrastructure and internal controls environment.

Our insurance, managed healthcare and HMO subsidiaries are subject to extensive regulation and supervision by regulatory authorities in each state in which they are licensed or authorized to do business, in addition to regulation by federal agencies. Future regulatory action by state or federal authorities could have a material adverse effect on the profitability or marketability of our health benefits or managed care products or on our business, financial condition and results of operations. In addition, because of our participation in government-sponsored programs such as Medicare and Medicaid, a number of our subsidiaries are also subject to regulation by CMS and state Medicaid agencies, and to changes in government regulations or policy with respect to, among other things, reimbursement levels, eligibility requirements, benefit coverage requirements and additional governmental participation, which could also adversely affect our business, cash flows, financial condition and results of operations.

In addition, under insolvency or guaranty association laws in most states, insurance companies can be assessed for certain obligations to policyholders and claimants of impaired or insolvent insurance companies. Some states have similar laws relating to HMOs and other payers such as consumer operated and oriented plans (co-ops) established under the ACA. We may experience assessments in the future if, for example, premiums established by other companies for their health insurance products, including certain long-term care products, are inadequate to cover the cost of care. Any such assessment could expose us to the risk of paying a portion of an impaired or insolvent insurance company's claims through state guaranty associations. We are not currently able to estimate our potential financial obligations, losses, or the availability of potential offsets associated with potential guaranty association assessments; however, any significant increase in guaranty association assessments could have a material adverse effect on our business, cash flows, financial condition and results of operations.

State legislatures will continue to focus on healthcare delivery and financing issues. State ballot initiatives can also be put to voters that would substantially impair our operating environment. Most states are very focused on how to manage and reduce their budgets and are exploring ways to mitigate cost increases. As such, some states have acted to reduce or limit increases to premium payments. Others have enacted, or are contemplating, significant reform of their health insurance markets to include provisions affecting both public programs and privately-financed health insurance arrangements. If enacted into law, these state proposals could have a material adverse impact on our business, cash flows, operations or financial condition.

A number of states in which we offer Medicaid products have not opted for Medicaid expansion under the ACA, at least for the present time. Where states allow certain programs to expire or have not opted for Medicaid expansion, we could experience reduced Medicaid enrollment and reduced growth opportunities. If future modifications to laws and regulations significantly reduce Medicaid enrollment, this will negatively impact our Medicaid business.

Additionally, from time to time, Congress has considered, and may consider in the future, various forms of managed care reform legislation which, if adopted, could fundamentally alter the treatment of coverage decisions under ERISA. There have been legislative attempts to limit ERISA's preemptive effect on state laws and litigants' ability to seek damages beyond the benefits offered under their plans. If adopted, such limitations could increase our liability exposure, could permit greater state regulation of our operations, and could expand the scope of damages, including punitive damages, litigants could be awarded. While we cannot predict if any of these initiatives will ultimately become effective or, if enacted, what their terms will be, their enactment could increase our costs, expose us to expanded liability or require us to revise the ways in which we conduct business.

We face competition in many of our markets, and if we fail to adequately adapt to changes in our industry and develop and implement strategic growth opportunities, our ability to compete and grow may be adversely affected.

As a health benefits company, we operate in a highly competitive environment and in an industry that is subject to significant changes from legislative reform, business consolidations, new strategic alliances, new market entrants, aggressive marketing practices by other health benefits organizations, technological advancements and market pressures brought about by an informed and organized customer base, particularly among large employers, which may increasingly have the ability to contract directly with providers. In addition, the PBM industry is highly competitive, and our PBM business will be subject to competition from owned drugstores, retail drugstore chains, supermarkets, discount retailers, membership clubs, internet companies and other mail-order and long-term care pharmacies. These factors have produced and will likely continue to produce significant pressures on our profitability.

In addition, as a result of changes to traditional health insurance over the past several years, the health insurance industry has experienced a significant shift in membership to insurance products with lower margins. In order to profitably grow our business in the future, we need to not only grow our profitable medical membership, but also continue to diversify our sources of revenue and earnings, including through the increased sale of our specialty products, such as dental, vision and other supplemental products, expansion of non-ACA medical products, expansion of our non-insurance assets and establishment of new cost of care solutions, including innovations in PBM services. If we are unable to acquire or develop and successfully manage new opportunities that further our strategic objectives and differentiate our products from our competitors, our ability to profitably grow our business could be adversely affected.

We also will have to respond to pricing and other actions taken by existing competitors and potentially disruptive new entrants. Due to the price transparency provided by public exchanges and new market entrants, we face competitive pressures from new and existing competitors in the market for Individual health insurance. These risks may be enhanced if employers shift to defined contribution healthcare benefits plans and make greater utilization of private insurance exchanges or encourage their employees to purchase health insurance on the public exchanges. We can provide no assurance that we will be able to compete successfully on these exchanges or that we will be able to benefit from any opportunities presented by such exchanges. The elimination of the individual mandate penalty in the ACA, effective January 1, 2019, may further disrupt the public exchange markets. If we are not competitive on these exchanges or are unsuccessful in reducing our cost structure, our future growth and profitability may be adversely impacted.

We are currently dependent on the non-exclusive services of independent agents and brokers in the marketing of our healthcare products, particularly with respect to individuals, seniors and small employer group customers. We face intense competition for the services and allegiance of these independent agents and brokers, who may also market the products of our competitors. Our relationship with our brokers and independent agents could be adversely impacted by changes in our business practices to address legislative changes, including potential reductions in commissions and consulting fees paid to agents and brokers. We cannot ensure that we will be able to compete successfully against current and future competitors for these services or that competitive pressures faced by us will not materially and adversely affect our business, cash flows, financial condition and results of operations.

A significant reduction in the enrollment in our health benefits programs, particularly in states where we have large regional concentrations, could have an adverse effect on our business, cash flows, financial condition and results of operations.

A significant reduction in the number of enrollees in our health benefits programs could adversely affect our business, cash flows, financial condition and results of operations. Factors that could contribute to a reduction in enrollment include: reductions in workforce by existing customers; a general economic upturn that results in fewer individuals being eligible for Medicaid programs; a general economic downturn that results in business failures and high unemployment rates; employers no longer offering certain healthcare coverage as an employee benefit or electing to offer coverage on a voluntary, employee-funded basis; participation on public exchanges; federal and state regulatory changes, including the elimination of the individual mandate penalty in the ACA effective January 1, 2019; failure to obtain new customers or retain existing customers; premium increases and benefit changes; our exit from a specific market; negative publicity and news coverage; and failure to attain or maintain nationally recognized accreditations.

The states in which we operate that have the largest concentrations of revenues include California, Florida, Georgia, Indiana, New York, Ohio, Texas and Virginia. Due to this concentration of business in these states, we are exposed to potential losses resulting from the risk of state-specific or regional economic downturns impacting these states. If any such negative economic conditions do not improve, we may experience a reduction in existing and new business, which could have a material adverse effect on our business, cash flows, financial condition and results of operations.

A cyber attack or other privacy or data security incident could result in an unauthorized disclosure of sensitive or confidential information, cause a loss of data, disrupt a large amount of our operations, give rise to remediation or other expenses, expose us to liability under federal and state laws, and subject us to litigation and investigations, which could have an adverse effect on our business, cash flows, financial condition and results of operations.

As part of our normal operations, we collect, process and retain certain sensitive and confidential information. We are subject to various federal, state and international laws and rules regarding the use and disclosure of certain sensitive or confidential information, including HIPAA, the HITECH Act, the Gramm-Leach-Bliley Act and numerous state laws governing personal information. Our facilities and systems, and those of our third-party service providers, are regularly the target of, and may be vulnerable to, cyber attacks, security breaches, acts of vandalism, computer viruses, misplaced or lost data, programming and/or human errors or other threats.

We have been, and will likely continue to be, the target of attempted cyber attacks and other security threats. In February 2015, we reported the discovery that certain of our information technology systems had been the target of an external cyber attack, as more fully described under Note 13, "Commitments and Contingencies - *Litigation and Regulatory Proceedings – Cyber Attack Regulatory Proceedings and Litigation,*" of the Notes to our Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K. The attackers gained unauthorized access to certain of our information technology systems and obtained personal information related to many individuals and employees. We have incurred expenses to investigate and remediate this matter and expect to continue to incur expenses of this nature in the foreseeable future. Although the consolidated civil actions, state court cases and investigation by the Office of Civil Rights related to this cyber attack have been settled and dismissed, respectively, an ongoing investigation by a multi-state group of Attorneys General remains outstanding. We also may be subject to additional litigation and governmental investigations which could divert the attention of management from the operation of our business, result in reputational damage and have a material adverse impact on our business, cash flows, financial condition and results of operations. While we have contingency plans and insurance coverage for potential liabilities of this nature, they may not be sufficient to cover all claims and liabilities.

We cannot ensure that we will be able to identify, prevent or contain the effects of additional cyber attacks or other cybersecurity risks in the future that bypass our security measures or disrupt our information technology systems or business. We have security technologies, processes and procedures in place to protect against cybersecurity risks and security breaches. However, hardware, software or applications we develop or procure from third parties may contain defects in design, manufacturer defects or other problems that could unexpectedly compromise information security. In addition, because the techniques used to obtain unauthorized access, disable or degrade service or sabotage systems change frequently and may not immediately produce signs of intrusion, we may be unable to anticipate these techniques, timely discover or counter them or implement adequate preventative measures. Viruses, worms or other malicious software programs may be used to attack our systems or otherwise exploit any security vulnerabilities, and such security attacks may cause system disruptions or shutdowns, or may cause personal information or proprietary or confidential information to be misappropriated or compromised. As a result, cybersecurity and the continued development and enhancement of our controls, processes and practices designed to protect our systems, computers, software, data and networks from attack, damage and unauthorized access remain a priority for us.

In addition, we use third-party technology, systems and services for a variety of reasons, including, without limitation, encryption and authentication technology, employee email, content delivery to customers, back-office support, and other functions. Although we have developed systems and processes that are designed to reduce the impact of a security breach at a third-party vendor, such measures cannot provide absolute security, and these third-party providers may also experience security breaches or interruptions to their information technology hardware and software infrastructure and communications systems that could adversely impact us.

Noncompliance with any privacy or security laws and regulations, or any security breach, cyber attack or cybersecurity breach, and any incident involving the misappropriation, loss or other unauthorized disclosure or use of, or access to,

sensitive or confidential member information, whether by us or by one of our third-party service providers, could require us to expend significant resources to continue to modify or enhance our protective measures and to remediate any damage. In addition, this could result in interruptions to our operations, damage our reputation and cause membership losses, and could also result in regulatory enforcement actions, material fines and penalties, litigation or other actions that could have a material adverse effect on our business, cash flows, financial condition and results of operations.

There are various risks associated with participating in Medicaid and Medicare programs, including dependence upon government funding and the timing of payments, compliance with government contracts and increased regulatory oversight.

We contract with various federal and state agencies, including CMS, to provide managed healthcare services, such as Medicare Advantage, Medicare Part D, Medicare Supplement, Medicaid, TANF, SPD, LTSS, CHIP, ACA-related Medicaid expansion programs and various specialty programs. We also provide various administrative services for several other entities offering medical and/or prescription drug plans to their Medicaid or Medicare eligible members through our affiliated companies, and we offer employer group waiver plans which provide medical and/or prescription drug coverage to retirees. We are also participating in MMPs in several states. These programs in our Government Business segment have been the subject of recent regulatory reform initiatives, including the ACA. It is difficult to predict the future impact of the ACA or other regulatory reforms on our Government Business segment due to the potential for further ACA modifications and other reforms. Regulatory reform initiatives or additional changes in existing laws or regulations, or their interpretations, could have a material adverse effect on our business, cash flows, financial condition and results of operations.

Revenues from the Medicare and Medicaid programs are dependent, in whole or in part, upon annual funding from the federal government and/or applicable state governments. The base premium rate paid by each state or federal agency differs depending upon a combination of various factors such as defined upper payment limits, a member's health status, age, gender, county or region, benefit mix, member eligibility category and risk scores. Future Medicare and Medicaid rates may be affected by continued government efforts to contain costs as well as federal and state budgetary constraints. If the federal government or any state in which we operate were to decrease rates paid to us, pay us less than the amount necessary to keep pace with our cost trends or seek an adjustment to previously negotiated rates, it could have a material adverse effect on our business, cash flows, financial condition and results of operations. Further, certain state contracts are subject to cancellation in the event of the unavailability of state funds. In addition, various states' MMPs are still subject to uncertainty surrounding payment rates and other requirements, which could affect where we seek to participate in these programs. An unexpected reduction, inadequate government funding or significantly delayed payments for these programs may adversely affect our business, cash flows, financial condition and results of operations.

In addition, Medicare and Medicaid are subject to various MLR rules. Other potential risks associated with the Medicare Advantage and Medicare Part D plans include increased medical or pharmaceutical costs, overpayments identified as a result of ongoing auditing and monitoring activities, potential uncollectability of receivables resulting from processing and/or verifying enrollment, inadequacy of underwriting assumptions, inability to receive and process correct information (including inability due to systems issues by the federal government, the applicable state government or us), uncollectability of premiums from members, and limited enrollment periods. While we believe we have adequately reviewed our assumptions and estimates regarding these complex and wide-ranging programs under Medicare Advantage and Medicare Part D, including those related to collectability of receivables and establishment of liabilities, actual results may be materially different than our assumptions and estimates and could have a material adverse effect on our business, financial condition and results of operations. Finally, there is the possibility that the Medicare Advantage program could be significantly impacted by any future modification, repeal or replacement of the ACA.

Our revenue on Medicare policies is based on bids submitted to CMS in June the year before the contract year. Although we base the commercial and Medicaid premiums we charge and our Medicare bids on our estimates of future medical costs over the fixed contract period, many factors may cause actual costs to exceed those estimated and reflected in premiums or bids. These factors may include medical cost inflation, increased use of services, increased cost of individual services, natural catastrophes or other large-scale medical emergencies, epidemics, the introduction of new or costly drugs, treatments and technologies, new treatment guidelines, new mandated benefits (such as the expansion of essential benefits coverage) or changes to other regulations and insured population characteristics. Relatively small differences between predicted and actual medical costs or utilization rates as a percentage of revenues can result in significant changes in our financial results.

Our contracts with CMS and state governmental agencies contain certain provisions regarding data submission, provider network maintenance, quality measures, claims payment, encounter data, continuity of care, call center performance and other requirements specific to federal and state program regulations. If we fail to comply with these requirements, we may be subject to fines, penalties, liquidated damages and retrospective adjustments in payments made to our health plans that could impact our profitability. In addition, we could be required to file a corrective plan of action with additional penalties for noncompliance, including a negative impact on future membership enrollment levels. Further, certain of our CMS and state Medicaid contracts are subject to a competitive procurement process. If our existing contracts are not renewed, if we are not awarded new contracts as a result of the competitive procurement process, or if we lose members under an existing contract as a result of a post-award challenge, it could have a material adverse effect on our business, cash flows, financial condition and results of operations.

Further, the Medicare Advantage Star Rating System utilized by CMS to evaluate Medicare Advantage Plans may have a significant effect on our results of operations, as higher-rated plans tend to experience increased enrollment and plans with a star rating of 4.0 or higher are eligible for quality-based bonus payments. Our star ratings may be negatively impacted if we fail to meet the quality, performance and regulatory compliance criteria established by CMS. Furthermore, the star rating system is subject to change annually by CMS, which may make it more difficult to achieve four stars or greater. If we do not maintain or continue to improve our star ratings, fail to meet or exceed our competitors' ratings, or if quality-based bonus payments are reduced or eliminated, we may experience a negative impact on our revenues and the benefits that our plans can offer, which could materially and adversely affect the marketability of our plans, our membership levels, results of operations, financial condition and cash flows. Similarly, a number of state Medicaid programs in which we participate have implemented performance standards, and if we fail to meet or exceed those standards, we may not receive performance-based bonus payments or may incur performance-based penalties.

In addition to the contractual requirements affecting our participation in Medicaid and Medicare programs, we are also subject to various federal and state healthcare laws and regulations, including those directed at preventing fraud, abuse and discrimination in government-funded programs. Failure to comply with these laws and regulations could result in investigations, litigation, fines, restrictions on, or exclusions from, program participation, or the imposition of corporate integrity agreements or other agreements with a federal or state governmental agency, any of which could adversely impact our business, cash flows, financial condition and results of operations.

We are periodically subject to CMS audits of our Medicare Advantage Plans to validate the diagnostic data and patient claims, as well as audits of our Medicare Part D plans by the Medicare Part D Recovery Audit Contractor, or RAC. CMS has recently proposed changing these audits in a way that could increase financial recoveries from health plans. These audits could result in significant adjustments in payments made to our health plans. In addition to these federal programs, a number of states have implemented Medicaid RAC programs which were authorized by the ACA. State RAC programs could increase the number of audits and any subsequent recoupment by the federal and state governments, which could adversely affect our financial condition and results of operations. If we fail to report and correct errors discovered through our own auditing procedures or during a CMS or RAC audit, or otherwise fail to comply with applicable laws and regulations, we could be subject to fines, civil penalties or other sanctions which could have a material adverse effect on our ability to participate in these programs, and on our financial condition, cash flows and results of operations.

Our Medicare and Medicaid contracts are also subject to minimum MLR audits. If a Medicare Advantage, MMP or Medicare Part D contract pays minimum MLR rebates for three consecutive years, it will become ineligible to participate in open enrollment. If a Medicare Advantage or Medicare Part D contract pays such rebates for five consecutive years, it will be terminated by CMS.

In addition, there are an increasing number of investigations regarding compliance with various provisions of the ACA. These investigations are being conducted by CMS and other federal authorities as well as state regulators. As a result, we could be subject to multiple investigations of the same issue. These investigations, and any possible enforcement actions, could result in penalties and the imposition of corrective action plans and/or changes to industry practices, which could adversely affect our ability to market our products.

A change in our healthcare product mix may impact our profitability.

Our healthcare products that involve greater potential risk generally tend to be more profitable than administrative services products and those healthcare products where the employer groups assume the underwriting risks. Individuals and small employer groups are more likely to purchase our higher-risk healthcare products because such purchasers are generally unable or unwilling to bear greater liability for healthcare expenditures. Typically, government-sponsored programs also involve our higher-risk healthcare products. A shift of enrollees from more profitable products to less profitable products could have a material adverse effect on our cash flows, financial condition and results of operations.

We face risks related to litigation.

We are, or may in the future, be a party to a variety of legal actions that may affect our business, such as employment and employment discrimination-related suits, administrative charges before government agencies, employee benefit claims, breach of contract actions, tort claims and intellectual property-related litigation. In addition, because of the nature of our business, we are subject to a variety of legal actions relating to our business operations, including the design, administration and offering of our products and services. These could include claims relating to the denial or limitation of healthcare benefits; development or application of medical policies and coverage and clinical guidelines; medical malpractice actions; product liability claims; allegations of anti-competitive and unfair business activities; provider disputes over reimbursement; provider tiering programs; narrow networks; termination of provider contracts; the recovery of overpayments from providers; self-funded business; disputes over co-payment calculations; reimbursement of out-of-network claims; the failure to disclose certain business practices; the failure to comply with various state or federal laws, including but not limited to, ERISA and the Mental Health Parity Act; and customer audits and contract performance, including government contracts. These actions or proceedings could have a material adverse effect on our business, cash flows, financial condition and results of operations.

In addition, we are also involved in, or may in the future be party to, pending or threatened litigation of the character incidental to the business transacted or arising out of our operations, including, but not limited to, breaches of security and violations of privacy requirements, shareholder actions, compliance with federal and state laws and regulations (including *qui tam* or "whistleblower" actions), or sales and acquisitions of businesses or assets (including as a result of the terminated Cigna Merger Agreement, or as more fully described under Note 13, "Commitments and Contingencies - *Litigation and Regulatory Proceedings - Cigna Corporation Merger Litigation*," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K). From time to time, we are involved as a party in various governmental investigations, audits, reviews and administrative proceedings, including challenges to the award of government contracts by disappointed bidders. These investigations, audits and reviews include routine and special investigations by various state insurance departments, various federal regulators including CMS and the Department of Health and Human Services Office of Inspector General (HHS-OIG), state attorneys general, the Department of Justice (DOJ), and various offices of the U.S. Attorney General. Following an investigation, we may be subject to civil or criminal fines, penalties and other sanctions if we are determined to be in violation of applicable laws or regulations. Liabilities that may result from these actions could have a material adverse effect on our cash flows, results of operations and financial condition.

Recent court decisions and legislative activity may increase our exposure for any of these types of claims. In some cases, substantial non-economic (including injunctive relief), treble or punitive damages may be sought. Although we maintain insurance coverage for some of these potential liabilities, some liabilities and damages may not be covered by insurance, insurers may dispute coverage or the amount of insurance may not be enough to cover the damages awarded. In addition, insurance coverage for all or certain forms of liability may become unavailable or prohibitively expensive in the future. Any adverse judgment against us resulting in such damage awards could result in negative publicity and have an adverse effect on our cash flows, results of operations and financial condition.

Further, litigation brought against the federal and some state governments over the ACA, including the 2018 Texas District Court ACA Decision, could have a material adverse effect on our business, cash flows, financial condition and results of operations as changes to, or the invalidation of, the ACA resulting from such litigation may be unfavorable to our business or may create uncertainty over the applicability and enforceability of portions of the law and related regulations, which impacts our strategy and could negatively impact our future growth opportunities.

Cigna's pursuit of litigation in connection with the Cigna Merger Agreement, together with our own litigation against Cigna, could cause us to incur substantial costs, may present material distractions and, if decided adverse to Anthem, could negatively impact our financial condition.

As described in Note 13, "Commitments and Contingencies - *Litigation and Regulatory Proceedings - Cigna Corporation Merger Litigation*," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K, in February 2017, Cigna commenced litigation against us in the Delaware Court of Chancery, or the Delaware Court, for a declaratory judgment that its purported termination of the Cigna Merger Agreement was lawful and seeking damages against us. We promptly filed our own litigation against Cigna seeking to compel Cigna's specific performance of the Cigna Merger Agreement and damages against Cigna. In May 2017, after the Delaware Court denied our motion to enjoin Cigna from terminating the Cigna Merger Agreement, we delivered to Cigna a notice terminating the Cigna Merger Agreement. The litigation in Delaware continues. These lawsuits could result in substantial costs to us, including litigation costs and potential settlement and judgment costs. Further, due to the potential significance of the allegations and damages claimed by Cigna, we expect that our officers will continue to spend substantial time focused on the litigation. Our defense against Cigna's claims, the pursuit of our claims or the settlement, or failure to reach a settlement, for any claims may result in negative media attention, and may adversely affect our business, reputation, financial condition, results of operations and cash flows.

We are dependent on the success of our relationships with third parties for various services and functions, including PBM services.

We contract with various third parties to perform certain functions and services and provide us with certain information technology systems. Certain of these third parties provide us with significant portions of our business infrastructure and operating requirements, and we could become overly dependent on key vendors, which could cause us to lose core competencies. A termination of our agreements with, or disruption in the performance of, one or more of these service providers could result in service disruptions or unavailability, reduced service quality and effectiveness, increased or duplicative costs or an inability to meet our obligations to our customers. In addition, we may also have to seek alternative service providers, which may be unavailable or only available on less favorable contract terms. Any of these outcomes could adversely affect our business, reputation, cash flows, financial condition and operating results.

In particular, we are a party to agreements with each of Express Scripts and CVS Health for the provision of certain PBM services to our plans. In January 2019, we provided notice to Express Scripts terminating the ESI PBM Agreement effective March 1, 2019, with the twelve-month transition period provided for in the ESI Agreement to migrate the services beginning on March 2, 2019. The litigation between us and Express Scripts regarding the ESI PBM Agreement continues, as more fully described under Note 13, "Commitments and Contingencies - *Litigation and Regulatory Proceedings - Express Scripts, Inc. Pharmacy Benefit Management Litigation*," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Beginning March 2, 2019, CVS Health may begin providing certain PBM services to IngenioRx pursuant to the CVS PBM Agreement. In connection with the transition of PBM services to CVS Health, if either Express Scripts or CVS Health fails to provide adequate transition and PBM services as contractually required, we may not be able to meet the full demands of our customers, which could have a material adverse effect on our business, reputation and results of operations. For additional information on the agreement with CVS Health, see "Business - General," in Part I, Item 1 of this Annual Report on Form 10-K.

There are various risks associated with providing healthcare services.

The direct provision of healthcare services by certain of our subsidiaries involves risks of additional litigation arising from medical malpractice actions based on our treatment decisions or brought against us or our physician associates for alleged malpractice or professional liability claims arising out of the delivery of healthcare and related services. In addition, liability may arise from maintaining healthcare premises that serve the public. If we fail to maintain adequate insurance coverage for these liabilities, or if such insurance is not available, the resulting costs could adversely affect our business, cash flows, financial condition and results of operations.

Additionally, many states in which certain of our subsidiaries operate limit the practice of medicine to licensed individuals or professional organizations comprised of licensed individuals. Business corporations generally may not exercise control over the medical decisions of physicians and we are not licensed to practice medicine. Rules and regulations relating to the practice of medicine, fee-splitting between physicians and referral sources, and similar issues vary from state to state. Further, certain federal and state laws, including those covering our Medicare and Medicaid plans, prohibit the offer, payment, solicitation, or receipt of any form of remuneration to induce, or in return for, the referral of patient care opportunities, including, but not limited to, Medicare patients, and also generally prohibit physicians from making referrals to any entity providing certain designated health services if the referring physician or related person has an ownership or financial interest in the entity. Any enforcement actions by governmental officials alleging non-compliance with these rules and regulations could adversely affect our business, cash flows, financial condition and results of operations.

Our PBM business and related operations are subject to a number of risks and uncertainties that are in addition to those we face in our core healthcare business.

Notwithstanding our arrangements with Express Scripts and CVS Health, we remain responsible to regulators and our customers for the delivery of those PBM services that we contract to provide. Our PBM business is subject to the risks inherent in the dispensing, packaging and distribution of pharmaceuticals and other healthcare products, including claims related to purported dispensing and other operational errors. Any failure by us or one of our PBM services suppliers to adhere to the laws and regulations applicable to the dispensing of pharmaceuticals could subject our PBM business to civil and criminal penalties.

Our PBM business is subject to federal and state laws and regulations that govern its relationships with pharmaceutical manufacturers, physicians, pharmacies and customers, including without limitation, federal and state anti-kickback laws, consumer protection laws, ERISA, HIPAA and laws related to the operation of internet and mail-service pharmacies, as well as an increasing number of licensure, registration and other laws and accreditation standards that impact the business practices of a PBM. In addition, the practice of pharmacy is subject to federal and state laws and regulation, including those of state boards of pharmacy, individual state-controlled substance authorities, the U.S. Drug Enforcement Agency and the FDA, and we and our third-party vendors are subject to registration requirements and state and federal laws concerning labeling, packaging, advertising, handling and adulteration of prescription drugs and dispensing of controlled substances. Noncompliance with applicable laws and regulations by us or our third-party vendors could have material adverse effects on our business, results of operations, financial condition, liquidity and reputation and could expose us to civil and criminal penalties.

Our PBM business also would be adversely affected if we are unable to contract on favorable terms with pharmaceutical manufacturers, and we could suffer exposure to liabilities and reputational harm in connection with purported errors by mail order or retail pharmacy businesses.

As a holding company, we are dependent on dividends from our subsidiaries. These dividends are necessary to pay our outstanding indebtedness. Our regulated subsidiaries are subject to state regulations, including restrictions on the payment of dividends, maintenance of minimum levels of capital and restrictions on investment portfolios.

We are a holding company whose assets include the outstanding shares of common stock (or other ownership interest) of our subsidiaries including our intermediate holding companies and regulated insurance and HMO subsidiaries. Our subsidiaries are separate legal entities. As a holding company, we depend on dividends and administrative expense reimbursements from our subsidiaries. Furthermore, our subsidiaries are not obligated to make funds available to us, and creditors of our subsidiaries will have a superior claim to certain of our subsidiaries' assets. Among other restrictions, state insurance and HMO laws may restrict the ability of our regulated subsidiaries to pay dividends. In some states, we have made special undertakings that may limit the ability of our regulated subsidiaries to pay dividends. In addition, our subsidiaries' ability to make any payments to us will also depend on their earnings, the terms of their indebtedness, business and tax considerations and other legal restrictions. Our ability to repurchase shares or pay dividends in the future to our shareholders and meet our obligations, including paying operating expenses and debt service on our outstanding and future indebtedness, will depend upon the receipt of dividends from our subsidiaries. An inability of our subsidiaries to pay dividends in the future in an amount sufficient for us to meet our financial obligations may materially adversely affect our business, cash flows, financial condition and results of operations.

Most of our regulated subsidiaries are subject to RBC standards imposed by their states of domicile. These laws are based on the RBC Model Act adopted by the National Association of Insurance Commissioners, or NAIC, and require our regulated subsidiaries to report their results of risk-based capital calculations to the departments of insurance and the NAIC. Failure to maintain the minimum RBC standards could subject our regulated subsidiaries to corrective action, including state supervision or liquidation. Changes to the existing RBC standards or the adoption of an RBC requirement at the holding company level, which is currently being considered by the NAIC, could further restrict our or our regulated subsidiaries' ability to pay dividends and adversely affect our business. In addition, as discussed in more detail below, we are a party to license agreements with the BCBSA which contain certain requirements and restrictions regarding our operations, including minimum capital and liquidity requirements, which could restrict the ability of our regulated subsidiaries to pay dividends.

Our regulated subsidiaries are subject to state laws and regulations that require diversification of their investment portfolios and limit the amount of investments in certain riskier investment categories, such as below-investment-grade fixed maturity securities, mortgage loans, real estate and equity investments, which could generate higher returns on their investments. Failure to comply with these laws and regulations might cause investments exceeding regulatory limitations to be treated as non-admitted assets for purposes of measuring statutory surplus and risk-based capital, and, in some instances, require the sale of those investments.

We have substantial indebtedness outstanding and may incur additional indebtedness in the future in connection with acquisitions or otherwise. Such indebtedness could adversely affect our ability to pursue desirable business opportunities and to react to changes in the economy or our industry, and exposes us to interest rate risk to the extent of our variable rate indebtedness.

Our debt service obligations require us to use a portion of our cash flow to pay interest and principal on debt instead of for other corporate purposes, including funding future expansion. If our cash flow and capital resources are insufficient to service our debt obligations, we may be forced to seek extraordinary dividends from our subsidiaries, sell assets, seek additional equity or debt capital or restructure our debt. However, these measures might be unsuccessful or inadequate to meet scheduled debt service obligations, or may not be available on commercially reasonable terms.

We may also incur future debt obligations, in connection with acquisitions or otherwise, that might subject us to restrictive covenants that could affect our financial and operational flexibility. Our breach or failure to comply with any of these covenants could result in a default under our credit facilities or other indebtedness. If we default under our credit agreement, the lenders could cease to make further extensions of credit or cause all of our outstanding debt obligations under our credit agreement to become immediately due and payable, together with accrued and unpaid interest. If the indebtedness under our notes or our credit agreement or our other indebtedness is accelerated, we may be unable to repay or finance the amounts due, on commercially reasonable terms, or at all.

Further, a substantial portion of our indebtedness bears interest at fluctuating interest rates, primarily based on the London Interbank Offered Rate ("LIBOR"). In July 2017, the Financial Conduct Authority, a regulator of financial services firms in the United Kingdom, announced that it intends to stop persuading or compelling banks to submit LIBOR rates after 2021. We are unable to predict the effect of any changes, any establishment of alternative reference rates or any other reforms to LIBOR or any replacement of LIBOR that may be enacted in the United Kingdom or elsewhere. Such changes, reforms or replacements relating to LIBOR could have an adverse impact on the market for or value of any LIBOR-linked securities, loans, derivatives and other financial obligations or extensions of credit held by us or on our overall financial condition or results of operations.

A downgrade in our credit ratings could have an adverse effect on our business, cash flows, financial condition and results of operations.

Claims-paying ability and financial strength and debt ratings by nationally recognized statistical rating organizations are an important factor in establishing the competitive position of insurance companies and health benefits companies. We believe our strong credit ratings are an important factor in marketing our products to customers, since credit ratings information is broadly disseminated and generally used by customers and creditors. In addition, if our credit ratings are downgraded or placed under review, our business, cash flows, financial condition and results of operations could be adversely impacted by limitations on future borrowings and a potential increase in our borrowing costs. Our ratings reflect each rating agency's opinion of our financial strength, operating performance and ability to meet our obligations to policyholders and

creditors, and are not evaluations directed toward the protection of investors in our common stock. Each of the ratings organizations reviews our ratings periodically, and there can be no assurance that our current ratings will be maintained in the future.

The health benefits industry is subject to negative publicity, which could adversely affect our business, cash flows, financial condition and results of operations.

The health benefits industry is subject to negative publicity, which can arise from, among other things, increases in premium rates, industry consolidation, cost of care initiatives and the ongoing debate over the ACA. Negative publicity may result in increased regulation and legislative review of industry practices, which may further increase our costs of doing business and adversely affect our profitability by limiting our ability to market or provide our products and services, requiring us to change our products and services, or increasing the regulatory oversight under which we operate. In addition, as long as we use the BCBS names and marks in marketing our health benefits products and services, any negative publicity concerning the BCBSA or other BCBSA licensees may adversely affect us and the sale of our health benefits products and services. Negative public perception or publicity of the health benefits industry in general, the BCBSA, other BCBSA licensees, or us or our key vendors in particular, could adversely affect our business, cash flows, financial condition and results of operations.

The failure to effectively maintain and upgrade our information systems could adversely affect our business.

Our business depends significantly on effective information systems, and we have many different information systems for our various businesses. As a result of our merger and acquisition activities, we have acquired additional systems. Our information systems require an ongoing commitment of significant resources to maintain and enhance existing systems and develop new systems in order to keep pace with continuing changes in information processing technology, emerging cybersecurity risks and threats, evolving industry and regulatory standards including public exchanges and other aspects of the ACA, compliance with legal requirements, private insurance exchanges and changing customer preferences. In addition, we may from time to time obtain significant portions of our systems-related or other services or facilities from independent third parties, which may make our operations vulnerable if such third parties fail to perform adequately.

Failure to adequately implement and maintain effective and efficient information systems with sufficiently advanced technological capabilities, or our failure to efficiently and effectively consolidate our information systems to eliminate redundant or obsolete applications, could result in competitive and cost disadvantages to us compared to our competitors, a diversion of management's time and could have a material adverse effect on our business, financial condition and results of operations. If the information we rely upon to run our business were found to be inaccurate or unreliable or if we fail to adequately maintain our information systems and data integrity effectively, we could experience problems in determining medical cost estimates and establishing appropriate pricing and reserves, have disputes with customers and providers, face regulatory problems, including sanctions and penalties, incur increases in operating expenses or suffer other adverse consequences, including a decrease in membership.

We are a party to license agreements with the BCBSA that entitle us to the exclusive and, in certain areas, non-exclusive use of the BCBS names and marks in our geographic territories. The termination of these license agreements or changes in the terms and conditions of these license agreements could adversely affect our business, cash flows, financial condition and results of operations.

We use the BCBS names and marks as identifiers for our products and services under licenses from the BCBSA. Our license agreements with the BCBSA contain certain requirements and restrictions regarding our operations and our use of the BCBS names and marks, including: minimum capital and liquidity requirements; enrollment and customer service performance requirements; participation in programs that provide portability of membership between plans; disclosures to the BCBSA relating to enrollment and financial conditions; disclosures as to the structure of the BCBS system in contracts with third parties and in public statements; plan governance requirements; cybersecurity requirements; a requirement that at least 80% (or, in the case of Blue Cross of California, substantially all) of a licensee's annual combined local net revenue, as defined by the BCBSA, attributable to healthcare plans and related services within its service areas must be sold, marketed, administered or underwritten under the BCBS names and marks; a requirement that at least two-thirds of a licensee's annual combined national net revenue, as defined by the BCBSA, attributable to healthcare plans and related services must be sold, marketed, administered or underwritten under the BCBS names and marks; a requirement that neither a plan nor any of its licensed affiliates may permit an entity other than a plan or a licensed affiliate to obtain control of the plan or the licensed

affiliate or to acquire a substantial portion of its assets related to licensable services; a requirement that we divide our Board of Directors into three classes serving staggered three-year terms; a requirement that we guarantee certain contractual and financial obligations of our licensed affiliates; and a requirement that we indemnify the BCBSA against any claims asserted against it resulting from the contractual and financial obligations of any subsidiary that serves as a fiscal intermediary providing administrative services for Medicare Parts A and B. Failure to comply with the foregoing requirements could result in a termination of the license agreements.

The license agreements may be modified by the BCBSA. To the extent that such amendments to the license agreements are adopted in the future, they could have a material adverse effect on our future expansion plans or results of operations. Further, BCBS licensees have certain requirements to perform administrative services for members of other BCBS licensees. As of December 31, 2018, we provided services to approximately 30 million Blue Cross and/or Blue Shield enrollees. If we or another BCBS licensee are not in compliance with all legal requirements or are unable to perform administrative services as required, this could have an adverse effect on our members and our ability to maintain our licenses, which could have a material adverse effect on our business, cash flows, financial condition and results of operations.

Upon the occurrence of an event causing termination of the license agreements, we would no longer have the right to use the BCBS names and marks or to sell BCBS health insurance products and services in one or more of our service areas. Furthermore, the BCBSA would be free to issue a license to use the BCBS names and marks in these service areas to another entity. Our existing BCBS members would be provided with instructions for obtaining alternative products and services licensed by the BCBSA. Events that could cause the termination of a license agreement with the BCBSA include, without limitation, failure to comply with minimum capital requirements imposed by the BCBSA, failure to comply with governance requirements such as maintaining a classified board structure, a change of control or violation of the BCBSA ownership limitations on our capital stock, impending financial insolvency and the appointment of a trustee or receiver or the commencement of any action against a licensee seeking its dissolution. We believe that the BCBS names and marks are valuable identifiers of our products and services in the marketplace.

Upon termination of a license agreement, the BCBSA would have the right to impose a “Re-establishment Fee” upon us, which would be used in part to fund the establishment of a replacement Blue Cross and/or Blue Shield licensee in the vacated service area. The fee is set at $98.33 per licensed enrollee. If the Re-establishment Fee was applied to our total Blue Cross and/or Blue Shield enrollees of approximately 30 million as of December 31, 2018, we would be assessed approximately $3 billion by the BCBSA. As a result, termination of the license agreements would have a material adverse effect on our business, cash flows, financial condition and results of operations.

Large-scale medical emergencies may have a material adverse effect on our business, cash flows, financial condition and results of operations.

Large-scale medical emergencies can take many forms and can cause widespread illness and death. For example, federal and state law enforcement officials have issued warnings about potential terrorist activity involving biological and other weapons. In addition, natural disasters such as hurricanes and the potential for a widespread pandemic of influenza coupled with the lack of availability of appropriate preventative medicines can have a significant impact on the health of the population of widespread areas. If the United States were to experience widespread bioterrorism or other attacks, large-scale natural disasters in our concentrated coverage areas or a large-scale pandemic or epidemic, our covered medical expenses could rise and we could experience a material adverse effect on our business, cash flows, financial condition and results of operations or, in the event of extreme circumstances, our viability could be threatened.

We have built a significant portion of our current business through mergers and acquisitions, joint ventures and strategic alliances and we expect to pursue such opportunities in the future.

The following are some of the risks associated with mergers, acquisitions, joint ventures and strategic alliances, referred to collectively as business combinations, that could have a material adverse effect on our business, cash flows, financial condition and results of operations:

- some of the business combinations may not achieve anticipated revenues, earnings or cash flow, business opportunities, synergies, growth prospects and other anticipated benefits;

- the goodwill or other intangible assets established as a result of our business combinations may be incorrectly valued or become non-recoverable;
- we may assume liabilities that were not disclosed to us or which were underestimated;
- we may experience difficulties in integrating business combinations, be unable to integrate business combinations successfully or as quickly as expected, and be unable to realize anticipated economic, operational and other benefits in a timely manner, which could result in substantial costs and delays or other operational, technical or financial problems;
- business combinations, and proposed business combinations that are not completed, could disrupt our ongoing business, lead to the incurrence of significant fees, distract management, result in the loss of key employees, divert resources, result in tax costs or inefficiencies and make it difficult to maintain our current business standards, controls, information technology systems, policies and procedures;
- we may finance future business combinations by issuing common stock for some or all of the purchase price, which could dilute the ownership interests of our shareholders;
- we may also incur additional debt related to future business combinations;
- we would be competing with other firms, some of which may have greater financial and other resources, to acquire attractive companies; and
- future business combinations may make it difficult to comply with the requirements of the BCBSA and lead to an increased risk that our BCBSA license agreements may be terminated.

The value of our intangible assets may become impaired.

Due largely to our past mergers, acquisitions and divestitures, goodwill and other intangible assets represent a substantial portion of our assets. If we make additional acquisitions, it is likely that we will record additional intangible assets on our consolidated balance sheets. The value we place on intangible assets may be adversely impacted if business combinations fail to perform in a manner consistent with our assumptions.

In accordance with applicable accounting standards, we periodically evaluate our goodwill and other intangible assets to determine whether all or a portion of their carrying values may no longer be recoverable, in which case a charge to income may be necessary. This impairment testing requires us to make assumptions and judgments regarding the estimated fair value of our reporting units, including goodwill and other intangible assets. In addition, certain other intangible assets with indefinite lives, such as trademarks, are also tested separately. Estimated fair values developed based on our assumptions and judgments might be significantly different if other reasonable assumptions and estimates were to be used. If estimated fair values are less than the carrying values of goodwill and other intangible assets with indefinite lives in future impairment tests, or if significant impairment indicators are noted relative to other intangible assets subject to amortization, we may be required to record impairment losses against future income.

Any future evaluations requiring an impairment of our goodwill and other intangible assets could materially affect our results of operations and shareholders' equity in the period in which the impairment occurs. A material decrease in shareholders' equity could, in turn, negatively impact our debt ratings or potentially impact our compliance with existing debt covenants.

In addition, the estimated value of our reporting units may be impacted as a result of business decisions we make associated with any future changes to laws and regulations. Such decisions, which could unfavorably affect our ability to support the carrying value of certain goodwill and other intangible assets, could result in impairment charges in future periods.

Adverse securities and credit market conditions may significantly affect our ability to meet liquidity needs.

During periods of increased volatility, adverse securities and credit markets may exert downward pressure on the availability of liquidity and credit capacity for certain issuers. We need liquidity to pay our operating expenses, make payments on our indebtedness and pay capital expenditures. The principal sources of our cash receipts are premiums,

administrative fees, investment income, other revenue, proceeds from the sale or maturity of our investment securities, proceeds from borrowings and proceeds from the issuance of common stock under our employee stock plans.

Our access to additional financing will depend on a variety of factors such as market conditions, the general availability of credit, the volume of trading activities, the availability of credit to our industry, our credit ratings and credit capacity, as well as the possibility that customers or lenders could develop a negative perception of our long- or short-term financial prospects. Similarly, our access to funds may be impaired if regulatory authorities or rating agencies take negative actions against us. If one or a combination of these factors were to occur, our internal sources of liquidity may prove to be insufficient, and in such case, we may not be able to successfully obtain additional financing on favorable terms, or at all.

The value of our investments is influenced by varying economic and market conditions, and a decrease in value may result in a loss charged to income.

The market values of our investments vary from time to time depending on economic and market conditions. For various reasons, we may sell certain of our investments at prices that are less than the carrying value of the investments. During periods in which interest rates are relatively low, as in recent years, our investment income could be adversely impacted. In addition, in periods of declining interest rates, bond calls and mortgage loan prepayments generally increase, resulting in the reinvestment of these funds at the then lower market rates. In periods of rising interest rates, the market values of our fixed maturity securities will generally decrease, which could result in material losses on investments in future periods. In addition, defaults by issuers, primarily from investments in corporate and municipal bonds, who fail to pay or perform their obligations, could reduce net investment income, which would adversely affect our profitability. We cannot assure you that our investment portfolios will produce positive returns or maintain their present values.

In accordance with FASB guidance for investments, we classify fixed maturity securities in our investment portfolio as “available-for-sale” or “trading” and report those securities at fair value. Current and long-term available-for-sale investment securities represented a significant percentage of our total consolidated assets at December 31, 2018.

Changes in the economic environment, including periods of increased volatility in the securities markets, can increase the difficulty of assessing investment impairment and the same influences tend to increase the risk of potential impairment of these assets. Over time, the economic and market environment may provide additional insight into the value of our investment securities, which could change our judgment regarding the fair value of certain securities and/or impairment. Given the sometimes rapidly changing market conditions and the significant judgments involved, there is continuing risk that future declines in fair value may occur and material other-than-temporary impairments may be charged to income in future periods, resulting in realized losses.

Changes in U.S. tax laws and regulations could have a material adverse effect on our business, cash flow, financial condition and results of operations. In addition, we may not be able to realize the value of our deferred tax assets.

Changes in tax laws and regulations, including with respect to corporate tax rates and the deductibility of expenses, or changes in the interpretation of tax laws and regulations by federal and/or state authorities, could have a material impact on the future value of our deferred tax assets and deferred tax liabilities, could result in significant one-time charges in the current or future taxable years and could increase our future U.S. tax expense. These changes could have a material adverse effect on our business, cash flow, financial condition and results of operations.

In accordance with applicable accounting standards, we separately recognize deferred tax assets and deferred tax liabilities. Such deferred tax assets and deferred tax liabilities represent the tax effect of temporary differences between financial reporting and tax reporting measured at tax rates enacted at the time the deferred tax asset or liability is recorded. At each financial reporting date, we evaluate our deferred tax assets to determine the likely realization of the benefit of the temporary differences. Our evaluation includes a review of the types of temporary differences that created the deferred tax asset; the amount of taxes paid on both capital gains and ordinary income in prior periods and available for a carry-back claim; the forecasted future taxable income, and therefore, the likely future deduction of the deferred tax item; and any other significant issues that might impact the realization of the deferred tax asset. If it is more likely than not that all or a portion of the deferred tax asset may not be realized, we establish a valuation allowance. Significant judgment is required in determining an appropriate valuation allowance.

Any future increase in our valuation allowance would result in additional income tax expense and a decrease in shareholders' equity, which could materially affect our financial position and results of operations in the period in which the increase occurs. A material decrease in shareholders' equity could, in turn, negatively impact our debt ratings or potentially impact our compliance with existing debt covenants.

We face intense competition to attract and retain employees. Further, managing key executive transition, succession and retention is critical to our success.

Our success depends on our ability to attract and retain qualified employees to meet current and future needs, and to integrate and engage employees who have joined us through acquisitions. We face intense competition for qualified employees, and there can be no assurance that we will be able to attract and retain such employees or that such competition among potential employers will not result in increasing salaries. An inability to retain existing employees or attract additional employees could have a material adverse effect on our business, cash flows, financial condition and results of operations.

We would be adversely affected if we fail to adequately plan for the succession of our President and Chief Executive Officer and other senior management and retention of key executives. While we have succession plans in place for members of our senior management, and employment arrangements with certain key executives, these plans and arrangements do not guarantee that the services of our senior executives will continue to be available to us or that we will be able to attract, transition and retain suitable successors.

Indiana law, other applicable laws, our articles of incorporation and bylaws, and provisions of our BCBSA license agreements may prevent or discourage takeovers and business combinations that our shareholders might consider to be in their best interest.

Indiana law and our articles of incorporation and bylaws may delay, defer, prevent or render more difficult a takeover attempt that our shareholders might consider to be in their best interests. For instance, they may prevent our shareholders from receiving the benefit from any premium to the market price of our common stock offered by a bidder in a takeover context. Even in the absence of a takeover attempt, the existence of these provisions may adversely affect the prevailing market price of our common stock if they are viewed as discouraging takeover attempts in the future.

We are regulated as an insurance holding company and subject to the insurance holding company acts of the states in which our insurance company subsidiaries are domiciled, as well as similar provisions included in the health statutes and regulations of certain states where these subsidiaries are regulated as managed care companies or HMOs. The insurance holding company acts and regulations and these similar provisions restrict the ability of any person to obtain control of an insurance company or HMO without prior regulatory approval. Under those statutes and regulations, without such approval or an exemption, no person may acquire any voting security of a domestic insurance company or HMO, or an insurance holding company which controls an insurance company or HMO, or merge with such a holding company, if as a result of such transaction such person would "control" the insurance holding company, insurance company or HMO. "Control" is generally defined as the direct or indirect power to direct or cause the direction of the management and policies of a person and is presumed to exist if a person directly or indirectly owns or controls 10% or more of the voting securities of another person. Further, the Indiana Business Corporation Law contains business combination provisions that, in general, prohibit for five years any business combination with a beneficial owner of 10% or more of our common stock unless the holder's acquisition of the stock was approved in advance by our Board of Directors.

Our articles of incorporation restrict the beneficial ownership of our capital stock in excess of specific ownership limits. The ownership limits restrict beneficial ownership of our voting capital stock to less than 10% for institutional investors and less than 5% for non-institutional investors, both as defined in our articles of incorporation. Additionally, no person may beneficially own shares of our common stock representing a 20% or more ownership interest in us. These restrictions are intended to ensure our compliance with the terms of our licenses with the BCBSA. Our articles of incorporation prohibit ownership of our capital stock beyond these ownership limits without prior approval of a majority of our continuing directors (as defined in our articles of incorporation). In addition, as discussed above in the risk factor describing our license agreements with the BCBSA, such license agreements are subject to termination upon a change of control and a re-establishment fee would be imposed upon termination of the license agreements.

Certain other provisions included in our articles of incorporation and bylaws may also have anti-takeover effects and may delay, defer or prevent a takeover attempt that our shareholders might consider to be in their best interests. In particular, our articles of incorporation and bylaws: divide our Board of Directors into three classes serving staggered three-year terms (which is required by our license agreement with the BCBSA); permit our Board of Directors to determine the terms of and issue one or more series of preferred stock without further action by shareholders; restrict the maximum number of directors; limit the ability of shareholders to remove directors; impose restrictions on shareholders' ability to fill vacancies on our Board of Directors; impose advance notice requirements for shareholder proposals and nominations of directors to be considered at meetings of shareholders; and prohibit shareholders from amending certain provisions of our bylaws.

We also face other risks that could adversely affect our business, financial condition or results of operations, which include:

- any requirement to restate financial results in the event of inappropriate application of accounting principles;
- a significant failure of our internal control over financial reporting;
- failure of our prevention and control systems related to employee compliance with internal policies, including data security;
- provider fraud that is not prevented or detected and impacts our medical costs or those of self-insured customers;
- failure to protect our proprietary information; and
- failure of our corporate governance policies or procedures.

ITEM 1B. UNRESOLVED SEC STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

We lease our principal executive offices located at 220 Virginia Avenue, Indianapolis, Indiana. In addition to this location, we have operating facilities located in each state where we operate as licensees of the BCBSA, in each state where Amerigroup conducts business and in certain other states where our other subsidiaries operate. A majority of these locations are also leased properties. Our facilities support our various business segments. We believe that our properties are adequate and suitable for our business as presently conducted as well as for the foreseeable future.

ITEM 3. LEGAL PROCEEDINGS.

For information regarding our legal proceedings, see Note 13, "Commitments and Contingencies - *Litigation and Regulatory Proceedings,*" of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

Market Information

Our common stock, par value $0.01 per share, is listed on the NYSE under the symbol "ANTM."

Holders

As of February 7, 2019, there were 60,778 shareholders of record of our common stock.

Securities Authorized for Issuance under Equity Compensation Plans

The information required by this Item concerning securities authorized for issuance under our equity compensation plans is set forth in or incorporated by reference into Part III, Item 12 "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" in this Annual Report on Form 10-K.

Issuer Purchases of Equity Securities

The following table presents information related to our repurchases of common stock for the periods indicated:

Period	Total Number of Shares Purchased[1]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs[2]	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Programs
(In millions, except share and per share data)				
October 1, 2018 to October 31, 2018	618,636	$ 273.13	612,200	$ 5,819
November 1, 2018 to November 30, 2018	443,657	277.54	438,100	5,697
December 1, 2018 to December 31, 2018	772,820	264.85	770,300	5,493
	1,835,113		1,820,600	

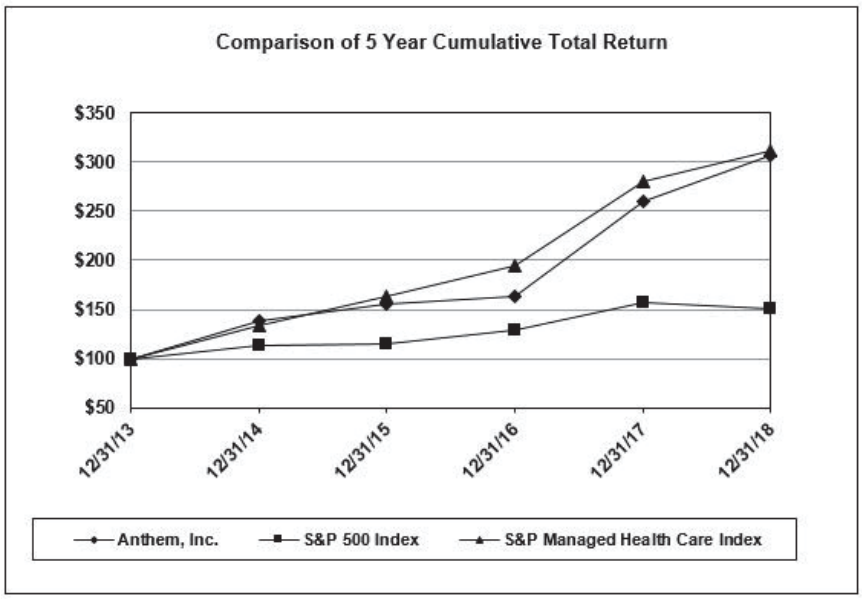
1 Total number of shares purchased includes 14,513 shares delivered to or withheld by us in connection with employee payroll tax withholding upon exercise or vesting of stock awards. Stock grants to employees and directors and stock issued for stock option plans and stock purchase plans in the consolidated statements of shareholders' equity are shown net of these shares purchased.

2 Represents the number of shares repurchased through the common stock repurchase program authorized by our Board of Directors, which the Board evaluates periodically. During the year ended December 31, 2018, we repurchased 6,783,692 shares at a cost of $1,685 under the program, including the cost of options to purchase shares. The Board of Directors has authorized our common stock repurchase program since 2003. The Board's most recent authorized increase to the program was $5,000 on December 7, 2017. Between January 1, 2019 and February 7, 2019, we repurchased 631,943 shares at a cost of $165, bringing our current availability to $5,328 at February 7, 2019. No duration has been placed on our common stock repurchase program and we reserve the right to discontinue the program at any time.

Performance Graph

The following Performance Graph and related information compares the cumulative total return to shareholders of our common stock for the period from December 31, 2013 through December 31, 2018, with the cumulative total return over such period of (i) the Standard & Poor's 500 Stock Index (the "S&P 500 Index") and (ii) the Standard & Poor's Managed Health Care Index (the "S&P Managed Health Care Index"). The graph assumes an investment of $100 on December 31, 2013 in each of our common stock, the S&P 500 Index and the S&P Managed Health Care Index (and the reinvestment of all dividends).

The comparisons shown in the graph below are based on historical data and we caution that the stock price performance shown in the graph below is not indicative of, and is not intended to forecast, the potential future performance of our common stock. Information used in the graph was obtained from S&P Global Market Intelligence, a source believed to be reliable, but we are not responsible for any errors or omissions in such information. The following graph and related information shall not be deemed "soliciting materials" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Exchange Act, except to the extent that we specifically incorporate it by reference into such filing.



	December 31,					
	2013	2014	2015	2016	2017	2018
Anthem, Inc.	$ 100	$ 138	$ 156	$ 164	$ 260	$ 307
S&P 500 Index	100	114	115	129	157	150
S&P Managed Health Care Index	100	134	163	195	280	311

Based upon an initial investment of $100 on December 31, 2013 with dividends reinvested.

ITEM 6. SELECTED FINANCIAL DATA.

The table below provides selected consolidated financial data of Anthem. The information has been derived from our consolidated financial statements for each of the years in the five-year period ended December 31, 2018. You should read this selected consolidated financial data in conjunction with the audited consolidated financial statements and notes as of and for the year ended December 31, 2018 included in Part II, Item 8 "Financial Statements and Supplementary Data," and Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in this Annual Report on Form 10-K.

	As of and for the Years Ended December 31				
	2018 [1]	2017 [1]	2016	2015 [1]	2014 [2]
(in millions, except where indicated and except per share data)					
Income Statement Data					
Total operating revenue[3]	$ 91,341	$ 89,061	$ 84,194	$ 78,405	$ 73,022
Total revenues	92,105	90,040	84,863	79,157	73,874
Income from continuing operations	3,750	3,843	2,470	2,560	2,560
Net income	3,750	3,843	2,470	2,560	2,570
Per Share Data					
Basic net income per share - continuing operations	$ 14.53	$ 14.70	$ 9.39	$ 9.73	$ 9.28
Diluted net income per share - continuing operations	14.19	14.35	9.21	9.38	8.96
Dividends per share	3.00	2.70	2.60	2.50	1.75
Other Data (unaudited)					
Benefit expense ratio[4]	84.2%	86.4%	84.8%	83.3%	83.1%
Selling, general and administrative expense ratio[5]	15.3%	14.2%	14.9%	16.0%	16.1%
Income from continuing operations before income tax expense as a percentage of total revenues	5.5%	4.4%	5.4%	5.9%	5.9%
Net income as a percentage of total revenues	4.1%	4.3%	2.9%	3.2%	3.5%
Medical membership (*in thousands*)	39,938	40,299	39,940	38,599	37,499
Balance Sheet Data					
Cash and investments[6]	$ 22,639	$ 25,179	$ 23,263	$ 21,065	$ 22,062
Total assets	71,571	70,540	65,083	61,718	61,676
Long-term debt, less current portion	17,217	17,382	14,359	15,325	14,020
Total liabilities	43,030	44,037	39,982	38,673	37,425
Total shareholders' equity	28,541	26,503	25,101	23,045	24,251

1 The net assets of and results of operations for America's 1st Choice, HealthSun and Simply Healthcare are included from their respective acquisition dates of February 15, 2018, December 21, 2017 and February 17, 2015, respectively.
2 The operating results of 1-800 CONTACTS, Inc. are reported as discontinued operations at December 31, 2014 as a result of the divestiture completed on January 31, 2014. Included in net income for the year ended December 31, 2014 is income from discontinued operations, net of tax, of $10.
3 Operating revenue is obtained by adding premiums and administrative fees and other revenue.
4 The benefit expense ratio represents benefit expenses as a percentage of premium revenue.
5 The selling, general and administrative expense ratio represents selling, general and administrative expenses as a percentage of total operating revenue.
6 Cash and investments is obtained by adding cash and cash equivalents, current and long-term fixed maturity securities and current and long-term equity securities.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

(In Millions, Except Per Share Data or As Otherwise Stated Herein)

This Management's Discussion and Analysis of Financial Condition and Results of Operations, or MD&A, should be read in conjunction with our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K. References to the terms "we," "our," "us," "Anthem" or the "Company" used throughout this MD&A refer to Anthem, Inc., an Indiana corporation, and, unless the context otherwise requires, its direct and indirect subsidiaries. References to the "states" include the District of Columbia, unless the context otherwise requires.

Overview

We are one of the largest health benefits companies in the United States in terms of medical membership, serving approximately 40 medical members through our affiliated health plans as of December 31, 2018. We are an independent licensee of the Blue Cross and Blue Shield Association, or BCBSA, an association of independent health benefit plans. We serve our members as the Blue Cross licensee for California and as the Blue Cross and Blue Shield, or BCBS, licensee for Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri (excluding 30 counties in the Kansas City area), Nevada, New Hampshire, New York (in the New York City metropolitan area and upstate New York), Ohio, Virginia (excluding the Northern Virginia suburbs of Washington, D.C.) and Wisconsin. In a majority of these service areas, we do business as Anthem Blue Cross, Anthem Blue Cross and Blue Shield, Blue Cross and Blue Shield of Georgia, and Empire Blue Cross Blue Shield or Empire Blue Cross. We also conduct business through arrangements with other BCBS licensees in Louisiana, South Carolina and western New York. Through our subsidiaries, we also serve customers in over 25 states across the country as America's 1st Choice, Amerigroup, Aspire Health, CareMore, Freedom Health, HealthLink, HealthSun, Optimum HealthCare, Simply Healthcare, and/or UniCare. We are licensed to conduct insurance operations in all 50 states and the District of Columbia through our subsidiaries.

We manage our operations through three reportable segments: Commercial & Specialty Business, Government Business and Other. During the fourth quarter of 2018, we reclassified certain ancillary businesses to align how our segments are currently being managed. Prior year amounts have been reclassified for comparability.

Our operating revenue consists of premiums and administrative fees and other revenue. Premium revenue comes from fully-insured contracts where we indemnify our policyholders against costs for covered health and life benefits. Administrative fees come from contracts where our customers are self-insured, or where the fee is based on either processing of transactions or a percent of network discount savings realized. Additionally, we earn administrative fee revenues from our Medicare processing business and from other health-related businesses including disease management programs. Other revenue includes miscellaneous income other than premium revenue and administrative fees.

Our benefit expense primarily includes costs of care for health services consumed by our fully-insured members, such as outpatient care, inpatient hospital care, professional services (primarily physician care) and pharmacy benefit costs. All four components are affected both by unit costs and utilization rates. Unit costs include the cost of outpatient medical procedures per visit, inpatient hospital care per admission, physician fees per office visit and prescription drug prices. Utilization rates represent the volume of consumption of health services and typically vary with the age and health status of our members and their social and lifestyle choices, along with clinical protocols and medical practice patterns in each of our markets. A portion of benefit expense recognized in each reporting period consists of actuarial estimates of claims incurred but not yet paid by us. Any changes in these estimates are recorded in the period the need for such an adjustment arises. While we offer a diversified mix of managed care products and services through our managed care plans, our aggregate cost of care can fluctuate based on a change in the overall mix of these products and services. Our managed care plans include: Preferred Provider Organizations, or PPOs; Health Maintenance Organizations, or HMOs; Point-of-Service plans, or POS plans; traditional indemnity plans and other hybrid plans, including Consumer-Driven Health Plans, or CDHPs; and hospital only and limited benefit products.

We classify certain claims-related costs as benefit expense to reflect costs incurred for our members' traditional medical care, as well as those expenses which improve our members' health and medical outcomes. These claims-related costs may be comprised of expenses incurred for: (i) medical management, including case and prospective utilization management; (ii) health and wellness, including disease management services for such conditions as diabetes, high-risk pregnancies,

congestive heart failure and asthma management and wellness initiatives like weight-loss programs and smoking cessation treatments; and (iii) clinical health policy such as identification and use of best clinical practices to avoid harm, identifying clinical errors and safety concerns, and identifying potential adverse drug interactions. These types of claims-related costs are designed to ultimately lower our members' cost of care.

Our selling, general and administrative expenses consist of fixed and variable costs. Examples of fixed costs are depreciation, amortization and certain facilities expenses. Certain variable costs, such as premium taxes, vary directly with premium volume. Commission expense generally varies with premium or membership volume. Other variable costs, such as salaries and benefits, do not vary directly with changes in premium but are more aligned with changes in membership. The acquisition or loss of a significant block of business would likely impact staffing levels and thus, associated compensation expense. Other variable costs include professional and consulting expenses and advertising. Other factors can impact our administrative cost structure, including systems efficiencies, inflation and changes in productivity.

Our results of operations depend in large part on our ability to accurately predict and effectively manage healthcare costs through effective contracting with providers of care to our members and our medical management and health and wellness programs. Several economic factors related to healthcare costs, such as regulatory mandates of coverage as well as direct-to-consumer advertising by providers and pharmaceutical companies, have a direct impact on the volume of care consumed by our members. The potential effect of escalating healthcare costs, any changes in our ability to negotiate competitive rates with our providers and any regulatory or market-driven restrictions on our ability to obtain adequate premium rates to offset overall inflation in healthcare costs, including increases in unit costs and utilization resulting from the aging of the population and other demographics, as well as advances in medical technology, may impose further risks to our ability to profitably underwrite our business, and may have a material adverse impact on our results of operations.

For additional information about our business and reportable segments, see Part I, Item 1, "Business" and in Note 19, "Segment Information" of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Business Trends

The Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, as amended, or collectively, the ACA, has changed and may continue to make broad-based changes to the U.S. healthcare system, which we expect will continue to impact our business model and strategy. Also, the legal challenges regarding the ACA, including the ultimate outcome of the December 2018 decision of the U.S. District Court for the Northern District of Texas, Fort Worth Division invalidating the ACA (the "2018 Texas District Court ACA Decision"), which judgment has been stayed pending appeal, could significantly disrupt our business. During 2018, we strategically reduced our participation in the Individual ACA-compliant market. Our strategy has been, and will continue to be, to only participate in rating regions where we have an appropriate level of confidence that these markets are on a path toward sustainability, including, but not limited to, factors such as expected financial performance, regulatory environment, and underlying market characteristics. We currently offer Individual ACA-compliant products in 73 of the 143 rating regions in which we operate.

In October 2017, we established a new pharmacy benefits manager, or PBM, called IngenioRx, and entered into a five-year agreement with CaremarkPCS Health, L.L.C., or CVS Health, which is a subsidiary of CVS Health Corporation, to begin offering PBM solutions upon the conclusion of our current PBM Agreement with Express Scripts Inc., or Express Scripts. The twelve-month transition period to migrate the services from Express Scripts begins March 2, 2019, at which time CVS Health can begin providing certain PBM services to IngenioRx. We expect IngenioRx to provide our members with more cost-effective solutions and improve our ability to integrate pharmacy benefits within our already strong medical and specialty platform.

Pricing Trends: We strive to price our healthcare benefit products consistent with anticipated underlying medical trends. We frequently make adjustments to respond to legislative and regulatory changes as well as pricing and other actions taken by existing competitors and new market entrants. Product pricing in our Commercial & Specialty Business segment, including our Individual and Small Group lines of business, remains competitive. The ACA imposed an annual Health Insurance Provider Fee, or HIP Fee, on health insurers that write certain types of health insurance on U.S. risks. We price our affected products to cover the impact of the HIP Fee. The HIP Fee was suspended for 2019 and is scheduled to resume for 2020.

Revenues from the Medicare and Medicaid programs are dependent, in whole or in part, upon annual funding from the federal government and/or applicable state governments.

Medical Cost Trends: Our medical cost trends are primarily driven by increases in the utilization of services across all provider types and the unit cost increases of these services. We work to mitigate these trends through various medical management programs such as utilization management, condition management, program integrity and specialty pharmacy management, as well as benefit design changes. There are many drivers of medical cost trends that can cause variance from our estimates, such as changes in the level and mix of services utilized, regulatory changes, aging of the population, health status and other demographic characteristics of our members, epidemics, advances in medical technology, new high cost prescription drugs, and healthcare provider or member fraud. Our underlying Local Group medical cost trends reflect the "allowed amount," or contractual rate, paid to providers. We estimate that our aggregate cost of care trend was slightly below the midpoint of our 5.5% to 6.5% range for the full year of 2018. We anticipate the Local Group medical cost trend will be in the range of 5.5% to 6.5% in 2019.

For additional discussion regarding business trends, see Part I, Item 1 "Business" of this Annual Report on Form 10-K.

Regulatory Trends and Uncertainties

The ACA presented us with new growth opportunities, but also introduced new risks, regulatory challenges and uncertainties, and required changes in the way products are designed, underwritten, priced, distributed and administered. Changes to our business environment are likely to continue for the next several years as elected officials at the national and state levels continue to propose and enact significant modifications to existing laws and regulations, including the reduction of the individual mandate penalty to zero effective January 1, 2019, elimination of funding for cost-sharing subsidies made available for qualified individuals, and changes to taxes and fees. In addition, the legal challenges regarding the ACA, including the ultimate outcome of the 2018 Texas District Court ACA Decision, continue to contribute to this uncertainty. We will continue to evaluate the impact of the ACA as additional guidance is made available and any further developments or judicial rulings occur.

The annual HIP Fee is allocated to health insurers based on the ratio of the amount of an insurer's net premium revenues written during the preceding calendar year to the amount of health insurance premium for all U.S. health risk for those certain lines of business written during the preceding calendar year. We record our estimated liability for the HIP Fee in full at the beginning of the year with a corresponding deferred asset that is amortized on a straight-line basis to selling, general and administrative expense. The final calculation and payment of the annual HIP Fee is due by September 30th of each fee year. The HIP Fee is non-deductible for federal income tax purposes. We price our affected products to cover the increased selling, general and administrative and income tax expenses associated with the HIP Fee. The total amount due from allocations to health insurers was $14,300 for 2018, and we recognized $1,544 as selling, general and administrative expense related to the HIP Fee. There was no corresponding expense for 2017 due to the suspension of the HIP Fee for 2017. The HIP Fee is suspended for 2019 and scheduled to resume for 2020.

As a result of the ACA, the U.S. Department of Health and Human Services, or HHS, issued Medical Loss Ratio, or MLR, regulations that require us to meet minimum MLR thresholds of 85% for Large Group and 80% for Small Group and Individual lines of business. Plans that do not meet the minimum thresholds have to pay a MLR rebate. For purposes of determining MLR rebates, HHS has defined the types of costs that should be included in the MLR rebate calculation. However, certain components of the MLR calculation as defined by HHS cannot be classified consistently under U.S. generally accepted accounting principles, or GAAP. While considered benefit expense or a reduction of premium revenue by HHS, certain of these costs are classified as other types of expense, such as selling, general and administrative expense or income tax expense, in our GAAP basis financial statements. Accordingly, the benefit expense ratio determined using our consolidated GAAP operating results is not comparable to the MLR calculated under HHS regulations.

The ACA also imposed a separate minimum MLR threshold of 85% for Medicare Advantage and Medicare Part D prescription drug plans, or Medicare Part D. Medicare Advantage or Medicare Part D plans that do not meet this threshold have to pay an MLR rebate. If a plan's MLR is below 85% for three consecutive years beginning with 2014, enrollment is restricted. A Medicare Advantage or Medicare Part D plan contract will be terminated if the plan's MLR is below 85% for five consecutive years.

For additional discussion regarding regulatory trends and uncertainties, and risk factors that could cause actual results to differ materially from those contained in forward-looking statements made in this Annual Report on Form 10-K, see Part I, Item 1 “Business - Regulation” and Part I, Item 1A “Risk Factors.”

Other Significant Items or Transactions

In October 2017, we established IngenioRx and entered into a five-year agreement with CVS Health to begin offering PBM solutions (the “CVS PBM Agreement”), which coincides with the conclusion of our current PBM agreement with Express Scripts (the “ESI PBM Agreement”). In January 2019, we exercised our contractual right to terminate the ESI PBM Agreement earlier than the original expiration date of December 31, 2019 due to the recent acquisition of Express Scripts by Cigna Corporation, or Cigna. As a result of exercising our early termination right, the ESI PBM Agreement will now terminate on March 1, 2019, and the twelve-month transition period to migrate the services begins on March 2, 2019. At that time CVS Health is able to begin providing certain PBM services to IngenioRx pursuant to the CVS PBM Agreement. Notwithstanding our termination of the ESI PBM Agreement, the litigation between us and Express Scripts regarding the ESI PBM Agreement continues. In March 2016, we filed a lawsuit against Express Scripts seeking to recover damages for pharmacy pricing that is higher than competitive benchmark pricing and damages related to operational breaches. Express Scripts filed an answer to the lawsuit disputing our contractual claims and alleging various defenses and counterclaims. For additional information regarding this lawsuit, see Note 13, “Commitments and Contingencies - *Litigation and Regulatory Proceedings - Express Scripts, Inc. Pharmacy Benefit Management Litigation,*” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

On February 15, 2018, we completed our acquisition of Freedom Health, Inc., Optimum HealthCare, Inc., America’s 1st Choice of South Carolina, Inc. and related entities, or collectively, America’s 1st Choice, a Medicare Advantage organization that offers HMO products, including Chronic Special Needs Plans and Dual-Eligible Special Needs Plans under its Freedom Health and Optimum HealthCare brands in Florida and its America’s 1st Choice of South Carolina brand in South Carolina. At the time of acquisition, through its Medicare Advantage Plans, America’s 1st Choice served approximately one hundred and thirty-five thousand members in 25 Florida and 3 South Carolina counties. This acquisition aligned with our plans for continued growth in the Medicare Advantage and Special Needs populations.

In December 2017, we acquired HealthSun Health Plans, Inc., or HealthSun, which at the time of acquisition served approximately forty thousand members in the state of Florida through its Medicare Advantage plans, and which received a five-star rating from the Centers for Medicare & Medicaid Services. This acquisition aligned with our plans for continued growth in the Medicare Advantage and dual-eligible populations.

For additional information related to the acquisitions of America’s 1st Choice and HealthSun, see Note 3, “Business Acquisitions,” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

In May 2017, we announced that we were terminating the Agreement and Plan of Merger, or Cigna Merger Agreement, between us and Cigna. Both we and Cigna have commenced litigation against the other seeking various actions and damages, including Cigna’s damage claim for a $1,850 termination fee pursuant to the terms of the Cigna Merger Agreement. For additional information about the ongoing litigation related to the Cigna Merger Agreement, see Note 13, “Commitments and Contingencies - *Litigation and Regulatory Proceedings - Cigna Corporation Merger Litigation,*” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Other significant transactions in recent years that have impacted or will impact our capital structure or that have influenced or will influence how we conduct our business operations include our Board of Directors’ declarations of dividends on our common stock (2013 through January 2019), repurchases of our common stock (2019 and prior), and debt repurchases and new debt issuances (2018 and prior). For additional information regarding these transactions, see Note 12, “Debt” and Note 14, “Capital Stock,” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Operating Performance

Operating revenue for the year ended December 31, 2018 was $91,341, an increase of $2,280, or 2.6%, from the year ended December 31, 2017. The increase in operating revenue was primarily a result of higher premium revenue in our

Government Business segment, and, to a lesser extent, increased administrative fees and other revenue in our Commercial & Specialty Business segment. These increases were partially offset by a decrease in premium revenue in our Commercial & Specialty Business segment.

Net income for the year ended December 31, 2018 was $3,750, a decrease of $93, or 2.4%, from the year ended December 31, 2017. The decrease in net income was primarily a result of higher income tax expense, net realized losses on investments and increased amortization of other intangible assets. The decrease in net income was partially offset by higher operating results in both our Commercial & Specialty Business and Government Business segments, lower realized losses on extinguishment of debt and an increase in net earnings from investment activities.

Our fully-diluted earnings per share, or EPS, for the year ended December 31, 2018 was $14.19, a decrease of $0.16, or 1.1%, from the year ended December 31, 2017. Our diluted shares for the year ended December 31, 2018 were 264.2, a decrease of 3.6, or 1.3% compared to the year ended December 31, 2017. The decrease in EPS resulted from the decrease in net income, partially offset by the lower number of shares outstanding in 2018.

Operating cash flow for the year ended December 31, 2018 was $3,827, or 1.0 times net income. Operating cash flow for the year ended December 31, 2017 was $4,185, or 1.1 times net income. The decrease in operating cash flow from 2017 of $358 was primarily due to increased spend to support growth initiatives and the impact of membership declines due to our reduced participation in ACA-compliant Individual marketplaces, and to a lesser extent, membership declines in our fully-insured Local Group business. The decrease in cash provided by operating activities was partially offset by cash receipts related to rate increases across our businesses designed to cover overall cost trends. The decrease was further offset by lower income taxes paid in 2018 as a result of the tax bill, H.R.1, *An Act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018*, or the Tax Cuts and Jobs Act, enacted by the federal government on December 22, 2017. The Tax Cuts and Jobs Act reduced the U.S. federal corporate income tax rate from 35% to 21% effective January 1, 2018.

Our results of operations discussed throughout this MD&A are determined in accordance with GAAP. We also calculate operating gain, a non-GAAP measure, to further aid investors in understanding and analyzing our core operating results. We define operating revenue as premium income and administrative fees and other revenues. Operating gain is calculated as total operating revenue less benefit expense and selling, general and administrative expense. We use these measures as a basis for evaluating segment performance, allocating resources, forecasting future operating periods and setting incentive compensation targets. This information is not intended to be considered in isolation or as a substitute for income before income tax expense, net income or EPS prepared in accordance with GAAP, and may not be comparable to similarly titled measures reported by other companies. For additional details on operating gain, see our “Reportable Segments Results of Operations” discussion included in this MD&A. For a reconciliation of reportable segment operating revenue to the amounts of total revenue included in the consolidated statements of income and a reconciliation of reportable segment operating gain to income before income tax expense, see Note 19, “Segment Information,” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

We intend to expand through a combination of organic growth, strategic acquisitions and efficient use of capital in both existing and new markets. Our growth strategy is designed to enable us to take advantage of additional economies of scale, as well as providing us access to new and evolving technologies and products. In addition, we believe geographic and product diversity reduces our exposure to local or regional regulatory, economic and competitive pressures and provides us with increased opportunities for growth. In 2018, we reduced our participation in the Individual ACA-compliant market. In all other markets, we have maintained our position or achieved growth as a result of strategic mergers and acquisitions, as well as organic growth resulting from delivering excellent service, offering competitively priced products, providing access to high-quality provider networks and effectively capitalizing on the brand strength of the Blue Cross and Blue Shield names and marks.

Membership

Our medical membership includes seven different customer types: Local Group, Individual, National Accounts, BlueCard®, Medicare, Medicaid and FEP®. BCBS-branded business generally refers to members in our service areas licensed by the BCBSA. Non-BCBS-branded business refers to members in our non-BCBS-branded America's 1st Choice, Amerigroup, CareMore, HealthSun, and Simply Healthcare plans, as well as HealthLink and UniCare members. In addition to the above medical membership, we also serve customers who purchase one or more of our other products or services that are often ancillary to our health business.

- Local Group consists of those employer customers with less than 5% of eligible employees located outside of the headquarter state, as well as customers with more than 5% of eligible employees located outside of the headquarter state with up to 5,000 eligible employees. In addition, Local Group includes UniCare members. Local Group accounts are generally sold through brokers or consultants working with industry specialists from our in-house sales force and are offered both on and off the public exchanges. Local Group insurance premiums may be based on claims incurred by the group or sold on a self-insured basis. The customer's buying decision is typically based upon the size and breadth of our networks, customer service, the quality of our medical management services, the administrative cost included in our quoted price, our financial stability, our reputation and our ability to effectively service large complex accounts. Local Group accounted for 39.4%, 39.4% and 38.6% of our medical members at December 31, 2018, 2017 and 2016, respectively.
- Individual consists of individual customers under age 65 and their covered dependents. Individual policies are generally sold through independent agents and brokers, retail partnerships, our in-house sales force or via the exchanges. Individual business is sold on a fully-insured basis. We offer on-exchange products through public exchanges and off-exchange products. Federal premium subsidies are available only for certain public exchange Individual products. Unsubsidized Individual customers are generally more sensitive to product pricing and, to a lesser extent, the configuration of the network and the efficiency of administration. Customer turnover is generally higher with Individual as compared to Local Group. Individual business accounted for 1.6%, 3.9% and 4.2% of our medical members at December 31, 2018, 2017 and 2016, respectively.
- National Accounts generally consist of multi-state employer groups primarily headquartered in an Anthem service area with at least 5% of the eligible employees located outside of the headquarter state and with more than 5,000 eligible employees. Some exceptions are allowed based on broker and consultant relationships. Service area is defined as the geographic area in which we are licensed to sell BCBS products. National Accounts are generally sold through independent brokers or consultants retained by the customer working with our in-house sales force. We believe we have an advantage when competing for very large National Accounts due to the size and breadth of our networks and our ability to access the national provider networks of BCBS companies at their competitive local market rates. National Accounts represented 19.0%, 18.5% and 18.8% of our medical members at December 31, 2018, 2017 and 2016, respectively.
- BlueCard® host customers represent enrollees of Blue Cross and/or Blue Shield plans not owned by Anthem who receive healthcare services in our BCBSA licensed markets. BlueCard® membership consists of estimated host members using the national BlueCard® program. Host members are generally members who reside in or travel to a state in which an Anthem subsidiary is the Blue Cross and/or Blue Shield licensee and who are covered under an employer-sponsored health plan issued by a non-Anthem controlled BCBSA licensee (i.e., the "home plan"). We perform certain administrative functions for BlueCard® members, for which we receive administrative fees from the BlueCard® members' home plans. Other administrative functions, including maintenance of enrollment information and customer service, are performed by the home plan. Host members are computed using, among other things, the average number of BlueCard® claims received per month. BlueCard® host membership accounted for 14.6%, 14.2% and 14.5% of our medical members at December 31, 2018, 2017 and 2016, respectively.
- Medicare customers are Medicare-eligible individual members age 65 and over who have enrolled in Medicare Supplement plans; Medicare Advantage, including Special Needs Plans; Medicare Part D; and dual-eligible programs through Medicare-Medicaid Plans, or MMPs. Medicare Supplement plans typically pay the difference between healthcare costs incurred by a beneficiary and amounts paid by Medicare. Medicare Advantage plans provide Medicare beneficiaries with a managed care alternative to traditional Medicare and often include a Medicare Part D benefit. In addition, our Medicare Advantage Special Needs Plans provide tailored benefits to Medicare beneficiaries who have chronic diseases and also cover certain dual-eligible customers, who are low-income seniors

and persons under age 65 with disabilities. Medicare Advantage membership also includes Employer Group Medicare Advantage members who are related to National Accounts or retired members of Local Group accounts who have selected a Medicare Advantage product. Medicare Part D offers a prescription drug plan to Medicare and MMP beneficiaries. MMP, which was established as a result of the passage of the ACA, is a demonstration program focused on serving members who are dually eligible for Medicaid and Medicare. Medicare Supplement and Medicare Advantage products are marketed in the same manner, primarily through independent agents and brokers. Medicare business accounted for 4.6%, 3.9% and 3.6% of our medical members at December 31, 2018, 2017 and 2016, respectively.

- Medicaid membership represents eligible members who receive healthcare benefits through publicly funded healthcare programs, including Medicaid, ACA-related Medicaid expansion programs, Temporary Assistance for Needy Families, programs for seniors and people with disabilities, Children's Health Insurance Programs, and specialty programs such as those focused on long-term services and support, HIV/AIDS, foster care, behavioral health and/or substance abuse disorders, and intellectual disabilities or developmental disabilities, among others. Total Medicaid program business accounted for 16.8%, 16.1% and 16.4% of our medical members at December 31, 2018, 2017 and 2016, respectively.
- FEP® members consist of United States government employees and their dependents within our geographic markets through our participation in the national contract between the BCBSA and the U.S. Office of Personnel Management. FEP® business accounted for 3.9% of our medical members at each of December 31, 2018, 2017 and 2016.

In addition to reporting our medical membership by customer type, we report by funding arrangement according to the level of risk that we assume in the product contract. Our two principal funding arrangement categories are fully-insured and self-funded. Fully-insured products are products in which we indemnify our policyholders against costs for health benefits. Self-funded products are offered to customers, generally larger employers, who elect to retain most or all of the financial risk associated with their employees' healthcare costs. Some self-funded customers choose to purchase stop loss coverage to limit their retained risk.

During the fourth quarter of 2018 we made a number of changes to our membership reporting to better align our reported membership to the appropriate type, funding arrangement and segment, including movement of our Employer Group Medicare Advantage members from National Accounts to Medicare Advantage, reclassification of these Employer Group members from the Commercial & Specialty Business segment to our Government Business segment, and other marginal changes.

The following table presents our medical membership by customer type, funding arrangement and reportable segment as of December 31, 2018, 2017 and 2016. Also included below is other membership by product. The medical membership and other membership presented are unaudited and in certain instances include estimates of the number of members represented by each contract at the end of the period.

	December 31			2018 vs. 2017		2017 vs. 2016	
(In thousands)	2018	2017 [1]	2016 [1]	Change	% Change	Change	% Change
Medical Membership							
Customer Type							
Local Group	15,733	15,888	15,417	(155)	(1.0)%	471	3.1 %
Individual	655	1,588	1,664	(933)	(58.8)%	(76)	(4.6)%
National:							
National Accounts	7,588	7,463	7,510	125	1.7 %	(47)	(0.6)%
BlueCard®	5,838	5,733	5,774	105	1.8 %	(41)	(0.7)%
Total National	13,426	13,196	13,284	230	1.7 %	(88)	(0.7)%
Medicare:							
Medicare Advantage	1,006	746	629	260	34.9 %	117	18.6 %
Medicare Supplement	846	823	828	23	2.8 %	(5)	(0.6)%
Total Medicare	1,852	1,569	1,457	283	18.0 %	112	7.7 %
Medicaid	6,716	6,496	6,548	220	3.4 %	(52)	(0.8)%
Federal Employee Program®	1,556	1,562	1,570	(6)	(0.4)%	(8)	(0.5)%
Total Medical Membership by Customer Type	39,938	40,299	39,940	(361)	(0.9)%	359	0.9 %
Funding Arrangement							
Self-Funded	25,287	24,862	24,563	425	1.7 %	299	1.2 %
Fully-Insured	14,651	15,437	15,377	(786)	(5.1)%	60	0.4 %
Total Medical Membership by Funding Arrangement	39,938	40,299	39,940	(361)	(0.9)%	359	0.9 %
Reportable Segment							
Commercial & Specialty Business	29,814	30,672	30,365	(858)	(2.8)%	307	1.0 %
Government Business	10,124	9,627	9,575	497	5.2 %	52	0.5 %
Total Medical Membership by Reportable Segment	39,938	40,299	39,940	(361)	(0.9)%	359	0.9 %
Other Membership							
Life and Disability Members	4,795	4,700	4,732	95	2.0 %	(32)	(0.7)%
Dental Members	5,807	5,864	5,486	(57)	(1.0)%	378	6.9 %
Dental Administration Members	5,327	5,342	5,294	(15)	(0.3)%	48	0.9 %
Vision Members	6,946	6,867	6,388	79	1.2 %	479	7.5 %
Medicare Part D Standalone Members	309	318	350	(9)	(2.8)%	(32)	(9.1)%

1 Certain types of membership have been reclassified to conform to the current year presentation, as described above.

December 31, 2018 Compared to December 31, 2017

Medical Membership

Total medical membership decreased primarily due to decreases in our Individual, Local Group and FEP membership, partially offset by increases in our Medicare, Medicaid, National Accounts and BlueCard® membership. Our reduced participation in ACA-compliant marketplaces led to the decreases in our Individual and fully-insured memberships. This decrease in fully-insured membership was partially offset by an increase in Medicare membership as a result of our America's 1st Choice acquisition and higher sales during open enrollment. Self-funded medical membership increased due to

increases in our National Accounts and Large Group businesses and higher activity from BlueCard® membership. Local Group membership decreased as a result of competitive pressures in fully-insured membership, partially offset by new sales and growth in our existing self-funded business. National Accounts membership increased primarily due to new sales and growth from existing contracts exceeding lapses. BlueCard® membership increased primarily due to higher membership activity at other BCBSA plans whose members reside in or travel to our licensed areas. Medicare Advantage membership increased primarily due to membership acquired through the acquisition of America's 1st Choice and organic growth in existing markets. Medicaid membership increased primarily due to new business, partially offset by certain state market contractions and membership reverification processes.

Other Membership

Growth in our other membership can be impacted by changes in our medical membership, as our medical members often purchase our other products that are ancillary to our health business. We have experienced growth in our life and disability and vision memberships primarily due to higher sales in our Large Group business. Dental membership decreased primarily due to our reduced participation in ACA-compliant marketplaces, partially offset by higher sales in our Local Group and National Accounts businesses. Dental administration membership decreased primarily due to the loss of a large managed dental contract, partially offset by membership expansion under current contracts.

December 31, 2017 Compared to December 31, 2016

Medical Membership

Total medical membership increased primarily due to increases in our Local Group and Medicare membership, partially offset by decreases in our Individual, National Accounts, Medicaid, and BlueCard® membership. Self-funded medical membership increased primarily due to new sales and growth in our existing Large Group accounts, partially offset by lower activity from BlueCard® membership and the loss of a large multi-state employer group contract in our National Accounts. Fully-insured membership increased primarily due to higher sales during Medicare open enrollment, new sales in Large Group accounts and Medicare membership acquired through the acquisition of HealthSun. These increases in fully-insured membership were partially offset by attrition in both our non-ACA-compliant and ACA-compliant off-exchange Individual product offerings. Local Group membership increased primarily due to new sales and growth in our existing Large Group accounts. Individual membership decreased primarily due to attrition in both our non-ACA-compliant and ACA-compliant off-exchange product offerings, partially offset by growth in ACA-compliant on-exchange product offerings. National Accounts membership decreased primarily due to the loss of a large multi-state employer group, partially offset by new sales. BlueCard® membership decreased primarily due to lower membership activity at other BCBSA plans whose members reside in or travel to our licensed areas. Medicare membership increased primarily due to higher sales during open enrollment, membership acquired through the acquisition of HealthSun and growth in certain existing Medicare Advantage markets. Medicaid membership decreased primarily due to membership reverification processes and the impact of a new entrant in one of our existing markets, partially offset by new business expansions.

Other Membership

Life and disability membership decreased primarily due to higher lapses in our fully-insured Local Group business. Dental membership increased primarily due to new sales and increased penetration in our Local Group and National Accounts businesses. Dental administration membership increased primarily due to membership expansion under current contracts. Vision membership increased primarily due to new sales and increased penetration in our National Accounts, Local Group and Medicare product offerings. Medicare Part D standalone membership decreased primarily due to our product repositioning strategies in certain markets.

Consolidated Results of Operations

Our consolidated summarized results of operations for the years ended December 31, 2018, 2017 and 2016 are discussed in the following section.

	Years Ended December 31			Change			
				2018 vs. 2017		2017 vs. 2016	
	2018	2017	2016	$	%	$	%
Total operating revenue	$ 91,341	$ 89,061	$ 84,194	$ 2,280	2.6 %	$ 4,867	5.8 %
Net investment income	970	867	779	103	11.9 %	88	11.3 %
Net realized (losses) gains on financial instruments	(180)	145	5	(325)	(224.1)%	140	2,800.0 %
Other-than-temporary impairment losses recognized in income	(26)	(33)	(115)	7	21.2 %	82	71.3 %
Total revenues	92,105	90,040	84,863	2,065	2.3 %	5,177	6.1 %
Benefit expense	71,895	72,236	66,834	(341)	(0.5)%	5,402	8.1 %
Selling, general and administrative expense	14,020	12,650	12,559	1,370	10.8 %	91	0.7 %
Other expense[1]	1,122	1,190	915	(68)	(5.7)%	275	30.1 %
Total expenses	87,037	86,076	80,308	961	1.1 %	5,768	7.2 %
Income before income tax expense	5,068	3,964	4,555	1,104	27.9 %	(591)	(13.0)%
Income tax expense	1,318	121	2,085	1,197	989.3 %	(1,964)	(94.2)%
Net income	$ 3,750	$ 3,843	$ 2,470	$ (93)	(2.4)%	$ 1,373	55.6 %
Average diluted shares outstanding	264.2	267.8	268.1	(3.6)	(1.3)%	(0.3)	(0.1)%
Diluted net income per share	$ 14.19	$ 14.35	$ 9.21	$ (0.16)	(1.1)%	$ 5.14	55.8 %
Effective Tax Rate	26.0%	3.1%	45.8%		2,290bp[3]		(4,270)bp[3]
Benefit expense ratio[2]	84.2%	86.4%	84.8%		(220)bp[3]		160bp[3]
Selling, general and administrative expense ratio[4]	15.3%	14.2%	14.9%		110bp[3]		(70)bp[3]
Income before income tax expense as a percentage of total revenues	5.5%	4.4%	5.4%		110bp[3]		(100)bp[3]
Net income as a percentage of total revenues	4.1%	4.3%	2.9%		(20)bp[3]		140bp[3]

Certain of the following definitions are also applicable to all other results of operations tables in this discussion:

1 Includes interest expense, amortization of other intangible assets and loss on extinguishment of debt.

2 Benefit expense ratio represents benefit expense as a percentage of premium revenue. Premiums for the years ended December 31, 2018, 2017 and 2016 were $85,421, $83,648 and $78,860, respectively. Premiums are included in total operating revenue presented above.

3 bp = basis point; one hundred basis points = 1%.

4 Selling, general and administrative expense ratio represents selling, general and administrative expense as a percentage of total operating revenue.

Year Ended December 31, 2018 Compared to the Year Ended December 31, 2017

Total operating revenue increased primarily from higher premiums, and, to a lesser extent, increased administrative fees and other revenue. Higher premiums were primarily due to rate increases designed to cover overall cost trends and the HIP Fee reinstatement for 2018, as well as membership growth in our Medicare business as a result of our acquisitions of America's 1st Choice and HealthSun and organic growth in existing markets. These increases in premiums were partially offset by a premium revenue decrease resulting from our reduced participation in ACA-compliant Individual markets in various states and a membership decline in our fully-insured Local Group business. The increase in administrative fees and other revenue primarily resulted from rate increases and membership growth in our self-funded Local Group and National Accounts businesses.

Net investment income increased primarily due to higher dividend yields on equity securities and higher income from alternative investments.

We recognized net realized losses on financial instruments in 2018 compared to net realized gains on financial instruments in 2017. This change was primarily due to the recognition of changes in the fair values of equity securities from the adoption of Accounting Standards Update No. 2016-01, *Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*, or ASU 2016-01. For additional information related to the adoption of ASU 2016-01, see Note 2, "Basis of Presentation and Significant Accounting Policies - *Recently Adopted Accounting Guidance*," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K. The change was further due to an increase in net realized losses on sales of fixed maturity securities, partially offset by increases in net realized gains on sales of equity securities and net realized gains on derivative financial instruments.

Benefit expense decreased primarily due to our reduced participation in ACA-compliant Individual marketplaces in various states. The decrease was partially offset by increased expenses related to membership growth in our Medicare business primarily as a result of our America's 1st Choice and HealthSun acquisitions and organic growth in existing markets. The decrease was further offset by higher medical costs in our Medicaid business.

Our benefit expense ratio decreased primarily due to the increase in premiums to cover the HIP Fee reinstatement for 2018 and, to a lesser extent, improved medical cost performance in our Commercial & Specialty Business segment. The decrease was partially offset by higher medical costs in our Medicaid business.

Selling, general and administrative expense increased primarily due to the reinstatement of the HIP Fee for 2018. The increase was further attributable to an increase in spend to drive future growth. These increases were partially offset by the recognition of a guaranty fund assessment during 2017 related to the liquidation order of Penn Treaty Network American Insurance Company and its subsidiary American Network Insurance Company, or collectively Penn Treaty, and a decrease in performance-based incentive compensation.

Our selling, general and administrative expense ratio increased primarily due to the reinstatement of the HIP Fee for 2018. The increase in the ratio was further attributable to an increase in spend to drive future growth. These increases were partially offset by the growth in operating revenue, the impact of the Penn Treaty guaranty fund assessment in 2017 and a decrease in performance-based incentive compensation.

Other expense decreased primarily due to lower debt extinguishment losses. For more information on our debt, see Note 12, "Debt" of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K. The decrease was partially offset by increased amortization of intangible assets acquired with the HealthSun and America's 1st Choice acquisitions.

Our income tax expense and effective tax rate increased primarily due to the non-recurring income tax benefit we recognized in 2017 related to the remeasurement of our deferred tax balance pursuant to the Tax Cuts and Jobs Act and the reinstatement of the non-tax deductible HIP Fee for 2018. This increase was partially offset by a decrease in income tax expense due to the effect of the Tax Cuts and Jobs Act, which reduced the U.S. federal corporate income tax rate from 35% to 21% effective January 1, 2018.

Our net income as a percentage of total revenue decreased as a result of all factors discussed above.

Year Ended December 31, 2017 Compared to the Year Ended December 31, 2016

Total operating revenue increased, resulting primarily from higher premiums, and, to a lesser extent, increased administrative fees and other revenue. Higher premiums were due, in part, to rate increases across our businesses designed to cover overall cost trends. The increase was further attributable to membership growth in our Medicare Advantage and Large Group product offerings. The increase in premiums was partially offset by the impact of the HIP Fee suspension for 2017, as we did not price affected products to cover any HIP Fee related expense in 2017. Additionally declines in both our non-ACA-compliant and ACA-compliant off-exchange Individual businesses, lower favorable adjustments to prior year estimates for the ACA risk adjustment premium stabilization program and declines in our National Accounts business partially offset the overall increase in premiums. The increase in administrative fees and other revenue primarily resulted from membership growth in our self-funded Large Group business.

Net investment income increased primarily due to higher income from alternative investments and higher investment yields on fixed maturity securities, partially offset by lower dividend yields on equity securities.

Net realized gains on financial instruments increased primarily due to a decrease in net realized losses on derivative financial instruments and an increase in net realized gains on sales of fixed maturity securities, partially offset by a decrease in net realized gains on sales of equity securities.

Other-than-temporary impairment losses on investments decreased primarily due to a decrease in impairment losses on fixed maturity securities.

Benefit expense increased primarily due to increased costs as a result of overall cost trends across our businesses. The increase was further attributable to membership growth in our Medicare Advantage and Large Group business product offerings. These increases were partially offset by the impact of membership declines in both our non-ACA-compliant and ACA-compliant off-exchange Individual product offerings.

Our benefit expense ratio increased in 2017. The increase in the ratio was largely driven by the loss of revenue associated with the HIP Fee suspension for 2017, higher medical cost experience in our Medicare business and adjustments to prior year estimates for the ACA risk adjustment premium stabilization program. The increase in the ratio was partially offset by improved medical cost experience in our Individual business.

Our selling, general and administrative expense increased due, in part, to an increase in spend to support our growth initiatives, the recognition of a guaranty fund assessment related to the liquidation order of Penn Treaty, an increase in performance-based incentive compensation and a legal settlement accrual related to settlement of the 2015 cyber attack class action litigation. For additional information regarding the cyber attack and related settlement, see Note 13, “Commitments and Contingencies - *Litigation and Regulatory Proceedings - Cyber Attack Regulatory Proceedings and Litigation,*” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K. These increases were partially offset by lower ACA fees, primarily as a result of the suspension of the HIP Fee for 2017 and, to a lesser extent, the expiration of the fees for the ACA temporary reinsurance premium stabilization program that ended on December 31, 2016. The increases were further offset by lower selling, general and administrative costs related to expense efficiency initiatives and lower transaction costs related to the terminated Cigna Merger Agreement.

Our selling, general and administrative expense ratio decreased due, in part, to the lower ACA fees discussed above, lower selling, general and administrative costs related to expense efficiency initiatives and growth in operating revenue. These decreases were partially offset by an increase in spend to support our growth initiatives, the impact of the Penn Treaty guaranty fund assessment, an increase in performance-based incentive compensation and the accrual related to the settlement of the 2015 cyber attack class action litigation.

Other expense increased primarily due to losses on extinguishment of debt. For more information on our debt, see Note 12, “Debt” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Income tax expense decreased primarily due to the effect of the Tax Cuts and Jobs Act, the suspension of the non-tax deductible HIP Fee for 2017 and the favorable impact of our recognition of tax benefits for prior acquisition costs incurred related to the terminated Cigna Merger Agreement. For the year ended December 31, 2017, we recognized a non-recurring income tax benefit related to the remeasurement of our deferred tax balance pursuant to the Tax Cuts and Jobs Act. For the year ended December 31, 2016, we recognized additional income tax expense related to the HIP Fee. The decrease in income tax expense was further due to the recognition of excess tax benefits during the year ended December 31, 2017 from the adoption of Accounting Standards Update No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting,* or ASU 2016-09. For additional information related to the adoption of ASU 2016-09, see Note 2, “Basis of Presentation of Significant Accounting Policies - *Recently Adopted Accounting Guidance*” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K. Additionally, during the year ended December 31, 2016, we recognized additional California deferred state tax expense resulting from specific California legislation related to Managed Care Organizations that did not recur in 2017.

Our effective tax rate decreased primarily due to the effect of the Tax Cuts and Jobs Act, the suspension of the HIP Fee in 2017, the deduction of the prior acquisition costs incurred related to the terminated Cigna Merger Agreement, the excess tax benefits from the adoption of ASU 2016-09 and the additional 2016 California deferred state tax expense, discussed above.

Our net income as a percentage of total revenue increased as a result of all factors discussed above.

Reportable Segments Results of Operations

We use operating gain to evaluate the performance of our reportable segments, which are Commercial & Specialty Business, Government Business, and Other. Operating gain, which is a non-GAAP measure, is calculated as total operating revenue less benefit expense and selling, general and administrative expense. It does not include net investment income, net realized (losses) gains on financial instruments, other-than-temporary impairment losses recognized in income, interest expense, amortization of other intangible assets, loss (gain) on extinguishment of debt or income taxes, as these items are managed in a corporate shared service environment and are not the responsibility of operating segment management.

The discussion of segment results for the years ended December 31, 2018, 2017 and 2016 presented below are based on operating gain, as described above, and operating margin, which is calculated as operating gain divided by operating revenue. Our definitions of operating gain and operating margin may not be comparable to similarly titled measures reported by other companies. For additional information, including a reconciliation of non-GAAP financial measures, see Note 19, "Segment Information," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Our Commercial & Specialty Business, Government Business, and Other segments' summarized results of operations for the years ended December 31, 2018, 2017 and 2016 are as follows:

	Years Ended December 31			Change			
				2018 vs. 2017		2017 vs. 2016	
	2018	2017 [2]	2016 [2]	$	%	$	%
Commercial & Specialty Business							
Operating revenue	$ 35,782	$ 40,363	$ 38,347	$ (4,581)	(11.3)%	$ 2,016	5.3%
Operating gain	$ 3,629	$ 2,847	$ 3,148	$ 782	27.5%	$ (301)	(9.6)%
Operating margin	10.1%	7.1%	8.2%		300bp		(110)bp
Government Business							
Operating revenue	$ 55,567	$ 48,702	$ 45,850	$ 6,865	14.1%	$ 2,852	6.2%
Operating gain	$ 1,895	$ 1,445	$ 1,827	$ 450	31.1%	$ (382)	(20.9)%
Operating margin	3.4%	3.0%	4.0%		40bp		(100)bp
Other							
Operating revenue	$ (8)	$ (4)	$ (3)	$ (4)	100.0%	$ (1)	33.3%
Operating loss[1]	$ (98)	$ (117)	$ (174)	$ 19	(16.2)%	$ 57	(32.8)%

1 Primarily a result of changes in unallocated corporate expenses.
2 Certain amounts have been reclassified to conform to the current year presentation.

Year Ended December 31, 2018 Compared to the Year Ended December 31, 2017

Commercial & Specialty Business

Operating revenue decreased primarily due to a decrease in our Individual business membership resulting from our reduced participation in ACA-compliant marketplaces in various states and, to a lesser extent, membership declines in our Local Group fully-insured products. The decrease was partially offset by premium rate increases designed to cover overall cost trends and the impact of the HIP Fee reinstatement for 2018. The decrease was further offset by an increase in administrative fees and other revenue due to rate increases and membership growth in our self-funded Large Group and National Accounts businesses.

Operating gain increased due to improved medical cost performance, the impact of the recognition of the Penn Treaty guaranty fund assessment in 2017, and a decrease in certain selling, general and administrative expenses.

Government Business

Operating revenue increased primarily due to membership growth in our Medicare business as a result of our acquisitions of America's 1st Choice and HealthSun and organic growth in existing markets. The increase was further due to premium rate increases designed to cover overall cost trends and the HIP Fee reinstatement for 2018.

Operating gain increased primarily due to the membership growth in our Medicare business described in the preceding paragraph. The increase was further due to retroactive premium adjustments recognized in various Medicaid markets and the impact of the HIP Fee reinstatement. These increases were partially offset by higher medical costs in our Medicaid business.

Year Ended December 31, 2017 Compared to the Year Ended December 31, 2016

Commercial & Specialty Business

Operating revenue increased primarily due to premium rate increases designed to cover overall cost trends in our Individual and Local Group businesses. The increase was further attributable to membership growth in our fully-insured Large Group business and an increase in administrative fees and other revenue. The increase in administrative fees and other revenue was primarily due to membership growth in our self-insured Large Group business. The increase in operating revenue was partially offset by the impact of the HIP Fee suspension for 2017, declines in membership in our non-ACA-compliant and ACA-compliant off-exchange Individual businesses, lower favorable adjustments to prior year estimates for the ACA risk adjustment premium stabilization program and declines in membership in our National Accounts business.

Operating gain decreased primarily due to the recognition of the guaranty fund assessment related to the Penn Treaty liquidation, an increase in spend to support our growth initiatives and adjustments to prior year estimates for the ACA risk adjustment premium stabilization program. The decrease in operating gain was further due to an increase in performance-based incentive compensation and the settlement accrual for the class action litigation related to the 2015 cyber attack. The decrease in operating gain was partially offset by lower selling, general and administrative costs related to expense efficiency initiatives and fixed costs leverage from higher operating revenue. The decrease in operating gain was further offset by improved medical cost experience in our Individual businesses.

Government Business

Operating revenue increased primarily due to premium rate increases designed to cover overall cost trends in our Medicaid and Medicare business. The increase was further due to new Medicaid business expansions and membership growth in our Medicare Advantage business. These increases were partially offset by the impact of the HIP Fee suspension for 2017 and Medicaid membership declines resulting from membership reverification processes and the impact of a new entrant in an existing market.

Operating gain decreased primarily due to the impact of the HIP Fee suspension for 2017 and higher medical cost experience in our Medicare business. The decrease was further due to an increase in performance-based incentive compensation and an increase in spend to support our growth initiatives. These decreases were partially offset by lower selling, general and administrative costs related to expense efficiency initiatives and fixed costs leverage from higher operating revenue.

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in conformity with GAAP. Application of GAAP requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes and within this MD&A. We consider our most important accounting policies that require significant estimates and management judgment to be those policies with respect to liabilities for medical claims payable, income taxes, goodwill and other intangible assets, investments and retirement benefits, which are discussed below. Our other significant accounting policies are summarized in Note 2, "Basis of Presentation and Significant Accounting Policies," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

We continually evaluate the accounting policies and estimates used to prepare the consolidated financial statements. In general, our estimates are based on historical experience, evaluation of current trends, information from third-party

professionals and various other assumptions that we believe to be reasonable under the known facts and circumstances. Estimates can require a significant amount of judgment and a different set of assumptions could result in material changes to our reported results.

Medical Claims Payable

The most subjective accounting estimate in our consolidated financial statements is our liability for medical claims payable. At December 31, 2018, this liability was $7,454 and represented 17% of our total consolidated liabilities. We record this liability and the corresponding benefit expense for incurred but not paid claims, including the estimated costs of processing such claims. Incurred but not paid claims include (1) an estimate for claims that are incurred but not reported, as well as claims reported to us but not yet processed through our systems, which approximated 98%, or $7,300, of our total medical claims liability as of December 31, 2018; and (2) claims reported to us and processed through our systems but not yet paid, which approximated 2%, or $154, of the total medical claims payable as of December 31, 2018. The level of claims payable processed through our systems but not yet paid may fluctuate from one period-end to the next, from approximately 1% to 5% of our total medical claims liability, due to timing of when claim payments are made.

Liabilities for both claims incurred but not reported and reported but not yet processed through our systems are determined in the aggregate, employing actuarial methods that are commonly used by health insurance actuaries and meet Actuarial Standards of Practice. Actuarial Standards of Practice require that the claim liabilities be appropriate under moderately adverse circumstances. We determine the amount of the liability for incurred but not paid claims by following a detailed actuarial process that uses both historical claim payment patterns as well as emerging medical cost trends to project our best estimate of claim liabilities. Under this process, historical paid claims data is formatted into “claim triangles,” which compare claim incurred dates to the dates of claim payments. This information is analyzed to create “completion factors” that represent the average percentage of total incurred claims that have been paid through a given date after being incurred. Completion factors are applied to claims paid through the period-end date to estimate the ultimate claim expense incurred for the period. Actuarial estimates of incurred but not paid claim liabilities are then determined by subtracting the actual paid claims from the estimate of the ultimate incurred claims.

For the most recent incurred months (typically the most recent two months), the percentage of claims paid for claims incurred in those months is generally low. This makes the completion factor methodology less reliable for such months. Therefore, incurred claims for recent months are not projected from historical completion and payment patterns; rather, they are projected by estimating the claims expense for those months based on recent claims expense levels and healthcare trend levels, or “trend factors.”

Because the reserve methodology is based upon historical information, it must be adjusted for known or suspected operational and environmental changes. These adjustments are made by our actuaries based on their knowledge and their estimate of emerging impacts to benefit costs and payment speed. Circumstances to be considered in developing our best estimate of reserves include changes in utilization levels, unit costs, mix of business, benefit plan designs, provider reimbursement levels, processing system conversions and changes, claim inventory levels, claim processing patterns, claim submission patterns and operational changes resulting from business combinations. A comparison of prior period liabilities to re-estimated claim liabilities based on subsequent claims development is also considered in making the liability determination. In our comparison to prior periods, the methods and assumptions are not changed as reserves are recalculated; rather, the availability of additional paid claims information drives changes in the re-estimate of the unpaid claim liability. To the extent appropriate, changes in such development are recorded as a change to current period benefit expense.

We regularly review and set assumptions regarding cost trends and utilization when initially establishing claim liabilities. We continually monitor and adjust the claims liability and benefit expense based on subsequent paid claims activity. If it is determined that our assumptions regarding cost trends and utilization are materially different than actual results, our income statement and financial position could be impacted in future periods. Adjustments of prior year estimates may result in additional benefit expense or a reduction of benefit expense in the period an adjustment is made. Further, due to the considerable variability of healthcare costs, adjustments to claim liabilities occur each period and are sometimes significant as compared to the net income recorded in that period. Prior period development is recognized immediately upon the actuary’s judgment that a portion of the prior period liability is no longer needed or that an additional liability should have been accrued. That determination is made when sufficient information is available to ascertain that the re-estimate of the liability is reasonable.

While there are many factors that are used as a part of the estimation of our medical claims payable liability, the two key assumptions having the most significant impact on our incurred but not paid claims liability as of December 31, 2018 were the completion and trend factors. As discussed above, these two key assumptions can be influenced by utilization levels, unit costs, mix of business, benefit plan designs, provider reimbursement levels, processing system conversions and changes, claim inventory levels, claim processing patterns, claim submission patterns and operational changes resulting from business combinations.

There is variation in the reasonable choice of completion factors by duration for durations of three months through twelve months where the completion factors have the most significant impact. As previously discussed, completion factors tend to be less reliable for the most recent months and therefore are not specifically utilized for months one and two. In our analysis for the claim liabilities at December 31, 2018, the variability in months three to five was estimated to be between 40 and 90 basis points, while months six through twelve have much lower estimated variability ranging from 0 to 30 basis points.

The difference in completion factor assumptions, assuming moderately adverse experience, results in variability of 3%, or approximately $213, in the December 31, 2018 incurred but not paid claims liability, depending on the completion factors chosen. It is important to note that the completion factor methodology inherently assumes that historical completion rates will be reflective of the current period. However, it is possible that the actual completion rates for the current period will develop differently from historical patterns and therefore could fall outside the possible variations described herein.

The other major assumption used in the establishment of the December 31, 2018 incurred but not paid claim liability was the trend factors. In our analysis for the period ended December 31, 2018, there was a 300 basis point differential in the high and low trend factors assuming moderately adverse experience. This range of trend factors would imply variability of 5%, or approximately $408, in the incurred but not paid claims liability, depending upon the trend factors used. Because historical trend factors are often not representative of current claim trends, the trend experience for the most recent six to nine months, plus knowledge of recent events likely affecting current trends, have been taken into consideration in establishing the incurred but not paid claims liability at December 31, 2018.

See Note 11, “Medical Claims Payable,” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K, for a reconciliation of the beginning and ending balance for medical claims payable for the years ended December 31, 2018, 2017 and 2016. Components of the total incurred claims for each year include amounts accrued for current year estimated claims expense as well as adjustments to prior year estimated accruals. In Note 11, “Medical Claims Payable,” the line labeled “Net incurred medical claims: Prior years redundancies” accounts for those adjustments made to prior year estimates. The impact of any reduction of “Net incurred medical claims: Prior years redundancies” may be offset as we establish the estimate of “Net incurred medical claims: Current year.” Our reserving practice is to consistently recognize the actuarial best estimate of our ultimate liability for our claims. When we recognize a release of the redundancy, we disclose the amount that is not in the ordinary course of business, if material.

The ratio of current year medical claims paid as a percent of current year net medical claims incurred was 90.2% for 2018, 89.4% for 2017 and 89.2% for 2016. This ratio serves as an indicator of claims processing speed whereby claims were processed slightly faster during 2018 than in both 2017 and 2016.

We calculate the percentage of prior year redundancies in the current year as a percent of prior year net incurred claims payable less prior year redundancies in the current year in order to demonstrate the development of the prior year reserves. For the year ended December 31, 2018, this metric was 13.7%, largely driven by favorable trend factor development at the end of 2017 as well as favorable completion factor development from 2017. For the year ended December 31, 2017, this metric was 18.9%, largely driven by favorable trend factor development at the end of 2016 as well as favorable completion factor development from 2016. For the year ended December 31, 2016, this metric was 14.2%, largely driven by favorable trend factor development at the end of 2015.

We calculate the percentage of prior year redundancies in the current year as a percent of prior year net incurred medical claims to indicate the percentage of redundancy included in the preceding year calculation of current year net incurred medical claims. We believe this calculation supports the reasonableness of our prior year estimate of incurred medical claims and the consistency in our methodology. For the year ended December 31, 2018, this metric was 1.3%, which was calculated using the redundancy of $930. This metric was 1.8% for 2017 and 1.4% for 2016. These metrics demonstrate a generally consistent level of reserve conservatism.

The following table shows the variance between total net incurred medical claims as reported in Note 11, "Medical Claims Payable," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K, for each of 2017 and 2016 and the incurred claims for such years had it been determined retrospectively (computed as the difference between "net incurred medical claims – current year" for the year shown and "net incurred medical claims – prior years redundancies" for the immediately following year):

	Years Ended December 31	
	2017	2016
Total net incurred medical claims, as reported	$ 69,244	$ 64,033
Retrospective basis, as described above	69,447	63,735
Variance	$ (203)	$ 298
Variance to total net incurred medical claims, as reported	(0.3)%	0.5%

Given that our business is primarily short tailed (which means that medical claims are generally paid within twelve months of the member receiving service from the provider), the variance to total net incurred medical claims, as reported above, is used to assess the reasonableness of our estimate of ultimate incurred medical claims for a given calendar year with the benefit of one year of experience. We expect that substantially all of the development of the 2018 estimate of medical claims payable will be known during 2019.

The 2017 variance to total net incurred medical claims, as reported of (0.3)% was less than the 2016 percentage of 0.5%. The higher 2016 variance was driven by a similar level of prior year redundancies in 2017 associated with 2016 claim payments to the prior year redundancies in 2016 associated with 2015 claims payments. Prior year redundancies in 2018 associated with 2017 claim payments were lower by comparison to the previous year, thus creating a smaller 2017 variance.

Income Taxes

We account for income taxes in accordance with FASB guidance, which requires, among other things, the separate recognition of deferred tax assets and deferred tax liabilities. Such deferred tax assets and deferred tax liabilities represent the tax effect of temporary differences between financial reporting and tax reporting measured at tax rates enacted at the time the deferred tax asset or liability is recorded. A valuation allowance must be established for deferred tax assets if it is "more likely than not" that all or a portion may be unrealized. Our judgment is required in determining an appropriate valuation allowance.

At each financial reporting date, we assess the adequacy of the valuation allowance by evaluating each of our deferred tax assets based on the following:

- the types of temporary differences that created the deferred tax asset;
- the amount of taxes paid in prior periods and available for a carry-back claim;
- the tax rate at which the deferred tax assets will likely be utilized at in the future;
- the forecasted future taxable income, and therefore, likely future deduction of the deferred tax item; and
- any significant other issues impacting the likely realization of the benefit of the temporary differences.

We, like other companies, frequently face challenges from tax authorities regarding the amount of taxes due. These challenges include questions regarding the timing and amount of deductions that we have taken on our tax returns. In evaluating any additional tax liability associated with various positions taken in our tax return filings, we record additional liabilities for potential adverse tax outcomes. Based on our evaluation of our tax positions, we believe we have appropriately accrued for uncertain tax benefits, as required by the guidance. To the extent we prevail in matters we have accrued for, our future effective tax rate would be reduced and net income would increase. If we are required to pay more than accrued, our future effective tax rate would increase and net income would decrease. Our effective tax rate and net income in any given future period could be materially impacted.

In the ordinary course of business, we are regularly audited by federal and other tax authorities, and from time to time, these audits result in proposed assessments. We believe our tax positions comply with applicable tax law and we intend to defend our positions vigorously through the federal, state and local appeals processes. We believe we have adequately provided for any reasonably foreseeable outcome related to these matters. Accordingly, although their ultimate resolution may require additional tax payments, we do not anticipate any material impact on our results of operations or financial condition from these matters.

For additional information, see Note 7, "Income Taxes," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Goodwill and Other Intangible Assets

Our consolidated goodwill at December 31, 2018 was $20,504 and other intangible assets were $9,007. The sum of goodwill and other intangible assets represented 41.2% of our total consolidated assets and 103.4% of our consolidated shareholders' equity at December 31, 2018.

We follow FASB guidance for business combinations and goodwill and other intangible assets, which specifies the types of acquired intangible assets that are required to be recognized and reported separately from goodwill. Under the guidance, goodwill and other intangible assets (with indefinite lives) are not amortized but are tested for impairment at least annually. Furthermore, goodwill and other intangible assets are allocated to reporting units for purposes of the annual impairment test. Our impairment tests require us to make assumptions and judgments regarding the estimated fair value of our reporting units, which include goodwill and other intangible assets. In addition, certain other intangible assets with indefinite lives, such as trademarks, are also tested separately.

We complete our annual impairment tests of existing goodwill and other intangible assets with indefinite lives during the fourth quarter of each year. These tests involve the use of estimates related to the fair value of goodwill at the reporting unit level and other intangible assets with indefinite lives, and require a significant degree of management judgment and the use of subjective assumptions. Certain interim impairment tests are also performed when potential impairment indicators exist or changes in our business or other triggering events occur. We have the option of first performing a qualitative assessment for each reporting unit to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount which is an indication that our goodwill may be impaired. These qualitative impairment tests include assessing events and factors that could affect the fair value of the indefinite-lived intangible assets. Our procedures include assessing our financial performance, macroeconomic conditions, industry and market considerations, various asset specific factors and entity specific events. If we determine that a reporting unit's goodwill may be impaired after utilizing these qualitative impairment analysis procedures, we are required to perform a quantitative impairment test.

Our quantitative impairment test utilizes the projected income and market valuation approaches for goodwill and the projected income approach for our indefinite lived intangible assets. Use of the projected income and market valuation approaches for our goodwill impairment test reflects our view that both valuation methodologies provide a reasonable estimate of fair value. The projected income approach is developed using assumptions about future revenue, expenses and net income derived from our internal planning process. These estimated future cash flows are then discounted. Our assumed discount rate is based on our industry's weighted-average cost of capital. Market valuations are based on observed multiples of certain measures including revenue, EBITDA, and book value of invested capital (debt and equity) and include market comparisons to publicly traded companies in our industry.

We did not incur any impairment losses as a result of our 2018 annual impairment tests, as the estimated fair values of our reporting units were substantially in excess of the carrying values as of December 31, 2018. Additionally, we do not believe that the estimated fair values of our reporting units are at risk of becoming impaired in the next twelve months.

While we believe we have appropriately allocated the purchase price of our acquisitions, this allocation requires many assumptions to be made regarding the fair value of assets and liabilities acquired. In addition, estimated fair values developed based on our assumptions and judgments might be significantly different if other reasonable assumptions and estimates were to be used. If estimated fair values are less than the carrying values of goodwill and other intangibles with indefinite lives in future annual impairment tests, or if significant impairment indicators are noted relative to other intangible assets subject to amortization, we may be required to record impairment losses against future income.

For additional information, see Note 3, “Business Acquisitions” and Note 9, “Goodwill and Other Intangible Assets,” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Investments

Current and long-term marketable investment securities were $18,705 at December 31, 2018 and represented 26.1% of our total consolidated assets at December 31, 2018. We classify fixed maturity securities in our investment portfolio as “available-for-sale” or “trading” and report those securities at fair value. Certain fixed maturity securities are available to support current operations and, accordingly, we classify such investments as current assets without regard to their contractual maturity. Investments used to satisfy contractual, regulatory or other requirements are classified as long-term, without regard to contractual maturity.

We review fixed maturity investment securities to determine if declines in fair value below cost are other-than-temporary. This review is subjective and requires a high degree of judgment. We conduct this review on a quarterly basis, using both qualitative and quantitative factors, to determine whether a decline in value is other-than-temporary. Such factors considered include the length of time and the extent to which a security’s market value has been less than its cost, the reasons for the decline in value (i.e., credit event compared to liquidity, general credit spread widening, currency exchange rate or interest rate factors), financial condition and near term prospects of the issuer, including the credit ratings and changes in the credit ratings of the issuer, recommendations of investment advisors, and forecasts of economic, market or industry trends.

FASB other-than-temporary impairment, or OTTI, guidance applies to fixed maturity securities and provides guidance on the recognition, presentation of, and disclosures for OTTIs. If a fixed maturity security is in an unrealized loss position and we have the intent to sell the fixed maturity security, or it is more likely than not that we will have to sell the fixed maturity security before recovery of its amortized cost basis, the decline in value is deemed to be other-than-temporary and is presented within the other-than-temporary impairment losses recognized in the income line item on our consolidated statements of income. For impaired fixed maturity securities that we do not intend to sell or it is more likely than not that we will not have to sell such securities, but we expect that we will not fully recover the amortized cost basis, the credit component of the OTTI is presented within the other-than-temporary impairment losses recognized in the income line item on our consolidated statements of income and the non-credit component of the OTTI is recognized in other comprehensive income. Furthermore, unrealized losses entirely caused by non-credit related factors related to fixed maturity securities for which we expect to fully recover the amortized cost basis continue to be recognized in accumulated other comprehensive loss.

The credit component of an OTTI is determined primarily by comparing the net present value of projected future cash flows with the amortized cost basis of the fixed maturity security. The net present value is calculated by discounting our best estimate of projected future cash flows at the effective interest rate implicit in the fixed maturity security at the date of acquisition. For mortgage-backed and asset-backed securities, cash flow estimates are based on assumptions regarding the underlying collateral, including prepayment speeds, vintage, type of underlying asset, geographic concentrations, default rates, recoveries and changes in value. For all other securities, cash flow estimates are driven by assumptions regarding probability of default, including changes in credit ratings and estimates regarding timing and amount of recoveries associated with a default.

We have a committee of accounting and investment associates and management that is responsible for managing the impairment review process. We believe we have adequately reviewed our investment securities for impairment and that our investment securities are carried at fair value. However, over time, the economic and market environment may provide additional insight regarding the fair value of certain securities, which could change our judgment regarding impairment. This could result in OTTI losses on investments being charged against future income. Given the uncertainty of future market conditions, as well as the significant judgments involved, there is continuing risk that declines in fair value may occur and material OTTI losses on investments may be recorded in future periods.

In addition to marketable investment securities, we held additional long-term investments of $3,726, or 5.2% of total consolidated assets, at December 31, 2018. These long-term investments consisted primarily of certain other equity investments, the cash surrender value of corporate-owned life insurance policies and real estate. Due to their less liquid nature, these investments are classified as long-term.

Through our investing activities, we are exposed to financial market risks, including those resulting from changes in interest rates and changes in equity market valuations. We manage market risks through our investment policy, which establishes credit quality limits and limits on investments in individual issuers. Ineffective management of these risks could have an impact on our future results of operations and financial condition. Our investment portfolio includes fixed maturity securities with a fair value of $17,179 at December 31, 2018. The weighted-average credit rating of these securities was "A" as of December 31, 2018. Included in this balance are investments in fixed maturity securities of states, municipalities and political subdivisions of $947 that are guaranteed by third parties. With the exception of seven securities with a fair value of $16, these securities are all investment-grade and carry a weighted-average credit rating of "A" as of December 31, 2018. The securities are guaranteed by a number of different guarantors, and we do not have any material exposure to any single guarantor, neither indirectly through the guarantees, nor directly through investment in the guarantor. Further, due to the high underlying credit rating of the issuers, the weighted-average credit rating of the fixed maturity securities without a guarantee, for which such information is available, was "A" as of December 31, 2018.

Fair values of fixed maturity and equity securities are based on quoted market prices, where available. These fair values are obtained primarily from third-party pricing services, which generally use Level I or Level II inputs for the determination of fair value in accordance with FASB guidance for fair value measurements and disclosures. We have controls in place to review the pricing services' qualifications and procedures used to determine fair values. In addition, we periodically review the pricing services' pricing methodologies, data sources and pricing inputs to ensure the fair values obtained are reasonable.

We obtain quoted market prices for each security from the pricing services, which are derived through recently reported trades for identical or similar securities, making adjustments through the reporting date based upon available market observable information. For securities not actively traded, the pricing services may use quoted market prices of comparable instruments or discounted cash flow analyses, incorporating inputs that are currently observable in the markets for similar securities. Inputs that are often used in these valuation methodologies include, but are not limited to, broker quotes, benchmark yields, credit spreads, default rates and prepayment speeds. As we are responsible for the determination of fair value, we perform analysis on the prices received from the pricing services to determine whether the prices are reasonable estimates of fair value. Our analysis includes procedures such as a review of month-to-month price fluctuations and price comparisons to secondary pricing services. There were no adjustments to quoted market prices obtained from the pricing services during the years ended December 31, 2018 and 2017.

In certain circumstances, it may not be possible to derive pricing model inputs from observable market activity, and therefore, such inputs are estimated internally. Such securities are designated Level III in accordance with FASB guidance. Securities designated Level III at December 31, 2018 totaled $623 and represented approximately 2.9% of our total assets measured at fair value on a recurring basis. Our Level III securities primarily consisted of certain corporate securities and equity securities for which observable inputs were not always available and the fair values of these securities were estimated using internal estimates for inputs including, but not limited to, prepayment speeds, credit spreads, default rates and benchmark yields.

For additional information, see Part II, Item 7A "Quantitative and Qualitative Disclosures about Market Risk," and Note 2, "Basis of Presentation and Significant Accounting Policies," Note 4, "Investments," and Note 6, "Fair Value," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Retirement Benefits

Pension Benefits

We sponsor defined benefit pension plans for some of our employees. These plans are accounted for in accordance with FASB guidance for retirement benefits, which requires that amounts recognized in financial statements be determined on an actuarial basis. As permitted by the guidance, we calculate the value of plan assets as described below. Further, the difference between our expected rate of return and the actual performance of plan assets, as well as certain changes in pension liabilities, are amortized over future periods.

An important factor in determining our pension expense is the assumption for expected long-term return on plan assets. As of our December 31, 2018 measurement date, we selected a weighted-average long-term rate of return on plan assets of 7.44%. We use a total portfolio return analysis in the development of our assumption. Factors such as past market performance, the long-term relationship between fixed maturity and equity securities, interest rates, inflation and asset

allocations are considered in the assumption. The assumption includes an estimate of the additional return expected from active management of the investment portfolio. Peer data and an average of historical returns are also reviewed for appropriateness of the selected assumption. We believe our assumption of future returns is reasonable. However, if we lower our expected long-term return on plan assets, future contributions to the pension plan and pension expense would likely increase.

This assumed long-term rate of return on assets is applied to a calculated value of plan assets, which recognizes changes in the fair value of plan assets in a systematic manner over three years, producing the expected return on plan assets that is included in the determination of pension expense. We apply a corridor approach to amortize unrecognized actuarial gains or losses. Under this approach, only accumulated net actuarial gains or losses in excess of 10% of the greater of the projected benefit obligation or the fair value of plan assets are amortized over the average remaining service or lifetime of the workforce as a component of pension expense. The net deferral of past asset gains or losses affects the calculated value of plan assets and, ultimately, future pension expense.

The discount rate reflects the current rate at which the pension liabilities could be effectively settled at the end of the year based on our most recent measurement date. At the December 31, 2017 measurement date, we changed the discount rate setting methodology from the single equivalent discount rate to the annual spot rate approach. Under the spot rate approach, individual spot rates from a full yield curve of published rates are used to discount each plan's cash flows to determine the plan's obligation. The spot rate approach produces a more precise measure of service and interest cost, and results in obligations that are equal at the measurement date under both methods. At the December 31, 2018 measurement date, the weighted-average discount rate under the annual spot rate approach was 4.15%, compared to 3.44% at the December 31, 2017 measurement date. The net effect of changes in the discount rate, as well as the net effect of other changes in actuarial assumptions and experience, have been deferred and amortized as a component of pension expense in accordance with FASB guidance.

In managing the plan assets, our objective is to be a responsible fiduciary while minimizing financial risk. Plan assets include a diversified mix of investment grade fixed maturity securities, equity securities and alternative investments across a range of sectors and levels of capitalization to maximize the long-term return for a prudent level of risk. In addition to producing a reasonable return, the investment strategy seeks to minimize the volatility in our expense and cash flow.

Effective January 1, 2019, we curtailed the benefits under the Anthem Cash Balance Plan B pension plan. All grandfathered participants will no longer have pay credits added to their accounts, but will continue to earn interest on existing account balances. Participants will continue to earn years of pension service for vesting purposes.

Other Postretirement Benefits

We provide most associates with certain medical, vision and dental benefits upon retirement. We use various actuarial assumptions, including a discount rate and the expected trend in healthcare costs, to estimate the costs and benefit obligations for our retiree benefits.

At our December 31, 2018 measurement date, the selected discount rate for all plans was 4.04%, compared to a discount rate of 3.42% at the December 31, 2017 measurement rate. We developed this rate using the annual spot rate approach as described above.

The assumed healthcare cost trend rates used to measure the expected cost of pre-Medicare (those who are not currently eligible for Medicare benefits) other benefits at our December 31, 2018 measurement date was 7.50% for 2019 with a gradual decline to 4.50% by the year 2028. The assumed healthcare cost trend rates used to measure the expected cost of post-Medicare (those who are currently eligible for Medicare benefits) other benefits at our December 31, 2018 measurement date was 6.00% for 2019 with a gradual decline to 4.50% by the year 2028. These estimated trend rates are subject to change in the future. The healthcare cost trend rate assumption affects the amounts reported. For example, an increase in the assumed healthcare cost trend rate of one percentage point would increase the postretirement benefit obligation as of December 31, 2018 by $24 and would increase service and interest costs by $1. Conversely, a decrease in the assumed healthcare cost trend rate of one percentage point would decrease the postretirement benefit obligation as of December 31, 2018 by $21 and would decrease service and interest costs by $1.

For additional information regarding our retirement benefits, see Note 10, "Retirement Benefits," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

New Accounting Pronouncements

For information regarding new accounting pronouncements that were issued or became effective during the year ended December 31, 2018 that had, or are expected to have, a material impact on our financial position, results of operations or financial statement disclosures, see the "*Recently Adopted Accounting Guidance*" and "*Recent Accounting Guidance Not Yet Adopted*" sections of Note 2, "Basis of Presentation and Significant Accounting Policies," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Liquidity and Capital Resources

Introduction

Our cash receipts result primarily from premiums, administrative fees and other revenue, investment income, proceeds from the sale or maturity of our investment securities, proceeds from borrowings, and proceeds from the issuance of common stock under our employee stock plans. Cash disbursements result mainly from claims payments, administrative expenses, taxes, purchases of investment securities, interest expense, payments on borrowings, acquisitions, capital expenditures, repurchases of our debt securities and common stock and the payment of cash dividends. Cash outflows fluctuate with the amount and timing of settlement of these transactions. Any future decline in our profitability would likely have an unfavorable impact on our liquidity.

We manage our cash, investments and capital structure so we are able to meet the short-term and long-term obligations of our business while maintaining financial flexibility and liquidity. We forecast, analyze and monitor our cash flows to enable investment and financing within the overall constraints of our financial strategy.

A substantial portion of the assets held by our regulated subsidiaries are in the form of cash and cash equivalents and investments. After considering expected cash flows from operating activities, we generally invest cash that exceeds our near term obligations in longer term marketable fixed maturity securities to improve our overall investment income returns. Our investment strategy is to make investments consistent with insurance statutes and other regulatory requirements, while preserving our asset base. Our investments are generally available-for-sale to meet liquidity and other needs. Our subsidiaries pay out excess capital annually in the form of dividends to their respective parent companies for general corporate use, as permitted by applicable regulations.

The availability of financing in the form of debt or equity is influenced by many factors, including our profitability, operating cash flows, debt levels, debt ratings, contractual restrictions, regulatory requirements and market conditions. The securities and credit markets have in the past experienced higher than normal volatility, although current market conditions are more stable. During recent years, the federal government and various governmental agencies have taken a number of steps to improve liquidity in the financial markets and strengthen the regulation of the financial services market. In addition, governments around the world have developed their own plans to provide liquidity and security in the credit markets and to ensure adequate capital in certain financial institutions.

We have a $2,500 commercial paper program. Should commercial paper issuance be unavailable, we have the ability to use a combination of cash on hand and/or our $3,500 senior revolving credit facility to redeem any outstanding commercial paper upon maturity. Additionally, we believe the lenders participating in our credit facility would be willing and able to provide financing in accordance with their legal obligations. In addition to the $3,500 senior revolving credit facility, we estimate that we expect to receive approximately $2,680 of dividends from our subsidiaries during 2019, which also provides further operating and financial flexibility.

A summary of our major sources and uses of cash and cash equivalents for the years ended December 31, 2018, 2017 and 2016 is as follows:

	Years Ended December 31			$ Change	
	2018	2017	2016	2018 vs. 2017	2017 vs. 2016
Sources of Cash					
Net cash provided by operating activities	$ 3,827	$ 4,185	$ 3,270	$ (358)	$ 915
Proceeds from sales, maturities, calls and redemptions of investments, net of purchases	1,929	—	—	1,929	—
Issuance of common stock under Equity Units stock purchase contracts	1,250	—	—	1,250	—
Issuances of commercial paper and short- and long-term debt, net of repayments	—	3,653	—	(3,653)	3,653
Issuances of common stock under employee stock plans	173	225	120	(52)	105
Changes in bank overdrafts	—	71	513	(71)	(442)
Other sources of cash, net	174	712	276	(538)	436
Total sources of cash	7,353	8,846	4,179	(1,493)	4,667
Uses of Cash:					
Purchases of investments, net of proceeds from sales, maturities, calls and redemptions	—	(2,913)	(114)	2,913	(2,799)
Purchases of subsidiaries, net of cash acquired	(1,760)	(2,080)	—	320	(2,080)
Repurchase and retirement of common stock	(1,685)	(1,998)	—	313	(1,998)
Purchases of property and equipment	(1,208)	(800)	(584)	(408)	(216)
Repayments of commercial paper and short- and long-term debt, net of issuances	(1,086)	—	(153)	(1,086)	153
Cash dividends	(776)	(705)	(684)	(71)	(21)
Changes in bank overdrafts	(210)	—	—	(210)	—
Other uses of cash, net	(301)	(820)	(687)	519	(133)
Total uses of cash	(7,026)	(9,316)	(2,222)	2,290	(7,094)
Effect of foreign exchange rates on cash and cash equivalents	(2)	4	5	(6)	(1)
Net increase (decrease) in cash and cash equivalents	$ 325	$ (466)	$ 1,962	$ 791	$ (2,428)

Liquidity—Year Ended December 31, 2018 Compared to Year Ended December 31, 2017

The decrease in cash provided by operating activities was primarily due to increased spend to support growth initiatives and the impact of membership declines due to our reduced participation in ACA-compliant Individual marketplaces, and to a lesser extent, membership declines in our fully-insured Local Group business. The decrease in cash provided by operating activities was partially offset by cash receipts related to rate increases across our businesses designed to cover overall cost trends. The decrease was further offset by lower income taxes paid in 2018 as a result of the Tax Cuts and Jobs Act.

Other significant changes in sources and uses of cash year-over-year included an increase in net proceeds from sales of investments and the issuance of common stock under our Equity Units stock purchase contracts in 2018. These increases in cash were partially offset by an increase in net repayments of commercial paper and short- and long-term debt and increased purchases of property and equipment.

Liquidity— Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

The increase in cash provided by operating activities was primarily attributable to an increase in premium receipts as a result of both rate increases across our businesses designed to cover overall cost trends and growth in membership. The increase in cash flow was partially offset by an increase in claims payments due to higher medical cost experience and

growth in membership. The increase was further offset by an increase in spend to support our growth initiatives, the timing of provider capitation payments for pass-through funding under the California Medicaid contract and the timing of certain state Medicaid payments.

Other significant changes in sources and uses of cash year-over-year included an increase in net purchases of investments, cash paid for acquisitions in 2017 and repurchases and retirement of common stock in 2017. These decreases in cash were partially offset by the cash received from the issuances of commercial paper and short- and long-term debt, net of repayments.

Financial Condition

We maintained a strong financial condition and liquidity position, with consolidated cash, cash equivalents and investments in fixed maturity and equity securities of $22,639 at December 31, 2018. Since December 31, 2017, total cash, cash equivalents and investments in fixed maturity and equity securities decreased by $2,540 primarily due to cash used for acquisitions, purchases of property and equipment, repurchases of our common stock, net repayments of commercial paper and short- and long-term debt and cash dividends paid to shareholders. These decreases were partially offset by cash generated from operations and the proceeds received from the issuance of our common stock under Equity Units stock purchase contracts.

Many of our subsidiaries are subject to various government regulations that restrict the timing and amount of dividends and other distributions that may be paid to their respective parent companies. Certain accounting practices prescribed by insurance regulatory authorities, or statutory accounting practices, differ from GAAP. Changes that occur in statutory accounting practices, if any, could impact our subsidiaries' future dividend capacity. In addition, we have agreed to certain undertakings to regulatory authorities, including the requirement to maintain certain capital levels in certain of our subsidiaries.

At December 31, 2018, we held $1,949 of cash, cash equivalents and investments at the parent company, which are available for general corporate use, including investment in our businesses, acquisitions, potential future common stock repurchases and dividends to shareholders, repurchases of debt securities and debt and interest payments.

Debt

Periodically, we access capital markets and issue debt, or Notes, for long-term borrowing purposes, for example, to refinance debt, to finance acquisitions or for share repurchases. Certain of these Notes may have a call feature that allows us to redeem the Notes at any time at our option and/or a put feature that allows a Note holder to redeem the Notes upon the occurrence of both a change in control event and a downgrade of the Notes below an investment grade rating. For more information on our debt, including redemptions and issuances, see Note 12, "Debt" of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

We calculate our consolidated debt-to-capital ratio, a non-GAAP measure, from the amounts presented on our audited consolidated balance sheets included in Part II, Item 8 of this Annual Report on Form 10-K. Our debt-to-capital ratio is calculated as total debt divided by total debt plus total shareholders' equity. Total debt is the sum of short-term borrowings, current portion of long-term debt, and long-term debt, less current portion. We believe our debt-to-capital ratio assists investors and rating agencies in measuring our overall leverage and additional borrowing capacity. In addition, our bank covenants include a maximum debt-to-capital ratio that we cannot and did not exceed. Our debt-to-capital ratio may not be comparable to similarly titled measures reported by other companies. Our consolidated debt-to-capital ratio was 40.2% and 42.9% as of December 31, 2018 and 2017, respectively.

Our senior debt is rated "A" by S&P Global, "BBB" by Fitch Ratings, Inc., "Baa2" by Moody's Investor Service, Inc. and "bbb+" by AM Best Company, Inc. We intend to maintain our senior debt investment grade ratings. If our credit ratings are downgraded, our business, financial condition and results of operations could be adversely impacted by limitations on future borrowings and a potential increase in our borrowing costs.

Future Sources and Uses of Liquidity

We have a shelf registration statement on file with the Securities and Exchange Commission to register an unlimited amount of any combination of debt or equity securities in one or more offerings. Specific information regarding terms and securities being offered will be provided at the time of an offering. Proceeds from future offerings are expected to be used for general corporate purposes, including, but not limited to, the repayment of debt, investments in or extensions of credit to our subsidiaries and the financing of possible acquisitions or business expansions.

We have a senior revolving credit facility, or the Facility, with a group of lenders for general corporate purposes. The Facility provides credit up to $3,500 and matures on August 25, 2020. Our ability to borrow under the Facility is subject to compliance with certain covenants. There were no amounts outstanding under the Facility at December 31, 2018.

We have an authorized commercial paper program of up to $2,500, the proceeds of which may be used for general corporate purposes. At December 31, 2018, we had $697 outstanding under our commercial paper program.

We are a member, through certain subsidiaries, of the Federal Home Loan Bank of Indianapolis, the Federal Home Loan Bank of Cincinnati and the Federal Home Loan Bank of Atlanta, or collectively, the FHLBs. As a member we have the ability to obtain short-term cash advances, subject to certain minimum collateral requirements. At December 31, 2018, we had $645 outstanding under our short-term FHLB borrowings.

Through certain subsidiaries, we have entered into multiple 364-day lines of credit with separate lenders for general corporate purposes. These lines of credit provide combined credit up to $600. Our ability to borrow under the lines of credit is subject to compliance with certain covenants. At December 31, 2018 we had $500 outstanding under our 364-day lines of credit.

As discussed in "*Financial Condition*" above, many of our subsidiaries are subject to various government regulations that restrict the timing and amount of dividends and other distributions that may be paid. Based upon these requirements, we currently estimate that approximately $2,680 of dividends will be paid to the parent company during 2019. During 2018, we received $3,606 of dividends from our subsidiaries.

We regularly review the appropriate use of capital, including acquisitions, common stock and debt security repurchases and dividends to shareholders. The declaration and payment of any dividends or repurchases of our common stock or debt is at the discretion of our Board of Directors and depends upon our financial condition, results of operations, future liquidity needs, regulatory and capital requirements and other factors deemed relevant by our Board of Directors.

On January 29, 2019, our Audit Committee declared a quarterly cash dividend to shareholders of $0.80 per share on the outstanding shares of our common stock. This quarterly dividend is payable on March 29, 2019 to the shareholders of record as of March 18, 2019.

Under our Board of Directors' authorization, we maintain a common stock repurchase program. As of December 31, 2018, we had Board authorization of $5,493 to repurchase our common stock.

For additional information regarding our sources and uses of capital, see Note 4, "Investments," Note 5 "Derivative Financial Instruments," Note 12 "Debt" and Note 14 "Capital Stock-*Use of Capital-Dividends and Stock Repurchase Program*" of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Contractual Obligations and Commitments

Our estimated contractual obligations and commitments as of December 31, 2018 are as follows:

		Payments Due by Period			
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
On-Balance Sheet:					
Debt[1]	$ 29,640	$ 3,379	$ 3,568	$ 3,695	$ 18,998
Other long-term liabilities[2]	1,374	30	574	472	298
Off-Balance Sheet:					
Purchase obligations[3]	3,849	1,261	1,151	1,345	92
Operating lease commitments	1,117	192	304	236	385
Investment commitments[4]	873	263	281	35	294
Total contractual obligations and commitments	$ 36,853	$ 5,125	$ 5,878	$ 5,783	$ 20,067

1 Includes estimated interest expense.
2 Primarily consists of reserves for future policy benefits, projected other postretirement benefits, deferred compensation, supplemental executive retirement plan liabilities and certain other miscellaneous long-term obligations. Estimated future payments for funded pension benefits have been excluded from this table as we had no funding requirements under ERISA at December 31, 2018 as a result of the value of the assets in the plans.
3 Includes estimated payments for future services under contractual arrangements from third-party service contracts.
4 Includes unfunded capital commitments for alternative investments.

The above table does not contain $278 of gross liabilities for uncertain tax positions and interest for which we cannot reasonably estimate the timing of the resolutions with the respective taxing authorities. For further information, see Note 7, “Income Taxes,” of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

In addition to the contractual obligations and commitments discussed above, we have a variety of other contractual agreements related to acquiring materials and services used in our operations. However, we do not believe these other agreements contain material noncancelable commitments.

We believe that funds from future operating cash flows, cash and investments and funds available under our Facility and/or from public or private financing sources, will be sufficient for future operations and commitments, and for capital acquisitions and other strategic transactions.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet derivative instruments, guarantee transactions, agreements or other contractual arrangements or any indemnification agreements that will require funding in future periods. We have not transferred assets to an unconsolidated entity that serves as credit, liquidity or market risk support to such entity. We do not hold any variable interest in an unconsolidated entity where such entity provides us with financing, liquidity, market risk or credit risk support.

Risk-Based Capital

Our regulated subsidiaries’ states of domicile have statutory risk-based capital, or RBC, requirements for health and other insurance companies and HMOs largely based on the National Association of Insurance Commissioners, or NAIC, Risk-Based Capital (RBC) For Health Organizations Model Act, or RBC Model Act. These RBC requirements are intended to measure capital adequacy, taking into account the risk characteristics of an insurer’s investments and products. The NAIC sets forth the formula for calculating the RBC requirements, which are designed to take into account asset risks, insurance risks, interest rate risks and other relevant risks with respect to an individual insurance company’s business. In general, under the RBC Model Act, an insurance company must submit a report of its RBC level to the state insurance department or insurance commissioner, as appropriate, at the end of each calendar year. Our regulated subsidiaries’ respective RBC levels as

of December 31, 2018, which was the most recent date for which reporting was required, were in excess of all mandatory RBC requirements. In addition to exceeding the RBC requirements, we are in compliance with the liquidity and capital requirements for a licensee of the BCBSA and with the tangible net worth requirements applicable to certain of our California subsidiaries.

For additional information, see Note 21, "Statutory Information," of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

(In Millions, Except Per Share Data or As Otherwise Stated Herein)

As a result of our investing and borrowing activities, we are exposed to financial market risks, including those resulting from changes in interest rates and changes in market valuations. Potential impacts discussed below are based upon sensitivity analyses performed on our financial position as of December 31, 2018. Actual results could vary from these estimates. Our primary objectives with our investment portfolio are to provide safety and preservation of capital, sufficient liquidity to meet cash flow requirements, the integration of investment strategy with the business operations and an attainment of a competitive after-tax total return.

Investments

Our investment portfolio is exposed to three primary sources of risk: credit quality risk, interest rate risk and market valuation risk.

The primary risks associated with our fixed maturity securities, which are classified as available-for-sale, are credit quality risk and interest rate risk. Credit quality risk is defined as the risk of a credit event, such as a ratings downgrade or default, to an individual fixed maturity security and the potential loss attributable to that event. Credit quality risk is managed through our investment policy, which establishes credit quality limitations on the overall portfolio as well as diversification and percentage limits on securities of individual issuers. The result is a well-diversified portfolio of fixed maturity securities, with an average credit rating of approximately "A." Interest rate risk is defined as the potential for economic losses on fixed maturity securities due to a change in market interest rates. Our fixed maturity portfolio is invested primarily in U.S. government securities, corporate bonds, asset-backed bonds, mortgage-related securities and municipal bonds, all of which have exposure to changes in the level of market interest rates. Interest rate risk is managed by maintaining asset duration within a band based upon our liabilities, operating performance and liquidity needs. Additionally, we have the capability of holding any security to maturity, which would allow us to realize full par value.

Investments in fixed maturity securities include corporate securities which account for 46.2% of the total fixed maturity securities at December 31, 2018 and are subject to credit/default risk. In a declining economic environment, corporate yields will usually increase prompted by concern over the ability of corporations to make interest payments, thus causing a decrease in the price of corporate securities, and the decline in value of the corporate fixed maturity portfolio. We manage this risk through fundamental credit analysis, diversification of issuers and industries and an average credit rating of our corporate fixed maturity portfolio of approximately "BBB."

Market risk for fixed maturity securities is addressed by actively managing the duration, allocation and diversification of our investment portfolio. We have evaluated the impact on the fixed maturity portfolio's fair value considering an immediate 100 basis point change in interest rates. A 100 basis point increase in interest rates would result in an approximate $733 decrease in fair value, whereas a 100 basis point decrease in interest rates would result in an approximate $723 increase in fair value. While we classify our fixed maturity securities as "available-for-sale" for accounting purposes, we believe our cash flows and the duration of our portfolio should allow us to hold securities to maturity, thereby avoiding the recognition of losses should interest rates rise significantly.

Our equity portfolio is comprised of large capitalization and small capitalization domestic equities, foreign equities, exchange-traded funds and index mutual funds. Our equity portfolio is subject to the volatility inherent in the stock market, driven by concerns over economic conditions, earnings and sales growth, inflation, and consumer confidence. These systemic risks cannot be managed through diversification alone. However, more routine risks, such as stock/industry specific risks, are managed by investing in a diversified equity portfolio.

As of December 31, 2018, 8.2% of our investments were equity securities. An immediate 10% decrease in each equity investment's value, arising from market movement, would result in a fair value decrease of $153. Alternatively, an immediate 10% increase in each equity investment's value, attributable to the same factor, would result in a fair value increase of $153.

For additional information regarding our investments, see Note 4, "*Investments*," of the Notes to Consolidated Financial Statements included in Part II, Item 8 and "Critical Accounting Policies and Estimates - *Investments*" within Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in this Annual Report on Form 10-K.

Long-Term Debt

Our total long-term debt at December 31, 2018 consists of senior unsecured notes, convertible debentures, commercial paper and subordinated surplus notes by one of our insurance subsidiaries. At December 31, 2018, the carrying value and estimated fair value of our long-term debt was $18,066 and $18,872, respectively. This debt is subject to interest rate risk as these instruments have fixed interest rates and the fair value is affected by changes in market interest rates. Should interest rates increase or decrease in the future, the estimated fair value of our fixed rate debt would decrease or increase accordingly.

For additional information regarding our long-term debt, see Note 6, "Fair Value" and Note 12, "Debt" of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Derivatives

We have exposure to economic losses due to interest rate risk arising from changes in the level or volatility of interest rates. We attempt to mitigate our exposure to interest rate risk through the use of derivative financial instruments. These strategies include the use of interest rate swaps and forward contracts, which are used to lock-in interest rates or to hedge (on an economic basis) interest rate risks associated with variable rate debt. We have used these types of instruments as designated hedges against specific liabilities.

Changes in interest rates will affect the estimated fair value of these derivatives. As of December 31, 2018, we recorded a net liability of $4, the estimated fair value of the swaps at that date. We have evaluated the impact on the interest rate swaps' fair value considering an immediate 100 basis point change in interest rates. A 100 basis point increase in interest rates would result in an approximate $27 decrease in fair value, whereas a 100 basis point decrease in interest rates would result in an approximate $27 increase in fair value.

For additional information regarding our derivatives, see Note 5, "Derivative Financial Instruments" of the Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

ANTHEM, INC.

CONSOLIDATED FINANCIAL STATEMENTS

Years ended December 31, 2018, 2017 and 2016

Contents

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Anthem, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Anthem, Inc. (the Company) as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and financial statement schedule listed in the Index at Item 15(c) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 20, 2019 expressed an unqualified opinion thereon.

Adoption of New Accounting Standard

As discussed in Note 2 to the consolidated financial statements, the Company changed its method of accounting for non-consolidated equity investments not accounted for under the equity method of accounting by requiring changes in fair value to be recognized in income for the year ended December 31, 2018.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1944.

Indianapolis, Indiana
February 20, 2019

Anthem, Inc.
Consolidated Balance Sheets

	December 31, 2018	December 31, 2017
(In millions, except share data)		
Assets		
Current assets:		
Cash and cash equivalents	$ 3,934	$ 3,609
Fixed maturity securities, current (amortized cost of $16,894 and $17,055)	16,692	17,377
Equity securities, current	1,493	3,599
Other invested assets, current	21	17
Accrued investment income	162	163
Premium receivables	4,465	3,605
Self-funded receivables	2,278	2,580
Other receivables	2,558	2,267
Income taxes receivable	10	342
Securities lending collateral	604	455
Other current assets	2,104	2,249
Total current assets	34,321	36,263
Long-term investments:		
Fixed maturity securities (amortized cost of $486 and $555)	487	561
Equity securities	33	33
Other invested assets	3,726	3,344
Property and equipment, net	2,735	2,175
Goodwill	20,504	19,231
Other intangible assets	9,007	8,368
Other noncurrent assets	758	565
Total assets	$ 71,571	$ 70,540
Liabilities and shareholders' equity		
Liabilities		
Current liabilities:		
Policy liabilities:		
Medical claims payable	$ 7,454	$ 7,992
Reserves for future policy benefits	75	70
Other policyholder liabilities	2,590	2,950
Total policy liabilities	10,119	11,012
Unearned income	902	860
Accounts payable and accrued expenses	4,959	5,024
Security trades pending payable	197	113
Securities lending payable	604	454
Short-term borrowings	1,145	1,275
Current portion of long-term debt	849	1,275
Other current liabilities	3,190	3,343
Total current liabilities	21,965	23,356
Long-term debt, less current portion	17,217	17,382
Reserves for future policy benefits, noncurrent	706	647
Deferred tax liabilities, net	1,960	1,727
Other noncurrent liabilities	1,182	925
Total liabilities	43,030	44,037
Commitments and contingencies—Note 13		
Shareholders' equity		
Preferred stock, without par value, shares authorized - 100,000,000; shares issued and outstanding - none	—	—
Common stock, par value $0.01, shares authorized - 900,000,000; shares issued and outstanding - 257,395,577 and 256,084,913	3	3
Additional paid-in capital	9,536	8,547
Retained earnings	19,988	18,054
Accumulated other comprehensive loss	(986)	(101)
Total shareholders' equity	28,541	26,503
Total liabilities and shareholders' equity	$ 71,571	$ 70,540

See accompanying notes.

Anthem, Inc.
Consolidated Statements of Income

(In millions, except per share data)	Years Ended December 31 2018	2017	2016
Revenues			
Premiums	$ 85,421	$ 83,648	$ 78,860
Administrative fees and other revenue	5,920	5,413	5,334
Total operating revenue	91,341	89,061	84,194
Net investment income	970	867	779
Net realized (losses) gains on financial instruments	(180)	145	5
Other-than-temporary impairment losses on investments:			
Total other-than-temporary impairment losses on investments	(29)	(35)	(147)
Portion of other-than-temporary impairment losses recognized in other comprehensive (loss) income	3	2	32
Other-than-temporary impairment losses recognized in income	(26)	(33)	(115)
Total revenues	92,105	90,040	84,863
Expenses			
Benefit expense	71,895	72,236	66,834
Selling, general and administrative expense	14,020	12,650	12,559
Interest expense	753	739	723
Amortization of other intangible assets	358	169	192
Loss on extinguishment of debt	11	282	—
Total expenses	87,037	86,076	80,308
Income before income tax expense	5,068	3,964	4,555
Income tax expense	1,318	121	2,085
Net income	$ 3,750	$ 3,843	$ 2,470
Net income per share			
Basic	$ 14.53	$ 14.70	$ 9.39
Diluted	$ 14.19	$ 14.35	$ 9.21
Dividends per share	$ 3.00	$ 2.70	$ 2.60

See accompanying notes.

Anthem, Inc.
Consolidated Statements of Comprehensive Income

(In millions)	Years Ended December 31 2018	2017	2016
Net income	$ 3,750	$ 3,843	$ 2,470
Other comprehensive (loss) income, net of tax:			
Change in net unrealized gains/losses on investments	(418)	173	118
Change in non-credit component of other-than-temporary impairment losses on investments	(2)	4	5
Change in net unrealized gains/losses on cash flow hedges	37	(65)	(87)
Change in net periodic pension and postretirement costs	(90)	51	(13)
Foreign currency translation adjustments	(1)	3	2
Other comprehensive (loss) income	(474)	166	25
Total comprehensive income	$ 3,276	$ 4,009	$ 2,495

See accompanying notes.

Anthem, Inc.
Consolidated Statements of Cash Flows

(In millions)	Years Ended December 31 2018	2017	2016
Operating activities			
Net income	$ 3,750	$ 3,843	$ 2,470
Adjustments to reconcile net income to net cash provided by operating activities:			
Net realized losses (gains) on financial instruments	180	(145)	(5)
Other-than-temporary impairment losses recognized in income	26	33	115
Loss on extinguishment of debt	11	282	—
Loss on disposal of assets	8	13	5
Deferred income taxes	91	(1,272)	127
Amortization, net of accretion	1,008	780	808
Depreciation expense	124	111	104
Impairment of property and equipment	5	2	45
Share-based compensation	226	170	165
Excess tax benefits from share-based compensation	—	—	(54)
Changes in operating assets and liabilities:			
Receivables, net	(695)	(22)	(1,381)
Other invested assets	(1)	(36)	(19)
Other assets	(26)	(629)	(128)
Policy liabilities	(1,059)	732	322
Unearned income	(36)	(120)	(174)
Accounts payable and accrued expenses	122	922	182
Other liabilities	(25)	(120)	606
Income taxes	323	(194)	179
Other, net	(205)	(165)	(97)
Net cash provided by operating activities	3,827	4,185	3,270
Investing activities			
Purchases of fixed maturity securities	(8,244)	(9,795)	(10,158)
Proceeds from fixed maturity securities:			
Sales	6,442	7,932	8,636
Maturities, calls and redemptions	1,938	1,848	1,419
Purchases of equity securities	(896)	(5,416)	(1,476)
Proceeds from sales of equity securities	2,809	3,463	1,593
Purchases of other invested assets	(531)	(1,164)	(433)
Proceeds from sales of other invested assets	411	219	305
Changes in collateral and settlement of non-hedging derivatives	—	65	(35)
Changes in securities lending collateral	(149)	625	222
Purchases of subsidiaries, net of cash acquired	(1,760)	(2,080)	—
Purchases of property and equipment	(1,208)	(800)	(584)
Proceeds from sales of property and equipment	—	9	—
Other, net	(71)	12	(3)
Net cash used in investing activities	(1,259)	(5,082)	(514)
Financing activities			
Net (repayments of) proceeds from commercial paper borrowings	(107)	175	(53)
Proceeds from long-term borrowings	835	5,458	—
Repayments of long-term borrowings	(1,684)	(2,815)	—
Proceeds from short-term borrowings	9,120	5,835	2,400
Repayments of short-term borrowings	(9,250)	(5,000)	(2,500)
Changes in securities lending payable	150	(625)	(222)
Changes in bank overdrafts	(210)	71	513
Proceeds from sale of put options	1	1	—
Proceeds from issuance of common stock under Equity Units stock purchase contracts	1,250	—	—
Repurchase and retirement of common stock	(1,685)	(1,998)	—
Change in collateral and settlements of debt-related derivatives	23	(149)	(360)
Cash dividends	(776)	(705)	(684)
Proceeds from issuance of common stock under employee stock plans	173	225	120
Taxes paid through withholding of common stock under employee stock plans	(81)	(46)	(67)
Excess tax benefits from share-based compensation	—	—	54
Net cash (used in) provided by financing activities	(2,241)	427	(799)
Effect of foreign exchange rates on cash and cash equivalents	(2)	4	5
Change in cash and cash equivalents	325	(466)	1,962
Cash and cash equivalents at beginning of year	3,609	4,075	2,113
Cash and cash equivalents at end of year	$ 3,934	$ 3,609	$ 4,075

See accompanying notes.

Anthem, Inc.
Consolidated Statements of Shareholders' Equity

(In millions)	Common Stock Number of Shares	Common Stock Par Value	Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
January 1, 2016	261.2	$ 3	$ 8,556	$ 14,778	$ (292)	$ 23,045
Net income	—	—	—	2,470	—	2,470
Other comprehensive income	—	—	—	—	25	25
Dividends and dividend equivalents	—	—	—	(688)	—	(688)
Issuance of common stock under employee stock plans, net of related tax benefits	2.5	—	249	—	—	249
December 31, 2016	263.7	3	8,805	16,560	(267)	25,101
Net income	—	—	—	3,843	—	3,843
Other comprehensive income	—	—	—	—	166	166
Premiums for and settlement of equity options	—	—	1	—	—	1
Repurchase and retirement of common stock	(10.5)	—	(356)	(1,642)	—	(1,998)
Dividends and dividend equivalents	—	—	—	(707)	—	(707)
Issuance of common stock under employee stock plans, net of related tax benefits	2.9	—	342	—	—	342
Convertible debenture conversions	—	—	(245)	—	—	(245)
December 31, 2017	256.1	3	8,547	18,054	(101)	26,503
Adoption of Accounting Standards Update No. 2016-01 (Note 2)	—	—	—	320	(320)	—
January 1, 2018	256.1	3	8,547	18,374	(421)	26,503
Net income	—	—	—	3,750	—	3,750
Other comprehensive loss	—	—	—	—	(474)	(474)
Issuance of common stock under Equity Units stock purchase contracts	6.0	—	1,250	—	—	1,250
Premiums for and settlement of equity options	—	—	1	—	—	1
Repurchase and retirement of common stock	(6.8)	—	(243)	(1,442)	—	(1,685)
Dividends and dividend equivalents	—	—	—	(785)	—	(785)
Issuance of common stock under employee stock plans, net of related tax benefits	2.1	—	318	—	—	318
Convertible debenture conversions	—	—	(337)	—	—	(337)
Adoption of Accounting Standards Update No. 2018-02 (Note 2)	—	—	—	91	(91)	—
December 31, 2018	257.4	$ 3	$ 9,536	$ 19,988	$ (986)	$ 28,541

See accompanying notes.

Anthem, Inc.

Notes to Consolidated Financial Statements

December 31, 2018

(In Millions, Except Per Share Data or As Otherwise Stated Herein)

1. Organization

References to the terms "we," "our," "us" or "Anthem" used throughout these Notes to Consolidated Financial Statements refer to Anthem, Inc., an Indiana corporation, and unless the context otherwise requires, its direct and indirect subsidiaries.

We are one of the largest health benefits companies in the United States in terms of medical membership, serving approximately 40 medical members through our affiliated health plans as of December 31, 2018. We offer a broad spectrum of network-based managed care plans to Large Group, Small Group, Individual, Medicaid and Medicare markets. Our managed care plans include: Preferred Provider Organizations, or PPOs; Health Maintenance Organizations, or HMOs; Point-of-Service, or POS, plans; traditional indemnity plans and other hybrid plans, including Consumer-Driven Health Plans, or CDHPs; and hospital only and limited benefit products. In addition, we provide a broad array of managed care services to self-funded customers, including claims processing, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services. We provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits, radiology benefit management and analytics-driven personal healthcare. We also provide services to the federal government in connection with the Federal Employee Program®, or FEP®.

We are an independent licensee of the Blue Cross and Blue Shield Association, or BCBSA, an association of independent health benefit plans. We serve our members as the Blue Cross licensee for California and as the Blue Cross and Blue Shield, or BCBS, licensee for Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri (excluding 30 counties in the Kansas City area), Nevada, New Hampshire, New York (in the New York City metropolitan area and upstate New York), Ohio, Virginia (excluding the Northern Virginia suburbs of Washington, D.C.) and Wisconsin. In a majority of these service areas, we do business as Anthem Blue Cross, Anthem Blue Cross and Blue Shield, Blue Cross and Blue Shield of Georgia, and Empire Blue Cross Blue Shield or Empire Blue Cross. We also conduct business through arrangements with other BCBS licensees in Louisiana, South Carolina and western New York. Through our subsidiaries, we also serve customers in over 25 states across the country as America's 1st Choice, Amerigroup, Aspire Health, CareMore, Freedom Health, HealthLink, HealthSun, Optimum HealthCare, Simply Healthcare, and/or UniCare. We are licensed to conduct insurance operations in all 50 states and the District of Columbia through our subsidiaries.

2. Basis of Presentation and Significant Accounting Policies

Basis of Presentation: The accompanying consolidated financial statements include the accounts of Anthem and its subsidiaries and have been prepared in conformity with U.S. generally accepted accounting principles, or GAAP. All significant intercompany accounts and transactions have been eliminated in consolidation.

Certain of our subsidiaries operate outside of the United States and have functional currencies other than the U.S. dollar, or USD. We translate the assets and liabilities of those subsidiaries to USD using the exchange rate in effect at the end of the period. We translate the revenues and expenses of those subsidiaries to USD using the average exchange rates in effect during the period. The net effect of these translation adjustments is included in "Foreign currency translation adjustments" in our consolidated statements of comprehensive income.

Reclassifications: Certain prior year amounts have been reclassified to conform to the current year presentation or adjusted to conform to the current year rounding convention of reporting financial data in whole millions of dollars, except as otherwise noted.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Use of Estimates: The preparation of consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

Cash and Cash Equivalents: Cash and cash equivalents includes available cash and all highly liquid investments with maturities of three months or less when purchased. We control a number of bank accounts that are used exclusively to hold customer funds for the administration of customer benefits, and we have cash and cash equivalents on deposit to meet certain regulatory requirements. These amounts totaled $222 and $182 at December 31, 2018 and 2017, respectively, and are included in the cash and cash equivalents line on our consolidated balance sheets.

Investments: Financial Accounting Standards Board, or FASB, other-than-temporary impairment, or OTTI, guidance applies to fixed maturity securities and provides guidance on the recognition, presentation of, and disclosures for OTTIs. If a fixed maturity security is in an unrealized loss position and we have the intent to sell the fixed maturity security, or it is more likely than not that we will have to sell the fixed maturity security before recovery of its amortized cost basis, the decline in value is deemed to be other-than-temporary and is presented within the other-than-temporary impairment losses recognized in the income line item on our consolidated statements of income. For impaired fixed maturity securities that we do not intend to sell or it is more likely than not that we will not have to sell such securities, but we expect that we will not fully recover the amortized cost basis, the credit component of the OTTI is presented within the other-than-temporary impairment losses recognized in the income line item on our consolidated statements of income and the non-credit component of the OTTI is recognized in other comprehensive income. Furthermore, unrealized losses entirely caused by non-credit related factors related to fixed maturity securities for which we expect to fully recover the amortized cost basis continue to be recognized in accumulated other comprehensive loss.

The credit component of an OTTI is determined primarily by comparing the net present value of projected future cash flows with the amortized cost basis of the fixed maturity security. The net present value is calculated by discounting our best estimate of projected future cash flows at the effective interest rate implicit in the fixed maturity security at the date of acquisition. For mortgage-backed and asset-backed securities, cash flow estimates are based on assumptions regarding the underlying collateral, including prepayment speeds, vintage, type of underlying asset, geographic concentrations, default rates, recoveries and changes in value. For all other securities, cash flow estimates are driven by assumptions regarding probability of default, including changes in credit ratings and estimates regarding timing and amount of recoveries associated with a default.

For asset-backed securities included in fixed maturity securities, we recognize income using an effective yield based on anticipated prepayments and the estimated economic life of the securities. When estimates of prepayments change, the effective yield is recalculated to reflect actual payments to date and anticipated future payments. The net investment in the securities is adjusted to the amount that would have existed had the new effective yield been applied since the acquisition of the securities. Such adjustments are reported within net investment income.

Effective January 1, 2018 and in accordance with the FASB guidance, the changes in fair value of our marketable equity securities are recognized in our results of operations within the net realized gains and losses on financial instruments. Prior to 2018, the unrealized gains or losses on our equity securities previously classified as available-for-sale were included in accumulated other comprehensive loss as a separate component of shareholders' equity, unless the decline in value was deemed to be other-than-temporary and we did not have the intent and ability to hold such equity securities until their full cost can be recovered, in which case such equity securities were written down to fair value and the loss was charged to other-than-temporary impairment losses recognized in income.

We maintain various rabbi trusts to account for the assets and liabilities under certain deferred compensation plans. Under these plans, the participants can defer certain types of compensation and elect to receive a return on the deferred amounts based on the changes in fair value of various investment options, primarily a variety of mutual funds. We have corporate-owned life insurance policies on certain participants in our deferred compensation plans. The cash surrender value of the corporate-owned life insurance policies is reported in other invested assets, long-term, in the consolidated balance sheets. The remaining rabbi trust assets are generally invested according to the participant's investment election and are classified as trading, which are reported in other invested assets, current, in the consolidated balance sheets.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

We use the equity method of accounting for investments in companies in which our ownership interest enables us to influence the operating or financial decisions of the investee company. Our proportionate share of equity in net income of these unconsolidated affiliates is reported within net investment income.

Investment income is recorded when earned. All securities sold resulting in investment gains and losses are recorded on the trade date. Realized gains and losses are determined on the basis of the cost or amortized cost of the specific securities sold.

We participate in securities lending programs whereby marketable securities in our investment portfolio are transferred to independent brokers or dealers in exchange for cash and securities collateral. Under FASB guidance related to accounting for transfers and servicing of financial assets and extinguishments of liabilities, we recognize the collateral as an asset, which is reported as securities lending collateral on our consolidated balance sheets, and we record a corresponding liability for the obligation to return the collateral to the borrower, which is reported as securities lending payable. The securities on loan are reported in the applicable investment category on our consolidated balance sheets. Unrealized gains or losses on securities lending collateral are included in accumulated other comprehensive loss as a separate component of shareholders' equity. The market value of loaned securities and that of the collateral pledged can fluctuate in non-synchronized fashions. To the extent the loaned securities' value appreciates faster or depreciates slower than the value of the collateral pledged, we are exposed to the risk of the shortfall. As a primary mitigating mechanism, the loaned securities and collateral pledged are marked to market on a daily basis and the shortfall, if any, is collected accordingly. Secondarily, the collateral level is set at 102% of the value of the loaned securities, which provides a cushion before any shortfall arises. The investment of the cash collateral is subject to market risk, which is managed by limiting the investments to higher quality and shorter duration instruments.

Receivables: Premium receivables include the uncollected amounts from insured groups, individuals and government programs. Premium receivables are reported net of an allowance for doubtful accounts of $278 and $302 at December 31, 2018 and 2017, respectively. Self-funded receivables include administrative fees, claims and other amounts due from self-funded customers. Self-funded receivables are reported net of an allowance for doubtful accounts of $47 and $153 at December 31, 2018 and 2017, respectively. The allowance for doubtful accounts is based on historical collection trends and our judgment regarding the ability to collect specific accounts.

Other receivables include pharmacy rebates, provider advances, claims recoveries, reinsurance receivables, proceeds due from brokers on investment trades, other government receivables and other miscellaneous amounts due to us. These receivables are reported net of an allowance for doubtful accounts of $280 and $306 at December 31, 2018 and 2017, respectively, which is based on historical collection trends and our judgment regarding the ability to collect specific accounts.

Income Taxes: We file a consolidated income tax return. Deferred income tax assets and liabilities are recognized for temporary differences between the financial statement and tax return basis of assets and liabilities based on enacted tax rates and laws. The deferred tax benefits of the deferred tax assets are recognized to the extent realization of such benefits is more likely than not. Deferred income tax expense or benefit generally represents the net change in deferred income tax assets and liabilities during the year, excluding the impact from amounts initially recorded for business combinations, if any, and amounts recorded to accumulated other comprehensive loss. Current income tax expense represents the tax consequences of revenues and expenses currently taxable or deductible on various income tax returns for the year reported.

We account for income tax contingencies in accordance with FASB guidance that contains a model to address uncertainty in tax positions and clarifies the accounting for income taxes by prescribing a minimum recognition threshold, which all income tax positions must achieve before being recognized in the financial statements.

Property and Equipment: Property and equipment is recorded at cost, net of accumulated depreciation. Depreciation is computed principally by the straight-line method over estimated useful lives ranging from fifteen to thirty-nine years for buildings and improvements, three to five years for computer equipment and software, and the lesser of the remaining life of the building lease, if any, or seven years for furniture and other equipment. Leasehold improvements are depreciated over the term of the related lease. Certain costs related to the development or purchase of internal-use software are capitalized and amortized over five years.

Goodwill and Other Intangible Assets: FASB guidance requires business combinations to be accounted for using the acquisition method of accounting and it also specifies the types of acquired intangible assets that are required to be recognized and reported separately from goodwill. Goodwill represents the excess of the cost of acquisition over the fair

value of net assets acquired. Other intangible assets represent the values assigned to customer relationships, provider and hospital networks, Blue Cross and Blue Shield and other trademarks, licenses, non-compete and other agreements. Goodwill and other intangible assets are allocated to reportable segments based on the relative fair value of the components of the businesses acquired.

Goodwill and other intangible assets with indefinite lives are not amortized but are tested for impairment at least annually. We complete our annual impairment tests of existing goodwill and other intangible assets with indefinite lives during the fourth quarter of each year. Certain interim impairment tests are also performed when potential impairment indicators exist or changes in our business or other triggering events occur. Goodwill and other intangible assets are allocated to reporting units for purposes of the annual goodwill impairment test. Other intangible assets with indefinite lives, such as trademarks, are tested for impairment separately.

FASB guidance allows for qualitative assessments of whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount for purposes of a goodwill impairment analysis and whether it is more likely than not that an indefinite-lived intangible asset is impaired for purposes of an indefinite-lived intangible asset impairment analysis. Quantitative analysis must be performed if qualitative analyses are not conclusive. Entities also have the option to bypass the assessment of qualitative factors and proceed directly to performing quantitative analyses. Our impairment tests require us to make assumptions and judgments regarding the estimated fair value of our reporting units, including goodwill and other intangible assets with indefinite lives. Estimated fair values developed based on our assumptions and judgments might be significantly different if other reasonable assumptions and estimates were to be used. We began our 2018 annual test with qualitative analyses.

Qualitative analysis involves assessing situations and developments that could affect key drivers used to evaluate whether the fair value of our goodwill and indefinite-lived intangible assets are impaired. Our procedures include assessing our financial performance, macroeconomic conditions, industry and market considerations, various asset specific factors, and entity specific events.

Fair value for purposes of a quantitative goodwill impairment test is calculated using a blend of the projected income and market valuation approaches. The projected income approach is developed using assumptions about future revenue, expenses and net income derived from our internal planning process. Our assumed discount rate is based on our industry's weighted-average cost of capital and reflects volatility associated with the cost of equity capital. Market valuations include market comparisons to publicly traded companies in our industry and are based on observed multiples of certain measures including revenue; earnings before interest, taxes, depreciation and amortization, or EBITDA; and book value of invested capital. A goodwill impairment loss is recognized to the extent that the carrying amount exceeds the asset's fair value. This determination is made at the reporting unit level and consists of two steps. First, the fair value of a reporting unit is determined and compared to its carrying amount. Second, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recognized for any excess of the carrying amount of the reporting unit's goodwill over the implied fair value of that goodwill. The implied fair value of goodwill is determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation on a business acquisition, at the impairment test date.

Fair value for purposes of a quantitative impairment test for indefinite-lived intangible assets is estimated using a projected income approach. We recognize an impairment loss when the estimated fair value of indefinite-lived intangible assets is less than the carrying value. If significant impairment indicators are noted relative to other intangible assets subject to amortization, we may be required to record impairment losses against future income.

Derivative Financial Instruments: We primarily invest in the following types of derivative financial instruments: interest rate swaps, futures, forward contracts, put and call options, swaptions, embedded derivatives and warrants. Derivatives embedded within non-derivative instruments, such as options embedded in convertible fixed maturity securities, are bifurcated from the host instrument when the embedded derivative is not clearly and closely related to the host instrument. Our use of derivatives is limited by statutes and regulations promulgated by the various regulatory bodies to which we are subject, and by our own derivative policy. Our derivative use is generally limited to hedging purposes, on an economic basis, and we generally do not use derivative instruments for speculative purposes.

We have exposure to economic losses due to interest rate risk arising from changes in the level or volatility of interest rates. We attempt to mitigate our exposure to interest rate risk through active portfolio management, including rebalancing

our existing portfolios of assets and liabilities, as well as changing the characteristics of investments to be purchased or sold in the future. In addition, derivative financial instruments are used to modify the interest rate exposure of certain liabilities or forecasted transactions. These strategies include the use of interest rate swaps and forward contracts, which are used to lock-in interest rates or to hedge, on an economic basis, interest rate risks associated with variable rate debt. We have used these types of instruments as designated hedges against specific liabilities.

All investments in derivatives are recorded as assets or liabilities at fair value. If certain correlation, hedge effectiveness and risk reduction criteria are met, a derivative may be specifically designated as a hedge of exposure to changes in fair value or cash flow. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the nature of any hedge designation thereon. Amounts excluded from the assessment of hedge effectiveness, if any, as well as the ineffective portion of the gain or loss, are reported in results of operations immediately. If the derivative is not designated as a hedge, the gain or loss resulting from the change in the fair value of the derivative is recognized in results of operations in the period of change. Cash flows associated with the settlement of non-designated derivatives are shown on a net basis in investing activity in our consolidated statements of cash flow.

From time to time, we may also purchase derivatives to hedge, on an economic basis, our exposure to foreign currency exchange fluctuations associated with the operations of certain of our subsidiaries. We generally use futures or forward contracts for these transactions. We generally do not designate these contracts as hedges and, accordingly, the changes in fair value of these derivatives are recognized in results of operations immediately.

Credit exposure associated with non-performance by the counterparties to derivative instruments is generally limited to the uncollateralized fair value of the asset related to instruments recognized in the consolidated balance sheets. We attempt to mitigate the risk of non-performance by selecting counterparties with high credit ratings and monitoring their creditworthiness and by diversifying derivatives among multiple counterparties. At December 31, 2018, we believe there were no material concentrations of credit risk with any individual counterparty.

We generally enter into master netting agreements, which reduce credit risk by permitting net settlement of transactions with the same counterparty. Certain of our derivative agreements also contain credit support provisions that require us or the counterparty to post collateral if there are declines in the derivative fair value or our credit rating. The derivative assets and derivative liabilities are reported at their fair values net of collateral and netting by the counterparty.

Retirement Benefits: We recognize the funded status of pension and other postretirement benefit plans on the consolidated balance sheets based on fiscal-year-end measurements of plan assets and benefit obligations. Prepaid pension benefits represent prepaid costs related to defined benefit pension plans and are reported with other noncurrent assets. Postretirement benefits represent outstanding obligations for retiree medical, life, vision and dental benefits. Liabilities for pension and other postretirement benefits are reported with current and noncurrent liabilities based on the amount by which the actuarial present value of benefits payable in the next twelve months included in the benefit obligation exceeds the fair value of plan assets.

We determine the expected return on plan assets using the calculated value of plan assets, which recognizes changes in the fair value of plan assets in a systematic manner over three years. We apply a corridor approach to amortize unrecognized actuarial gains or losses. Under this approach, only accumulated net actuarial gains or losses in excess of 10% of the greater of the projected benefit obligation or the fair value of plan assets are amortized over the average remaining service or lifetime of the workforce as a component of net periodic benefit cost.

The discount rate reflects the current rate at which the pension liabilities could be effectively settled at the end of the year based on our most recent measurement date. At the December 31, 2017 measurement date, we changed the discount rate setting methodology from the single equivalent discount rate to the annual spot rate approach. Under the spot rate approach, individual spot rates from a full yield curve of published rates are used to discount each plan's cash flows to determine the plan's obligations. The spot rate approach produces a more precise measure of service and interest cost, and results in obligations that are equal at the measurement date under both methods.

The assumed healthcare cost trend rates used to measure the expected cost of other postretirement benefits are based on an initial assumed healthcare cost trend rate declining to an ultimate healthcare cost trend rate over a select number of years.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Medical Claims Payable: Liabilities for medical claims payable include estimated provisions for incurred but not paid claims on an undiscounted basis, as well as estimated provisions for expenses related to the processing of claims. Incurred but not paid claims include (1) an estimate for claims that are incurred but not reported, as well as claims reported to us but not yet processed through our systems; and (2) claims reported to us and processed through our systems but not yet paid.

Liabilities for both claims incurred but not reported and reported but not yet processed through our systems are determined in the aggregate, employing actuarial methods that are commonly used by health insurance actuaries and meet Actuarial Standards of Practice. Actuarial Standards of Practice require that the claim liabilities be appropriate under moderately adverse circumstances. We determine the amount of the liability for incurred but not paid claims by following a detailed actuarial process that uses both historical claim payment patterns as well as emerging medical cost trends to project our best estimate of claim liabilities. Under this process, historical paid claims data is formatted into "claim triangles," which compare claim incurred dates to the dates of claim payments. This information is analyzed to create "completion factors" that represent the average percentage of total incurred claims that have been paid through a given date after being incurred. Completion factors are applied to claims paid through the period-end date to estimate the ultimate claim expense incurred for the period. Actuarial estimates of incurred but not paid claim liabilities are then determined by subtracting the actual paid claims from the estimate of the ultimate incurred claims.

For the most recent incurred months (typically the most recent two months), the percentage of claims paid for claims incurred in those months is generally low. This makes the completion factor methodology less reliable for such months. Therefore, incurred claims for recent months are not projected from historical completion and payment patterns; rather, they are projected by estimating the claims expense for those months based on recent claims expense levels and healthcare trend levels, or "trend factors."

We regularly review and set assumptions regarding cost trends and utilization when initially establishing claim liabilities. We continually monitor and adjust the claims liability and benefit expense based on subsequent paid claims activity. If it is determined that our assumptions regarding cost trends and utilization are materially different than actual results, our income statement and financial position could be impacted in future periods.

Premium deficiencies are recognized when it is probable that expected claims and administrative expenses will exceed future premiums on existing medical insurance contracts without consideration of investment income. Determination of premium deficiencies for longer duration life and disability contracts includes consideration of investment income. For purposes of premium deficiencies, contracts are deemed to be either short or long duration and are grouped in a manner consistent with our method of acquiring, servicing and measuring the profitability of such contracts. Once established, premium deficiencies are released commensurate with actual claims experience over the remaining life of the contract. No premium deficiencies were established at December 31, 2018 or 2017.

Benefit expense includes incurred medical claims as well as quality improvement expenses for our fully-insured members. Quality improvement activities are those designed to improve member health outcomes, prevent hospital readmissions and improve patient safety. They also include expenses for wellness and health promotion provided to our members.

Reserves for Future Policy Benefits: Reserves for future policy benefits include liabilities for life and long-term disability insurance policy benefits based upon interest, mortality and morbidity assumptions from published actuarial tables, modified based upon our experience. Future policy benefits also include liabilities for insurance policies for which some of the premiums received in earlier years are intended to pay anticipated benefits to be incurred in future years. Future policy benefits are continually monitored and reviewed, and when reserves are adjusted, differences are reflected in benefit expense.

The current portion of reserves for future policy benefits relates to the portion of such reserves that we expect to pay within one year. We believe that our liabilities for future policy benefits, along with future premiums received, are adequate to satisfy our ultimate benefit liability; however, these estimates are inherently subject to a number of variable circumstances. Consequently, the actual results could differ materially from the amounts recorded in our consolidated financial statements.

Other Policyholder Liabilities: Other policyholder liabilities include rate stabilization reserves associated with retrospectively rated insurance contracts and certain case-specific reserves. Other policyholder liabilities also includes liabilities for premium refunds based upon the minimum medical loss ratio, or MLR, the relative health risk of members, or other contractual or regulatory requirements. Rate stabilization reserves represent accumulated premiums that exceed what

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

customers owe us based on actual claim experience. The timing of payment of these retrospectively rated refunds is based on the contractual terms with our customers and can vary from period to period based on the specific contractual requirements.

We are required to meet certain minimum MLR thresholds prescribed by the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, as amended, or collectively, the ACA. If we do not meet or exceed the minimum MLR thresholds specified by the ACA, we are required to pay rebates to certain customers. Minimum MLR rebates are calculated by subsidiary, state and applicable line of business (Large Group, Small Group, Individual and Medicare) in accordance with regulations issued by the Department of Health and Human Services, or HHS. Such calculations are made using estimated calendar year medical loss expense and premiums, as defined by HHS.

We follow HHS guidelines for determining the types of expenses that may be included in our minimum MLR rebate calculations, which differ from benefit expense and premiums as reported in our consolidated financial statements prepared in conformity with GAAP. Certain amounts reported as expense in our GAAP basis consolidated financial statements may be reported as a reduction of premiums in accordance with HHS regulations. In addition, profit amounts included in our payments to third-party administrative service providers are recorded as benefit expense in our consolidated GAAP financial statements while HHS does not allow for the inclusion of these expenses within the medical loss expense for purposes of calculating minimum MLR.

Revenue Recognition: Premiums for fully-insured contracts are recognized as revenue over the period insurance coverage is provided, and, if applicable, net of amounts recognized for the ACA MLR rebates, risk adjustment, reinsurance and risk corridor or contractual premium stabilization programs. Premium payments from contracted government agencies are based on eligibility lists produced by the government agencies. Premiums related to the unexpired contractual coverage periods are reflected in the accompanying consolidated balance sheets as unearned income. Premiums include revenue adjustments for retrospectively rated contracts where revenue is based on the estimated loss experience of the contract. Premium rates for certain lines of business are subject to approval by the Department of Insurance of each respective state. Additionally, delays in annual premium rate changes from contracted government agencies require that we defer the recognition of any increases to the period in which the premium rates become final. The value of the impact can be significant in the period in which it is recognized depending on the magnitude of the premium rate increase, the membership to which it applies and the length of the delay between the effective date of the rate increase and the final contract date. Premium rate decreases are recognized in the period the change in premium rate becomes effective and the change in the rate is known, which may be prior to the period when the contract amendment affecting the rate is finalized.

Administrative fees and other revenues include revenue from certain group contracts that provide for the group to be at risk for all, or with supplemental insurance arrangements, a portion of their claims experience. We charge these self-funded groups an administrative fee, which is based on the number of members in a group or the group's claim experience. In addition, administrative fees and other revenues include amounts received for the administration of Medicare or certain other government programs. Under our self-funded arrangements, revenue is recognized as administrative services are performed. All benefit payments under these programs are excluded from benefit expense.

For our non-fully-insured contracts, we had no material contract assets, contract liabilities or deferred contract costs recorded on our consolidated balance sheet at December 31, 2018. Revenue recognized in 2018 from performance obligations related to prior years, such as due to changes in transaction price, was not material. For contracts that have an original expected duration of greater than one year, revenue expected to be recognized in future periods related to unfulfilled contractual performance obligations and contracts with variable consideration related to undelivered performance obligations is not material.

Share-Based Compensation: Our current compensation philosophy provides for share-based compensation, including stock options, restricted stock awards and an employee stock purchase plan. Stock options are granted for a fixed number of shares with an exercise price at least equal to the fair value of the shares at the date of the grant. Restricted stock awards are issued at the fair value of the stock on the grant date. The employee stock purchase plan allows for a purchase price per share which is 95% of the fair value of a share of common stock on the last trading day of the plan quarter. The employee stock purchase plan discount is not recognized as compensation expense based on GAAP guidance. All other share-based payments to employees are recognized as compensation expense in the income statement based on their fair values. Additionally, excess tax benefits, which result from actual tax benefits realized when awards vest or options are exercised exceeding deferred tax benefits previously recognized based on grant date fair value, are recognized as tax benefits in the income statement. Our

share-based employee compensation plans and assumptions are described in Note 14, "Capital Stock." Also see "*Recently Adopted Accounting Guidance*" within this Note 2 for reference to accounting changes adopted related to share-based compensation.

***Advertising and Marketing Costs*:** We use print, broadcast and other advertising to promote our products and to develop our corporate image. We market our products through direct marketing activities and an extensive network of independent agents, brokers and retail partnerships for Individual and Medicare customers, and for certain Local Group customers with a smaller employee base. Products for National Accounts and Local Group customers with a larger employee base are generally sold through independent brokers or consultants retained by the customer and working with industry specialists from our in-house sales force. In the Individual and Small Group markets we offer products through state or federally facilitated marketplaces, or public exchanges, and off-exchange products. The cost of advertising and marketing for product promotion is expensed as incurred while advertising and marketing costs associated with our corporate image is expensed when first aired. Total advertising and marketing expense was $385, $338 and $246 for the years ended December 31, 2018, 2017 and 2016, respectively.

***Health Insurance Provider Fee*:** The ACA imposed an annual Health Insurance Provider Fee, or HIP Fee, on health insurers that write certain types of health insurance on U.S. risks. The annual HIP Fee is allocated to health insurers based on the ratio of the amount of an insurer's net premium revenues written during the preceding calendar year to the amount of health insurance premium for all U.S. health risk for those certain lines of business written during the preceding calendar year. We record our estimated liability for the HIP Fee in full at the beginning of the year with a corresponding deferred asset that is amortized on a straight-line basis to selling, general and administrative expense. The final calculation and payment of the annual HIP Fee is due by September 30th of each fee year. The HIP Fee is non-deductible for federal income tax purposes. We price our affected products to cover the increased selling, general and administrative and income tax expenses associated with the HIP Fee. The total amount due from allocations to health insurers was $11,300 for 2016, was suspended for 2017, had resumed and increased to $14,300 for 2018 and is suspended for 2019. The HIP Fee is scheduled to go back into effect for 2020. For the years ended December 31, 2018 and 2016, we recognized $1,544 and $1,176, respectively, as selling, general and administrative expense related to the HIP Fee. There was no corresponding expense for 2017 due to the suspension of the HIP Fee for 2017.

Earnings per Share: Earnings per share amounts, on a basic and diluted basis, have been calculated based upon the weighted-average common shares outstanding for the period.

Basic earnings per share excludes dilution and is computed by dividing income available to common shareholders by the weighted-average number of common shares outstanding for the period. Diluted earnings per share may include the dilutive effect of stock options, restricted stock, convertible debentures and Equity Units, using the treasury stock method. See Note 12, "Debt," for a description of our Equity Units. The treasury stock method assumes exercise of stock options and vesting of restricted stock, with the assumed proceeds used to purchase common stock at the average market price for the period. The difference between the number of shares assumed issued and number of shares assumed purchased represents the dilutive shares.

Recently Adopted Accounting Guidance: In February 2018, the FASB issued Accounting Standards Update No. 2018-02, *Income Statement—Reporting Comprehensive Income (Topic 220)*: *Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*, or ASU 2018-02. On December 22, 2017, the federal government enacted a tax bill, H.R.1, *An act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018*, or the Tax Cuts and Jobs Act. The Tax Cuts and Jobs Act contains significant changes to corporate taxation, including, but not limited to, reducing the U.S. federal corporate income tax rate from 35% to 21% and modifying or limiting many business deductions. Current FASB guidance requires adjustments of deferred taxes due to a change in the federal corporate income tax rate to be included in income from operations. As a result, the tax effects of items within accumulated other comprehensive loss did not reflect the appropriate tax rate. The amendments in ASU 2018-02 allow a reclassification from accumulated other comprehensive loss to retained earnings for stranded tax effects resulting from the change in the federal corporate income tax rate. We adopted the amendments in ASU 2018-02 for our interim and annual reporting periods beginning on January 1, 2018 and reclassified $91 of stranded tax effects from accumulated other comprehensive loss to retained earnings on our consolidated balance sheets. The adoption of ASU 2018-02 did not have any impact on our results of operations or cash flows.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

In August 2017, the FASB issued Accounting Standards Update No. 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities*, or ASU 2017-12. This update amends the hedge accounting recognition and presentation requirements in Topic 815 with the objective of improving the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements. The update also makes certain targeted improvements to simplify the application of the hedge accounting guidance and provides several transition elections. We adopted ASU 2017-12 on October 1, 2017. The adoption of ASU 2017-12 did not have a material impact on our consolidated financial position, results of operations or cash flows.

In May 2017, the FASB issued Accounting Standards Update No. 2017-09, *Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting*, or ASU 2017-09. This update provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. We adopted ASU 2017-09 on January 1, 2018. The guidance has been and will be applied prospectively to awards modified on or after the adoption date. The adoption of ASU 2017-09 did not have any impact on our consolidated financial position, results of operations or cash flows.

In March 2017, the FASB issued Accounting Standards Update No. 2017-07, *Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, or ASU 2017-07. This amendment requires entities to disaggregate the service cost component from the other components of the benefit cost and present the service cost component in the same income statement line item as other employee compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations. Certain of our defined benefit plans have previously been frozen, resulting in no annual service costs, and the remaining service costs for our non-frozen plan are not material. We adopted ASU 2017-07 on January 1, 2018 and it did not have a material impact on our results of operations, cash flows or consolidated financial position.

In December 2016, the FASB issued Accounting Standards Update No. 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*. In May 2016, the FASB issued Accounting Standards Update No. 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*. In April 2016, the FASB issued Accounting Standards Update No. 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing,* or ASU 2016-10. In March 2016, the FASB issued Accounting Standards Update No. 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross verses Net)*. These updates provide additional clarification and implementation guidance on the previously issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*. Collectively, these updates require a company to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. These updates supersede almost all existing revenue recognition guidance under GAAP, with certain exceptions, including an exception for our premium revenues, which are recorded on the Premiums line item on our consolidated statements of income and will continue to be accounted for in accordance with the provisions of Accounting Standards Codification, or ASC, Topic 944, *Financial Services - Insurance*. Our administrative service and other contracts that are subject to these Accounting Standards Updates are recorded in the Administrative fees and other revenue line item on our consolidated statements of income and represents approximately 6% of our consolidated total operating revenue. We adopted these standards on January 1, 2018 using the modified retrospective approach. The adoption of these standards did not have a material impact on our beginning retained earnings, results of operations, cash flows or consolidated financial position.

In November 2016, the FASB issued Accounting Standards Update No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash,* or ASU 2016-18. This update amends ASC Topic 230 to add and clarify guidance on the classification and presentation of restricted cash in the statement of cash flows. The guidance requires entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. We adopted ASU 2016-18 on January 1, 2018 using a retrospective approach. The adoption of ASU 2016-18 did not have a material impact on our consolidated statements of cash flows and did not impact our results of operations or consolidated financial position.

In August 2016, the FASB issued Accounting Standards Update No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments,* or ASU 2016-15. This update addresses the presentation and classification on the statement of cash flows for eight specific items, with the objective of reducing existing diversity in

practice in how certain cash receipts and cash payments are presented and classified. We adopted ASU 2016-15 on January 1, 2018. The adoption of ASU 2016-15 did not have a material impact on our consolidated statements of cash flows, results of operations or consolidated financial position.

In March 2016, the FASB issued Accounting Standards Update No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, or ASU 2016-09. The amendments in this update simplify several aspects of accounting for and reporting on share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. We adopted the amendments in ASU 2016-09 on January 1, 2017. We continue to estimate forfeitures expected to occur in determining stock compensation recognized in each period. We prospectively recognized tax benefits of $36, or $0.13 per diluted share, for the year ended December 31, 2017 in our consolidated statements of income, which previously would have been recorded to additional paid-in capital. In addition, we prospectively recognized excess tax benefits as an operating activity within our consolidated statement of cash flows for the year ended December 31, 2017. Finally, we retrospectively recognized taxes paid on our employees' behalf through the withholding of common stock as a financing activity within our consolidated statements of cash flows for the years ended December 31, 2017 and 2016.

In January 2016, the FASB issued Accounting Standards Update No. 2016-01, *Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*, or ASU 2016-01. The amendments in ASU 2016-01 change the accounting for non-consolidated equity investments that are not accounted for under the equity method of accounting by requiring changes in fair value to be recognized in income. Additionally, ASU 2016-01 simplifies the impairment assessment of equity investments without readily determinable fair values; requires entities to use the exit price when estimating the fair value of financial instruments; and modifies various presentation disclosure requirements for financial instruments. We adopted ASU 2016-01 on January 1, 2018 as a cumulative-effect adjustment and reclassified $320 of unrealized gains on equity investments, net of tax, from accumulated other comprehensive loss to retained earnings on our consolidated balance sheet. Effective January 1, 2018, our results of operations include the changes in fair value of these financial instruments.

In April 2015, the FASB issued Accounting Standards Update No. 2015-05, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Fees Paid in a Cloud Computing Arrangement*, or ASU 2015-05. This update provides guidance to help entities determine whether a cloud computing arrangement contains a software license that should be accounted for as internal-use software or as a service contract. ASU 2015-05 became effective January 1, 2016 and we elected to adopt the provisions of the new guidance prospectively to all arrangements entered into or materially modified on or after January 1, 2016. The adoption of ASU 2015-05 did not have an impact on our consolidated financial position, results of operations or cash flows.

In February 2015, the FASB issued Accounting Standards Update No. 2015-02, *Consolidation (Topic 810): Amendments to the Consolidation Analysis*, or ASU 2015-02. This update amended the consolidation guidance by modifying the evaluation criteria for whether limited partnerships and similar legal entities are variable interest entities or voting interest entities, eliminating the presumption that a general partner should consolidate a limited partnership, and affecting the consolidation analysis of reporting entities that are involved with variable interest entities. We adopted the provisions of ASU 2015-02 effective January 1, 2016, and re-evaluated all legal entity investments under the revised consolidation model. The adoption of ASU 2015-02 did not have a material impact on our consolidated financial position, results of operations or cash flows.

Recent Accounting Guidance Not Yet Adopted: In November 2018, the FASB issued Accounting Standards Update No. 2018-19, *Codification Improvements to Topic 326, Financial Instruments - Credit Losses,* or ASU 2018-19. The amendments in ASU 2018-19 provide additional clarification and implementation guidance on certain aspects of the previously issued Accounting Standards Update No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments,* or ASU 2016-13, and have the same effective date and transition requirements as ASU 2016-13. ASU 2016-13 introduces a current expected credit loss model for measuring expected credit losses for certain types of financial instruments held at the reporting date based on historical experience, current conditions and reasonable supportable forecasts. ASU 2016-13 replaces the current incurred loss model for measuring expected credit losses, requires expected losses on available-for-sale debt securities to be recognized through an allowance for credit losses rather than as reductions in the amortized cost of the securities and provides for additional disclosure requirements. ASU 2016-13 is effective for interim and annual reporting periods beginning after December 15, 2019, with early adoption permitted for

interim and annual reporting periods beginning after December 15, 2018. We are currently evaluating the effects the adoption of ASU 2016-13 will have on our consolidated financial statements, results of operations and cash flows.

In August 2018, the FASB issued Accounting Standards Update No. 2018-15, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract*, or ASU 2018-15. The amendments in ASU 2018-15 require implementation costs incurred by customers in cloud computing arrangements to be deferred and recognized over the term of the arrangement, if those costs would be capitalized by the customer in a software licensing arrangement under the internal-use software guidance. The amendments also require an entity to disclose the nature of its hosting arrangements and adhere to certain presentation requirements in its balance sheet, income statement and statement of cash flows. ASU 2018-15 is effective for us on January 1, 2020, with early adoption permitted. The guidance can be applied either prospectively to all implementation costs incurred after the date of adoption or retrospectively. We are currently evaluating the effects the adoption of ASU 2018-15 will have on our consolidated financial position, results of operations and cash flows.

In August 2018, the FASB issued Accounting Standards Update No. 2018-14, *Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20): Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans*, or ASU 2018-14. The amendments in ASU 2018-14 eliminate, add and modify certain disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. The amendments are effective for our annual reporting periods beginning after December 15, 2020, with early adoption permitted. The guidance is to be applied on a retrospective basis to all periods presented. We are currently evaluating the effects the adoption of ASU 2018-14 will have on our disclosures.

In August 2018, the FASB issued Accounting Standards Update No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement,* or ASU 2018-13. The amendments in ASU 2018-13 eliminate, add and modify certain disclosure requirements for fair value measurements. The amendments are effective for our interim and annual reporting periods beginning after December 15, 2019, with early adoption permitted for either the entire ASU or only the provisions that eliminate or modify disclosure requirements. We early adopted the provisions that eliminate and modify disclosure requirements on a retrospective basis effective in this Annual Report on Form 10-K and we adopted the new disclosure requirements on a prospective basis effective January 1, 2019.

In August 2018, the FASB issued Accounting Standards Update No. 2018-12, *Financial Services Insurance (Topic 944): Targeted Improvements to the Accounting for Long-Duration Contracts,* or ASU 2018-12. The amendments in ASU 2018-12 make changes to a variety of areas to simplify or improve the existing recognition, measurement, presentation and disclosure requirements for long-duration contracts issued by an insurance entity. The amendments require insurers to annually review the assumptions they make about their policyholders and update the liabilities for future policy benefits if the assumptions change. The amendments also simplify the amortization of deferred contract acquisition costs and add new disclosure requirements about the assumptions insurers use to measure their liabilities and how they may affect future cash flows. The amendments in ASU 2018-12 will be effective for our interim and annual reporting periods beginning after December 15, 2020. The amendments related to the liability for future policy benefits for traditional and limited-payment contracts and deferred acquisition costs are to be applied to contracts in force as of the beginning of the earliest period presented, with an option to apply such amendments retrospectively with a cumulative-effect adjustment to the opening balance of retained earnings as of the earliest period presented. The amendments for market risk benefits are to be applied retrospectively. We are currently evaluating the effects the adoption of ASU 2018-12 will have on our consolidated financial position, results of operations, cash flows, and related disclosures.

In July 2018, the FASB issued Accounting Standards Update No. 2018-11, *Leases* (Topic 842): *Targeted Improvements*, or ASU 2018-11, and Accounting Standards Update No. 2018-10, *Codification Improvements to Topic 842*, *Leases*, or ASU 2018-10. The amendments in ASU 2018-11 provide for an additional and optional transition method that allows an entity to initially apply ASC Topic 842 at the adoption date and recognize a cumulative effect adjustment to its opening balance of retained earnings in the period of adoption and continue its reporting for the comparative periods presented in accordance with the current lease guidance in ASC Topic 840. The amendments in ASU 2018-11 also provide lessors with a practical expedient, by class of underlying asset, to not separate nonlease components from the associated lease component and, instead, to account for those components as a single component if the nonlease components otherwise would be accounted for under the new revenue guidance in ASC Topic 606 and if certain conditions are met. The amendments in ASU 2018-10

provide additional clarification and implementation guidance on certain aspects of the previously issued Accounting Standards Update No. 2016-02, *Leases (Topic 842)*, or ASU 2016-02, and have the same effective and transition requirements as ASU 2016-02. Upon the effective date, ASU 2016-02 will supersede the current lease guidance in ASC Topic 840. Under the new guidance, lessees will be required to recognize for all leases, with the exception of short-term leases, a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis. Concurrently, lessees will be required to recognize a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. ASU 2016-02 became effective for us on January 1, 2019. ASU 2016-02 requires a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative periods presented in the financial statements. As noted above, ASU 2018-11 provides for an additional and optional transition method. We applied the optional transition method upon adoption and have elected the package of practical expedients permitted, which among other things, allows us to carry forward lease classification for our existing leases. In preparation for the adoption of this standard and to enable the preparation of the required financial information, we implemented a new lease accounting software solution as well as new internal controls. The adoption of this standard impacted our consolidated balance sheet in January 2019, as we recorded lease assets and liabilities of approximately $700 for our operating leases. The adoption of this standard did not have an impact on our consolidated statements of income or cash flows. We also do not believe the new standard will have an impact on our liquidity or debt-covenant compliance under our current agreements.

In March 2017, the FASB issued Accounting Standards Update No. 2017-08, *Receivables—Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities*, or ASU 2017-08. This update changes the amortization period for certain purchased callable debt securities held at a premium by shortening the amortization period for the premium to the earliest call date. Under current guidance, the premium is generally amortized over the contractual life of the instrument. The amendments are to be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. We adopted ASU 2017-08 on January 1, 2019 and the adoption of this standard did not have a material impact on our beginning retained earnings or upon our consolidated financial position, results of operations or cash flows.

In January 2017, the FASB issued Accounting Standards Update No. 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, or ASU 2017-04. This update removes Step 2 of the goodwill impairment test under current guidance, which requires a hypothetical purchase price allocation. The new guidance requires an impairment charge to be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value. Upon adoption, the guidance is to be applied prospectively. ASU 2017-04 is effective for us on January 1, 2020, with early adoption permitted. The adoption of ASU 2017-04 is not expected to have a material impact on our consolidated financial position, results of operations or cash flows.

There were no other new accounting pronouncements that were issued or became effective during the year ended December 31, 2018 that had, or are expected to have, a material impact on our financial position, results of operations, cash flows or financial statement disclosures.

3. Business Acquisitions

Acquisition of America's 1st Choice

On February 15, 2018, we completed our acquisition of Freedom Health, Inc., Optimum HealthCare, Inc., America's 1st Choice of South Carolina, Inc. and related entities, or collectively, America's 1st Choice, a Medicare Advantage organization that offers HMO products, including Chronic Special Needs Plans and Dual-Eligible Special Needs Plans under its Freedom Health and Optimum HealthCare brands in Florida and its America's 1st Choice of South Carolina brand in South Carolina. At the time of acquisition, through its Medicare Advantage Plans, America's 1st Choice served approximately one hundred and thirty-five thousand members in twenty-five Florida and three South Carolina counties. This acquisition aligns with our plans for continued growth in the Medicare Advantage and Special Needs populations.

In accordance with FASB accounting guidance for business combinations, the consideration transferred was allocated to the fair value of America's 1st Choice's assets acquired and liabilities assumed, including identifiable intangible assets. The excess of the consideration transferred over the fair value of net assets acquired resulted in goodwill of $1,029 at December 31, 2018, of which $295 was tax deductible. All of the goodwill was allocated to our Government Business segment.

Goodwill recognized from the acquisition of America's 1st Choice primarily relates to the future economic benefits arising from the assets acquired and is consistent with our stated intentions to strengthen our position and expand operations in the government sector to service Medicare Advantage and Special Needs populations.

The fair value of the net assets acquired from America's 1st Choice includes $711 of other intangible assets at December 31, 2018, which primarily consist of finite-lived customer relationships with amortization periods ranging from 7 to 13 years. The results of operations of America's 1st Choice are included in our consolidated financial statements within our Government Business segment for the periods following February 15, 2018. The pro forma effects of this acquisition for prior periods were not material to our consolidated results of operations.

Acquisition of HealthSun

On December 21, 2017, we completed our acquisition of HealthSun Health Plans, Inc., or HealthSun, which at the time of acquisition served approximately forty thousand members in the state of Florida through its Medicare Advantage Plans, and which received a five-star rating from the Centers for Medicare & Medicaid Services. This acquisition aligns with our plans for continued growth in the Medicare Advantage and dual-eligible populations.

In accordance with FASB accounting guidance for business combinations, the consideration transferred was allocated to the fair value of HealthSun's assets acquired and liabilities assumed, including identifiable intangible assets. The excess of the consideration transferred over the fair value of net assets acquired resulted in goodwill of $1,631, at December 31, 2018, of which $956 was tax deductible. All of the goodwill was allocated to our Government Business segment. Goodwill recognized from the acquisition of HealthSun primarily relates to the future economic benefits arising from the assets acquired and is consistent with our stated intentions to strengthen our position and expand operations in the government sector to service Medicare Advantage and dual-eligible enrollees. Subsequent to the acquisition date, we recognized a $12 decrease to goodwill primarily related to adjustments to provisional amounts of intangible assets recorded on the acquisition date.

The fair value of the net assets acquired from HealthSun includes $637 of other intangible assets at December 31, 2018, which primarily consist of finite-lived customer relationships with amortization periods ranging from 7 to 11 years. The results of operations of HealthSun are included in our consolidated financial statements within our Government Business segment for the periods following December 21, 2017. The pro forma effects of this acquisition for prior periods were not material to our consolidated results of operations.

Termination of Agreement and Plan of Merger with Cigna Corporation

On July 24, 2015, we and Cigna Corporation, or Cigna, announced that we entered into an Agreement and Plan of Merger, or Cigna Merger Agreement, dated as of July 23, 2015, to acquire all outstanding shares of Cigna. On May 12, 2017, we delivered to Cigna a notice terminating the Cigna Merger Agreement. Both we and Cigna have commenced litigation against the other seeking various actions and damages, including Cigna's damage claim for a $1,850 termination fee pursuant to the terms of the Cigna Merger Agreement. For additional information, see Note 13, "Commitments and Contingencies - *Litigation and Regulatory Proceedings - Cigna Corporation Merger Litigation.*"

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

4. Investments

A summary of current and long-term fixed maturity securities, available-for-sale, at December 31, 2018 and 2017 is as follows:

	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses		Estimated Fair Value	Non-Credit Component of OTTIs Recognized in Accumulated Other Comprehensive Loss
			Less than 12 Months	12 Months or Greater		
December 31, 2018						
Fixed maturity securities:						
United States Government securities	$ 414	$ 3	$ —	$ (1)	$ 416	$ —
Government sponsored securities	108	1	—	(1)	108	—
States, municipalities and political subdivisions, tax-exempt	4,716	91	(3)	(19)	4,785	—
Corporate securities	8,189	33	(170)	(115)	7,937	(3)
Residential mortgage-backed securities	2,769	31	(3)	(47)	2,750	—
Commercial mortgage-backed securities	69	—	—	(2)	67	—
Other securities	1,115	14	(8)	(5)	1,116	—
Total fixed maturity securities	$ 17,380	$ 173	$ (184)	$ (190)	$ 17,179	$ (3)
December 31, 2017						
Fixed maturity securities:						
United States Government securities	$ 649	$ 2	$ (5)	$ (1)	$ 645	$ —
Government sponsored securities	90	—	—	—	90	—
States, municipalities and political subdivisions, tax-exempt	5,854	193	(5)	(7)	6,035	—
Corporate securities	7,363	166	(30)	(13)	7,486	—
Residential mortgage-backed securities	2,520	39	(8)	(12)	2,539	—
Commercial mortgage-backed securities	80	1	—	(2)	79	—
Other securities	1,054	14	(3)	(1)	1,064	—
Total fixed maturity securities	$ 17,610	$ 415	$ (51)	$ (36)	$ 17,938	$ —

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

For fixed maturity securities in an unrealized loss position at December 31, 2018 and 2017, the following table summarizes the aggregate fair values and gross unrealized losses by length of time those securities have continuously been in an unrealized loss position.

	Less than 12 Months			12 Months or Greater		
	Number of Securities	Estimated Fair Value	Gross Unrealized Loss	Number of Securities	Estimated Fair Value	Gross Unrealized Loss
(Securities are whole amounts)						
December 31, 2018						
Fixed maturity securities:						
United States Government securities	5	$ 47	$ —	25	$ 79	$ (1)
Government sponsored securities	8	11	—	24	31	(1)
States, municipalities and political subdivisions, tax-exempt	177	295	(3)	604	1,032	(19)
Corporate securities	2,185	4,503	(170)	1,220	2,072	(115)
Residential mortgage-backed securities	259	383	(3)	816	1,458	(47)
Commercial mortgage-backed securities	6	11	—	19	37	(2)
Other securities	193	599	(8)	93	237	(5)
Total fixed maturity securities	2,833	$ 5,849	$ (184)	2,801	$ 4,946	$ (190)
December 31, 2017						
Fixed maturity securities:						
United States Government securities	36	$ 450	$ (5)	11	$ 56	$ (1)
Government sponsored securities	12	16	—	16	15	—
States, municipalities and political subdivisions, tax-exempt	414	641	(5)	189	356	(7)
Corporate securities	1,081	2,200	(30)	279	330	(13)
Residential mortgage-backed securities	445	1,050	(8)	287	478	(12)
Commercial mortgage-backed securities	7	14	—	12	27	(2)
Other securities	132	406	(3)	20	36	(1)
Total fixed maturity securities	2,127	$ 4,777	$ (51)	814	$ 1,298	$ (36)

The amortized cost and fair value of fixed maturity securities at December 31, 2018, by contractual maturity, are shown below. Expected maturities may differ from contractual maturities because the issuers of the securities may have the right to prepay obligations.

	Amortized Cost	Estimated Fair Value
Due in one year or less	$ 543	$ 544
Due after one year through five years	5,174	5,105
Due after five years through ten years	4,956	4,857
Due after ten years	3,869	3,856
Mortgage-backed securities	2,838	2,817
Total fixed maturity securities	$ 17,380	$ 17,179

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Equity Securities

A summary of current and long-term marketable equity securities at December 31, 2018 and 2017 is as follows:

	December 31, 2018	December 31, 2017
Equity Securities:		
Exchange traded funds	$ 2	$ 1,300
Fixed maturity mutual funds	557	791
Common equity securities	654	1,254
Private equity securities	313	287
Total	$ 1,526	$ 3,632

Investment Income

The major categories of net investment income for the years ended December 31, 2018, 2017 and 2016 are as follows:

	2018	2017	2016
Fixed maturity securities	$ 681	$ 614	$ 673
Equity securities	86	116	62
Cash equivalents	51	25	3
Other	193	153	85
Investment income	1,011	908	823
Investment expense	(41)	(41)	(44)
Net investment income	$ 970	$ 867	$ 779

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Investment Gains

Net realized investment gains/losses and the net change in unrealized appreciation/depreciation on investments for the years ended December 31, 2018, 2017 and 2016 are as follows:

	2018	2017	2016
Net realized gains (losses):			
Fixed maturity securities:			
Gross realized gains from sales	$ 85	$ 137	$ 210
Gross realized losses from sales	(116)	(55)	(152)
Net realized (losses) gains from sales of fixed maturity securities	(31)	82	58
Equity securities:			
Gross realized gains	77	140	205
Gross realized losses	(276)	(17)	(50)
Net realized (losses) gains on equity securities	(199)	123	155
Other investments:			
Gross realized gains from sales	27	—	7
Gross realized losses from sales	—	(5)	—
Net realized gains (losses) from sales of other investments	27	(5)	7
Net realized (losses) gains on investments	(203)	200	220
Other-than-temporary impairment losses recognized in income:			
Fixed maturity securities	(9)	(4)	(75)
Equity securities	—	(15)	(22)
Other investments	(17)	(14)	(18)
Other-than-temporary impairment losses recognized in income	(26)	(33)	(115)
Change in net unrealized (losses) gains on investments:			
Fixed maturity securities	(529)	156	193
Equity securities	—	111	7
Other investments	5	(10)	(2)
Total change in net unrealized (losses) gains on investments	(524)	257	198
Deferred income tax benefit (expense)	106	(84)	(80)
Change in net unrealized (losses) gains on investments	(418)	173	118
Net realized (losses) gains on investments, other-than-temporary impairment losses recognized in income and change in net unrealized (losses) gains on investments	$ (647)	$ 340	$ 223

The gains and losses related to equity securities for the year ended December 31, 2018 are as follows:

	2018
Net realized losses recognized on equity securities	$ (199)
Less: Net realized losses recognized on equity securities sold during the period	57
Unrealized losses recognized in income on equity securities still held at December 31	$ (142)

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A primary objective in the management of our fixed maturity and equity portfolios is to maximize total return relative to underlying liabilities and respective liquidity needs. In achieving this goal, assets may be sold to take advantage of market conditions or other investment opportunities as well as tax considerations. Sales will generally produce realized gains and losses. In the ordinary course of business, we may sell securities at a loss for a number of reasons, including, but not limited to: (i) changes in the investment environment; (ii) expectations that the fair value could deteriorate further; (iii) desire to reduce exposure to an issuer or an industry; (iv) changes in credit quality; or (v) changes in expected cash flow.

Proceeds from sales, maturities, calls or redemptions of fixed maturity securities and the related gross realized gains and gross realized losses for the years ended December 31 are as follows:

	2018	2017	2016
Proceeds	$ 8,380	$ 9,780	$ 10,055
Gross realized gains	85	137	210
Gross realized losses	(116)	(55)	(152)

A significant judgment in the valuation of investments is the determination of when an other-than-temporary decline in value has occurred. We follow a consistent and systematic process for recognizing impairments on securities that sustain other-than-temporary declines in value. We have established a committee responsible for the impairment review process. The decision to impair a security incorporates both quantitative criteria and qualitative information. The impairment review process considers a number of factors including, but not limited to: (i) the length of time and the extent to which the fair value has been less than book value, (ii) the financial condition and near term prospects of the issuer, (iii) our intent and ability to retain impaired investments for a period of time sufficient to allow for any anticipated recovery in fair value, (iv) our intent to sell or the likelihood that we will need to sell a fixed maturity security before recovery of its amortized cost basis, (v) whether the debtor is current on interest and principal payments, (vi) the reasons for the decline in value (i.e., credit event compared to liquidity, general credit spread widening, currency exchange rate or interest rate factors) and (vii) general market conditions and industry or sector specific factors. For securities that are deemed to be other-than-temporarily impaired, the security is adjusted to fair value and the resulting losses are recognized in the consolidated statements of income. The new cost basis of the impaired securities is not increased for future recoveries in fair value.

Other-than-temporary impairments recorded in 2018, 2017 and 2016 were primarily the result of the continued credit deterioration on specific issuers in the bond markets. There were no individually significant OTTI losses on investments by issuer during 2018, 2017 or 2016.

Investment securities are exposed to various risks, such as interest rate, market and credit. Due to the level of risk associated with certain investment securities and the level of uncertainty related to changes in the value of investment securities, it is possible that changes in these risk factors in the near term could have an adverse material impact on our results of operations or shareholders' equity.

The changes in the amount of the credit component of OTTI losses on fixed maturity securities recognized in income, for which a portion of the OTTI losses was recognized in other comprehensive income, was not material for the years ended December 31, 2018, 2017 or 2016.

At December 31, 2018 and 2017, no investments exceeded 10% of shareholders' equity.

At December 31, 2018 and 2017, the carrying value of fixed maturity investments that did not produce income during the years then ended were $0 and $9, respectively.

As of December 31, 2018 and 2017, we had committed approximately $873 and $824, respectively, to future capital calls from various third-party investments in exchange for an ownership interest in the related entities.

At December 31, 2018 and 2017, securities with carrying values of approximately $487 and $561, respectively, were deposited by our insurance subsidiaries under requirements of regulatory authorities.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Securities Lending Programs

The fair value of the collateral received at the time of the securities lending transactions amounted to $604 and $454 at December 31, 2018 and 2017, respectively. The value of the collateral represented 102% and 104% of the market value of the securities on loan at December 31, 2018 and 2017, respectively.

The remaining contractual maturity of our securities lending agreements at December 31, 2018 is as follows:

	Overnight and Continuous	Less than 30 days	30-90 days	Greater Than 90 days	Total
Securities lending transactions					
United States Government securities	$ 169	$ —	$ —	$ —	$ 169
Corporate securities	396	—	—	—	396
Equity securities	39	—	—	—	39
Total	$ 604	$ —	$ —	$ —	$ 604

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

5. Derivative Financial Instruments

We primarily invest in the following types of derivative financial instruments: interest rate swaps, futures, forward contracts, put and call options, swaptions, embedded derivatives and warrants. We also enter into master netting agreements which reduce credit risk by permitting net settlement of transactions. We had posted collateral of $1 and $12 related to our derivative financial instruments at December 31, 2018 and 2017, respectively.

A summary of the aggregate contractual or notional amounts and estimated fair values related to derivative financial instruments at December 31, 2018 and 2017 is as follows:

	Contractual/ Notional Amount	Balance Sheet Location	Estimated Fair Value	
			Asset	(Liability)
December 31, 2018				
Hedging instruments				
Interest rate swaps - fixed to floating	$ 1,200	Other assets/other liabilities	$ 7	$ (11)
Non-hedging instruments				
Interest rate swaps	164	Equity securities	4	(1)
Options	100	Other assets/other liabilities	—	—
Futures	415	Equity securities	5	(5)
Subtotal non-hedging	679	Subtotal non-hedging	9	(6)
Total derivatives	$ 1,879	Total derivatives	16	(17)
		Amounts netted	(14)	14
		Net derivatives	$ 2	$ (3)
December 31, 2017				
Hedging instruments				
Interest rate swaps - fixed to floating	$ 1,235	Other assets/other liabilities	$ 2	$ (5)
Interest rate swaps - forward starting pay fixed	425	Other assets/other liabilities	—	$ (9)
Subtotal hedging	1,660	Subtotal hedging	2	(14)
Non-hedging instruments				
Interest rate swaps	171	Equity securities	1	(5)
Options	100	Other assets/other liabilities	—	—
Futures	117	Equity securities	—	(2)
Subtotal non-hedging	388	Subtotal non-hedging	1	(7)
Total derivatives	$ 2,048	Total derivatives	3	(21)
		Amounts netted	(1)	1
		Net derivatives	$ 2	$ (20)

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Fair Value Hedges

We have entered into various interest rate swap contracts to convert a portion of our interest rate exposure on our long-term debt from fixed rates to floating rates. The floating rates payable on all of our fair value hedges are benchmarked to the London Interbank Offered Rate, or LIBOR. A summary of our outstanding fair value hedges at December 31, 2018 and 2017 is as follows:

Type of Fair Value Hedges	Year Entered Into	Outstanding Notional Amount		Interest Rate Received	Expiration Date
		2018	2017		
Interest rate swap	2018	$ 50	$ —	4.101 %	September 1, 2027
Interest rate swap	2018	450	—	3.300	January 15, 2023
Interest rate swap	2018	90	—	4.350	August 15, 2020
Interest rate swap	2017	50	50	4.350	August 15, 2020
Interest rate swap	2015	200	200	4.350	August 15, 2020
Interest rate swap	2014	150	150	4.350	August 15, 2020
Interest rate swap	2013	10	10	4.350	August 15, 2020
Interest rate swap	2012	200	200	4.350	August 15, 2020
Interest rate swap	2012	—	625	1.875	January 15, 2018
Total notional amount outstanding		$ 1,200	$ 1,235		

The following amounts were recorded on our consolidated balance sheets related to cumulative basis adjustments for fair value hedges at December 31, 2018 and 2017:

Balance Sheet Classification in Which Hedged Item is Included	Carrying Amount of Hedged Liability		Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Liability	
	2018	2017	2018	2017
Current portion of long term-debt	$ 849	$ 1,275	$ 7	$ 2
Long-term debt	17,217	17,382	(11)	(5)

Cash Flow Hedges

We have entered into a series of forward starting pay fixed interest rate swaps with the objective of eliminating the variability of cash flows in the interest payments on anticipated future financings. During 2018, swaps in the notional amount of $425 were terminated. We received an aggregate of $24 from the swap counter parties upon termination.

The unrecognized loss for all outstanding, expired and terminated cash flow hedges included in accumulated other comprehensive loss, net of tax, was $246 and $233 at December 31, 2018 and 2017, respectively. As of December 31, 2018, the total amount of amortization over the next twelve months for all cash flow hedges is estimated to increase interest expense by approximately $14. No amounts were excluded from effectiveness testing.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of the effect of cash flow hedges in accumulated other comprehensive loss for the years ended December 31, 2018 and 2017 is as follows:

Type of Cash Flow Hedge	Hedge Loss Recognized in Other Comprehensive Income (Loss)	Income Statement Location of Loss Reclassification from Accumulated Other Comprehensive Loss	Hedge Loss Reclassified from Accumulated Other Comprehensive Loss
Year ended December 31, 2018			
Forward starting pay fixed swaps	$ (33)	Interest expense	$ (14)
Year ended December 31, 2017			
Forward starting pay fixed swaps	$ (112)	Interest expense	$ (7)
Forward starting pay fixed swaps		Net realized (losses) gains on financial instruments	$ (7)

A summary of the effect of cash flow hedges in accumulated other comprehensive loss for the year ended December 31, 2016 is as follows:

	Effective Portion			Ineffective Portion	
Type of Cash Flow Hedge	Hedge Loss Recognized in Other Comprehensive Income (Loss)	Income Statement Location of Loss Reclassification from Accumulated Other Comprehensive Loss	Hedge Loss Reclassified from Accumulated Other Comprehensive Loss	Income Statement Location of Loss Recognized	Hedge Loss Recognized
Year ended December 31, 2016					
Forward starting pay fixed swaps	$ (140)	Interest expense	$ (6)	Net realized (losses) gains on financial instruments	$ (8)

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Income Statement Relationship of Fair Value and Cash Flow Hedging

A summary of the relationship between the effects of fair value and cash flow hedges on the total amount of income and expense presented in our consolidated statements of income for the years ended December 31, 2018, 2017 and 2016 is as follows:

	Classification and Amount of Gain (Loss) Recognized in Income on Fair Value and Cash Flow Hedging Relationships					
	2018		2017		2016	
	Net Realized (Losses) Gains on Financial Instruments	Interest Expense	Net Realized (Losses) Gains on Financial Instruments	Interest Expense	Net Realized (Losses) Gains on Financial Instruments	Interest Expense
Total amount of income or expense in the income statement in which the effects of fair value or cash flow hedges are recorded	$ (180)	$ (753)	$ 145	$ (739)	$ 5	$ (723)
Gain (loss) on fair value hedging relationships:						
Interest rate swaps:						
Hedged items	—	—	—	—	—	(8)
Derivatives designated as hedging instruments	—	—	—	—	—	8
Loss on cash flow hedging relationships:						
Forward starting pay fixed swaps:						
Amount of loss reclassified from accumulated other comprehensive loss into net income	—	(14)	—	(7)	—	(6)
Amount of loss reclassified from accumulated other comprehensive loss into net income due to ineffectiveness and missed forecasted transactions	—	—	(7)	—	(8)	—

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Non-Hedging Derivatives

A summary of the effect of non-hedging derivatives on our consolidated statements of income for the years ended December 31, 2018, 2017 and 2016 is as follows:

Type of Non-hedging Derivatives	Income Statement Location of Gain (Loss) Recognized	Derivative Gain (Loss) Recognized
Year ended December 31, 2018		
Interest rate swaps	Net realized (losses) gains on financial instruments	$ 14
Options	Net realized (losses) gains on financial instruments	1
Futures	Net realized (losses) gains on financial instruments	8
Total		$ 23
Year ended December 31, 2017		
Interest rate swaps	Net realized (losses) gains on financial instruments	$ (9)
Options	Net realized (losses) gains on financial instruments	(36)
Futures	Net realized (losses) gains on financial instruments	(3)
Total		$ (48)
Year ended December 31, 2016		
Interest rate swaps	Net realized (losses) gains on financial instruments	$ 1
Options	Net realized (losses) gains on financial instruments	(209)
Futures	Net realized (losses) gains on financial instruments	1
Total		$ (207)

6. Fair Value

Assets and liabilities recorded at fair value in the consolidated balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Level inputs, as defined by FASB guidance for fair value measurements and disclosures, are as follows:

Level Input:	Input Definition:
Level I	Inputs are unadjusted, quoted prices for identical assets or liabilities in active markets at the measurement date.
Level II	Inputs other than quoted prices included in Level I that are observable for the asset or liability through corroboration with market data at the measurement date.
Level III	Unobservable inputs that reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date.

The following methods, assumptions and inputs were used to determine the fair value of each class of the following assets and liabilities recorded at fair value in the consolidated balance sheets:

Cash equivalents: Cash equivalents primarily consist of highly rated money market funds with maturities of three months or less, and are purchased daily at par value with specified yield rates. Due to the high ratings and short-term nature of the funds, we designate all cash equivalents as Level I.

Fixed maturity securities, available-for-sale: Fair values of available-for-sale fixed maturity securities are based on quoted market prices, where available. These fair values are obtained primarily from third-party pricing services, which generally use Level I or Level II inputs for the determination of fair value to facilitate fair value measurements and disclosures. Level II securities primarily include corporate securities, securities from states, municipalities and political subdivisions, mortgage-backed securities, United States Government securities and certain other asset-backed securities. For securities not actively traded, the pricing services may use quoted market prices of comparable instruments or discounted cash flow analyses, incorporating inputs that are currently observable in the markets for similar securities. We have controls

in place to review the pricing services' qualifications and procedures used to determine fair values. In addition, we periodically review the pricing services' pricing methodologies, data sources and pricing inputs to ensure the fair values obtained are reasonable. Inputs that are often used in the valuation methodologies include, but are not limited to, broker quotes, benchmark yields, credit spreads, default rates and prepayment speeds. We also have certain fixed maturity securities, primarily corporate debt securities, that are designated Level III securities. For these securities, the valuation methodologies may incorporate broker quotes or discounted cash flow analyses using assumptions for inputs such as expected cash flows, benchmark yields, credit spreads, default rates and prepayment speeds that are not observable in the markets.

Equity securities: Fair values of equity securities are generally designated as Level I and are based on quoted market prices. For certain equity securities, quoted market prices for the identical security are not always available and the fair value is estimated by reference to similar securities for which quoted prices are available. These securities are designated Level II. We also have certain equity securities, including private equity securities, for which the fair value is estimated based on each security's current condition and future cash flow projections. Such securities are designated Level III. The fair values of these private equity securities are generally based on either broker quotes or discounted cash flow projections using assumptions for inputs such as the weighted-average cost of capital, long-term revenue growth rates and earnings before interest, taxes, depreciation and amortization, and/or revenue multiples that are not observable in the markets.

Other invested assets, current: Other invested assets, current include securities held in rabbi trusts that are classified as trading. These securities are designated Level I securities as fair values are based on quoted market prices.

Securities lending collateral: Fair values of securities lending collateral are based on quoted market prices, where available. These fair values are obtained primarily from third-party pricing services, which generally use Level I or Level II inputs for the determination of fair value, to facilitate fair value measurements and disclosures.

Derivatives: Fair values are based on the quoted market prices by the financial institution that is the counterparty to the derivative transaction. We independently verify prices provided by the counterparties using valuation models that incorporate market observable inputs for similar derivative transactions. Derivatives are designated as Level II securities.

In addition, the following methods and assumptions were used to determine the fair value of each class of pension benefit plan assets and other benefit plan assets not defined above (see Note 10, "Retirement Benefits," for fair values of benefit plan assets):

Mutual funds: Fair values are based on quoted market prices, which represent the net asset value, or NAV, of the shares held.

Common and collective trusts: Fair values of common/collective trusts that replicate traded money market funds are based on cost, which approximates fair value. Fair values of common/collective trusts that invest in securities are valued at the NAV of the shares held, where the trust applies fair value measurements to the underlying investments to determine the NAV.

Partnership interests: Fair values are estimated based on the plan's proportionate share of the undistributed partners' capital as reported in audited financial statements of the partnership.

Contract with insurance company: Fair value of the contract in the insurance company general investment account is determined by the insurance company based on the fair value of the underlying investments of the account.

Investment in DOL 103-12 trust: Fair value is based on the plan's proportionate share of the fair value of investments held by the trust, qualified as a Department of Labor Regulation 2520.103-12 entity, or DOL 103-12 trust, as reported in the audited financial statements of the trust, where the trustee applies fair value measurements to the underlying investments of the trust.

Life insurance contracts: Fair value is based on the cash surrender value of the policies as reported by the insurer.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of fair value measurements by level for assets and liabilities measured at fair value on a recurring basis at December 31, 2018 and 2017 is as follows:

	Level I	Level II	Level III	Total
December 31, 2018				
Assets:				
Cash equivalents	$ 1,815	$ —	$ —	$ 1,815
Fixed maturity securities, available-for-sale:				
United States Government securities	—	416	—	416
Government sponsored securities	—	108	—	108
States, municipalities and political subdivisions, tax-exempt	—	4,785	—	4,785
Corporate securities	2	7,648	287	7,937
Residential mortgage-backed securities	—	2,744	6	2,750
Commercial mortgage-backed securities	—	67	—	67
Other securities	—	1,099	17	1,116
Total fixed maturity securities, available-for-sale	2	16,867	310	17,179
Equity securities:				
Exchange traded funds	2	—	—	2
Fixed maturity mutual funds	—	557	—	557
Common equity securities	601	53	—	654
Private equity securities	—	—	313	313
Total equity securities	603	610	313	1,526
Other invested assets, current	21	—	—	21
Securities lending collateral	314	290	—	604
Derivatives	—	16	—	16
Total assets	$ 2,755	$ 17,783	$ 623	$ 21,161
Liabilities:				
Derivatives	$ —	$ (17)	$ —	$ (17)
Total liabilities	$ —	$ (17)	$ —	$ (17)
December 31, 2017				
Assets:				
Cash equivalents	$ 1,956	$ —	$ —	$ 1,956
Fixed maturity securities, available-for-sale:				
United States Government securities	—	645	—	645
Government sponsored securities	—	90	—	90
States, municipalities and political subdivisions, tax-exempt	—	6,035	—	6,035
Corporate securities	25	7,232	229	7,486
Residential mortgage-backed securities	—	2,534	5	2,539
Commercial mortgage-backed securities	—	79	—	79
Other securities	75	973	16	1,064
Total fixed maturity securities, available-for-sale	100	17,588	250	17,938
Equity securities:				
Exchange traded funds	1,300	—	—	1,300
Fixed maturity mutual funds	—	791	—	791
Common equity securities	1,147	107	—	1,254
Private equity securities	—	—	287	287
Total equity securities	2,447	898	287	3,632
Other invested assets, current	17	—	—	17
Securities lending collateral	214	241	—	455
Derivatives	—	3	—	3
Total assets	$ 4,734	$ 18,730	$ 537	$ 24,001
Liabilities:				
Derivatives	$ —	$ (21)	$ —	$ (21)
Total liabilities	$ —	$ (21)	$ —	$ (21)

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A reconciliation of the beginning and ending balances of assets measured at fair value on a recurring basis using Level III inputs for the years ended December 31, 2018, 2017 and 2016 is as follows:

	Corporate Securities	Residential Mortgage-backed Securities	Commercial Mortgage-backed Securities	Other Securities	Equity Securities	Total
Year ended December 31, 2018						
Beginning balance at January 1, 2018	$ 229	$ 5	$ —	$ 16	$ 287	$ 537
Total gains (losses):						
Recognized in net income	1	—	—	—	(229)	(228)
Recognized in accumulated other comprehensive loss	(5)	—	—	—	—	(5)
Purchases	120	2	—	18	290	430
Sales	(33)	—	—	(1)	(35)	(69)
Settlements	(88)	(1)	—	(10)	—	(99)
Transfers into Level III	65	—	—	9	—	74
Transfers out of Level III	(2)	—	—	(15)	—	(17)
Ending balance at December 31, 2018	$ 287	$ 6	$ —	$ 17	$ 313	$ 623
Change in unrealized losses included in net income related to assets still held at December 31, 2018	$ —	$ —	$ —	$ —	$ 30	$ 30
Year ended December 31, 2017						
Beginning balance at January 1, 2017	$ 239	$ 11	$ —	$ 43	$ 188	$ 481
Total (losses) gains:						
Recognized in net income	(1)	—	—	—	—	(1)
Recognized in accumulated other comprehensive loss	3	—	—	—	11	14
Purchases	88	4	—	36	89	217
Sales	(48)	(5)	—	(1)	(1)	(55)
Settlements	(64)	(2)	—	(7)	—	(73)
Transfers into Level III	15	3	—	15	—	33
Transfers out of Level III	(3)	(6)	—	(70)	—	(79)
Ending balance at December 31, 2017	$ 229	$ 5	$ —	$ 16	$ 287	$ 537
Change in unrealized losses included in net income related to assets still held at December 31, 2017	$ (3)	$ —	$ —	$ —	$ —	$ (3)
Year ended December 31, 2016						
Beginning balance at January 1, 2016	$ 186	$ —	$ 2	$ 26	$ 102	$ 316
Total (losses) gains:						
Recognized in net income	(3)	—	—	—	1	(2)
Recognized in accumulated other comprehensive loss	(2)	—	—	(1)	(1)	(4)
Purchases	170	4	—	—	223	397
Sales	(5)	—	—	—	(137)	(142)
Settlements	(57)	—	—	(1)	—	(58)
Transfers into Level III	7	9	—	29	—	45
Transfers out of Level III	(57)	(2)	(2)	(10)	—	(71)
Ending balance at December 31, 2016	$ 239	$ 11	$ —	$ 43	$ 188	$ 481
Change in unrealized losses included in net income related to assets still held at December 31, 2016	$ (2)	$ —	$ —	$ —	$ —	$ (2)

There were no individually material transfers into or out of Level III during the years ended December 31, 2018, 2017 or 2016.

Our valuation policy is determined by members of our treasury and accounting departments. Whenever possible, our policy is to obtain quoted market prices in active markets to estimate fair values for recognition and disclosure purposes. Where quoted market prices in active markets are not available, fair values are estimated using discounted cash flow analyses, broker quotes or other valuation techniques. These techniques are significantly affected by our assumptions,

including discount rates and estimates of future cash flows. Potential taxes and other transaction costs are not considered in estimating fair values. Our valuation policy is generally to obtain quoted prices for each security from third-party pricing services, which are derived through recently reported trades for identical or similar securities making adjustments through the reporting date based upon available market observable information. As we are responsible for the determination of fair value, we perform analysis on the prices received from the pricing services to determine whether the prices are reasonable estimates of fair value. This analysis is performed by our internal treasury personnel who are familiar with our investment portfolios, the pricing services engaged and the valuation techniques and inputs used. Our analysis includes procedures such as a review of month-to-month price fluctuations and price comparisons to secondary pricing services. There were no adjustments to quoted market prices obtained from the pricing services during the years ended December 31, 2018, 2017 or 2016.

Certain assets and liabilities are measured at fair value on a nonrecurring basis; that is, the instruments are not measured at fair value on an ongoing basis but are subject to fair value adjustments only in certain circumstances. As disclosed in Note 3, “Business Acquisitions,” we completed our acquisition of America’s 1st Choice on February 15, 2018. The net assets acquired in our acquisition of America’s 1st Choice and resulting goodwill and other intangible assets were recorded at fair value primarily using Level III inputs. The majority of America’s 1st Choice assets acquired and liabilities assumed were recorded at their carrying values as of the respective date of acquisition, as their carrying values approximated their fair values due to their short-term nature. The fair values of goodwill and other intangible assets acquired in our acquisition of America’s 1st Choice were internally estimated based on the income approach. The income approach estimates fair value based on the present value of the cash flows that the assets could be expected to generate in the future. We developed internal estimates for the expected cash flows and discount rate in the present value calculation. Other than the assets acquired and liabilities assumed in our acquisition of America’s 1st Choice described above, there were no other material assets or liabilities measured at fair value on a nonrecurring basis during the years ended December 31, 2018 or 2017.

In addition to the preceding disclosures on assets recorded at fair value in the consolidated balance sheets, FASB guidance also requires the disclosure of fair values for certain other financial instruments for which it is practicable to estimate fair value, whether or not such values are recognized in the consolidated balance sheets.

Non-financial instruments such as real estate, property and equipment, other current assets, deferred income taxes, intangible assets and certain financial instruments, such as policy liabilities, are excluded from the fair value disclosures. Therefore, the fair value amounts cannot be aggregated to determine our underlying economic value.

The carrying amounts reported in the consolidated balance sheets for cash, accrued investment income, premium receivables, self-funded receivables, other receivables, income taxes receivable, unearned income, accounts payable and accrued expenses, security trades pending payable, securities lending payable and certain other current liabilities approximate fair value because of the short-term nature of these items. These assets and liabilities are not listed in the table below.

The following methods and assumptions were used to estimate the fair value of each class of financial instrument that is recorded at its carrying value on the consolidated balance sheets:

Other invested assets, long-term: Other invested assets, long-term primarily include our investments in limited partnerships, joint ventures and other non-controlled corporations, as well as the cash surrender value of corporate-owned life insurance policies. Investments in limited partnerships, joint ventures and other non-controlled corporations are carried at our share in the entities’ undistributed earnings, which approximates fair value. The carrying value of corporate-owned life insurance policies represents the cash surrender value as reported by the respective insurer, which approximates fair value.

Short-term borrowings: The fair value of our short-term borrowings is based on quoted market prices for the same or similar debt, or if no quoted market prices were available, on the current market interest rates estimated to be available to us for debt of similar terms and remaining maturities.

Long-term debt - commercial paper: The carrying amount for commercial paper approximates fair value, as the underlying instruments have variable interest rates at market value.

Long-term debt - senior unsecured notes and surplus notes: The fair values of our notes are based on quoted market prices in active markets for the same or similar debt, or, if no quoted market prices are available, on the current market observable rates estimated to be available to us for debt of similar terms and remaining maturities.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Long-term debt—convertible debentures: The fair value of our convertible debentures is based on the quoted market price in the active private market in which the convertible debentures trade.

A summary of the estimated fair values by level of each class of financial instrument that is recorded at its carrying value on our consolidated balance sheets at December 31, 2018 and 2017 are as follows:

	Carrying Value	Estimated Fair Value			
		Level I	Level II	Level III	Total
December 31, 2018					
Assets:					
Other invested assets, long-term	$ 3,726	$ —	$ —	$ 3,726	$ 3,726
Liabilities:					
Debt:					
Short-term borrowings	1,145	—	1,145	—	1,145
Commercial paper	697	—	697	—	697
Notes	17,178	—	17,145	—	17,145
Convertible debentures	191	—	1,030	—	1,030
December 31, 2017					
Assets:					
Other invested assets, long-term	$ 3,344	$ —	$ —	$ 3,344	$ 3,344
Liabilities:					
Debt:					
Short-term borrowings	1,275	—	1,275	—	1,275
Commercial paper	804	—	804	—	804
Notes	17,593	—	18,815	—	18,815
Convertible debentures	260	—	1,216	—	1,216

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

7. Income Taxes

The components of deferred income taxes at December 31, 2018 and 2017 are as follows:

	2018	2017
Deferred tax assets relating to:		
Retirement benefits	$ 226	$ 211
Accrued expenses	301	279
Insurance reserves	96	136
Net operating loss carryforwards	7	4
Bad debt reserves	104	128
State income tax	32	33
Deferred compensation	20	24
Investment basis difference	—	24
Unrealized losses on securities	41	—
Other	72	81
Total deferred tax assets	899	920
Deferred tax liabilities relating to:		
Investment basis difference	52	—
Unrealized gains on securities	—	175
Intangible assets:		
Trademarks and state Medicaid licenses	1,529	1,529
Customer, provider and hospital relationships	290	186
Internally developed software and other amortization differences	461	324
Retirement benefits	183	170
Debt discount	27	28
State deferred tax	105	105
Depreciation and amortization	47	41
Other	165	89
Total deferred tax liabilities	2,859	2,647
Net deferred tax liability	$ 1,960	$ 1,727

Significant components of the provision for income taxes for the years ended December 31, 2018, 2017 and 2016 consist of the following:

	2018	2017	2016
Current tax expense:			
Federal	$ 1,128	$ 1,356	$ 1,862
State and local	78	39	94
Total current tax expense	1,206	1,395	1,956
Deferred tax expense (benefit)	112	(1,274)	129
Total income tax expense	$ 1,318	$ 121	$ 2,085

State and local current tax expense is reported gross of federal benefit, and includes amounts related to audit settlements, uncertain tax positions, state tax credits and true up of prior years' tax. Such items are included in multiple lines in the following rate reconciliation table on a net of federal tax basis.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A reconciliation of income tax expense recorded in the consolidated statements of income and amounts computed at the statutory federal income tax rate for the years ended December 31, 2018, 2017 and 2016 is as follows:

	2018		2017		2016	
	Amount	Percent	Amount	Percent	Amount	Percent
Amount at statutory rate	$ 1,064	21.0%	$ 1,387	35.0%	$ 1,594	35.0%
State and local income taxes net of federal tax expense/benefit	63	1.2	(2)	(0.1)	62	1.4
Tax exempt interest and dividends received deduction	(27)	(0.5)	(58)	(1.4)	(62)	(1.4)
HIP Fee	324	6.4	—	—	412	9.0
Tax Cuts and Jobs Act	(28)	(0.6)	(1,108)	(27.9)	—	—
Other, net	(78)	(1.5)	(98)	(2.5)	79	1.8
Total income tax expense	$ 1,318	26.0%	$ 121	3.1%	$ 2,085	45.8%

During the year ended December 31, 2018, we recognized income tax expense of $324, or $1.23 per diluted share, as a result of the non-tax deductibility of the HIP Fee payment. On December 22, 2017, the federal government enacted the Tax Cuts and Jobs Act, which contains significant changes to corporate taxation, including, but not limited to, reducing the U.S. federal corporate income tax rate from 35% to 21% and modifying or limiting many business deductions. At December 31, 2018, we have completed our accounting for the tax effects of enactment of the Tax Cuts and Jobs Act. There was no material change to our 2017 provisional amount. In addition we reclassified, for our interim and annual reporting periods beginning on January 1, 2018, $91 of stranded tax effects from accumulated other comprehensive loss to retained earnings on our consolidated balance sheet.

During the year ended December 31, 2017, we recognized an income tax benefit of $1,108, or $4.14 per diluted share, as a result of the provisional amount recorded related to the remeasurement of our deferred tax balance as a result of the enactment of the Tax Cuts and Jobs Act. The HIP Fee payment was suspended for 2017.

During the year ended December 31, 2016, we recognized income tax expense of $412, or $1.54 per diluted share, as a result of the non-tax deductibility of the HIP Fee payments.

The change in the carrying amount of gross unrecognized tax benefits from uncertain tax positions for the years ended December 31, 2018 and 2017 is as follows:

	2018	2017
Balance at January 1	$ 190	$ 131
Additions based on:		
Tax positions related to current year	35	3
Tax positions related to prior years	50	83
Reductions based on:		
Tax positions related to prior years	(31)	(18)
Settlements with taxing authorities	(3)	(9)
Balance at December 31	$ 241	$ 190

The table above excludes interest, net of related tax benefits, which is treated as income tax expense (benefit) under our accounting policy. The interest is included in the amounts described in the following paragraph.

The amount of unrecognized tax benefits that would impact our effective tax rate in future periods, if recognized, was $237 and $175 at December 31, 2018 and 2017, respectively. Also included in the table above, at December 31, 2018, is $2 that would be recognized as an adjustment to additional paid-in capital, which would not affect our effective tax rate. In

addition to the contingent liabilities included in the table above, during 2017 we filed protective state income tax refund claims of approximately $310. There were no equivalent protective state income tax refund claims filed in 2018.

For the years ended December 31, 2018, 2017 and 2016, we recognized net interest expense of $15, $3 and $7, respectively. We had accrued approximately $37 and $22 for the payment of interest at December 31, 2018 and 2017, respectively.

As of December 31, 2018, as further described below, certain tax years remain open to examination by the Internal Revenue Service, or IRS, and various state and local authorities. In addition, we continue to discuss certain industry issues with the IRS. As a result of these examinations and discussions, we have recorded amounts for uncertain tax positions. It is anticipated that the amount of unrecognized tax benefits will change in the next twelve months due to possible settlements of audits and changes in temporary items. However, the ultimate resolution of these items is dependent on the completion of negotiations with various taxing authorities. While it is difficult to determine when other tax settlements will actually occur, it is reasonably possible that one could occur in the next twelve months and our unrecognized tax benefits could change within a range of approximately $(54) to $(158).

We are a member of the IRS Compliance Assurance Process, or CAP. The objective of CAP is to reduce taxpayer burden and uncertainty while assuring the IRS of the accuracy of tax returns prior to filing, thereby reducing or eliminating the need for post-filing examinations.

As of December 31, 2018, the IRS examination of our 2018 and 2017 tax years continues to be in process.

In certain states, we pay premium taxes in lieu of state income taxes. Premium taxes are reported with selling, general and administrative expense.

At December 31, 2018, we had unused federal tax net operating loss carryforwards of approximately $20 to offset future taxable income. The loss carryforwards expire in the years 2032 through 2037. During 2018, 2017 and 2016, federal income taxes paid totaled $738, $1,503 and $1,665, respectively.

8. Property and Equipment

A summary of property and equipment at December 31, 2018 and 2017 is as follows:

	2018	2017
Computer software, purchased and internally developed	$ 3,532	$ 2,613
Computer equipment, furniture and other equipment	1,266	1,080
Leasehold improvements	563	494
Building and improvements	169	168
Land and improvements	18	18
Property and equipment, gross	5,548	4,373
Accumulated depreciation and amortization	(2,813)	(2,198)
Property and equipment, net	$ 2,735	$ 2,175

Depreciation expense for 2018, 2017 and 2016 was $124, $111 and $104, respectively. Amortization expense on computer software and leasehold improvements for 2018, 2017 and 2016 was $528, $490 and $472, respectively, which includes amortization expense on computer software, both purchased and internally developed, for 2018, 2017 and 2016 of $465, $435 and $412, respectively. Capitalized costs related to the internal development of software of $3,226 and $2,373 at December 31, 2018 and 2017, respectively, are reported with computer software.

During the years ended December 31, 2018, 2017 and 2016, we recognized $5, $2 and $25, respectively, of impairments related to computer software, primarily internally developed. We also recognized $20 of impairments related to computer equipment in 2016. These impairments were due to project cancellation or asset replacement, some of which resulted from a change in strategic focus needed to effectively manage business operations in a post-ACA environment.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

9. Goodwill and Other Intangible Assets

A summary of the change in the carrying amount of goodwill for our segments (see Note 19, "Segment Information") for 2018 and 2017 is as follows:

	Commercial and Specialty Business	Government Business	Other	Total
Balance as of January 1, 2017	$ 11,818	$ 5,743	$ —	$ 17,561
Acquisitions	—	1,659	11	1,670
Balance as of December 31, 2017	11,818	7,402	11	19,231
Acquisitions	—	1,285	—	1,285
Adjustments	(267)	266	(11)	(12)
Balance as of December 31, 2018	$ 11,551	$ 8,953	$ —	$ 20,504
Accumulated impairment as of December 31, 2018	$ (41)	$ —	$ —	$ (41)

The increase in goodwill in 2018 was primarily due to the acquisition of America's 1st Choice in February 2018. The increase in goodwill in 2017 was primarily due to the acquisition of HealthSun in December 2017. For additional information regarding these acquisitions, see Note 3, "Business Acquisitions".

The adjustments in 2018 include measurement period adjustments for HealthSun as well as certain reclassifications made for segment reporting. For additional information, see Note 19, "Segment Information".

As required by FASB guidance, we completed annual impairment tests of existing goodwill and other intangible assets with indefinite lives during 2018, 2017 and 2016. We perform these annual impairment tests during the fourth quarter. FASB guidance also requires interim impairment testing to be performed when potential impairment indicators exist. These tests involve the use of estimates related to the fair value of goodwill and intangible assets with indefinite lives and require a significant degree of management judgment and the use of subjective assumptions. Qualitative testing procedures include assessing our financial performance, macroeconomic conditions, industry and market considerations, various asset specific factors and entity specific events. For quantitative testing, the fair values are estimated using the projected income and market valuation approaches, incorporating Level III internal estimates for inputs, including, but not limited to, revenue projections, income projections, cash flows and discount rates. We did not incur any impairment losses in 2018, 2017 or 2016, as the estimated fair values of our reporting units were substantially in excess of their carrying values.

The components of other intangible assets as of December 31, 2018 and 2017 are as follows:

	2018			2017		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intangible assets with finite lives:						
Customer relationships	$ 4,495	$ (3,185)	$ 1,310	$ 3,725	$ (2,878)	$ 847
Provider and hospital relationships	228	(85)	143	187	(73)	114
Other	352	(88)	264	184	(67)	117
Total	5,075	(3,358)	1,717	4,096	(3,018)	1,078
Intangible assets with indefinite lives:						
Blue Cross and Blue Shield and other trademarks	6,299	—	6,299	6,299	—	6,299
State Medicaid licenses	991	—	991	991	—	991
Total	7,290	—	7,290	7,290	—	7,290
Other intangible assets	$ 12,365	$ (3,358)	$ 9,007	$ 11,386	$ (3,018)	$ 8,368

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

As of December 31, 2018, the estimated amortization expense for each of the five succeeding years is as follows: 2019, $337; 2020, $289; 2021, $243; 2022, $195; and 2023, $161.

10. Retirement Benefits

We sponsor various non-contributory employee defined benefit plans through certain subsidiaries.

The Anthem Cash Balance Plan A and the Anthem Cash Balance Plan B are cash balance pension plans covering certain eligible employees of the affiliated companies that participate in these plans. Effective January 1, 2006, benefits were curtailed, with the result that most participants stopped accruing benefits but continue to earn interest on benefits accrued prior to the curtailment. Certain participants subject to collective bargaining and certain other participants who met grandfathering rules continued to accrue benefits. Participants who did not receive credits and/or benefit accruals are included in the Anthem Cash Balance Plan A, while employees who were still receiving credits and/or benefits participate in the Anthem Cash Balance Plan B. Effective January 1, 2019, benefits under the Anthem Cash Balance Plan B were curtailed. All grandfathered participants will no longer have pay credits added to their accounts but will continue to earn interest on existing account balances. Participants will continue to earn years of pension service for vesting purposes. Several pension plans acquired through various corporate mergers and acquisitions have been merged into these plans in prior years.

The UGS Pension Plan is a defined benefit pension plan with a cash balance component. The UGS Pension Plan covers eligible employees of the affiliated companies that participate in the UGS Pension Plan. Effective January 1, 2004, benefits were curtailed, with the result that most participants stopped accruing benefits but continue to earn interest on benefits previously accrued. Certain employees subject to collective bargaining agreements and certain other employees who met grandfathering rules continue to accrue benefits. Effective December 31, 2017, the UGS Pension Plan was merged into the Anthem Cash Balance Plan B.

The Employees' Retirement Plan of Blue Cross of California, or the BCC Plan, is a defined benefit pension plan that covers eligible employees of Blue Cross of California who are covered by a collective bargaining agreement. Effective January 1, 2007, benefits were curtailed under the BCC Plan with the result that no Blue Cross of California employees hired or rehired after December 31, 2006 are eligible to participate in the BCC Plan.

All of the plans' assets consist primarily of common stocks, fixed maturity securities, investment funds and short-term investments. The funding policies for all plans are to contribute amounts at least sufficient to meet the minimum funding requirements set forth in the Employee Retirement Income Security Act of 1974, as amended, or ERISA, including amendments by the Pension Protection Act of 2006, and in accordance with income tax regulations, plus such additional amounts as are necessary to provide assets sufficient to meet the benefits to be paid to plan participants.

We use a December 31 measurement date for determining benefit obligations and fair value of plan assets.

The following tables disclose consolidated "pension benefits," which include the defined benefit pension plans described above, and consolidated "other benefits," which include postretirement health and welfare benefits including medical, vision and dental benefits offered to certain employees. Calculations were computed using assumptions at the December 31 measurement dates.

The reconciliation of the benefit obligation is as follows:

	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Benefit obligation at beginning of year	$ 1,872	$ 1,825	$ 524	$ 565
Service cost	8	10	1	1
Interest cost	55	66	15	21
Actuarial (gain) loss	(70)	104	(57)	(39)
Benefits paid	(122)	(133)	(52)	(24)
Benefit obligation at end of year	$ 1,743	$ 1,872	$ 431	$ 524

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The changes in the fair value of plan assets are as follows:

	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Fair value of plan assets at beginning of year	$ 2,012	$ 1,888	$ 356	$ 332
Actual return on plan assets	(76)	253	(17)	41
Employer contributions	4	4	49	7
Benefits paid	(122)	(133)	(52)	(24)
Fair value of plan assets at end of year	$ 1,818	$ 2,012	$ 336	$ 356

The net amount included in the consolidated balance sheets is as follows:

	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Noncurrent assets	$ 134	$ 202	$ —	$ —
Current liabilities	(6)	(5)	—	—
Noncurrent liabilities	(53)	(57)	(95)	(168)
Net amount at December 31	$ 75	$ 140	$ (95)	$ (168)

The net amounts included in accumulated other comprehensive loss that have not been recognized as components of net periodic benefit costs are as follows:

	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Net actuarial loss	$ 751	$ 625	$ 58	$ 77
Prior service cost (credit)	1	1	(34)	(46)
Net amount before tax at December 31	$ 752	$ 626	$ 24	$ 31

The estimated net actuarial loss and prior service cost for the defined benefit pension plans that will be reclassified from accumulated other comprehensive loss into net periodic benefit costs over the next year are $16 and $0, respectively. The estimated net actuarial loss and prior service credit for postretirement benefit plans that will be reclassified from accumulated other comprehensive loss into net periodic benefit costs over the next year are $2 and $12, respectively.

The accumulated benefit obligation for the defined benefit pension plans was $1,742 and $1,869 at December 31, 2018 and 2017, respectively.

As of December 31, 2018, certain pension plans had accumulated benefit obligations in excess of plan assets. For those same plans, the projected benefit obligation was also in excess of plan assets. Such plans had a combined projected benefit obligation, accumulated benefit obligation and fair value of plan assets of $94, $93 and $36, respectively.

The weighted-average assumptions used in calculating the benefit obligations for all plans are as follows:

	Pension Benefits		Other Benefits	
	2018	2017	2018	2017
Discount rate	4.15%	3.44%	4.04%	3.42%
Rate of compensation increase	3.00%	3.00%	3.00%	3.00%
Expected rate of return on plan assets	7.44%	7.83%	7.00%	7.00%

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The components of net periodic benefit credit included in the consolidated statements of income are as follows:

	2018	2017	2016
Pension Benefits			
Service cost	$ 8	$ 10	$ 12
Interest cost	55	66	69
Expected return on assets	(147)	(147)	(147)
Recognized actuarial loss	22	22	19
Amortization of prior service credit	—	—	(1)
Settlement loss	5	7	7
Net periodic benefit credit	$ (57)	$ (42)	$ (41)
Other Benefits			
Service cost	$ 1	$ 1	$ 2
Interest cost	15	21	22
Expected return on assets	(24)	(23)	(22)
Recognized actuarial loss	3	11	12
Amortization of prior service credit	(12)	(13)	(14)
Net periodic benefit credit	$ (17)	$ (3)	$ —

During the years ended December 31, 2018, 2017 and 2016 we incurred total settlement losses of $5, $7 and $7, respectively, as lump-sum payments exceeded the service cost and interest cost components of net periodic benefit cost for certain of our plans.

The weighted-average assumptions used in calculating the net periodic benefit cost for all plans are as follows:

	2018	2017	2016
Pension Benefits			
Discount rate	3.44%	3.77%	3.92%
Rate of compensation increase	3.00%	3.00%	3.00%
Expected rate of return on plan assets	7.83%	7.95%	7.84%
Other Benefits			
Discount rate	3.42%	3.82%	4.01%
Rate of compensation increase	3.00%	3.00%	3.00%
Expected rate of return on plan assets	7.00%	7.00%	7.00%

The assumed healthcare cost trend rates used to measure the expected cost of pre-Medicare (those who are not currently eligible for Medicare benefits) other benefits at our December 31, 2018 measurement date was 7.50% for 2019 with a gradual decline to 4.50% by the year 2028. The assumed healthcare cost trend rates used to measure the expected cost of post-Medicare (those who are currently eligible for Medicare benefits) other benefits at our December 31, 2018 measurement date was 6.00% for 2019 with a gradual decline to 4.50% by the year 2028. These estimated trend rates are subject to change in the future. The healthcare cost trend rate assumption affects the amounts reported. For example, an increase in the assumed healthcare cost trend rate of one percentage point would increase the postretirement benefit obligation as of December 31, 2018 by $24 and would increase service and interest costs by $1. Conversely, a decrease in the assumed healthcare cost trend rate of one percentage point would decrease the postretirement benefit obligation as of December 31, 2018 by $21 and would decrease service and interest costs by $1.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Plan assets include a diversified mix of investment grade fixed maturity securities, equity securities and alternative investments across a range of sectors and levels of capitalization to maximize the long-term return for a prudent level of risk. The weighted-average target allocation for pension benefit plan assets is 44% equity securities, 47% fixed maturity securities, and 9% to all other types of investments. Equity securities primarily include a mix of domestic securities, foreign securities and mutual funds invested in equities. Fixed maturity securities primarily include treasury securities, corporate bonds and asset-backed investments issued by corporations and the U.S. government. Other types of investments primarily include partnership interests, collective trusts that replicate money market funds and insurance contracts designed specifically for employee benefit plans. As of December 31, 2018, there were no significant concentrations of investments in the pension benefit assets or other benefit assets. No plan assets were invested in Anthem common stock.

Pension benefit assets and other benefit assets recorded at fair value are categorized based upon the level of judgment associated with the inputs used to measure their fair value.

The fair values of our pension benefit assets and other benefit assets by asset category and level inputs at December 31, 2018, excluding cash, investment income receivable and amounts due to/from brokers, resulting in a net asset of $69, are as follows (see Note 6, “Fair Value,” for additional information regarding the definition of level inputs):

	Level I	Level II	Level III	Total
December 31, 2018				
Pension Benefit Assets:				
Equity securities:				
U.S. securities	$ 488	$ —	$ —	$ 488
Foreign securities	147	—	—	147
Mutual funds	36	—	—	36
Fixed maturity securities:				
Government securities	—	248	—	248
Corporate securities	—	347	—	347
Asset-backed securities	—	153	—	153
Other types of investments:				
Partnership interests	—	—	187	187
Insurance company contracts	—	—	166	166
Total pension benefit assets	$ 671	$ 748	$ 353	$ 1,772
Other Benefit Assets:				
Equity securities:				
U.S. securities	$ 9	$ —	$ —	$ 9
Foreign securities	3	—	—	3
Mutual funds	27	—	—	27
Fixed maturity securities:				
Government securities	—	3	—	3
Corporate securities	—	5	—	5
Asset-backed securities	—	5	—	5
Other types of investments:				
Partnership interests	—	—	2	2
Life insurance contracts	—	—	249	249
Investment in DOL 103-12 trust	—	10	—	10
Total other benefit assets	$ 39	$ 23	$ 251	$ 313

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The fair values of our pension benefit assets and other benefit assets by asset category and level inputs at December 31, 2017, excluding cash, investment income receivable and amounts due to/from brokers, resulting in a net asset of $14, are as follows:

	Level I	Level II	Level III	Total
December 31, 2017				
Pension Benefit Assets:				
Equity securities:				
U.S. securities	$ 584	$ 5	$ —	$ 589
Foreign securities	179	—	—	179
Mutual funds	39	—	—	39
Fixed maturity securities:				
Government securities	227	—	—	227
Corporate securities	—	377	—	377
Asset-backed securities	—	140	—	140
Other types of investments:				
Common and collective trusts	—	54	—	54
Partnership interests	—	—	221	221
Insurance company contracts	—	—	173	173
Total pension benefit assets	$ 1,029	$ 576	$ 394	$ 1,999
Other Benefit Assets:				
Equity securities:				
U.S. securities	$ 10	$ —	$ —	$ 10
Foreign securities	3	—	—	3
Mutual funds	48	—	—	48
Fixed maturity securities:				
Government securities	3	—	—	3
Corporate securities	—	5	—	5
Asset-backed securities	—	5	—	5
Other types of investments:				
Common and collective trusts	—	1	—	1
Life insurance contracts	—	—	269	269
Investment in DOL 103-12 trust	—	11	—	11
Total other benefit assets	$ 64	$ 22	$ 269	$ 355

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A reconciliation of the beginning and ending balances of plan assets measured at fair value using Level III inputs for the years ended December 31, 2018, 2017 and 2016 is as follows:

	Partnership Interests	Insurance Company Contracts	Life Insurance Contracts	Total
Year ended December 31, 2018				
Beginning balance at January 1, 2018	$ 221	$ 173	$ 269	$ 663
Actual return on plan assets relating to assets still held at the reporting date	(10)	(7)	(15)	(32)
Purchases	—	8	—	8
Sales	(22)	(8)	(5)	(35)
Ending balance at December 31, 2018	$ 189	$ 166	$ 249	$ 604
Year ended December 31, 2017				
Beginning balance at January 1, 2017	$ 114	$ 173	$ 238	$ 525
Actual return on plan assets relating to assets still held at the reporting date	20	(1)	31	50
Purchases	126	10	—	136
Sales	(39)	(9)	—	(48)
Ending balance at December 31, 2017	$ 221	$ 173	$ 269	$ 663
Year ended December 31, 2016				
Beginning balance at January 1, 2016	$ 119	$ 174	$ 230	$ 523
Actual return on plan assets relating to assets still held at the reporting date	(4)	(3)	11	4
Purchases	18	9	—	27
Sales	(19)	(7)	(3)	(29)
Ending balance at December 31, 2016	$ 114	$ 173	$ 238	$ 525

During 2018, we transferred our United States Government securities from Level I to Level II based on the inputs used to measure fair value. There were no transfers into or out of Level III during the years ended December 31, 2018, 2017 or 2016.

Our current funding strategy is to fund an amount at least equal to the minimum required funding as determined under ERISA with consideration of maximum tax deductible amounts. We may elect to make discretionary contributions up to the maximum amount deductible for income tax purposes. For the years ended December 31, 2018, 2017 and 2016, no material contributions were necessary to meet ERISA required funding levels. However, during the years ended December 31, 2018, 2017 and 2016, we made tax deductible discretionary contributions to the pension benefit plans of $4, $4 and $11, respectively. Employer contributions to other benefit plans represent discretionary contributions and do not include payments to retirees for current benefits.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Our estimated future payments for pension benefits and postretirement benefits, which reflect expected future service, as appropriate, are as follows:

	Pension Benefits	Other Benefits
2019	$ 124	$ 37
2020	121	37
2021	123	37
2022	123	37
2023	121	36
2024 - 2028	575	159

In addition to the defined benefit plans, we maintain the Anthem 401(k) Plan which is a qualified defined contribution plan covering substantially all employees. Voluntary employee contributions are matched by us subject to certain limitations. Contributions made by us totaled $211, $142 and $132 during 2018, 2017 and 2016, respectively. Contributions in 2018 include approximately $58 for a one time contribution made to employees following the enactment of the Tax Cuts and Jobs Act.

11. Medical Claims Payable

A reconciliation of the beginning and ending balances for medical claims payable, by segment (see Note 19, "Segment Information"), for the year ended December 31, 2018 is as follows:

	Commercial & Specialty Business	Government Business	Total
Gross medical claims payable, beginning of year	$ 3,383	$ 4,431	$ 7,814
Ceded medical claims payable, beginning of year	(78)	(27)	(105)
Net medical claims payable, beginning of year	3,305	4,404	7,709
Business combinations and purchase adjustments	—	199	199
Net incurred medical claims:			
Current year	24,094	45,487	69,581
Prior years redundancies	(456)	(474)	(930)
Total net incurred medical claims	23,638	45,013	68,651
Net payments attributable to:			
Current year medical claims	21,633	41,115	62,748
Prior years medical claims	2,734	3,845	6,579
Total net payments	24,367	44,960	69,327
Net medical claims payable, end of year	2,576	4,656	7,232
Ceded medical claims payable, end of year	10	24	34
Gross medical claims payable, end of year	$ 2,586	$ 4,680	$ 7,266

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A reconciliation of the beginning and ending balances for medical claims payable, by segment, for the year ended December 31, 2017 is as follows:

	Commercial & Specialty Business	Government Business	Total
Gross medical claims payable, beginning of year	$ 3,247	$ 4,409	$ 7,656
Ceded medical claims payable, beginning of year	(521)	(18)	(539)
Net medical claims payable, beginning of year	2,726	4,391	7,117
Business combinations and purchase adjustments	—	76	76
Net incurred medical claims:			
Current year	29,467	40,910	70,377
Prior years redundancies	(462)	(671)	(1,133)
Total net incurred medical claims	29,005	40,239	69,244
Net payments attributable to:			
Current year medical claims	26,250	36,673	62,923
Prior years medical claims	2,176	3,629	5,805
Total net payments	28,426	40,302	68,728
Net medical claims payable, end of year	3,305	4,404	7,709
Ceded medical claims payable, end of year	78	27	105
Gross medical claims payable, end of year	$ 3,383	$ 4,431	$ 7,814

A reconciliation of the beginning and ending balances for medical claims payable, by segment, for the year ended December 31, 2016 is as follows:

	Commercial & Specialty Business	Government Business	Total
Gross medical claims payable, beginning of year	$ 3,371	$ 3,989	$ 7,360
Ceded medical claims payable, beginning of year	(636)	(10)	(646)
Net medical claims payable, beginning of year	2,735	3,979	6,714
Net incurred medical claims:			
Current year	27,588	37,280	64,868
Prior years redundancies	(463)	(372)	(835)
Total net incurred medical claims	27,125	36,908	64,033
Net payments attributable to:			
Current year medical claims	24,928	32,951	57,879
Prior years medical claims	2,206	3,545	5,751
Total net payments	27,134	36,496	63,630
Net medical claims payable, end of year	2,726	4,391	7,117
Ceded medical claims payable, end of year	521	18	539
Gross medical claims payable, end of year	$ 3,247	$ 4,409	$ 7,656

Amounts incurred related to prior years vary from previously estimated liabilities as the claims are ultimately settled. Liabilities at any period-end are continually reviewed and re-estimated as information regarding actual claims payments, or runout, becomes known. This information is compared to the originally established year end liability. Negative amounts reported for incurred medical claims related to prior years result from claims being settled for amounts less than originally estimated. The prior year redundancy of $930 shown above for the year ended December 31, 2018 represents an estimate

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

based on paid claim activity from January 1, 2018 to December 31, 2018. Medical claim liabilities are usually described as having a "short tail," which means that they are generally paid within twelve months of the member receiving service from the provider. Accordingly, the majority of the $930 redundancy relates to claims incurred in calendar year 2017.

The following table provides a summary of the two key assumptions having the most significant impact on our incurred but not paid liability estimates for the years ended December 31, 2018, 2017 and 2016, which are the completion and trend factors. These two key assumptions can be influenced by utilization levels, unit costs, mix of business, benefit plan designs, provider reimbursement levels, processing system conversions and changes, claim inventory levels, claim processing patterns, claim submission patterns and operational changes resulting from business combinations.

	Favorable Developments by Changes in Key Assumptions		
	2018	2017	2016
Assumed trend factors	$ (515)	$ (631)	$ (578)
Assumed completion factors	(415)	(502)	(257)
Total	$ (930)	$ (1,133)	$ (835)

The favorable development recognized in 2018 and 2017 resulted from trend and completion factors developing more favorably than originally expected. The favorable development recognized in 2016 resulted primarily from trend factors in late 2015 developing more favorably than originally expected as well as a smaller but significant contribution from completion factor development.

The reconciliation of net incurred medical claims to benefit expense included in the consolidated statements of income is as follows:

	Years Ended December 31		
	2018	2017	2016
Net incurred medical claims:			
Commercial & Specialty Business	$ 23,638	$ 29,005	$ 27,125
Government Business	45,013	40,239	36,908
Total net incurred medical claims	68,651	69,244	64,033
Quality improvement and other claims expense	3,244	2,992	2,801
Benefit expense	$ 71,895	$ 72,236	$ 66,834

Incurred claims development, net of reinsurance, for the Commercial & Specialty Business for the years ended December 31, 2018, 2017 and 2016 is as follows:

Commercial & Specialty Business	Cumulative Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance		
Claim Years	2016 (Unaudited)	2017 (Unaudited)	2018
2016 & Prior	$ 29,861	$ 29,399	$ 29,298
2017		29,467	29,112
2018			24,094
Total			$ 82,504

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Paid claims development, net of reinsurance, for the Commercial & Specialty Business for the years ended December 31, 2018, 2017 and 2016 is as follows:

Commercial & Specialty Business	**Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance**		
Claim Years	**2016 (Unaudited)**	**2017 (Unaudited)**	**2018**
2016 & Prior	$ 27,135	$ 29,311	$ 29,289
2017		26,250	29,006
2018			21,633
Total			$ 79,928

At December 31, 2018, the total of incurred but not reported liabilities plus expected development on reported claims for the Commercial & Specialty Business was $9, $106 and $2,461 for the claim years 2016 and prior, 2017 and 2018, respectively.

At December 31, 2018, the cumulative number of reported claims for the Commercial & Specialty Business was 120, 117 and 85 for the claim years 2016 and prior, 2017 and 2018, respectively.

Incurred claims development, net of reinsurance, for the Government Business as of and for the years ended December 31, 2018, 2017 and 2016 is as follows:

Government Business	**Cumulative Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance**		
Claim Years	**2016 (Unaudited)**	**2017 (Unaudited)**	**2018**
2016 & Prior	$ 40,888	$ 40,217	$ 40,133
2017		40,986	40,596
2018			45,686
Total			$ 126,415

Paid claims development, net of reinsurance, for the Government Business as of and for the years ended December 31, 2018, 2017 and 2016 is as follows:

Government Business	**Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance**		
Claim Years	**2016 (Unaudited)**	**2017 (Unaudited)**	**2018**
2016 & Prior	$ 36,497	$ 40,126	$ 40,103
2017		36,673	40,541
2018			41,115
Total			$ 121,759

At December 31, 2018, the total of incurred but not reported liabilities plus expected development on reported claims for the Government Business was $30, $55 and $4,571 for the claim years 2016 and prior, 2017 and 2018, respectively.

At December 31, 2018, the cumulative number of reported claims for the Government Business was 209, 211 and 205 for the claim years 2016 and prior, 2017 and 2018, respectively.

The information about incurred claims development, paid claims development and cumulative number of reported claims for the years ended December 31, 2016 and 2017, for both the Commercial & Specialty Business and Government Business, is unaudited and presented as supplementary information.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The cumulative number of reported claims for each claim year, for both the Commercial & Specialty Business and Government Business, have been developed using historical data captured by our claim payment systems. The provided claim amounts are not a precise tool for understanding utilization of medical services. They could be impacted by a variety of factors including changes in provider billing practices, provider reimbursement arrangements, mix of services, benefit design or processing systems. The cumulative number of reported claims has been provided to comply with FASB accounting standards and is not used by management in its claims analysis. Our cumulative number of reported claims may not be comparable to similar measures reported by other health benefits companies.

The reconciliation of the Commercial & Specialty Business and Government Business incurred and paid claims development information for the three years ended December 31, 2018, reflected in the tables above, to the consolidated ending balance for medical claims payable included in the consolidated balance sheet, as of December 31, 2018, is as follows:

	Commercial & Specialty Business	Government Business	Total
Cumulative incurred claims and allocated claim adjustment expenses, net of reinsurance	$ 82,504	$ 126,415	$ 208,919
Less: Cumulative paid claims and allocated claim adjustment expenses, net of reinsurance	79,928	121,759	201,687
Net medical claims payable, end of year	2,576	4,656	7,232
Ceded medical claims payable, end of year	10	24	34
Insurance lines other than short duration	—	188	188
Gross medical claims payable, end of year	$ 2,586	$ 4,868	$ 7,454

12. Debt

Short-term Borrowings

We are a member, through certain subsidiaries, of the Federal Home Loan Bank of Indianapolis, the Federal Home Loan Bank of Cincinnati and the Federal Home Loan Bank of Atlanta, or collectively, the FHLBs. As a member we have the ability to obtain short-term cash advances, subject to certain minimum collateral requirements. At December 31, 2018 and 2017, $645 and $825, respectively, were outstanding under our short-term FHLB borrowings. These outstanding short-term FHLB borrowings at December 31, 2018 and 2017 had fixed interest rates of 2.458% and 1.386%, respectively.

Through certain subsidiaries, we have entered into multiple 364-day lines of credit with separate lenders for general corporate purposes. In 2018, we increased the combined borrowing capacity on these line of credit from $450 to $600. The interest rate on each line of credit is based on the LIBOR rate plus a predetermined rate. Our ability to borrow under the lines of credit is subject to compliance with certain covenants. At December 31, 2018 and 2017, $500 and $450, respectively, were outstanding under our 364-day lines of credit.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Long-term Debt

The carrying value of long-term debt at December 31, 2018 and 2017 consists of the following:

	2018	2017
Senior unsecured notes:		
1.875%, due 2018	$ —	$ 625
2.300%, due 2018	—	649
2.250%, due 2019	849	847
2.500%, due 2020	897	895
4.350%, due 2020	688	693
3.700%, due 2021	698	698
2.950%, due 2022	747	746
3.125%, due 2022	846	845
3.300%, due 2023	1,000	994
3.350%, due 2024	846	845
3.500%, due 2024	794	793
3.650%, due 2027	1,589	1,589
4.101%, due 2028	1,250	—
5.950%, due 2034	334	334
5.850%, due 2036	396	396
6.375%, due 2037	366	366
5.800%, due 2040	124	123
4.625%, due 2042	887	887
4.650%, due 2043	986	986
4.650%, due 2044	791	791
5.100%, due 2044	594	594
4.375%, due 2047	1,386	1,386
4.550%, due 2048	838	—
4.850%, due 2054	247	247
Remarketable subordinated notes:		
1.900%, due 2028	—	1,239
Surplus note:		
9.000%, due 2027	25	25
Senior convertible debentures:		
2.750%, due 2042	191	260
Variable rate debt:		
Commercial paper program	697	804
Total long-term debt	18,066	18,657
Current portion of long-term debt	(849)	(1,275)
Long-term debt, less current portion	$ 17,217	$ 17,382

All debt is a direct obligation of Anthem, Inc., except for the surplus note, the FHLB borrowings and the lines of credit.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

We generally issue senior unsecured notes, or Notes, for long-term borrowing purposes. Certain of these Notes may have a call feature that allows us to redeem the Notes at any time at our option and/or a put feature that allows a Note holder to redeem the Notes upon the occurrence of both a change in control event and a downgrade of the Notes below an investment grade rating.

On July 16, 2018, we repaid, at maturity, the $650 outstanding balance of our 2.300% senior unsecured notes. On January 15, 2018, we repaid, at maturity, the $625 outstanding balance of our 1.875% senior unsecured notes.

On May 1, 2018, we settled our Equity Units stock purchase contracts at a settlement rate of 0.2412 shares of our common stock, using a market value formula set forth in the Equity Units purchase contracts. This resulted in the issuance of approximately 6 shares. We had issued 25 Equity Units on May 12, 2015, pursuant to an underwriting agreement dated May 6, 2015, in an aggregate principal amount of $1,250. Each Equity Unit had a stated amount of $50 (whole dollars) and consisted of a purchase contract obligating the holder to purchase a certain number of shares of our common stock on May 1, 2018, subject to earlier termination or settlement, for a price in cash of $50 (whole dollars); and a 5% undivided beneficial ownership interest in $1,000 (whole dollars) principal amount of our 1.900% remarketable subordinated notes, or RSNs, due 2028. At December 31, 2017, the stock purchase contract liability was $21 and was included in other current liabilities and other noncurrent liabilities with a corresponding offset to additional paid-in capital in our consolidated balance sheet. Contract adjustment payments commenced on August 1, 2015 at a rate of 3.350% per annum on the stated amount per Equity Unit. The RSNs were pledged as collateral to secure the purchase of common stock under the related stock purchase contracts. Quarterly interest payments on the RSNs commenced on August 1, 2015. On March 2, 2018, we remarketed the RSNs and used the proceeds to purchase U.S. Treasury securities that were pledged to secure the stock purchase obligations of the holders of the Equity Units. The purchasers of the RSNs transferred the RSNs to us in exchange for $1,250 principal amount of our 4.101% senior notes due 2028, or the 2028 Notes, and a cash payment of $4. We cancelled the RSNs upon receipt and recognized a loss on extinguishment of debt of $18. At the remarketing, we also issued $850 aggregate principal amount of 4.550% notes due 2048, or the 2048 Notes, under our shelf registration statement. We used the proceeds from the 2048 Notes for working capital and general corporate purposes. Interest on the 2028 Notes and the 2048 Notes is payable semi-annually in arrears on March 1 and September 1 of each year, commencing on September 1, 2018.

On November 21, 2017, we issued $900 aggregate principal amount of 2.500% Notes due 2020, $750 aggregate principal amount of 2.950% Notes due 2022, $850 aggregate principal amount of 3.350% Notes due 2024, $1,600 aggregate principal amount of 3.650% Notes due 2027 and $1,400 aggregate principal amount of 4.375% Notes due 2047 under our shelf registration statement. Interest on the 2020 Notes is payable semi-annually in arrears on May 21 and November 21 of each year, commencing on May 21, 2018. Interest on the 2022 Notes, the 2024 Notes, the 2027 Notes and the 2047 Notes is payable semi-annually in arrears on June 1 and December 1 of each year, commencing on June 1, 2018. The net proceeds were used to fund the acquisitions of HealthSun and America's 1st Choice; redemption of the 7.000% Notes due 2019, discussed below; and redemption of the Tender Notes, discussed below.

On November 14, 2017, we initiated a cash tender offer to purchase any and all of our 7.000% Notes due 2019, or the Any and All Notes, and certain of our 5.950% Notes due 2034, 5.850% Notes due 2036, 6.375% Notes due 2037, 5.800% Notes due 2040 and 5.100% Notes due 2044, or the Maximum Tender Offer Notes, and collectively with the Any and All Notes, the Tender Notes. On November 21, 2017, we repurchased $185 aggregate principal amount of the Any and All Notes, plus applicable premium and accrued and unpaid interest, for cash totaling $199. On November 30, 2017, we repurchased $836 aggregate principal amount of the Maximum Tender Offer Notes, plus applicable premium and accrued and unpaid interest, for cash totaling $1,095. We recognized a loss on extinguishment of debt of $266 for the repurchase of the Tender Notes.

On December 14, 2017, we redeemed the $255 remaining outstanding principal balance of our 7.000% Notes due 2019, plus applicable premium for early redemption and accrued and unpaid interest to the redemption date, for cash totaling $275. We recognized a loss on extinguishment of debt of $14 for the repurchase of these Notes.

On June 15, 2017 and February 15, 2017, we repaid, upon maturity, the $529 outstanding balance of our 5.875% Notes and the $400 outstanding balance of our 2.375% Notes, respectively.

The surplus note is an unsecured obligation of Anthem Insurance Companies, Inc., or Anthem Insurance, a wholly owned subsidiary, and is subordinate in right of payment to all of Anthem Insurance's existing and future indebtedness. Any payment of interest or principal on the surplus note may be made only with the prior approval of the Indiana Department of Insurance,

or IDOI, and only out of capital and surplus funds of Anthem Insurance that the IDOI determines to be available for the payment under Indiana insurance laws.

We have a senior revolving credit facility, or the Facility, with a group of lenders for general corporate purposes. The Facility provides credit up to $3,500 and matures on August 25, 2020. The interest rate on the Facility is based on either the LIBOR rate or a base rate plus a predetermined rate based on our public debt rating at the date of utilization. Our ability to borrow under the Facility is subject to compliance with certain covenants. There were no amounts outstanding under the Facility at December 31, 2018 or 2017.

We have an authorized commercial paper program of up to $2,500, the proceeds of which may be used for general corporate purposes. At December 31, 2018, we had $697 outstanding under our commercial paper program with a weighted-average interest rate of 2.8270%. At December 31, 2017, we had $804 outstanding under our commercial paper program with a weighted-average interest rate of 1.8247%. Commercial paper borrowings have been classified as long-term debt at December 31, 2018 and 2017, as our general practice and intent is to replace short-term commercial paper outstanding at expiration with additional short-term commercial paper for an uninterrupted period extending for more than one year, and we have the ability to redeem our commercial paper with borrowings under the Facility described above.

During the year ended December 31, 2015, we entered into a bridge facility commitment letter and a joinder agreement, and a term loan facility, to finance a portion of the consideration under the now terminated Cigna Merger Agreement. In January 2017, we reduced the size of the bridge facility from $22,500 to $19,500 and extended the termination date under the Cigna Merger Agreement, as well as the availability of commitments under the bridge facility and term loan facility, to April 30, 2017. We recorded $108 and $104 of interest expense related to the amortization of the bridge loan facility and other related fees during the years ended December 31, 2017 and 2016, respectively. The commitment of the lenders to provide the bridge facility and term loan facility expired on April 30, 2017.

Convertible Debentures

On October 9, 2012, we issued $1,500 of senior convertible debentures, or the Debentures, in a private offering to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended, or the Securities Act. The Debentures are governed by an indenture dated as of October 9, 2012 between us and The Bank of New York Mellon Trust Company, N.A., as trustee, or the Indenture. The Debentures bear interest at a rate of 2.750% per year, payable semi-annually in arrears in cash on April 15 and October 15 of each year, and mature on October 15, 2042, unless earlier redeemed, repurchased or converted into shares of common stock at the applicable conversion rate. The Debentures also have a contingent interest feature that will require us to pay additional interest based on certain thresholds and for certain events, as defined in the Indenture, beginning on October 15, 2022.

Holders may convert their Debentures at their option prior to the close of business on the business day immediately preceding April 15, 2042, only under the following circumstances: (1) during any fiscal quarter if the last reported sale price of our common stock for at least 20 trading days during a period of 30 consecutive trading days ending on the last trading day of the preceding fiscal quarter is greater than or equal to 130% of the applicable conversion price on each applicable trading day; (2) during the five business day period after any 10 consecutive trading day period, or the measurement period, in which the trading price per $1,000 (whole dollars) principal amount of Debentures for each trading day of that measurement period was less than 98% of the product of the last reported sale price of our common stock and the applicable conversion rate on each such day; (3) if we call any or all of the Debentures for redemption, at any time prior to the close of business on the third scheduled trading day prior to the redemption date; or (4) upon the occurrence of specified corporate events, as defined in the Indenture. On and after April 15, 2042 and until the close of business on the third scheduled trading day immediately preceding the Debentures' maturity date of October 15, 2042, holders may convert their Debentures into common stock at any time irrespective of the preceding circumstances. The Debentures are redeemable at our option at any time on or after October 20, 2022, upon the occurrence of certain events, as defined in the Indenture.

Upon conversion of the Debentures, we will deliver cash up to the aggregate principal amount of the Debentures converted. With respect to any conversion obligation in excess of the aggregate principal amount of the Debentures converted, we have the option to settle the excess with cash, shares of our common stock or a combination thereof based on a daily conversion value, determined in accordance with the Indenture. The initial conversion rate for the Debentures was 13.2319 shares of our common stock per Debenture, which represented a 25% conversion premium based on the closing

price of $60.46 per share of our common stock on October 2, 2012 (the date the Debentures' terms were finalized) and is equivalent to an initial conversion price of $75.575 per share of our common stock.

During the year ended December 31, 2018, $109 aggregate principal amount of the Debentures were surrendered for conversion by certain holders in accordance with the terms and provisions of the Indenture. We elected to settle the excess of the principal amount of the conversions with cash for total payments of $402. We recognized a gain on the extinguishment of debt related to the Debentures of $7, based on the fair values of the debt on the conversion settlement dates. During the year ended December 31, 2017, $117 aggregate principal amount of the Debentures was surrendered for conversion. We elected to settle the excess of the principal amount of the conversions with cash for total payments of $345 and recognized a loss on the extinguishment of debt of $2. There were no repurchases or material conversions during the year ended December 31, 2016.

As of December 31, 2018, our common stock was last traded at a price of $262.63 per share. If the remaining Debentures had been converted or matured at December 31, 2018, we would have been obligated to pay the principal of the Debentures plus an amount in cash or shares equal to $757. The Debentures and underlying shares of our common stock have not been and will not be registered under the Securities Act, or any state securities laws, and may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements.

We have accounted for the Debentures in accordance with the cash conversion guidance in FASB guidance for debt with conversion and other options. As a result, the value of the embedded conversion option, net of deferred taxes and equity issuance costs, has been bifurcated from its debt host and recorded as a component of additional paid-in capital in our consolidated balance sheets.

The following table summarizes, at December 31, 2018, the related balances, conversion rate and conversion price of the Debentures:

Outstanding principal amount	$	287
Unamortized debt discount	$	93
Net debt carrying amount	$	191
Equity component carrying amount	$	104
Conversion rate (shares of common stock per $1,000 of principal amount)		13.8474
Effective conversion price (per $1,000 of principal amount)	$	72.2151

The remaining amortization period of the unamortized debt discount as of December 31, 2018 is approximately 24 years. The unamortized discount will be amortized into interest expense using the effective interest method based on an effective interest rate of 5.130%, which represents the market interest rate for a comparable debt instrument that does not have a conversion feature. During the years ended December 31, 2018, 2017 and 2016, we recognized $12, $17 and $17, respectively, of interest expense related to the Debentures, of which $10, $14 and $14, respectively, represented interest expense recognized at the stated interest rate of 2.750% and $2, $3 and $3, respectively, represented interest expense resulting from amortization of the debt discount.

Total interest paid during 2018, 2017 and 2016 was $728, $778, and $595, respectively.

We were in compliance with all applicable covenants under all of our outstanding debt agreements at December 31, 2018 and 2017.

Future maturities of all long-term debt outstanding at December 31, 2018 are as follows: 2019, $1,546; 2020, $1,585; 2021, $698; 2022, $1,593; 2023, $1,000 and thereafter, $11,644.

13. Commitments and Contingencies

Litigation and Regulatory Proceedings

In the ordinary course of business, we are defendants in, or parties to, a number of pending or threatened legal actions or proceedings. To the extent a plaintiff or plaintiffs in the following cases have specified in their complaint or in other court filings the amount of damages being sought, we have noted those alleged damages in the descriptions below. With respect to

the cases described below, we contest liability and/or the amount of damages in each matter and believe we have meritorious defenses.

Where available information indicates that it is probable that a loss has been incurred as of the date of the consolidated financial statements and we can reasonably estimate the amount of that loss, we accrue the estimated loss by a charge to income. In many proceedings, however, it is difficult to determine whether any loss is probable or reasonably possible. In addition, even where loss is possible or an exposure to loss exists in excess of the liability already accrued with respect to a previously identified loss contingency, it is not always possible to reasonably estimate the amount of the possible loss or range of loss.

With respect to many of the proceedings to which we are a party, we cannot provide an estimate of the possible losses, or the range of possible losses in excess of the amount, if any, accrued, for various reasons, including but not limited to some or all of the following: (i) there are novel or unsettled legal issues presented, (ii) the proceedings are in early stages, (iii) there is uncertainty as to the likelihood of a class being certified or decertified or the ultimate size and scope of the class, (iv) there is uncertainty as to the outcome of pending appeals or motions, (v) there are significant factual issues to be resolved, and/or (vi) in many cases, the plaintiffs have not specified damages in their complaint or in court filings. For those legal proceedings where a loss is probable, or reasonably possible, and for which it is possible to reasonably estimate the amount of the possible loss or range of losses, we currently believe that the range of possible losses, in excess of established reserves is, in the aggregate, from $0 to approximately $250 at December 31, 2018. This estimated aggregate range of reasonably possible losses is based upon currently available information taking into account our best estimate of such losses for which such an estimate can be made.

Blue Cross Blue Shield Antitrust Litigation

We are a defendant in multiple lawsuits that were initially filed in 2012 against the BCBSA and Blue Cross and/or Blue Shield licensees, or Blue plans, across the country. The cases were consolidated into a single multi-district proceeding captioned *In re Blue Cross Blue Shield Antitrust Litigation* that is pending in the United States District Court for the Northern District of Alabama, or the Court. Generally, the suits allege that the BCBSA and the Blue plans have conspired to horizontally allocate geographic markets through license agreements, best efforts rules that limit the percentage of non-Blue revenue of each plan, restrictions on acquisitions rules governing the BlueCard and National Accounts programs and other arrangements in violation of the Sherman Antitrust Act, or Sherman Act, and related state laws. The cases were brought by two putative nationwide classes of plaintiffs, health plan subscribers and providers, and actions filed in Alabama, Arkansas, California, Florida, Hawaii, Illinois, Indiana, Kansas, Kansas City, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, North Carolina, North Dakota, Oklahoma, Pennsylvania, South Dakota, Rhode Island, South Carolina, Tennessee, Texas, Vermont and Virginia have been consolidated into the multi-district proceeding.

In response to cross motions for partial summary judgment by plaintiffs and defendants, the Court issued an order in April 2018 determining that the defendants' aggregation of geographic market allocations and output restrictions are to be analyzed under a per se standard of review, and the BlueCard program and other alleged Section 1 Sherman Act violations are to be analyzed under the rule of reason standard of review. The Court also found that there remain genuine issues of material fact as to whether defendants operate as a single entity with regard to the enforcement of the Blue Cross Blue Shield trademarks. In June 2018, in response to a motion filed by the defendants, the Court certified its April order for interlocutory appeal to the United States Court of Appeals for the Eleventh Circuit, or the Eleventh Circuit. Also in June 2018, the defendants filed, with the Eleventh Circuit Court of Appeals, a petition for permission to appeal the April order, which Plaintiffs opposed. In December 2018, the Eleventh Circuit denied the petition. No dates have been set for either the final pretrial conferences or trials in these actions. We intend to vigorously defend these suits; however, their ultimate outcome cannot be presently determined.

Blue Cross of California Taxation Litigation

In July 2013, our California affiliate Blue Cross of California (doing business as Anthem Blue Cross), or BCC, was named as a defendant in a California taxpayer action filed in Los Angeles County Superior Court, captioned *Michael D. Myers v. State Board of Equalization, et al.* This action was brought under a California statute that permits an individual taxpayer to sue a governmental agency when the taxpayer believes the agency has failed to enforce governing law. Plaintiff contends that BCC, a licensed Health Care Service Plan, or HCSP, is an "insurer" for purposes of taxation despite acknowledging it is not an "insurer" under regulatory law. At the time, under California law, "insurers" were required to pay

a gross premiums tax, or GPT, calculated as 2.35% on gross premiums. As a licensed HCSP, BCC has paid the California Corporate Franchise Tax, or CFT, the tax paid by California businesses generally. Plaintiff contends that BCC must pay the GPT rather than the CFT, and seeks a writ of mandate directing the taxing agencies to collect the GPT and an order requiring BCC to pay GPT back taxes, interest, and penalties, for the eight-year period prior to the filing of the complaint.

In March 2018, the Court denied BCC's motion for judgment on the pleadings and similar motions brought by other entities. We filed a writ of mandate in the California Court of Appeal. The Court of Appeal accepted our writ, and we anticipate that a hearing on our writ will occur in mid-2019. Because GPT is constitutionally imposed in lieu of certain other taxes, BCC has filed protective tax refund claims with the City of Los Angeles, the California Department of Health Care Services and the Franchise Tax Board to protect its rights to recover certain taxes previously paid should BCC eventually be determined to be subject to the GPT for the tax periods at issue in the litigation. BCC intends to vigorously defend this suit; however, its ultimate outcome cannot be presently determined.

Express Scripts, Inc. Pharmacy Benefit Management Litigation

In March 2016, we filed a lawsuit against Express Scripts, Inc., or Express Scripts, our vendor for pharmacy benefit management, or PBM, services, captioned *Anthem, Inc. v. Express Scripts, Inc.*, in the U.S. District Court for the Southern District of New York. The lawsuit seeks to recover over $14,800 in damages for pharmacy pricing that is higher than competitive benchmark pricing under the agreement between the parties, or ESI PBM Agreement, over $158 in damages related to operational breaches, as well as various declarations under the ESI PBM Agreement between the parties, including that Express Scripts: (i) breached its obligation to negotiate in good faith and to agree in writing to new pricing terms; (ii) is required to provide competitive benchmark pricing to us through the term of the ESI PBM Agreement; (iii) has breached the ESI PBM Agreement and that we can terminate the ESI PBM Agreement; and (iv) is required under the PBM Agreement to provide post-termination services, at competitive benchmark pricing, for one year following any termination.

Express Scripts has disputed our contractual claims and is seeking declaratory judgments: (i) regarding the timing of the periodic pricing review under the ESI PBM Agreement; (ii) that it has no obligation to ensure that we receive any specific level of pricing, that we have no contractual right to any change in pricing under the ESI PBM Agreement and that its sole obligation is to negotiate proposed pricing terms in good faith; and (iii) that we do not have the right to terminate the ESI PBM Agreement. In the alternative, Express Scripts claims that we have been unjustly enriched by its payment of $4,675 at the time of the ESI PBM Agreement. In March 2017, the court granted our motion to dismiss Express Scripts' counterclaims for (i) breach of the implied covenant of good faith and fair dealing, and (ii) unjust enrichment with prejudice. The only remaining claims are for breach of contract and declaratory relief. We intend to vigorously pursue our claims and defend against any counterclaims, which we believe are without merit; however, the ultimate outcome cannot be presently determined.

ERISA Litigation

We are a defendant in a class action lawsuit that was initially filed in June 2016 against Anthem, Inc. and Express Scripts, which has been consolidated into a single multi-district lawsuit captioned *In Re Express Scripts/Anthem ERISA Litigation,* in the U.S. District Court for the Southern District of New York. The consolidated complaint was filed by plaintiffs against Express Scripts and us on behalf of all persons who are participants in or beneficiaries of any ERISA or non-ERISA healthcare plan from December 1, 2009 to the present in which we provided prescription drug benefits through the ESI PBM Agreement and paid a percentage based co-insurance payment in the course of using that prescription drug benefit. The plaintiffs allege that we breached our duties, either under ERISA or with respect to the implied covenant of good faith and fair dealing implied in the health plans, (i) by failing to adequately monitor Express Scripts' pricing under the ESI PBM Agreement and (ii) by placing our own pecuniary interest above the best interests of our insureds by allegedly agreeing to higher pricing in the ESI PBM Agreement in exchange for the purchase price for our NextRx PBM business, and (iii) with respect to the non-ERISA members, by negotiating and entering into the ESI PBM Agreement that was allegedly detrimental to the interests of such non-ERISA members. Plaintiffs seek to hold us and Express Scripts jointly and severally liable and to recover all losses suffered by the proposed class, equitable relief, disgorgement of alleged ill-gotten gains, injunctive relief, attorney's fees and costs and interest.

In April 2017, we filed a motion to dismiss the claims brought against us, and it was granted, without prejudice, in January 2018. Plaintiffs filed a notice of appeal with the United States Court of Appeals for the Second Circuit, which was

heard in October 2018. We intend to vigorously defend this suit; however, its ultimate outcome cannot be presently determined.

Cigna Corporation Merger Litigation

In July 2015, we and Cigna announced that we entered into the Cigna Merger Agreement, pursuant to which we would acquire all outstanding shares of Cigna. In July 2016, the U.S. Department of Justice, or DOJ, along with certain state attorneys general, filed a civil antitrust lawsuit in the U.S. District Court for the District of Columbia, or District Court, seeking to block the merger. In February 2017, Cigna purported to terminate the Cigna Merger Agreement and commenced litigation against us in the Delaware Court of Chancery, or Delaware Court, seeking damages, including the $1,850 termination fee pursuant to the terms of the Cigna Merger Agreement, and a declaratory judgment that its purported termination of the Cigna Merger Agreement was lawful, among other claims, which is captioned *Cigna Corp. v. Anthem Inc.*

Also in February 2017, we initiated our own litigation against Cigna in the Delaware Court seeking a temporary restraining order to enjoin Cigna from terminating the Cigna Merger Agreement, specific performance compelling Cigna to comply with the Cigna Merger Agreement and damages, which is captioned *Anthem Inc. v. Cigna Corp*. In April 2017, the U.S. Circuit Court of Appeals for the District of Columbia affirmed the ruling of the District Court, which blocked the merger. In May 2017, after the Delaware Court denied our motion to enjoin Cigna from terminating the Cigna Merger Agreement, we delivered to Cigna a notice terminating the Cigna Merger Agreement.

The litigation in Delaware is ongoing with trial scheduled to commence in late February 2019. We believe Cigna's allegations are without merit and we intend to vigorously pursue our claims and defend against Cigna's allegations; however, the ultimate outcome of our litigation with Cigna cannot be presently determined.

In October 2018, a shareholder filed a derivative lawsuit in the State of Indiana Marion County Superior Court, captioned *Henry Bittmann, Derivatively, et al. v. Joseph R Swedish, et al.*, purportedly on behalf of Anthem and its shareholders against certain current and former directors and officers alleging breaches of fiduciary duties, unjust enrichment and corporate waste associated with the Cigna Merger Agreement. This case has been stayed at the request of the parties pending the outcome of our litigation with Cigna in the Delaware Court. This lawsuit's ultimate outcome cannot be presently determined.

U.S. Department of Justice (DOJ) Civil Investigative Demands

Beginning in December 2016, the DOJ has issued civil investigative demands to us to discover information about our chart review and risk adjustment programs under Parts C and D of the Medicare Program. We understand the DOJ is investigating the programs of other Medicare Advantage health plans, along with providers and vendors. We continue to cooperate with the DOJ's investigation, and the ultimate outcome cannot presently be determined.

Cyber Attack Regulatory Proceedings and Litigation

In February 2015, we reported that we were the target of a sophisticated external cyber attack. The attackers gained unauthorized access to certain of our information technology systems and obtained personal information related to many individuals and employees, such as names, birth dates, healthcare identification/social security numbers, street addresses, email addresses, phone numbers and employment information, including income data. To date, there is no evidence that credit card or medical information, such as claims, test results or diagnostic codes, were targeted, accessed or obtained, although no assurance can be given that we will not identify additional information that was accessed or obtained.

Upon discovery of the cyber attack, we took immediate action to remediate the security vulnerability and retained a cybersecurity firm to evaluate our systems and identify solutions based on the evolving landscape. We have provided credit monitoring and identity protection services to those who have been affected by this cyber attack. We have continued to implement security enhancements since this incident. We have incurred expenses subsequent to the cyber attack to investigate and remediate this matter and expect to continue to incur expenses of this nature in the foreseeable future. We recognize these expenses in the periods in which they are incurred.

Federal and state agencies, including state insurance regulators, state attorneys general, the HHS Office of Civil Rights and the Federal Bureau of Investigation, are investigating, or have investigated, events related to the cyber attack, including how it occurred, its consequences and our responses. In connection with the resolution of the National Association of

Insurance Commissioners' multistate targeted market conduct and financial exam in December 2016, we agreed to provide a customized credit protection program, equivalent to a credit freeze, for our members who were under the age of eighteen on January 27, 2015. No fines or penalties were imposed on us. In October 2018, we resolved the investigation by the HHS Office of Civil Rights. The resolution included a monetary settlement along with an agreement to a two-year Corrective Action Plan. Additionally, an ongoing investigation by a multi-state group of Attorneys General remains outstanding. Although we are cooperating in this investigation, we may be subject to additional fines or other obligations, which may have an adverse effect on how we operate our business and an adverse effect on our results of operations and financial condition.

Civil class actions were filed in various federal and state courts by current or former members and others seeking damages that they alleged arose from the cyber attack. In June 2015, the Judicial Panel on Multidistrict Litigation entered an order transferring the consolidated civil actions to the U.S. District Court for the Northern District of California, or the U.S. District Court, in a matter captioned *In Re Anthem, Inc. Data Breach Litigation*. The parties agreed to settle plaintiffs' claims on a class-wide basis for a total settlement payment of $115. In August 2017, the U.S. District Court issued an order of preliminary approval of the settlement. The U.S. District Court held hearings on plaintiffs' motion for final approval and class counsel's fee petition in February and June 2018 and appointed a special master to review class counsel's fee petition. Final approval of the settlement was granted by the U.S. District Court in August 2018. All appeals that were filed with the Ninth Circuit Court of Appeals by class-member objections challenging approval of the settlement have been resolved. This matter is now closed. The three state court cases related to the cyber attack that were proceeding outside of this multidistrict litigation have been resolved and dismissed with prejudice.

We have contingency plans and insurance coverage for certain expenses and potential liabilities of this nature and will pursue coverage for all applicable losses; however, the ultimate outcome of our pursuit of insurance coverage cannot be presently determined. We intend to vigorously defend the remaining regulatory actions related to the cyber attack; however, their ultimate outcome cannot be presently determined.

Other Contingencies

From time to time, we and certain of our subsidiaries are parties to various legal proceedings, many of which involve claims for coverage encountered in the ordinary course of business. We, like HMOs and health insurers generally, exclude certain healthcare and other services from coverage under our HMO, PPO and other plans. We are, in the ordinary course of business, subject to the claims of our enrollees arising out of decisions to restrict or deny reimbursement for uncovered services. The loss of even one such claim, if it results in a significant punitive damage award, could have a material adverse effect on us. In addition, the risk of potential liability under punitive damage theories may increase significantly the difficulty of obtaining reasonable settlements of coverage claims.

In addition to the lawsuits described above, we are also involved in other pending and threatened litigation of the character incidental to our business, and are from time to time involved as a party in various governmental investigations, audits, reviews and administrative proceedings. These investigations, audits, reviews and administrative proceedings include routine and special inquiries by state insurance departments, state attorneys general, the U.S. Attorney General and subcommittees of the U.S. Congress. Such investigations, audits, reviews and administrative proceedings could result in the imposition of civil or criminal fines, penalties, other sanctions and additional rules, regulations or other restrictions on our business operations. Any liability that may result from any one of these actions, or in the aggregate, could have a material adverse effect on our consolidated financial position or results of operations.

Contractual Obligations and Commitments

Express Scripts, through our ESI PBM Agreement, is the provider of certain PBM services to our plans. In October 2017, we established a new pharmacy benefits manager, called IngenioRx, and entered into a five-year agreement with CaremarkPCS Health, L.L.C., or CVS Health, which is a subsidiary of CVS Health Corporation, to begin offering PBM solutions, or the CVS PBM Agreement. In January 2019, we exercised our contractual right to terminate the ESI PBM Agreement earlier than the original expiration date of December 31, 2019 due to the recent acquisition of Express Scripts by Cigna. As a result of exercising our early termination right, the ESI PBM Agreement will now terminate on March 1, 2019, and the twelve-month transition period provided for in the ESI PBM Agreement to migrate the services begins on March 2, 2019. At that time CVS Health is able to begin providing certain PBM services to IngenioRx, pursuant to the CVS PBM Agreement. Notwithstanding our termination of the ESI PBM Agreement, the litigation between us and Express Scripts

regarding the ESI PBM Agreement continues. In March 2016, we filed a lawsuit against Express Scripts seeking to recover damages for pharmacy pricing that is higher than competitive benchmark pricing, damages related to operational breaches, as well as various declarations under the ESI PBM Agreement between the parties. For additional information regarding this lawsuit, refer to the *Litigation and Regulatory Proceedings-Express Scripts, Inc. Pharmacy Benefit Management Litigation* section above. We believe we have appropriately recognized all rights and obligations under the ESI PBM Agreement as of December 31, 2018.

Vulnerability from Concentrations

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash equivalents, investment securities, premium receivables and instruments held through hedging activities. All investment securities are managed by professional investment managers within policies authorized by our Board of Directors. Such policies limit the amounts that may be invested in any one issuer and prescribe certain investee company criteria. Concentrations of credit risk with respect to premium receivables are limited due to the large number of employer groups that constitute our customer base in the states in which we conduct business. As of December 31, 2018, there were no significant concentrations of financial instruments in a single investee, industry or geographic location.

14. Capital Stock

Stock Incentive Plans

Our Board of Directors has adopted the 2017 Anthem Incentive Compensation Plan, or 2017 Incentive Plan, which has been approved by our shareholders. The term of the 2017 Incentive Plan is such that no awards may be granted on or after May 18, 2027. The 2017 Incentive Plan gives authority to the Compensation Committee of the Board of Directors to make incentive awards to our non-employee directors, employees and consultants, consisting of stock options, stock, restricted stock, restricted stock units, cash-based awards, stock appreciation rights, performance shares and performance units. The 2017 Incentive Plan limits the number of available shares for issuance to 37.5 shares, subject to adjustment as set forth in the 2017 Incentive Plan.

Stock options are granted for a fixed number of shares with an exercise price at least equal to the fair value of the shares at the grant date. Historically, stock options have vested over three years in equal semi-annual installments and generally have a term of ten years from the grant date. Amendments to the 2017 Incentive Plan, effective July 1, 2018, require future grants of stock options to vest in three equal annual installments.

Certain option grants contain provisions whereby the employee continues to vest in the award subsequent to termination due to retirement. Our attribution method for newly granted awards considers all vesting and other provisions, including retirement eligibility, in determining the requisite service period over which the fair value of the awards will be recognized.

Awards of restricted stock or restricted stock units are issued at the fair value of the stock on the grant date and may also include one or more performance measures that must be met for the award to vest. The restrictions lapse in three equal annual installments. Performance units issued in 2018 will vest in 2021, based on earnings targets over the three year period of 2018 to 2020. Performance units issued in 2017 will vest in 2020, based on earnings targets over the three year period of 2017 to 2019. Performance units issued in 2016 will vest in 2019, based on earnings targets over the three year period of 2016 to 2018.

For the years ended December 31, 2018, 2017 and 2016, we recognized share-based compensation expense of $226, $170 and $165, respectively, as well as related tax benefits of $61, $68 and $61, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of stock option activity for the year ended December 31, 2018 is as follows:

	Number of Shares	Weighted-Average Option Price per Share	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2018	4.3	$ 124.31		
Granted	0.9	232.79		
Exercised	(1.3)	112.72		
Forfeited or expired	(0.2)	189.52		
Outstanding at December 31, 2018	3.7	149.65	6.15	$ 416
Exercisable at December 31, 2018	2.4	125.88	5.00	$ 331

The intrinsic value of options exercised during the years ended December 31, 2018, 2017 and 2016 amounted to $172, $192 and $103, respectively. We recognized tax benefits of $47, $76 and $38 in 2018, 2017 and 2016, respectively, from option exercises and disqualifying dispositions. During the years ended December 31, 2018, 2017 and 2016, we received cash of $141, $200 and $95, respectively, from exercises of stock options.

The total fair value of restricted stock awards that vested during the years ended December 31, 2018, 2017 and 2016 was $237, $127 and $185, respectively.

A summary of the status of nonvested restricted stock activity, including restricted stock units, for the year ended December 31, 2018 is as follows:

	Restricted Stock Shares and Units	Weighted-Average Grant Date Fair Value per Share
Nonvested at January 1, 2018	2.0	$ 152.20
Granted	0.9	233.73
Vested	(1.0)	147.93
Forfeited	(0.2)	188.06
Nonvested at December 31, 2018	1.7	183.32

During the year ended December 31, 2018, we granted approximately 0.3 restricted stock units that are contingent upon us achieving earning targets over the three year period of 2018 to 2020. These grants have been included in the activity shown above, but will be subject to adjustment at the end of 2020, based on results in the three year period.

During the year ended December 31, 2018, we granted an additional 0.2 restricted stock units, associated with our 2015 grants, that were earned as a result of satisfactory completion of performance measures between 2015 and 2017. These grants and vested shares have been included in the activity shown above.

As of December 31, 2018, the total remaining unrecognized compensation expense related to nonvested stock options and restricted stock, including restricted stock units, amounted to $22 and $136, respectively, which will be amortized over the weighted-average remaining requisite service periods of 11 months and 12 months, respectively.

As of December 31, 2018, there were approximately 26.9 shares of common stock available for future grants under the 2017 Incentive Plan.

Fair Value

We use a binomial lattice valuation model to estimate the fair value of all stock options granted. Expected volatility assumptions used in the binomial lattice model are based on an analysis of implied volatilities of publicly traded options on our stock and historical volatility of our stock price. The risk-free interest rate is derived from the U.S. Treasury strip rates at the time of the grant. The expected term of the options was derived from the outputs of the binomial lattice model, which

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

incorporates post-vesting forfeiture assumptions based on an analysis of historical data. The dividend yield was based on our estimate of future dividend yields. Similar groups of employees that have dissimilar exercise behavior are considered separately for valuation purposes. We utilize the multiple-grant approach for recognizing compensation expense associated with each separately vesting portion of the share-based award.

The following weighted-average assumptions were used to estimate the fair values of options granted during the years ended December 31, 2018, 2017 and 2016:

	2018	2017	2016
Risk-free interest rate	2.90%	2.31%	1.76%
Volatility factor	30.00%	32.00%	32.00%
Dividend yield (annual)	1.30%	1.60%	2.00%
Weighted-average expected life (years)	3.70	4.00	4.10

The following weighted-average fair values were determined for the years ending December 31, 2018, 2017 and 2016:

	2018	2017	2016
Options granted during the year	$ 55.48	$ 40.88	$ 30.56
Restricted stock awards granted during the year	233.73	174.44	131.81

The binomial lattice option-pricing model requires the input of highly subjective assumptions including the expected stock price volatility. Because our stock option grants have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in our opinion, existing models do not necessarily provide a reliable single measure of the fair value of our stock option grants.

Employee Stock Purchase Plan

We have registered 14.0 shares of common stock for the Employee Stock Purchase Plan, or the Stock Purchase Plan, which is intended to provide a means to encourage and assist employees in acquiring a stock ownership interest in Anthem. Pursuant to the terms of the Stock Purchase Plan, an employee is permitted to purchase no more than $25,000 (actual dollars) worth of stock in any calendar year, based on the fair value of the stock at the end of each plan quarter. Employees become participants by electing payroll deductions from 1% to 15% of gross compensation. Once purchased, the stock is accumulated in the employee's investment account. The Stock Purchase Plan allows participants to purchase shares of our common stock at a price per share of 95% of the fair value of a share of common stock on the last trading day of the plan quarter. The employee stock purchase plan discount is not recognized as compensation expense based on GAAP guidance. There were 0.2 shares issued during the year ended December 31, 2018. As of December 31, 2018, 5.0 shares were available for issuance under the Stock Purchase Plan.

Effective January 1, 2019, the price per share for the shares purchased under the Stock Purchase Plan will be 90% of the fair value of a share of common stock on the lower of the first or last trading day of the plan quarter. This additional discount will result in compensation expense beginning in the first quarter of 2019. Participants will be required to hold shares purchased under the Stock Purchase Plan for at least one year from the purchase date.

Use of Capital and Stock Repurchase Program

We regularly review the appropriate use of capital, including acquisitions, common stock and debt security repurchases and dividends to shareholders. The declaration and payment of any dividends or repurchases of our common stock or debt is at the discretion of our Board of Directors and depends upon our financial condition, results of operations, future liquidity needs, regulatory and capital requirements and other factors deemed relevant by our Board of Directors.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of the cash dividend activity for the years ended December 31, 2018 and 2017 is as follows:

Declaration Date	Record Date	Payment Date	Cash Dividend per Share	Total
Year ended December 31, 2018				
January 30, 2018	March 9, 2018	March 23, 2018	$ 0.75	$ 192
April 24, 2018	June 8, 2018	June 25, 2018	0.75	196
July 24, 2018	September 10, 2018	September 25, 2018	0.75	195
October 30, 2018	December 5, 2018	December 21, 2018	0.75	193
Year ended December 31, 2017				
February 22, 2017	March 10, 2017	March 24, 2017	$ 0.65	$ 172
April 27, 2017	June 9, 2017	June 23, 2017	0.65	172
July 25, 2017	September 8, 2017	September 25, 2017	0.70	181
October 24, 2017	December 5, 2017	December 21, 2017	0.70	180

On January 29, 2019, our Audit Committee declared a quarterly cash dividend to shareholders of $0.80 per share on the outstanding shares of our common stock. This quarterly dividend is payable on March 29, 2019 to the shareholders of record as of March 18, 2019.

Under our Board of Directors' authorization, we maintain a common stock repurchase program. On December 7, 2017, the Board of Directors authorized a $5,000 increase to the common stock repurchase program. Repurchases may be made from time to time at prevailing market prices, subject to certain restrictions on volume, pricing and timing. The repurchases are effected from time to time in the open market, through negotiated transactions, including accelerated share repurchase agreements, and through plans designed to comply with Rule 10b5-1 under the Securities Exchange Act of 1934, as amended. Our stock repurchase program is discretionary as we are under no obligation to repurchase shares. We repurchase shares under the program when we believe it is a prudent use of capital. The excess cost of the repurchased shares over par value is charged on a pro rata basis to additional paid-in capital and retained earnings.

A summary of common stock repurchases for the period January 1, 2019 through February 7, 2019 (subsequent to December 31, 2018) and for the years ended December 31, 2018 and 2017 is as follows:

	January 1, 2019 through February 7, 2019	Years Ended December 31	
		2018	2017
Shares repurchased	0.6	6.8	10.5
Average price per share	$ 261.26	$ 248.34	$ 189.93
Aggregate cost	$ 165	$ 1,685	$ 1,998
Authorization remaining at end of year	$ 5,328	$ 5,493	$ 7,178

We expect to utilize the remaining authorized amount over a multi-year period, subject to market and industry conditions.

For additional information regarding the use of capital for debt security repurchases, see Note 12, "Debt."

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

15. Accumulated Other Comprehensive Loss

A reconciliation of the components of accumulated other comprehensive loss at December 31, 2018 and 2017 is as follows:

	2018	2017
Investments:		
Gross unrealized gains	$ 173	$ 940
Gross unrealized losses	(371)	(105)
Net pretax unrealized (losses) gains	(198)	835
Deferred tax asset (liability)	39	(301)
Net unrealized (losses) gains on investments	(159)	534
Non-credit components of OTTI on investments:		
Gross unrealized losses	(3)	—
Deferred tax asset	1	—
Net unrealized non-credit component of OTTI on investments	(2)	—
Cash flow hedges:		
Gross unrealized losses	(311)	(359)
Deferred tax asset	65	126
Net unrealized losses on cash flow hedges	(246)	(233)
Defined benefit pension plans:		
Deferred net actuarial loss	(751)	(625)
Deferred prior service cost	(1)	(1)
Deferred tax asset	193	244
Net unrecognized periodic benefit costs for defined benefit pension plans	(559)	(382)
Postretirement benefit plans:		
Deferred net actuarial loss	(58)	(77)
Deferred prior service credits	34	46
Deferred tax asset	6	12
Net unrecognized periodic benefit costs for postretirement benefit plans	(18)	(19)
Foreign currency translation adjustments:		
Gross unrealized losses	(3)	(2)
Deferred tax asset	1	1
Net unrealized losses on foreign currency translation adjustments	(2)	(1)
Accumulated other comprehensive loss	$ (986)	$ (101)

We adopted the FASB standard on accounting for non-consolidated equity investments (ASU 2016-01) on January 1, 2018 as a cumulative-effect adjustment and reclassified $320 of unrealized gains on equity investments, net of tax, from accumulated other comprehensive loss to retained earnings on our consolidated balance sheet. We also adopted the FASB standard on reclassification of certain tax effects from accumulated other comprehensive income (ASU 2018-02) on January 1, 2018 and reclassified $91 of stranded tax effects from accumulated other comprehensive loss to retained earnings on our consolidated balance sheet. See Note 2, "Basis of Presentation and Significant Accounting Policies – *Recently Adopted Accounting Guidance*" for further information on these standards.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Other comprehensive income (loss) reclassification adjustments for the years ended December 31, 2018, 2017 and 2016 are as follows:

	2018	2017	2016
Investments:			
Net holding (loss) gain on investment securities arising during the period, net of tax benefit (expense) of $133, ($153), and ($119), respectively	$ (465)	$ 280	$ 186
Reclassification adjustment for net realized loss (gain) on investment securities, net of tax (benefit) expense of $(13), $58, and $37, respectively	47	(107)	(68)
Total reclassification adjustment on investments	(418)	173	118
Non-credit component of OTTI on investments:			
Non-credit component of OTTI on investments, net of tax benefit (expense) of $1, ($3), and ($3), respectively	(2)	4	5
Cash flow hedges:			
Holding gain (loss), net of tax (expense) benefit of $(10), $35, and $47, respectively	37	(65)	(87)
Other:			
Net change in unrecognized periodic benefit costs for defined benefit pension and postretirement benefit plans, net of tax benefit (expense) of $29, $(35), and $5, respectively	(90)	51	(13)
Foreign currency translation adjustment, net of tax expense of $0, ($1), and ($1), respectively	(1)	3	2
Net (loss) gain recognized in other comprehensive loss, net of tax benefit (expense) of $140, ($99), and ($34), respectively	$ (474)	$ 166	$ 25

16. Reinsurance

We reinsure certain risks with other companies and assume risk from other companies. We remain primarily liable to policyholders under ceded insurance contracts and are contingently liable for amounts recoverable from reinsurers in the event that such reinsurers do not meet their contractual obligations. In conjunction with the ACA temporary reinsurance premium stabilization program that was effective for 2014 through 2016, we recognized assessments upon our fully-insured non-grandfathered individual market plans that were eligible for reinsurance recoveries as ceded premiums and estimated reinsurance recoveries as a reduction to benefit expense. Assessments upon all other lines of business that were not eligible for reinsurance recoveries were recognized in selling, general and administrative expense.

A summary of direct, assumed and ceded premiums written and earned for the years ended December 31, 2018, 2017 and 2016 is as follows:

	2018		2017		2016	
	Written	Earned	Written	Earned	Written	Earned
Direct	$ 84,835	$ 85,213	$ 83,974	$ 83,418	$ 78,200	$ 78,726
Assumed	264	259	275	275	217	217
Ceded	(51)	(51)	(44)	(45)	(80)	(83)
Net premiums	$ 85,048	$ 85,421	$ 84,205	$ 83,648	$ 78,337	$ 78,860
Percentage—assumed to net premiums	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of net premiums written and earned by segment (see Note 19, "Segment Information") for the years ended December 31, 2018, 2017 and 2016 is as follows:

	2018		2017		2016	
	Written	Earned	Written	Earned	Written	Earned
Reportable segments:						
Commercial & Specialty Business	$ 30,661	$ 30,532	$ 35,382	$ 35,503	$ 33,101	$ 33,577
Government Business	54,387	54,889	48,823	48,145	45,236	45,283
Net premiums	$ 85,048	$ 85,421	$ 84,205	$ 83,648	$ 78,337	$ 78,860

The effect of reinsurance on benefit expense for the years ended December 31, 2018, 2017 and 2016 is as follows:

	2018	2017	2016
Direct	$ 71,749	$ 72,135	$ 67,222
Assumed	219	217	184
Ceded	(73)	(116)	(572)
Net benefit expense	$ 71,895	$ 72,236	$ 66,834

The effect of reinsurance on certain assets and liabilities at December 31, 2018 and 2017 is as follows:

	2018	2017
Policy liabilities, assumed	$ 50	$ 54
Unearned income, assumed	6	1
Premiums payable, ceded	17	9
Premiums receivable, assumed	37	33

17. Leases

We lease office space and certain computer and related equipment using noncancelable operating leases. At December 31, 2018, future lease payments for operating leases with initial or remaining noncancelable terms of one year or more consisted of the following:

2019	$ 192
2020	165
2021	139
2022	127
2023	109
Thereafter	385
Total minimum payments required	$ 1,117

We have certain lease agreements that contain contingent payment provisions. Under these provisions, we pay contingent amounts in addition to base rent, primarily based upon annual changes in the consumer price index. The schedule above contains estimated amounts for potential future increases in lease payments based on the contingent payment provisions.

Lease expense for 2018, 2017 and 2016 was $207, $205 and $207, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

18. Earnings per Share

The denominator for basic and diluted earnings per share at December 31, 2018, 2017 and 2016 is as follows:

	2018	2017	2016
Denominator for basic earnings per share—weighted-average shares	258.1	261.5	262.9
Effect of dilutive securities—employee stock options, non-vested restricted stock awards, convertible debentures and equity units	6.1	6.3	5.2
Denominator for diluted earnings per share	264.2	267.8	268.1

During the years ended December 31, 2018, 2017 and 2016, weighted-average shares related to certain stock options of 0.3, 0.4 and 2.2, respectively, were excluded from the denominator for diluted earnings per share because the stock options were anti-dilutive. The Equity Unit purchase contracts were settled in May 2018, and approximately 6.0 shares of our common stock were issued and included in the basic earnings per share calculation.

During the years ended December 31, 2018, 2017 and 2016, we issued approximately 0.3, 0.4 and 0.5 restricted stock units, respectively, of which vesting was contingent upon us meeting certain earnings targets. Contingent restricted stock units are excluded from the denominator for diluted earnings per share and are included only if and when the contingency is met. The 2018 contingent restricted stock units are being measured over the three year period of 2018 through 2020, the 2017 contingent restricted stock units are being measured over the three year period of 2017 through 2019 and the 2016 contingent restricted stock units are being measured over the three year period of 2016 through 2018. Contingent restricted stock units vest in March of the year following each measurement period.

19. Segment Information

Our organizational structure is comprised of three reportable segments: Commercial & Specialty Business; Government Business; and Other.

Our Commercial & Specialty Business segment includes our Local Group, National Accounts, Individual and Specialty businesses. Business units in the Commercial & Specialty Business segment offer fully-insured health products; provide a broad array of managed care services to self-funded customers including claims processing, underwriting, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services; and provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits.

Our Government Business segment includes our Medicare and Medicaid businesses, National Government Services, or NGS, and services provided to the federal government in connection with FEP®. Our Medicare business includes services such as Medicare Supplement plans; Medicare Advantage, including Special Needs Plans; Medicare Part D; and dual-eligible programs through Medicare-Medicaid Plans. Our Medicaid business includes our managed care alternatives through publicly funded healthcare programs, including Medicaid, ACA-related Medicaid expansion programs, Temporary Assistance for Needy Families programs, programs for seniors and people with disabilities, Children's Health Insurance Programs, and specialty programs such as those focused on long-term services and support, HIV/AIDS, foster care, behavioral health and/or substance abuse disorders, and intellectual disabilities or developmental disabilities. NGS acts as a Medicare contractor for the federal government in several regions across the nation.

Our Other segment includes certain eliminations and corporate expenses not allocated to either of our other reportable segments.

We define operating revenues to include premium income and administrative fees and other revenues. Operating revenues are derived from premiums and fees received, primarily from the sale and administration of health benefit products. Operating gain, a non-GAAP measure, is calculated as total operating revenue less benefit expense and selling, general and administrative expense.

Through our participation in various federal government programs, we generated approximately 19.8%, 17.8% and 18.2% of our total consolidated revenues from agencies of the U.S. government for the years ended December 31, 2018, 2017, and 2016, respectively. These revenues are contained in the Government Business segment.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The accounting policies of the segments are consistent with those described in the summary of significant accounting policies in Note 2, "Basis of Presentation and Significant Accounting Policies," except that certain shared administrative expenses for each segment are recognized on a pro rata allocated basis, which in the aggregate approximates the consolidated expense. Any difference between the allocated expenses and actual consolidated expense is included in other expenses not allocated to reportable segments. Intersegment sales and expenses are recorded at cost and eliminated in the consolidated financial statements. We evaluate performance of the reportable segments based on operating gain or loss as defined above. We evaluate net investment income, net realized gains on financial instruments, OTTI losses recognized in income, interest expense, amortization expense, gain or loss on extinguishment of debt, income taxes, assets and liabilities on a consolidated basis as these items are managed in a corporate shared service environment and are not the responsibility of segment operating management.

During the fourth quarter of 2018, we reclassified certain ancillary businesses to align how our segments are currently being managed. Prior year amounts have been reclassified for comparability.

Financial data by reportable segment for the years ended December 31, 2018, 2017 and 2016 is as follows:

	Commercial & Specialty Business	Government Business	Other	Total
Year ended December 31, 2018				
Operating revenue	$ 35,782	$ 55,567	$ (8)	$ 91,341
Operating gain (loss)	3,629	1,895	(98)	5,426
Depreciation and amortization of property and equipment	—	—	652	652
Year ended December 31, 2017				
Operating revenue	$ 40,363	$ 48,702	$ (4)	$ 89,061
Operating gain (loss)	2,847	1,445	(117)	4,175
Depreciation and amortization of property and equipment	—	—	601	601
Year ended December 31, 2016				
Operating revenue	$ 38,347	$ 45,850	$ (3)	$ 84,194
Operating gain (loss)	3,148	1,827	(174)	4,801
Depreciation and amortization of property and equipment	—	—	576	576

The major product revenues for each of the reportable segments for the years ended December 31, 2018, 2017 and 2016 are as follows:

	2018	2017	2016
Commercial & Specialty Business			
Managed care products	$ 29,013	$ 33,971	$ 32,134
Managed care services	5,115	4,732	4,616
Dental/Vision products and services	1,220	1,218	1,182
Other	434	442	415
Total Commercial & Specialty Business	35,782	40,363	38,347
Government Business			
Managed care products	54,889	48,145	45,283
Managed care services	678	557	567
Total Government Business	55,567	48,702	45,850
Other			
Other	(8)	(4)	(3)
Total product revenues	$ 91,341	$ 89,061	$ 84,194

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The classification between managed care products and managed care services in the above table primarily distinguishes between the levels of risk assumed. Managed care products represent insurance products where we bear the insurance risk, whereas managed care services represent product offerings where we provide claims adjudication and other administrative services to the customer, but the customer principally bears the insurance risk.

Asset, liability and equity details by reportable segment have not been disclosed, as we do not internally report such information.

A reconciliation of reportable segment operating revenues to the amounts of total revenues included in the consolidated statements of income for the years ended December 31, 2018, 2017 and 2016 is as follows:

	2018	2017	2016
Reportable segments operating revenues	$ 91,341	$ 89,061	$ 84,194
Net investment income	970	867	779
Net realized (losses) gains on financial instruments	(180)	145	5
Other-than-temporary impairment losses recognized in income	(26)	(33)	(115)
Total revenues	$ 92,105	$ 90,040	$ 84,863

A reconciliation of reportable segment operating gain to income before income tax expense included in the consolidated statements of income for the years ended December 31, 2018, 2017 and 2016 is as follows:

	2018	2017	2016
Reportable segments operating gain	$ 5,426	$ 4,175	$ 4,801
Net investment income	970	867	779
Net realized (losses) gains on financial instruments	(180)	145	5
Other-than-temporary impairment losses recognized in income	(26)	(33)	(115)
Interest expense	(753)	(739)	(723)
Amortization of other intangible assets	(358)	(169)	(192)
Loss on extinguishment of debt	(11)	(282)	—
Income before income tax expense	$ 5,068	$ 3,964	$ 4,555

20. Related Party Transactions

We have a 19.50% equity investment in National Accounts Service Company, LLC, or NASCO, which processes National Accounts claims and provides other administrative services for us and certain other Blue Cross Blue Shield plans. Administrative expenses incurred related to NASCO services totaled $79, $73 and $80, for the years ended December 31, 2018, 2017 and 2016, respectively. Amounts due to NASCO were $5 and $6 at December 31, 2018 and 2017, respectively.

21. Statutory Information

The majority of our insurance and HMO subsidiaries report their accounts in conformity with accounting practices prescribed or permitted by state insurance regulatory authorities, commonly referred to as statutory accounting, which vary in certain respects from GAAP. However, certain of our insurance and HMO subsidiaries, including BCC, Blue Cross of California Partnership Plan, Inc., Golden West Health Plan, Inc. and CareMore Health Plan are regulated by the California Department of Managed Health Care, or DMHC, and report their accounts in conformity with GAAP (these entities are collectively referred to as the "DMHC regulated entities"). Typical differences of GAAP reporting as compared to statutory reporting are the inclusion of unrealized gains or losses relating to fixed maturity securities in shareholders' equity, recognition of all assets including those that are non-admitted for statutory purposes and recognition of all deferred tax assets without regard to statutory limits. The National Association of Insurance Commissioners, or NAIC, developed a codified version of the statutory accounting principles, designed to foster more consistency among the states for accounting guidelines and reporting. Prescribed statutory accounting practices are set forth in a variety of publications of the NAIC as well as state laws, regulations and general administrative rules.

Our ability to pay dividends and credit obligations is significantly dependent on receipt of dividends from our subsidiaries. The payment of dividends to us by our insurance and HMO subsidiaries without prior approval of the insurance departments of each subsidiary's domiciliary jurisdiction is limited by formula. Dividends in excess of these amounts are subject to prior approval by the respective state insurance departments or the DMHC.

Our statutory basis insurance and HMO subsidiaries are subject to risk-based capital, or RBC, requirements. RBC is a method developed by the NAIC to determine the minimum amount of statutory capital appropriate for an insurance company or HMO to support its overall business operations in consideration of its size and risk profile. The formula for determining the amount of RBC specifies various factors, weighted based on the perceived degree of risk, which are applied to certain financial balances and financial activity. Below minimum RBC requirements are classified within certain levels, each of which requires specified corrective action. Additionally, the DMHC regulated entities are subject to capital and solvency requirements as prescribed by the DMHC. As of December 31, 2018 and 2017, all of our regulated subsidiaries exceeded the minimum RBC requirements and/or capital and solvency requirements of their applicable governmental regulator. The statutory RBC necessary to satisfy regulatory requirements of our statutory basis insurance and HMO subsidiaries was approximately $4,800 and $4,700 as of December 31, 2018 and 2017, respectively. The tangible net equity required for the DMHC regulated entities was approximately $570 and $670 as of December 31, 2018 and 2017, respectively.

Statutory-basis capital and surplus of our insurance and HMO subsidiaries and capital and surplus of our other regulated subsidiaries, excluding the DMHC regulated entities, was $12,038 and $11,666 at December 31, 2018 and 2017, respectively. Statutory-basis net income of our insurance and HMO subsidiaries and net income of our other regulated subsidiaries, excluding the DMHC regulated entities, was $3,412, $2,674 and $2,613 for 2018, 2017 and 2016, respectively. GAAP equity of the DMHC regulated entities was $3,125 and $2,917 at December 31, 2018 and 2017, respectively. GAAP net income of the DMHC regulated entities was $789, $1,047 and $775 for the years ended December 31, 2018, 2017 and 2016, respectively.

22. Selected Quarterly Financial Data (Unaudited)

Selected quarterly financial data is as follows:

	For the Quarter Ended			
	March 31	June 30	September 30	December 31
2018				
Total revenues	$ 22,537	$ 22,944	$ 23,251	$ 23,373
Income before income tax expense	1,780	1,504	1,242	542
Net income	1,312	1,054	960	424
Basic net income per share	$ 5.13	$ 4.07	$ 3.70	$ 1.64
Diluted net income per share	4.99	3.98	3.62	1.61
2017				
Total revenues	$ 22,525	$ 22,407	$ 22,426	$ 22,682
Income before income tax expense	1,514	1,205	1,119	126
Net income	1,009	855	747	1,232
Basic net income per share	$ 3.82	$ 3.23	$ 2.87	$ 4.80
Diluted net income per share	3.73	3.16	2.80	4.67

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

There have been no changes in or disagreements with our independent registered public accounting firm on accounting or financial disclosures.

ITEM 9A. CONTROLS AND PROCEDURES.

Evaluation of Disclosure Controls and Procedures

We carried out an evaluation as of December 31, 2018, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rule 13a-15(e) of the Exchange Act. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective in timely alerting them to material information relating to us (including our consolidated subsidiaries) required to be disclosed in our reports under the Exchange Act. In addition, based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective in ensuring that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosures.

Management's Report on Internal Control over Financial Reporting

Management, under the supervision and with the participation of the principal executive officer and principal financial officer, of Anthem, Inc., or the Company, is responsible for establishing and maintaining effective internal control over financial reporting, or Internal Control, as such term is defined in the Exchange Act. The Company's Internal Control is designed to provide reasonable assurance regarding the reliability of the Company's financial reporting and the preparation of financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles, or GAAP. The Company's Internal Control includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of inherent limitations in any Internal Control, no matter how well designed, misstatements due to error or fraud may occur and not be detected. Accordingly, even effective Internal Control can provide only reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

Management, under the supervision and with the participation of the principal executive officer and principal financial officer, assessed the effectiveness of the Company's Internal Control as of December 31, 2018. Management's assessment was based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

The Company completed its acquisition of America's 1st Choice on February 15, 2018. As permitted by the U.S. Securities and Exchange Commission, management's assessment as of December 31, 2018 did not include the Internal Control of America's 1st Choice, which is included in the Company's consolidated financial statements as of December 31, 2018. Such operations of America's 1st Choice constituted 0.5% and 0.6% of the Company's total assets and net assets, respectively, as of December 31, 2018, and 1.9% and 1.9% of the Company's total revenue and net income for the year then ended.

Based on management's assessment, which excluded an assessment of Internal Control of America's 1st Choice, management has concluded that the Company's Internal Control was effective as of December 31, 2018 to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with GAAP.

Ernst & Young LLP, the Company's independent registered public accounting firm, has audited the consolidated financial statements of the Company for the year ended December 31, 2018, and has also issued an audit report dated February 20, 2019, on the effectiveness of the Company's Internal Control as of December 31, 2018, which is included in this Annual Report on Form 10-K.

/S/ GAIL K. BOUDREAUX	/S/ JOHN E. GALLINA
President and Chief Executive Officer	Executive Vice President and Chief Financial Officer

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting that occurred during the three months ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Anthem, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Anthem, Inc.'s internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control–Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Anthem, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

As indicated in the accompanying Management's Report on Internal Control Over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of America's 1st Choice, which is included in the 2018 consolidated financial statements of the Company and constituted 0.5% and 0.6% of total and net assets, respectively, as of December 31, 2018, and 1.9% and 1.9% of revenues and net income, respectively, for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of America's 1st Choice.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of Anthem, Inc. as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and financial statement schedule listed in the Index at Item 15(c) and our report dated February 20, 2019 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ ERNST & YOUNG LLP

Indianapolis, Indiana
February 20, 2019

ITEM 9B. OTHER INFORMATION.

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The information required by this Item concerning our Executive Officers, Directors and nominees for Director, Audit Committee members and financial expert(s) and concerning disclosure of delinquent filers under Section 16(a) of the Exchange Act and our Standards of Ethical Business Conduct is incorporated herein by reference from our definitive Proxy Statement for our 2019 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this Item concerning remuneration of our Executive Officers and Directors, material transactions involving such Executive Officers and Directors and Compensation Committee interlocks, as well as the Compensation Committee Report and Pay Ratio Disclosure are incorporated herein by reference from our definitive Proxy Statement for our 2019 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information required by this Item concerning the stock ownership of management and five percent beneficial owners and securities authorized for issuance under equity compensation plans is incorporated herein by reference from our definitive Proxy Statement for our 2019 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information required by this Item concerning certain relationships and related person transactions and director independence is incorporated herein by reference from our definitive Proxy Statement for our 2019 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information required by this Item concerning principal accountant fees and services is incorporated herein by reference from our definitive Proxy Statement for our 2019 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) 1. Financial Statements:

The following consolidated financial statements of the Company are set forth in Part II, Item 8:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2018 and 2017

Consolidated Statements of Income for the years ended December 31, 2018, 2017, and 2016

Consolidated Statements of Comprehensive Income for the years ended December 31, 2018, 2017, and 2016

Consolidated Statements of Shareholders' Equity for the years ended December 31, 2018, 2017 and 2016

Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2016

Notes to Consolidated Financial Statements

2. Financial Statement Schedule:

The following financial statement schedule of the Company is included in Item 15(c):

Schedule II—Condensed Financial Information of Registrant (Parent Company Only).

All other schedules for which provision is made in the applicable accounting regulations of the SEC are not required under the related instructions, are inapplicable, or the required information is included in the consolidated financial statements, and therefore, have been omitted.

3. Exhibits required to be filed as part of this report:

Exhibit Number	Exhibit
2.1	Agreement and Plan of Merger, dated as of July 23, 2015 among Anthem, Inc., Anthem Merger Sub. Corp. and Cigna Corporation, incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on July 27, 2015.
3.1	Amended and Restated Articles of Incorporation of the Company, as amended and restated effective May 16, 2018, incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on May 16, 2018.
3.2	Bylaws of the Company, as amended and restated effective May 16, 2018, incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed on May 16, 2018.
4.1	Form of Specimen Certificate of the Company's common stock, $0.01 par value per share, incorporated by reference to Exhibit 4.3 to the Company's Post-Effective Amendment No.1 to Form S-8 Registration Statement filed on May 23, 2017.
4.2	Indenture, dated as of December 9, 2004, between the Company and The Bank of New York Trust Company, N.A., as trustee, including the Form of the Company's 5.950% Notes due 2034, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on December 15, 2004, SEC File No. 001-16751.
4.3	Indenture, dated as of January 10, 2006, between the Company and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A.), as trustee, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on January 11, 2006, SEC File No. 001-16751.
(a)	Form of 5.85% Notes due 2036, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on January 11, 2006, SEC File No. 001-16751.

Exhibit Number	Exhibit
	(b) Form of 6.375% Notes due 2037, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on June 8, 2007, SEC File No. 001-16751.
	(c) Form of 4.350% Notes due 2020, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on August 12, 2010, SEC File No. 001-16751.
	(d) Form of 5.800% Notes due 2040, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on August 12, 2010, SEC File No. 001-16751.
	(e) Form of 3.700% Notes due 2021, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on August 15, 2011, SEC File No. 001-16751.
	(f) Form of 3.125% Notes due 2022, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on May 7, 2012, SEC File No. 001-16751.
	(g) Form of 4.625% Notes due 2042, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on May 7, 2012, SEC File No. 001-16751.
	(h) Form of 3.300% Notes due 2023, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on September 10, 2012, SEC File No. 001-16751.
	(i) Form of 4.650% Notes due 2043, incorporated by reference to Exhibit 4.5 to the Company's Current Report on Form 8-K filed on September 10, 2012, SEC File No. 001-16751.
	(j) Form of 5.100% Notes due 2044, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on July 31, 2013, SEC File No. 001-16751.
	(k) Form of 2.250% Notes due 2019, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on August 12, 2014.
	(l) Form of 3.500% Notes due 2024, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on August 12, 2014.
	(m) Form of 4.650% Notes due 2044, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on August 12, 2014.
	(n) Form of 4.850% Notes due 2054, incorporated by reference to Exhibit 4.5 to the Company's Current Report on Form 8-K filed on August 12, 2014.
4.4	Indenture dated as of October 9, 2012 between the Company and The Bank of New York Mellon Trust Company, N.A. as trustee, including the Form of the 2.750% Senior Convertible Debentures due 2042, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on October 9, 2012, SEC File No. 001-16751.
4.5	Subordinated Indenture, dated as of May 12, 2015, between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on May 12, 2015.
	(a) First Supplemental Indenture to the Subordinated Indenture, dated as of May 12, 2015, between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee, including the Form of 1.90% Remarketable Subordinated Notes due 2028, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on May 12, 2015.
4.6	Indenture dated as of November 21, 2017 between the Company and The Bank of New York Mellon Trust Company, N.A. as trustee, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 21, 2017.
	(a) Form of 2.500% Notes due 2020, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on November 21, 2017.
	(b) Form of 2.950% Notes due 2022, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on November 21, 2017.
	(c) Form of 3.350% Notes due 2024, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on November 21, 2017.
	(d) Form of 3.650% Notes due 2027, incorporated by reference to Exhibit 4.5 to the Company's Current Report on Form 8-K filed on November 21, 2017.

Exhibit Number		Exhibit
		(e) Form of 4.375% Notes due 2047, incorporated by reference to Exhibit 4.6 to the Company's Current Report on Form 8-K filed on November 21, 2017.
		(f) Form of 4.101% Notes due 2028, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on March 2, 2018.
		(g) Form of 4.550% Notes due 2048, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on March 2, 2018.
4.7		Upon the request of the Securities and Exchange Commission, the Company will furnish copies of any other instruments defining the rights of holders of long-term debt of the Company or its subsidiaries.
10.1	*	Anthem Incentive Compensation Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on December 2, 2014.
		(a) Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2013, incorporated by reference to Exhibit 10.2(s) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013, SEC File No. 001-76751.
		(b) Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2014, incorporated by reference to Exhibit 10.2(p) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014.
		(c) Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2015, incorporated by reference to Exhibit 10.2(n) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015.
		(d) Form of Amendment, dated March 9, 2016, to Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2014, incorporated by reference to Exhibit 10.2(m) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
		(e) Form of Amendment, dated March 9, 2016, to Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2015, incorporated by reference to Exhibit 10.2(p) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
		(f) Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2016 and 2017, incorporated by reference to Exhibit 10.2(s) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
		(g) Form of Incentive Compensation Plan Restricted Stock Unit Award Agreement for 2016 and 2017, incorporated by reference to Exhibit 10.2(t) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
		(h) Form of Incentive Compensation Plan Performance Stock Unit Award Agreement for 2016, incorporated by reference to Exhibit 10.2(u) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
10.2	*	2017 Anthem Incentive Compensation Plan, effective May 18, 2017, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 18, 2017.
		(a) Form of Incentive Compensation Plan Performance Stock Unit Award Agreement for 2017, incorporated by reference to Exhibit 10.1(r) to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017.
		(b) Form of Incentive Compensation Plan Performance Stock Unit Award Agreement for the Chief Executive Officer for 2017, incorporated by reference to Exhibit 10.2(b) to the Company's Annual Report on Form 10-K for the year ended December 31, 2017.
		(c) First Amendment, effective January 1, 2018, to 2017 Anthem Incentive Compensation Plan, incorporated by reference to Exhibit 10.2(c) to the Company's Annual Report on Form 10-K for the year ended December 31, 2017.
		(d) Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2018, incorporated by reference to Exhibit 10.2(d) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018.
		(e) Form of Incentive Compensation Plan Restricted Stock Unit Award Agreement for 2018, incorporated by reference to Exhibit 10.2(e) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018.

Exhibit Number		Exhibit
		(f) Form of Incentive Compensation Plan Performance Stock Unit Award Agreement for 2018, incorporated by reference to Exhibit 10.2(f) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018.
		(g) Form of Incentive Compensation Plan Performance Stock Unit Award Agreement for Executive Vice President and CEO of IngenioRx, incorporated by reference to Exhibit 10.2(g) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018.
		(h) Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement commencing July 2018, incorporated by reference to Exhibit 10.2(h) to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018.
		(i) Form of Incentive Compensation Plan Restricted Stock Unit Award Agreement commencing July 2018, incorporated by reference to Exhibit 10.2(i) to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018.
		(j) Form of Incentive Compensation Plan Performance Stock Unit Award Agreement commencing July 2018, incorporated by reference to Exhibit 10.2(j) to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018.
		(k) Second Amendment, effective August 6, 2018, to 2017 Anthem Incentive Compensation Plan incorporated by reference to Exhibit 10.2(k) to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018.
10.3	*	Anthem, Inc. Comprehensive Nonqualified Deferred Compensation Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.3 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.
10.4	*	Anthem, Inc. Executive Agreement Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.4 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.
		(a) First Amendment, dated March 9, 2016, to Executive Agreement Plan, incorporated by reference to Exhibit 10.4(a) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
		(b) Second Amendment, dated January 6, 2017, to Executive Agreement Plan, incorporated by reference to Exhibit 10.3(b) to the Company's Annual Report on Form 10-K for the year ended December 31, 2016.
		(c) Third Amendment, dated August 27, 2018, to Executive Agreement Plan, incorporated by reference to Exhibit 10.4(c) to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2018.
10.5	*	Anthem, Inc. Executive Salary Continuation Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.5 to the Company's Annual Report on Form 10-K for the year ended December 31, 2015.
10.6	*	Anthem, Inc. Directed Executive Compensation Plan amended effective January 1, 2019.
10.7	*	Anthem, Inc. Board of Directors Compensation Program, as amended effective May 18, 2017, incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017.
10.8	*	Anthem Board of Directors' Deferred Compensation Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.8 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.
10.9	*	(a) Form of Employment Agreement between the Company and each of the following: John E. Gallina, Brian T. Griffin, Peter D. Haytaian, Gloria McCarthy and Thomas C. Zielinski, incorporated by reference to Exhibit A to Exhibit 10.41 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007, SEC File No. 001-16751.
		(b) Form of Employment Agreement between the Company and Gail Boudreaux, incorporated by reference to Exhibit A to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 6, 2017.
		(c) Form of Employment Agreement between the Company and each of the following: Felicia F. Norwood, Prakash Patel and Leah Stark incorporated by reference to Exhibit 10.9(d) to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2018.

Exhibit Number		Exhibit
10.10	*	Offer Letter, by and between the Company and Gail Boudreaux, dated as of November 5, 2017, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 6, 2017.
10.11	*	Transition Letter Agreement between the Company and Joseph R. Swedish, dated as of November 5, 2017, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on November 6, 2017.
10.12		Blue Cross License Agreement by and between Blue Cross Blue Shield Association and the Company, including revisions, if any, adopted by the Member Plans through September 27, 2018.
10.13		Blue Shield License Agreement by and between Blue Cross Blue Shield Association and the Company, including revisions, if any, adopted by the Member Plans through September 27, 2018.
21		Subsidiaries of the Company.
23		Consent of Independent Registered Public Accounting Firm.
31.1		Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Exchange Act Rules, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2		Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Exchange Act Rules, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1		Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2		Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101		The following materials from Anthem, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2018, formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets; (ii) the Consolidated Statements of Income; (iii) the Consolidated Statements of Comprehensive Income; (iv) the Consolidated Statements of Cash Flows; (v) the Consolidated Statements of Shareholders' Equity; (vi) the Notes to Consolidated Financial Statements and (vii) Financial Statement Schedule II.

* Indicates management contracts or compensatory plans or arrangements.

(b) Exhibits

The response to this portion of Item 15 is set forth in paragraph (a) 3 above.

(c) Financial Statement Schedule

Schedule II—Condensed Financial Information of Registrant (Parent Company Only).

ITEM 16. FORM 10-K SUMMARY.

None.

Schedule II—Condensed Financial Information of Registrant

Anthem, Inc. (Parent Company Only)
Balance Sheets

(In millions, except share data)	December 31, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 1,290	$ 956
Fixed maturity securities, current (amortized cost of $589 and $342)	573	346
Equity securities, current	86	1,458
Other invested assets, current	10	5
Other receivables	131	61
Income taxes receivable	—	75
Net due from subsidiaries	170	2,428
Securities lending collateral	35	15
Other current assets	320	228
Total current assets	2,615	5,572
Long-term investments:		
Equity securities	6	6
Other invested assets, long-term	616	644
Property and equipment, net	186	118
Deferred tax assets, net	209	162
Investments in subsidiaries	44,877	40,211
Other noncurrent assets	225	89
Total assets	$ 48,734	$ 46,802
Liabilities and shareholders' equity		
Liabilities		
Current liabilities:		
Accounts payable and accrued expenses	$ 1,429	$ 1,232
Security trades pending payable	—	11
Securities lending payable	35	14
Income taxes payable	112	—
Current portion of long-term debt	849	1,275
Other current liabilities	235	219
Total current liabilities	2,660	2,751
Long-term debt, less current portion	17,192	17,357
Other noncurrent liabilities	341	191
Total liabilities	20,193	20,299
Commitments and contingencies—Note 5		
Shareholders' equity		
Preferred stock, without par value, shares authorized - 100,000,000; shares issued and outstanding - none	—	—
Common stock, par value $0.01, shares authorized - 900,000,000; shares issued and outstanding - 257,395,577 and 256,084,913	3	3
Additional paid-in capital	9,536	8,547
Retained earnings	19,988	18,054
Accumulated other comprehensive loss	(986)	(101)
Total shareholders' equity	28,541	26,503
Total liabilities and shareholders' equity	$ 48,734	$ 46,802

See accompanying notes.

Anthem, Inc. (Parent Company Only)
Statements of Income

(In millions)	Years ended December 31 2018	2017	2016
Revenues			
Net investment income	$ 39	$ 64	$ 75
Net realized losses on financial instruments	(46)	(18)	(195)
Other-than-temporary impairment losses on investments:			
Total other-than-temporary impairment losses on investments	(15)	(7)	(65)
Portion of other-than-temporary impairment losses recognized in other comprehensive (loss) income	—	—	17
Other-than-temporary impairment losses recognized in income	(15)	(7)	(48)
Other revenue	2	—	—
Total (losses) revenues	(20)	39	(168)
Expenses			
General and administrative expense	86	437	270
Interest expense	723	727	719
Loss on extinguishment of debt	11	283	—
Total expenses	820	1,447	989
Loss before income tax credits and equity in net income of subsidiaries	(840)	(1,408)	(1,157)
Income tax credits	(238)	(216)	(439)
Equity in net income of subsidiaries	4,352	5,035	3,188
Net income	$ 3,750	$ 3,843	$ 2,470

See accompanying notes.

Anthem, Inc. (Parent Company Only)
Statements of Comprehensive Income

(in millions)	Years ended December 31 2018	2017	2016
Net income	$ 3,750	$ 3,843	$ 2,470
Other comprehensive income, net of tax:			
Change in net unrealized gains/losses on investments	(418)	173	118
Change in non-credit component of other-than-temporary impairment losses on investments	(2)	4	5
Change in net unrealized gains/losses on cash flow hedges	37	(65)	(87)
Change in net periodic pension and postretirement costs	(90)	51	(13)
Foreign currency translation adjustments	(1)	3	2
Other comprehensive (loss) income	(474)	166	25
Total comprehensive income	$ 3,276	$ 4,009	$ 2,495

See accompanying notes.

Anthem, Inc. (Parent Company Only)
Statements of Cash Flows

(In millions)	Years ended December 31 2018	2017	2016
Operating activities			
Net income	$ 3,750	$ 3,843	$ 2,470
Adjustments to reconcile net income to net cash provided by operating activities:			
Undistributed earnings of subsidiaries	(744)	(2,437)	(502)
Net realized losses on financial instruments	46	18	195
Other-than-temporary impairment losses recognized in income	15	7	48
Loss on extinguishment of debt	11	283	—
Loss on disposal of assets	—	—	2
Deferred income taxes	(43)	(33)	(7)
Amortization, net of accretion	43	25	34
Depreciation expense	70	69	70
Share-based compensation	226	170	165
Excess tax benefits from share-based compensation	—	—	(54)
Changes in operating assets and liabilities:			
Receivables, net	(73)	(17)	18
Other invested assets, current	(5)	(1)	1
Other assets	(225)	(102)	213
Amounts due to/from subsidiaries	2,259	(1,034)	(1,488)
Accounts payable and accrued expenses	303	491	44
Other liabilities	154	(61)	(31)
Income taxes	187	(6)	198
Other, net	1	(2)	5
Net cash provided by operating activities	5,975	1,213	1,381
Investing activities			
Purchases of investments	(800)	(3,814)	(2,875)
Proceeds from sales, maturities, calls and redemptions of investments	1,865	2,595	3,310
Changes in collateral and settlement of non-hedging derivatives	—	65	(34)
Capitalization of subsidiaries	(4,379)	(124)	(295)
Changes in securities lending collateral	(21)	25	92
Purchases of property and equipment, net of sales	(137)	(44)	(99)
Other, net	4	18	(8)
Net cash (used in) provided by investing activities	(3,468)	(1,279)	91
Financing activities			
Net (repayments of) proceeds from commercial paper borrowings	(107)	175	(53)
Proceeds from long-term borrowings	835	5,458	—
Repayments of long-term borrowings	(1,684)	(2,815)	—
Changes in securities lending payable	21	(25)	(91)
Changes in bank overdrafts	(107)	51	30
Proceeds from sale of put options	1	1	—
Proceeds from issuance of common stock under Equity Units stock purchase contracts	1,250	—	—
Repurchase and retirement of common stock	(1,685)	(1,998)	—
Change in collateral and settlements of debt-related derivatives	23	(149)	(360)
Cash dividends	(812)	(737)	(715)
Proceeds from issuance of common stock under employee stock plans	173	225	120
Taxes paid through withholding of common stock under employee stock plans	(81)	(47)	(67)
Excess tax benefits from share-based compensation	—	—	54
Net cash (used in) provided by financing activities	(2,173)	139	(1,082)
Change in cash and cash equivalents	334	73	390
Cash and cash equivalents at beginning of year	956	883	493
Cash and cash equivalents at end of year	$ 1,290	$ 956	$ 883

See accompanying notes.

Anthem, Inc.
(Parent Company Only)
Notes to Condensed Financial Statements

December 31, 2018
(In Millions, Except Per Share Data)

1. Basis of Presentation and Significant Accounting Policies

In the parent company only financial statements of Anthem, Inc., or Anthem, Anthem's investment in subsidiaries is stated at cost plus equity in undistributed earnings of the subsidiaries. Anthem's share of net income of its unconsolidated subsidiaries is included in income using the equity method of accounting.

Certain amounts presented in the parent company only financial statements are eliminated in the consolidated financial statements of Anthem.

Certain prior year amounts have been adjusted to conform to the current year rounding convention of reporting financial data in whole millions of dollars, except as otherwise noted.

Anthem's parent company only financial statements should be read in conjunction with Anthem's audited consolidated financial statements and the accompanying notes included in Part II, Item 8 of this Annual Report on Form 10-K.

2. Subsidiary Transactions

Dividends from Subsidiaries

Anthem received cash dividends from subsidiaries of $3,606, $2,268 and $2,689 during 2018, 2017 and 2016, respectively.

Dividends to Subsidiaries

Certain subsidiaries of Anthem own shares of Anthem common stock. Anthem paid cash dividends to subsidiaries related to these shares of common stock in the amount of $36, $32 and $31 during 2018, 2017 and 2016, respectively.

Investments in Subsidiaries

Capital contributions to subsidiaries were $4,379, $124 and $295 during 2018, 2017 and 2016, respectively.

Amounts Due to and From Subsidiaries

At December 31, 2018 and 2017, Anthem reported amounts due from subsidiaries of $170 and $2,428, respectively. The amounts due from subsidiaries primarily include amounts for allocated administrative expenses or cash held overnight at the parent level resulting from daily cash management activities. These items are routinely settled, and as such, are classified as current assets or liabilities.

Guarantees on Behalf of Subsidiaries

Anthem guarantees contractual or financial obligations or solvency requirements for certain of its subsidiaries. These guarantees approximated $580 at December 31, 2018. There were no payments made on these guarantees in 2018.

3. Derivative Financial Instruments

The information regarding derivative financial instruments contained in Note 5, "Derivative Financial Instruments," of the Notes to Consolidated Financial Statements of Anthem and its subsidiaries, included in Part II, Item 8 of this Annual Report on Form 10-K, is incorporated herein by reference.

4. Long-Term Debt

The information regarding long-term debt contained in Note 12, "Debt," of the Notes to Consolidated Financial Statements of Anthem and its subsidiaries, included in Part II, Item 8 of this Annual Report on Form 10-K, is incorporated herein by reference.

5. Commitments and Contingencies

The information regarding commitments and contingencies contained in Note 13, "Commitments and Contingencies," of the Notes to Consolidated Financial Statements of Anthem and its subsidiaries, included in Part II, Item 8 of this Annual Report on Form 10-K, is incorporated herein by reference.

6. Capital Stock

The information regarding capital stock contained in Note 14, "Capital Stock," of the Notes to Consolidated Financial Statements of Anthem and its subsidiaries, included in Part II, Item 8 of this Annual Report on Form 10-K, is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ANTHEM, INC.

By: /s/ GAIL K. BOUDREAUX
Gail K. Boudreaux
President and Chief Executive Officer

Dated: February 20, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ GAIL K. BOUDREAUX **Gail K. Boudreaux**	President and Chief Executive Officer, Director (Principal Executive Officer)	February 20, 2019
/s/ JOHN E. GALLINA **John E. Gallina**	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 20, 2019
/s/ RONALD W. PENCZEK **Ronald W. Penczek**	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 20, 2019
/s/ ELIZABETH E. TALLETT **Elizabeth E. Tallett**	Chair of the Board	February 20, 2019
/s/ R. KERRY CLARK **R. Kerry Clark**	Director	February 20, 2019
/s/ ROBERT L. DIXON, JR. **Robert L. Dixon, Jr.**	Director	February 20, 2019
/s/ LEWIS HAY III **Lewis Hay III**	Director	February 20, 2019
/s/ JULIE A. HILL **Julie A. Hill**	Director	February 20, 2019
/s/ BAHIJA JALLAL **Bahija Jallal**	Director	February 20, 2019
/s/ ANTONIO F. NERI **Antonio F. Neri**	Director	February 20, 2019
/s/ RAMIRO G. PERU **Ramiro G. Peru**	Director	February 20, 2019
/s/ GEORGE A. SCHAEFER, JR. **George A. Schaefer, Jr.**	Director	February 20, 2019

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULE 13a-14(a) AND RULE 15d-14(a) OF THE EXCHANGE ACT RULES,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Gail K. Boudreaux, certify that:

1. I have reviewed this report on Form 10-K of Anthem, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 20, 2019

/s/ GAIL K. BOUDREAUX

President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULE 13a-14(a) AND RULE 15d-14(a) OF THE EXCHANGE ACT RULES,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, John E. Gallina, certify that:

1. I have reviewed this report on Form 10-K of Anthem, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 20, 2019

/s/ JOHN E. GALLINA
Executive Vice President and
Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Anthem, Inc. (the "Company") on Form 10-K for the period ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gail K. Boudreaux, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ GAIL K. BOUDREAUX

Gail K. Boudreaux
President and Chief Executive Officer
February 20, 2019

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Anthem, Inc. (the "Company") on Form 10-K for the period ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John E. Gallina, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ JOHN E. GALLINA

John E. Gallina
Executive Vice President and Chief Financial Officer
February 20, 2019

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2017
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to
Commission file number: 001-16751

ANTHEM, INC.
(Exact name of registrant as specified in its charter)

INDIANA	**35-2145715**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**
120 MONUMENT CIRCLE INDIANAPOLIS, INDIANA	**46204**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: **(317) 488-6000**
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Name of each exchange on which registered**
Common Stock, Par Value $0.01	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: NONE

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant (assuming solely for the purposes of this calculation that all Directors and executive officers of the registrant are "affiliates") as of June 30, 2017 was approximately $49,440,818,164.

As of February 9, 2018, 255,721,900 shares of the Registrant's Common Stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Part III of this Annual Report on Form 10-K incorporates by reference information from the registrant's Definitive Proxy Statement for the Annual Meeting of Shareholders to be held May 16, 2018.

Anthem, Inc.

Annual Report on Form 10-K
For the Year Ended December 31, 2017

Table of Contents

References in this Annual Report on Form 10-K to the terms "we," "our," "us," "Anthem" or the "Company" refer to Anthem, Inc., an Indiana corporation, and, unless the context otherwise requires, its direct and indirect subsidiaries. References to the term "states" include the District of Columbia, unless the context otherwise requires.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, including Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations", contains forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, that reflect our views about future events and financial performance. When used in this report, the words "expect," "feel," "believe," "will," "may," "should," "anticipate," "intend," "estimate," "project," "forecast," "plan" and similar expressions are intended to identify forward-looking statements, which are generally not historical in nature. These statements include, but are not limited to: financial projections and estimates and their underlying assumptions; statements regarding plans, objectives and expectations with respect to future operations, products and services; and statements regarding future performance. Such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond our control, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking statements. You are cautioned not to place undue reliance on these forward- looking statements that speak only as of the date hereof. You are also urged to carefully review and consider the various disclosures made by us, which attempt to advise interested parties of the factors that affect our business, including "Risk Factors" set forth in Part I, Item 1A hereof and our reports filed with the U.S. Securities and Exchange Commission, or SEC, from time to time. Except to the extent otherwise required by federal securities laws, we do not undertake any obligation to republish revised forward-looking statements to reflect events or circumstances after the date hereof. These risks and uncertainties include, but are not limited to: the impact of federal and state regulation, including ongoing changes in the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, as amended, or collectively, the ACA; trends in healthcare costs and utilization rates; our ability to contract with providers on cost-effective and competitive terms; our ability to secure sufficient premium rates including regulatory approval for and implementation of such rates; reduced enrollment; risks and uncertainties regarding Medicare and Medicaid programs, including those related to non-compliance with the complex regulations imposed thereon, our ability to maintain and achieve improvement in Centers for Medicare and Medicaid Services, or CMS, Star ratings and other quality scores and funding risks with respect to revenue received from participation therein; competitive pressures, including competitor pricing, which could affect our ability to maintain or increase our market share; a negative change in our healthcare product mix; our ability to adapt to changes in the industry and develop and implement strategic growth opportunities; costs and other liabilities associated with litigation, government investigations, audits or reviews; the ultimate outcome of litigation between Cigna Corporation, or Cigna, and us related to the merger agreement between the parties, including our claim for damages against Cigna, Cigna's claim for payment of a termination fee and other damages against us, and the potential for such litigation to cause us to incur substantial costs, materially distract management and negatively impact our reputation and financial positions; medical malpractice or professional liability claims or other risks related to healthcare services provided by our subsidiaries; possible restrictions in the payment of dividends by our subsidiaries and increases in required minimum levels of capital; the potential negative effect from our substantial amount of outstanding indebtedness; a downgrade in our financial strength ratings; the effects of any negative publicity related to the health benefits industry in general or us in particular; unauthorized disclosure of member or employee sensitive or confidential information, including the impact and outcome of any investigations, inquiries, claims and litigation related thereto; failure to effectively maintain and modernize our information systems; non-compliance by any party with the Express Scripts, Inc. pharmacy benefit management services agreement, which could result in financial penalties, our inability to meet customer demands, and sanctions imposed by governmental entities, including CMS; state guaranty fund assessments for insolvent insurers; events that may negatively affect our licenses with the Blue Cross and Blue Shield Association; regional concentrations of our business and future public health epidemics and catastrophes; general risks associated with mergers, acquisitions and strategic alliances; our ability to repurchase shares of our common stock and pay dividends on our common stock due to the adequacy of our cash flow and earnings and other considerations; possible impairment of the value of our intangible assets if future results do not adequately support goodwill and other intangible assets; changes in economic and market conditions, as well as regulations that may negatively affect our liquidity and investment portfolios; changes in U.S. tax laws; intense competition to attract and retain employees; various laws and provisions in our governing documents that may prevent or discourage takeovers and business combinations; and general economic downturns.

PART I

ITEM 1. BUSINESS.

General

We are one of the largest health benefits companies in the United States in terms of medical membership, serving 40.2 million medical members through our affiliated health plans as of December 31, 2017. We are an independent licensee of the Blue Cross and Blue Shield Association, or BCBSA, an association of independent health benefit plans. We serve our members as the Blue Cross licensee for California and as the Blue Cross and Blue Shield, or BCBS, licensee for Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri (excluding 30 counties in the Kansas City area), Nevada, New Hampshire, New York (in varying counties as BCBS, Blue Cross or Empire BlueCross BlueShield HealthPlus), Ohio, Virginia (excluding the Northern Virginia suburbs of Washington, D.C.) and Wisconsin. In a majority of these service areas we do business as Anthem Blue Cross, Anthem Blue Cross and Blue Shield, Blue Cross and Blue Shield of Georgia, and Empire Blue Cross Blue Shield or Empire Blue Cross (in our New York service areas). We also conduct business through arrangements with other BCBS licensees in Louisiana, South Carolina and western New York. Through our AMERIGROUP Corporation, or Amerigroup, subsidiary and other subsidiaries, we conduct business in Florida, Georgia, Iowa, Kansas, Maryland, Nevada, New Jersey, New Mexico, Tennessee, Texas, Washington and Washington, D.C. In addition, we conduct business through our Simply Healthcare Holdings, Inc., or Simply Healthcare, and HealthSun Health Plans, Inc., or HealthSun, subsidiaries in Florida. We also serve customers throughout the country as HealthLink, UniCare, and in certain Arizona, California, Connecticut, Iowa, Nevada, Tennessee and Virginia markets through our CareMore Health Group, Inc., or CareMore, subsidiary. We are licensed to conduct insurance operations in all 50 states and the District of Columbia through our subsidiaries.

On February 15, 2018, we completed our acquisition of Freedom Health, Inc., Optimum HealthCare, Inc., America's 1st Choice of South Carolina, Inc. and related entities, or collectively, America's 1st Choice, a Medicare Advantage organization that offers health maintenance organization, or HMO, products, including Chronic Special Needs Plans and Dual-Eligible Special Needs Plans under its Freedom Health and Optimum HealthCare brands in Florida and its America's 1st Choice of South Carolina brand in South Carolina. Through its Medicare Advantage Plans, America's 1st Choice currently serves approximately one hundred and thirty thousand members in twenty-five Florida and three South Carolina counties. The acquisition of America's 1st Choice aligns with our plans for continued growth in the Medicare Advantage and Special Needs populations.

On December 21, 2017, we completed our acquisition of HealthSun, which serves approximately forty thousand members in the state of Florida through its Medicare Advantage Plans, which received a five-star rating from the Centers for Medicare & Medicaid Services, or CMS. The HealthSun acquisition aligns with our plans for continued growth in the Medicare Advantage and dual-eligible populations.

In March 2016, we filed a lawsuit against our vendor for pharmacy benefit management services, Express Scripts, Inc., or Express Scripts, seeking to recover damages for pharmacy pricing that is higher than competitive benchmark pricing and damages related to operational breaches, as well as various declarations under the agreement between the parties. In April 2016, Express Scripts filed an answer to the lawsuit disputing our contractual claims and alleging various defenses and counterclaims. For additional information regarding this lawsuit, see Note 13, "Commitments and Contingencies - *Litigation,*" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K. In October 2017, we announced that we are establishing a new pharmacy benefits manager, or PBM, called IngenioRx, and have entered into a five-year agreement with CaremarkPCS Health, L.L.C., or CVS Health, to begin offering a full suite of PBM solutions starting on January 1, 2020, which coincides with the conclusion of our current agreement with Express Scripts.

On July 24, 2015, we and Cigna Corporation, or Cigna, announced that we entered into an Agreement and Plan of Merger, or Cigna Merger Agreement, dated as of July 23, 2015, to acquire all outstanding shares of Cigna. In July 2016, the U.S. Department of Justice, along with certain state attorneys general, filed a civil antitrust lawsuit in the U.S. District Court for the District of Columbia, or District Court, seeking to block the merger. On February 14, 2017, Cigna purported to terminate the Cigna Merger Agreement and commenced litigation against us in the Delaware Court of Chancery, or Delaware Court, seeking damages, including the $1.85 billion termination fee pursuant to the terms of the Cigna Merger Agreement,

and a declaratory judgment that its purported termination of the Cigna Merger Agreement was lawful, among other claims, which is captioned *Cigna Corp. v. Anthem Inc.* We believe Cigna's allegations are without merit. Also on February 14, 2017, we initiated our own litigation against Cigna in the Delaware Court seeking a temporary restraining order to enjoin Cigna from terminating the Cigna Merger Agreement, specific performance compelling Cigna to comply with the Cigna Merger Agreement and damages, which is captioned *Anthem Inc. v. Cigna Corp*. On April 28, 2017, the U.S. Circuit Court of Appeals for the District of Columbia affirmed the ruling of the District Court, which blocked the merger. On May 11, 2017, the Delaware Court denied our motion to enjoin Cigna from terminating the Cigna Merger Agreement. On May 12, 2017, we delivered to Cigna a notice terminating the Cigna Merger Agreement. For additional information about these lawsuits, see Note 13, "Commitments and Contingencies - *Litigation,*" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Our vision is to become America's valued health partner. Together we are transforming healthcare with trusted and caring solutions and as a result, we focus on delivering quality products and services that give members access to the care they need. With an unyielding commitment to meeting the needs of our diverse customers, we are guided by the following values:

- Accountable
- Caring
- Easy to do business with
- Innovative
- Trustworthy

We offer a broad spectrum of network-based managed care plans to Large Group, Small Group, Individual, Medicaid and Medicare markets. Our managed care plans include: Preferred Provider Organizations, or PPOs; HMOs; Point-of-Service, or POS, plans; traditional indemnity plans and other hybrid plans, including Consumer-Driven Health Plans, or CDHPs; and hospital only and limited benefit products. In addition, we provide a broad array of managed care services to self-funded customers, including claims processing, underwriting, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services. We provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits, radiology benefit management and analytics-driven personal healthcare. We also provide services to the federal government in connection with the Federal Employee Program®, or FEP®.

The increased focus on healthcare costs by employers, the government and consumers has continued to drive the growth of alternatives to traditional indemnity health insurance. HMO, PPO and hybrid plans are among the various forms of managed care products that have been developed. Through these types of products, insurers attempt to contain the cost of healthcare by negotiating contracts with hospitals, physicians and other providers to deliver high quality healthcare to members at favorable rates. These products usually feature medical management and other quality and cost optimization measures such as pre-admission review and approval for certain non-emergency services, pre-authorization of outpatient surgical procedures, network credentialing to determine that network doctors and hospitals have the required certifications and expertise, and various levels of care management programs to help members better understand and navigate the healthcare system. In addition, providers may have incentives to achieve certain quality measures, may share medical cost risk or may have other incentives to deliver quality medical services in a cost-effective manner. Also, certain plans offer members incentives for healthy behaviors, such as smoking cessation and weight management. Members are charged periodic, prepaid premiums and generally pay co-payments, coinsurance and/or deductibles when they receive services. While the distinctions between the various types of plans have lessened over recent years, PPO, POS and CDHP products generally provide reduced benefits for out-of-network services, while traditional HMO products generally provide little to no reimbursement for non-emergency out-of-network utilization, but often offer more generous benefit coverage. An HMO plan may also require members to select one of the network primary care physicians, or PCPs, to coordinate their care and approve any specialist or other services.

Economic factors, greater consumer and employer sophistication and accountability have resulted in an increased demand for choice in both product/benefit designs and provider network configurations. As a result we continue to offer our broad access PPO networks with multiple benefit designs, but are also focused on leveraging our provider collaboration initiatives with our Accountable Care Organization, or ACO, partnerships to develop both narrow and tiered network

offerings. This array of network and product configurations allows both the employer and the employee to design and select the combination of benefit designs (e.g., traditional PPOs, high deductibles, health reimbursement accounts, health savings accounts, PCP based products, tiered copays) and networks (e.g., broad, narrow, tiered, closed or exclusive provider, and open) that optimize choice, quality and price at the consumer, employer and market level. We believe we are well-positioned in each of our states to respond to these market preferences.

For our fully-insured products, we charge a premium and assume all of the healthcare risk. Under self-funded products, we charge a fee for services and the employer or plan sponsor reimburses us for the healthcare costs. In addition, we charge a premium to underwrite stop loss insurance for Large Group and National Account employers that maintain self-funded health plans.

Our medical membership includes seven different customer types: Local Group, Individual, National Accounts, BlueCard®, Medicare, Medicaid and FEP®.

BCBS-branded business generally refers to members in our service areas licensed by the BCBSA. Non-BCBS-branded business refers to members in our non-BCBS-branded Amerigroup, CareMore, Simply Healthcare and HealthSun plans, as well as HealthLink and UniCare members, and effective February 12, 2018, our America's 1st Choice members. In addition to the above medical membership, we also serve customers who purchase one or more of our other products or services that are often ancillary to our health business.

Our products are generally developed and marketed with an emphasis on the differing needs of our customers. In particular, our product development and marketing efforts take into account the differing characteristics between the various customers served by us, as well as the unique needs of educational and public entities, labor groups, federal employee health and benefit programs, national employers and state-run programs servicing low-income, high-risk and under-served markets. Overall, we seek to establish pricing and product designs to provide value for our customers while achieving an appropriate level of profitability for each of our customer categories balanced with the competitive objective to grow market share. We believe that one of the keys to our success has been our focus on these distinct customer types, which better enables us to develop benefit plans and services that meet our customers' unique needs.

We market our products through direct marketing activities and an extensive network of independent agents, brokers and retail partnerships for Individual and Medicare customers, and for certain Local Group customers with a smaller employee base. Products for National Accounts and Local Group customers with a larger employee base are generally sold through independent brokers or consultants retained by the customer and working with industry specialists from our in-house sales force. In the Individual and Small Group markets, we offer on-exchange products through state or federally facilitated marketplaces, referred to as public exchanges, and off-exchange products. Federal subsidies are available for certain members, subject to income and family size, who purchase public exchange products.

Being a licensee of the BCBS association of companies, of which there were 36 independent primary licensees as of December 31, 2017, provides significant market value, especially when competing for very large multi-state employer groups. For example, each BCBS member company is able to utilize other BCBS licensees' substantial provider networks and discounts when any BCBS member works or travels outside of the state in which their policy is written. This program is referred to as BlueCard® and is a source of revenue when we provide member services in the states where we are the BCBS licensee to individuals who are customers of BCBS plans not affiliated with us. This program also provides a national provider network for our members when they travel to other states.

For additional information describing each of our customer types, detailed marketing efforts and changes in medical membership over the last three years, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Part II, Item 7 of this Annual Report on Form 10-K.

Our results of operations depend in large part on accurately predicting healthcare costs and our ability to manage future healthcare costs through adequate product pricing, medical management, product design and negotiation of favorable provider contracts.

Advances in medical technology, increases in specialty drug costs, increases in hospital expenditures and other provider costs, the aging of the population and other demographic characteristics continue to contribute to rising healthcare costs. Our managed care plans and products are designed to encourage providers and members to participate in quality, cost-effective

health benefit programs by using the full range of our innovative medical management services, quality initiatives and financial incentives. Our market share and high business retention rates enable us to realize the long-term benefits of investing in preventive and early detection programs. Our ability to provide cost-effective health benefits products and services is enhanced through a disciplined approach to internal cost containment, prudent management of our risk exposure and successful integration of acquired businesses. In addition, our ability to manage selling, general and administrative costs continues to be a driver of our overall profitability.

The future results of our operations will also be impacted by certain external forces and resulting changes in our business model and strategy. The Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, as amended, or collectively, the ACA, has changed and may continue to make broad-based changes to the U.S. healthcare system. The ACA presented us with new growth opportunities, but also introduced new risks, regulatory challenges and uncertainties, and required changes in the way products are designed, underwritten, priced, distributed and administered. Changes to our business are likely to continue for the next several years as elected officials at the national and state levels have proposed significant modifications to existing laws and regulations, including the potential repeal or replacement of the ACA and the reduction or elimination of federal subsidies made available through the ACA for certain public exchange Individual products, including the discontinuance of the cost-sharing reduction subsidy effective October 2017. As a result of the complexity of the ACA, its impact on healthcare in the United States and the continuing modification and interpretation of the ACA rules, we will continue to evaluate the impact of the ACA as additional guidance is made available. For additional discussion, see "Regulation," herein and Part I, Item 1A "Risk Factors" in this Annual Report on Form 10-K.

In addition to the external forces discussed in the preceding paragraph, our results of operations are impacted by levels and mix of membership. In recent years, we have experienced membership growth due to the quality and pricing of our health benefits products and services, improved economic conditions, decreases in unemployment, acquisitions, entry into new markets and expansions in existing markets. In addition, we believe the self-insured portion of our group membership base will continue to increase as a percentage of total group membership. However, these membership trends could be negatively impacted by various factors that could have a material adverse effect on our future results of operations such as general economic downturns that result in business failures, failure to obtain new customers or retain existing customers, premium increases, benefit changes or our exit from a specific market. See Part I, Item 1A "Risk Factors" and Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in this Annual Report on Form 10-K.

Private exchanges have gained visibility in the marketplace based on the promise of helping employers reduce costs, increase consumer engagement and manage the complexities created by the ACA and other market forces. While private exchanges have been a distribution channel in the Medicare and Individual markets for some time, in more recent years the Commercial market has received an increased level of attention from the consulting and broker communities as well as health insurance carriers. In response, we have continued our broad-based strategy of offering our own private exchange, Anthem Health Marketplace, consumer experience platform to groups, while also participating in four large national consultant-led exchanges, several regional broker-led exchanges and various Individual, Commercial and Medicare exchanges. To date, adoption levels in the Commercial market overall have been lower than analyst predictions. While the ultimate volume, pace of growth and winning business models remain highly uncertain in this space, we continue to believe we are well positioned to adapt with the market as it evolves.

During 2017, we notified various state regulators of our decision to dramatically reduce our participation in the Individual ACA-compliant marketplaces within their respective states. The uncertainty around, and subsequent termination of, the federal funding of the cost-sharing reduction subsidy available through the ACA was an important factor as we evaluated the appropriate level of our marketplace participation. Our strategy has been, and will continue to be, to only participate in rating regions where we have an appropriate level of confidence that these markets are on a path toward sustainability, including, but not limited to, factors such as expected financial performance, regulatory environment, and underlying market characteristics. In 2018, we will continue to offer Individual ACA-compliant products in 56 of the 143 rating regions in which we operate.

We believe healthcare is local and that we have the strong local presence required to understand and meet local customer needs. Further, we believe we are well-positioned to deliver what customers want: innovative, choice-based and affordable products; distinctive service; simplified transactions; and better access to information for quality care. Our local presence,

combined with our national expertise, has created opportunities for collaborative programs that reward physicians and hospitals for clinical quality and excellence. We feel that our commitment to health improvement and care management provides added value to customers and healthcare professionals. Ultimately, we believe that practical and sustainable improvements in healthcare must focus on improving healthcare quality while managing costs for total affordability. We have implemented initiatives driving payment innovation and partnering with providers to compel improved cost, quality and health, and we continue to develop new and innovative ways to effectively manage risk and engage our members. In addition, we are focused on achieving efficiencies from our national scale while optimizing service performance for our customers. Finally, we expect to continue to rationalize our portfolio of businesses and products and align our investments to capitalize on new opportunities to drive growth in our existing markets and expand into new markets in the future.

We continue to enhance interactions with customers, providers, brokers, agents, employees and other stakeholders through web-enabled technology and improving internal operations. Our approach includes not only sales and distribution of health benefits products on the Internet, but also implementing advanced capabilities that improve services benefiting customers, agents, brokers, and providers while optimizing administrative costs. These enhancements can also help improve the quality, coordination and safety of healthcare through increased communications between patients and their physicians.

In pursuing our vision of becoming America's valued health partner, we intend to transform healthcare by providing trusted and caring solutions and delivering quality products and services that give customers access to the care they need. At the same time, we will focus on earnings per share, or EPS, growth through organic membership growth, improvements in our operating cost structure, strategic acquisitions and the efficient use of capital.

Significant Transactions

The significant transactions that have occurred over the last five years that have impacted or will impact our capital structure or that have influenced or will influence how we conduct our business operations include:

- Acquisition of America's 1st Choice (2018);
- Acquisition of HealthSun (2017);
- Acquisition of Simply Healthcare (2015);
- Use of Capital—Board of Directors declaration of dividends on common stock (2013 through January 2018); authorization for repurchases of our common stock (2017 and prior); and debt repurchases and new debt issuances (2017 and prior); and
- Divestiture of 1-800 CONTACTS, Inc. (2014).

For additional information regarding certain of these transactions, see Note 3, “Business Acquisitions,” Note 12, “Debt,” and Note 14, “Capital Stock,” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Competition

The managed care industry is highly competitive, both nationally and in our local markets. Competition continues to be intense due to aggressive marketing and pricing, business consolidations, new competitors in the market, a proliferation of new products, the impact of the ACA, and increased quality awareness and price sensitivity among customers.

We believe that participants in the managed care industry compete for customers based on quality of service, price, access to provider networks, access to care management and wellness programs (including health information), innovation, breadth and flexibility of products and benefits, reputation (including National Committee on Quality Assurance, or NCQA, accreditation status), brand recognition and financial stability. Our ability to attract and retain customers is substantially tied to our ability to distinguish ourselves from our competitors in these areas.

Also, a health plan’s ability to interact with employers, customers and other third parties (including healthcare professionals) through electronic data transfer has become a more important competitive factor, and we have made significant investments in technology to enhance our electronic interaction with providers, employers, customers and third parties.

We believe our exclusive right to market products under the most recognized brand in the industry, BCBS, in our most significant markets provides us with greater brand recognition over competitive product offerings. Our provider networks in our markets enable us to achieve efficiencies and distinctive service levels by allowing us to offer a broad range of health benefits to our customers on a more cost-effective basis than many of our competitors. We strive to distinguish our products through provider access, service, care management, product value and brand recognition.

Product pricing remains competitive and we strive to price our healthcare benefit products consistent with anticipated underlying medical trends. We believe our pricing strategy, based on predictive modeling, proprietary research and data-driven processes has positioned us to benefit from the potential growth opportunities available through entry into new markets, expansions in existing markets and as a result of any subsequent changes to the current regulatory scheme. We believe that our pricing strategy, brand name and network quality will provide a strong foundation for membership growth opportunities in the future.

To build our provider networks, we compete with other health benefits plans for the best contracts with hospitals, physicians and other providers. We believe that physicians and other providers primarily consider customer volume, reimbursement rates, timeliness of reimbursement and administrative service capabilities along with the reduction of non-value added administrative tasks when deciding whether to contract with a health benefits plan.

At the sales and distribution level, we compete for qualified agents and brokers to recommend and distribute our products. Strong competition exists among insurance companies and health benefits plans for agents and brokers with demonstrated ability to secure new business and maintain existing accounts. We believe that the quality and price of our products, support services, reputation and prior relationships, along with a reasonable commission structure are the factors agents and brokers consider in choosing whether to market our products. We believe that we have good relationships with our agents and brokers, and that our products, support services and commission structure compare favorably to those of our competitors in all of our markets. Typically, we are the largest competitor in each of our Blue-branded markets and, thus, are a closely-watched target by other insurance competitors.

Reportable Segments

We manage our operations through three reportable segments: Commercial & Specialty Business, Government Business and Other. We regularly evaluate the appropriateness of our reportable segments, particularly in light of organizational changes, merger and acquisition activity and changing laws and regulations. As a result, these reportable segments may change in the future.

Our Commercial & Specialty Business and Government Business segments both offer a diversified mix of managed care products, including PPOs, HMOs, traditional indemnity benefits and POS plans, as well as a variety of hybrid benefit plans including CDHPs, hospital only and limited benefit products.

Our Commercial & Specialty Business segment includes our Local Group, National Accounts, Individual and Specialty businesses. Business units in the Commercial & Specialty Business segment offer fully-insured health products; provide a broad array of managed care services to self-funded customers including claims processing, underwriting, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services; and provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits, radiology benefit management and analytics-driven personal healthcare guidance.

Our Government Business segment includes our Medicare and Medicaid businesses, National Government Services, or NGS, and services provided to the federal government in connection with FEP®. Medicaid makes federal matching funds available to all states for the delivery of healthcare benefits to eligible individuals, principally those with incomes below specified levels who meet other state-specified requirements. Medicaid is structured to allow each state to establish its own eligibility standards, benefits package, payment rates and program administration under broad federal guidelines. Our Medicare customers are Medicare-eligible individual members age 65 and over who have enrolled in Medicare Advantage, a managed care alternative for the Medicare program, who have purchased Medicare Supplement benefit coverage, some disabled members under age 65, or members of all ages with end stage renal disease. Medicare Supplement policies are sold to Medicare recipients as supplements to the benefits they receive from the Medicare program. Rates are filed with, and in some cases approved by, state insurance departments. Most of the premium for Medicare Advantage is paid directly by the

federal government on behalf of the participant who may also be charged a small premium. Additionally, through our alliance partnership engagements with larger provider groups and BCBS plans, we offer a variety of Medicaid services that include joint ventures, administrative service offerings, and full-risk arrangements. NGS acts as a Medicare contractor for the federal government in several regions across the nation.

Our Other segment includes other businesses that do not individually meet the quantitative thresholds for an operating segment as defined by Financial Accounting Standards Board, or FASB, guidance, as well as corporate expenses not allocated to either of our other reportable segments.

Through our participation in various federal government programs, we generated approximately 17.8%, 18.2% and 18.8% of our total consolidated revenues from agencies of the U.S. government for the years ended December 31, 2017, 2016 and 2015, respectively. These revenues are contained in the Government Business segment. An immaterial amount of our total consolidated revenues is derived from activities outside of the U.S.

For additional information regarding the operating results of our segments, see Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and Note 19, “Segment Information,” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Products and Services

A general description of our products and services is provided below:

Preferred Provider Organization: PPO products offer the member an option to select any health care provider, with benefits reimbursed by us at a higher level when care is received from a participating network provider. Increasingly, customers are choosing our PPO products offered with an exclusive provider organization which eliminates coverage out of network. Coverage is subject to co-payments or deductibles and coinsurance, with member cost sharing usually limited by out-of-pocket maximums.

Consumer-Driven Health Plans: CDHPs provide consumers with increased financial responsibility, choice and control regarding how their health care dollars are spent. Generally, CDHPs combine a high-deductible PPO plan with an employer-funded and/or employee-funded personal care account, which may result in tax benefits to the employee. Some or all of the dollars remaining in the personal care account at year-end can be rolled over to the next year for future health care needs.

Traditional Indemnity: Indemnity products offer the member an option to select any health care provider for covered services. Coverage is subject to deductibles and coinsurance, with member cost sharing usually limited by out-of-pocket maximums.

Health Maintenance Organization: HMO products include comprehensive managed care benefits, generally through a participating network of physicians, hospitals and other providers. A member in one of our HMOs must typically select a PCP from our network. PCPs generally are family practitioners, internists or pediatricians who provide necessary preventive and primary medical care, and are generally responsible for coordinating other necessary health care services. We offer HMO plans with varying levels of co-payments, which result in different levels of premium rates.

Point-of-Service: POS products blend the characteristics of HMO, PPO and indemnity plans. Members can have comprehensive HMO-style benefits through participating network providers with minimum out-of-pocket expenses (co-payments) and also can go directly, without a referral, to any provider they choose, subject to, among other things, certain deductibles and coinsurance. Member cost sharing is limited by out-of-pocket maximums.

ACA Public Exchange and Off-Exchange Products: The ACA required the modification of existing products and development of new products to meet the requirements of the legislation, subject to certain transitional relief. Individual and Small Group products cover essential health benefits as defined in the ACA along with many other requirements and cost sharing features. Individual and Small Group products offered on and off the public exchanges meet the definition of the “metal” product requirements (bronze, silver, gold and platinum) and each metal product must satisfy a specific actuarial value. Health insurers participating on the public exchanges must offer at least one silver and one gold product.

Administrative Services: In addition to fully-insured products, we provide administrative services to Large Group, Small Group and National Account employers that maintain self-funded health plans. These administrative services include

underwriting, actuarial services, medical cost management, disease management, wellness programs, claims processing and other administrative services for self-funded employers. Self-funded health plans are also able to use our provider networks and to realize savings through our negotiated provider arrangements, while allowing employers the ability to design certain health benefit plans in accordance with their own requirements and objectives. We also underwrite stop loss insurance for self-funded plans.

BlueCard®: BlueCard® is a national program that links participating health care providers and independent BCBS plans. BlueCard® host members are generally members who reside in or travel to a state in which an Anthem subsidiary is the Blue Cross and/or Blue Shield licensee and who are covered under an employer sponsored health plan serviced by a non-Anthem controlled BCBS licensee, which is the "home" plan. We perform certain administrative functions for BlueCard® host members, for which we receive administrative fees from the BlueCard® members' home plans. Other administrative functions, including maintenance of enrollment information and customer service, are performed by the home plan.

Medicare Plans: We offer a wide variety of plans, products and options to individuals age 65 and older such as Medicare Supplement plans; Medicare Advantage, including Special Needs Plans; Medicare Part D Prescription Drug Plans, or Medicare Part D; and dual-eligible programs through Medicare-Medicaid Plans, or MMPs. Medicare Supplement plans typically pay the difference between health care costs incurred by a beneficiary and amounts paid by Medicare. Medicare Advantage plans provide Medicare beneficiaries with a managed care alternative to traditional Medicare and often include a Medicare Part D benefit. In addition, our Medicare Advantage Special Needs Plans provide tailored benefits to Medicare beneficiaries who have chronic diseases and also cover certain dual-eligible customers, who are low-income seniors and persons under age 65 with disabilities. Medicare Part D offers a prescription drug plan to Medicare and MMP beneficiaries. MMP is a demonstration program focused on serving members who are dually eligible for Medicaid and Medicare, which was established as a result of the passage of the ACA. We offer these plans to customers through our health benefit subsidiaries throughout the country, including Amerigroup, CareMore, Simply Healthcare and HealthSun, and effective February 12, 2018, through America's 1st Choice.

Individual Plans: We offer a full range of health insurance plans with a variety of options and deductibles for individuals who are not covered by employer-sponsored coverage and are not eligible for government sponsored plans, such as Medicare and/or Medicaid. Individual policies are generally sold through independent agents and brokers, retail partnerships, our in-house sales force or via the exchanges. Individual business is sold on a fully-insured basis. We offer on-exchange products through public exchanges and off-exchange products. Federal premium subsidies are available only for certain public exchange Individual products. Unsubsidized Individual customers are generally more sensitive to product pricing and, to a lesser extent, the configuration of the network, and the efficiency of administration. Instability in the Individual market has resulted in a targeted approach where we offer products in select geographies.

Medicaid Plans and Other State-Sponsored Programs: We have contracts to serve members enrolled in publicly funded health care programs, including Medicaid; ACA-related Medicaid expansion programs; Temporary Assistance for Needy Families, or TANF; programs for seniors and people with disabilities, or SPD; Children's Health Insurance Programs, or CHIP; and specialty programs such as those focused on long-term services and support, or LTSS; HIV/AIDS; children living in foster care; behavioral health and/or substance abuse disorders; and intellectual disabilities and/or developmental disabilities, or ID/DD programs. The Medicaid program makes federal matching funds available to all states for the delivery of health care benefits for low income and/or high medical risk individuals. These programs are managed by the individual states based on broad federal guidelines. TANF is a state and federally funded program designed for the population consisting primarily of low-income children and their guardians. SPD is a federal income supplement program designed for Supplemental Security Income recipients; however, states can broaden eligibility criteria. This population consists of low-income seniors and people with disabilities. CHIP is a state and federally funded program that provides health care coverage to children not otherwise covered by Medicaid or other insurance programs. LTSS is a state and federally funded program that offers states a broad and flexible set of program design options and refers to the delivery of long-term services and support for our members who receive home and community- or institution-based services for long-term care. Our HIV/AIDS program is a state and federally sponsored program that provides services to those living with HIV/AIDS. Our Foster Care program is a state and federally sponsored program serving children with complex needs within the foster care system. Our Behavioral Health program is a state and federally sponsored program providing services to those with mental health and/or substance abuse disorders. ID/DD is a state and federally sponsored program serving those living with limitations in intellectual functioning and adaptive behavior learning disabilities. Our Medicaid plans also cover certain dual-eligible customers, as previously described above, who also receive Medicare benefits. We provide Medicaid and other state

sponsored services, such as administrative services, in California, Florida, Georgia, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Nevada, New Jersey, New York, South Carolina, Tennessee, Texas, Virginia, Washington, West Virginia, Wisconsin and Washington D.C.

Pharmacy Products: We market and sell an integrated prescription drug product to both fully-insured and self-funded customers through our health benefit subsidiaries throughout the country. This comprehensive product includes features such as drug formularies, a pharmacy network, maintenance of a prescription drug database and mail order capabilities. Since December 1, 2009, we have delegated certain functions and administrative services related to our integrated prescription drug products to Express Scripts under a ten year contract, excluding our HealthSun and America's 1st Choice subsidiaries, our CareMore operations in the state of Arizona and certain self-insured members who have exclusive agreements with different PBM service providers. Express Scripts manages the network of pharmacy providers, operates mail order pharmacies and processes prescription drug claims on our behalf, while we sell and support the product for clients, make formulary decisions and set drug benefit design strategy and provide front line member support. In March 2016, we filed a lawsuit against Express Scripts seeking to recover damages for pharmacy pricing that is higher than competitive benchmark pricing. For additional information, see Note 13, "Commitments and Contingencies - *Litigation*," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K. In October 2017, we announced that we are establishing a new PBM, called IngenioRx, and have entered into a five-year agreement with CVS Health to begin offering a full suite of PBM solutions starting on January 1, 2020, which coincides with the conclusion of our current PBM agreement with Express Scripts.

Life Insurance: We offer an array of competitive individual and group life insurance benefit products to both Large Group and Small Group customers in conjunction with our health plans. The life products include term life and accidental death and dismemberment.

Disability: We offer short-term and long-term disability products, usually in conjunction with our health plans.

Radiology Benefit Management: We offer outpatient diagnostic imaging management services to health plans. These services include utilization management for advanced diagnostic imaging procedures, network development and optimization, patient safety, claims adjudication and provider payment.

Personal Health Care Guidance: We offer evidence-based and analytics-driven personal health care guidance. These services help improve the quality, coordination and safety of health care, enhance communications between patients and their physicians, and reduce medical costs.

Dental: Our dental plans include networks in certain states in which we operate. Many of the dental benefits are provided to customers enrolled in our health plans and are offered on both a fully-insured and self-funded basis. Our members also have access to additional dental providers through our participation in the National Dental GRID, a national dental network developed by and for BCBS plans. The National Dental GRID includes dentists in all 50 states and provides multi-state customers with a national solution providing in-network discounts across the country. Additionally, we offer managed dental services to other health care plans to assist those plans in providing dental benefits to their customers.

Vision Services and Products: Our vision plans include networks within the states in which we operate. Many of the vision benefits are provided to customers enrolled in our health plans and are offered on both a fully-insured and self-funded basis.

Medicare Administrative Operations: Through our subsidiary, NGS, we serve as a fiscal intermediary, carrier and Medicare administrative contractor for the federal government providing administrative services for the Medicare program, Parts A and B, which generally provides coverage for persons who are 65 or older and for persons who are disabled or with end-stage renal disease. Part A of the Medicare program provides coverage for services provided by hospitals, skilled nursing facilities and other health care facilities. Part B of the Medicare program provides coverage for services provided by physicians, physical and occupational therapists and other professional providers, as well as certain durable medical equipment and medical supplies.

Networks and Provider Relations

Our relationships with physicians, hospitals and professionals that render health care services to our members are guided by local, regional and national standards for network development, reimbursement and contract methodologies. While following industry standards, we are simultaneously seeking to lead transformation efforts within our health care system, moving from a fragmented model premised on episodic intervention to one based on proactive, coordinated care built around the needs of the patient. A key element of this transformation involves a transition from traditional fee-for-service payment models to models where providers are paid based on the value, both in quality and affordability, of the care they deliver.

We establish "market-based" hospital reimbursement payments that we believe are fair, but aggressive, and among the most competitive in the market. We also seek to ensure that physicians in our network are paid in a timely manner at appropriate rates. In many instances, we deploy multi-year contracting strategies, including case rates or fixed rates, to limit our exposure to medical cost inflation and to increase cost predictability. We maintain both broad and narrow provider networks to ensure member choice, based on both price and access needs, while implementing programs designed to improve the quality of care our members receive. Increasingly, we are supplementing our broad-based networks with smaller or more cost-effective networks that are designed to be attractive to a more price-sensitive customer segment, such as public exchange customers.

Our reimbursement strategies vary across markets and depend on the degree of consolidation and integration of physician groups and hospitals. Under a fee-for-service reimbursement methodology for physicians, fee schedules are developed at the state level based on an assessment of several factors and conditions, including the CMS resource-based relative value system, or RBRVS, medical practice cost inflation and physician supply. We utilize CMS RBRVS fee schedules as a reference point for fee schedule development and analysis. The RBRVS structure was developed, maintained, and updated by CMS and is used by the Medicare program and other major payers. In addition, we have implemented and continue to expand physician incentive contracting, or "pay-for-performance," which ties physician payment levels to performance on clinical measures.

While we generally do not delegate full financial responsibility to our physician providers in the form of capitation-based reimbursement, we maintain capitation-based arrangements in certain markets where we determine that market dynamics result in it being a useful method to lower costs and reduce underwriting risk.

Our hospital contracts provide for a variety of reimbursement arrangements depending on local market dynamics and current hospital utilization efficiency. Most hospitals are reimbursed a fixed amount per day or reimbursed a per-case amount, per admission, for inpatient covered services. A small percentage of hospitals, primarily rural, sole community hospitals, are reimbursed on a discount from approved charge basis for covered services. Our "per-case" reimbursement methods utilize many of the same attributes contained in Medicare's Diagnosis Related Groups, or DRG, methodology. Hospital outpatient services are reimbursed by fixed case rates, fee schedules or percent of approved charges. Our hospital contracts recognize unique hospital attributes, such as academic medical centers or community hospitals, and the volume of care performed for our members. To improve predictability of expected costs, we frequently use a multi-year contracting approach with providers. In addition, the majority of our hospital contracts include a pay-for-performance component where reimbursement levels are linked to improved clinical performance, patient safety and medical error reduction.

Our provider engagement and contracting strategies are moving away from "unit price" or volume-based payment models to payment models that align compensation with the value delivered as measured by health care, quality and cost. Our Enhanced Personal Health Care program augments traditional fee-for-service with shared savings opportunities for providers when actual health care costs are below projected costs, and providers meet specific quality measures. The quality measures are based on nationally accepted, credible standards (e.g., NCQA, the American Diabetes Association and the American Academy of Pediatrics) and span preventive, acute and chronic care. We understand, however, that payment incentives alone are insufficient to create the large-scale, system-wide transformation required to achieve meaningful impacts on cost, quality and member experience. Accordingly, we invested in care delivery transformation and population health management support structures to help providers succeed under value-based payment models. This support includes our web-based population health management technology and teams of dedicated expert consultants who work alongside providers, sharing best practices, and helping them leverage our data to the benefit of their patients. In some of these arrangements, participating physician practices receive a per-member, per-month clinical coordination fee to compensate them for important care management activities that occur outside of the patient visit (e.g., purchasing an electronic health record or hiring care

management nurses), all of which have been shown to reduce health care costs and improve care outcomes. Since the launch of Enhanced Personal Health Care, we now have arrangements with provider organizations covering 52% of our PCPs and have rolled this program out in each of the fourteen states where we operate as a licensee of the BCBSA.

Medical Management Programs

Our medical management programs include a broad array of activities that facilitate improvements in the quality of care provided to our members and promote cost-effective medical care. These medical management activities and programs are administered and directed by physicians and nurses. The goals of our medical management strategies are to ensure that the care delivered to our members is supported by appropriate medical and scientific evidence, is received on a timely basis and occurs in the most appropriate location. The following is a general description of our medical management programs, which are available to our members depending on the particular plan or product in which they participate:

Precertification: A traditional medical management program involves assessment of the appropriateness of certain hospitalizations and other medical services prior to the services being rendered. For example, precertification is used to determine whether a set of hospital and medical services is being appropriately applied to the member's clinical condition, in accordance with criteria for medical necessity as that term is defined in the member's benefits contract. All of our health plans have implemented precertification programs for common high-tech radiology studies, including cardiac diagnostic testing, addressing an area of historically significant cost trends. Through our American Imaging Management, Inc. subsidiary, doing business as AIM Specialty Health, or AIM, we promote appropriate, safe and affordable member care in imaging as well as oncology, sleep management and specialty pharmacy benefits. These expanded specialty benefit management solutions leverage clinical expertise and technology to engage our provider communities and members in more effective and efficient use of outpatient services.

Care Coordination: Another traditional medical management strategy we use is care coordination, which is based on nationally recognized criteria developed by third-party medical specialists. With inpatient care coordination, the requirements and intensity of services during a patient's hospital stay are reviewed, at times by an onsite skilled nurse professional in collaboration with the hospital's medical and nursing staff, in order to coordinate care and determine the most effective transition of care from the hospital setting. In addition, guidance for many continued stay cases is reviewed with physician medical directors to ensure appropriate utilization of medical services. We also coordinate care for outpatient services to help ensure that patients with chronic conditions who receive care from multiple physicians are able to manage the exchange of information between physicians and coordinate office visits to their physicians.

Case Management: We have implemented a medical management strategy focused on identifying the small percentage of the membership that will require a high level of intervention to manage their health care needs. The registered nurses and medical directors focus on members likely to be readmitted to the hospital and help them coordinate their care through pharmacy compliance, post-hospital care, follow-up visits to see their physician and support in their home. We are also working to move increasing aspects of this work to the providers we work with via our provider collaboration programs such as Togetherworks, a set of capabilities, offerings, programs and products that help us partner with providers to leverage data, insights and technology to deliver the right care, at the right time, in the right place.

Formulary management: We have developed formularies, which are selections of drugs based on clinical quality and effectiveness. A pharmacy and therapeutics committee of physicians uses scientific and clinical evidence to ensure that our members have access to the appropriate drug therapies.

Medical policy: A medical policy group, comprised of physician leaders from various areas of the country, working in cooperation with academic medical centers, practicing community physicians and medical specialty organizations such as the American College of Radiology and national organizations such as the Centers for Disease Control and Prevention and the American Cancer Society, determines our national policy for the application of new medical technologies and treatments.

Quality programs: We are actively engaged with our hospital and physician networks to enable them to improve medical and surgical care and achieve better outcomes for our members. We endorse, encourage and incentivize hospitals and physicians to support national initiatives to improve the quality of clinical care and patient outcomes and to reduce medication errors and hospital infections.

External review procedures: We work with outside experts through a process of external review to provide our members scientifically and clinically, evidence-based medical care. When we receive member concerns, we have formal appeals procedures that ultimately allow coverage disputes related to medical necessity decisions under the benefits contract to be settled by independent expert physicians.

Service management: In HMO and POS networks, PCPs serve as the overall coordinators of members' health care needs by providing an array of preventive health services and overseeing referrals to specialists for appropriate medical care. In PPO networks, patients have access to network physicians without a PCP serving as the coordinator of care.

Provider Cost Comparison Tools: Through Estimate Your Cost, Anthem Care Comparison and other tools, our members can compare cost estimates and quality data for common services at contracted providers, with cost estimates for facility, professional and ancillary services. These cost estimates bundle related services typically performed at the time of the procedure, not just for the procedure itself. Users can review cost data for over 400 procedures in 49 states. Members can also estimate out-of-pocket costs based on a member's own benefit coverage, deductible, and out-of-pocket maximum. We also offer information on overall facility ratings and patient experience using trusted third party data. We continue to work on enhancing and evolving our tools to assist members in making informed and value-based health care decisions. In addition, we collaborate with an external independent vendor to support employers wanting to purchase a transparent and consumer engagement web solution with certain additional functionality.

Personal Health Care Guidance: These services help improve the quality, coordination and safety of health care, enhance communications between patients and their physicians, and reduce medical costs. Examples of services include member and physician messaging, providing access to evidence-based medical guidelines, physician quality profiling, and other consulting services.

Anthem Health Guide: Anthem Health Guide integrates customer service with clinical and wellness coaching to provide easier navigation of health care services for our members. Members are supported by a team of nurses, coaches, educators, and social workers using voice, click-to-chat, secure email and mobile technology. Our Smart Engagement Platform supports this integrated team using our smart engagement triggers for speech recognition, preventative and clinical gaps in care and highlighting when we have members who are identified for current health care support. Anthem Health Guide is fully integrated with our specialty products, such as dental, vision and other supplemental products, to ensure members can optimize their benefits.

Care Management Programs

We continue to expand our *360º Health* suite of integrated care management programs and tools. *360º Health* offers the following programs, among others, which are available to our members depending on the particular plan or product in which they participate, and have been proven to increase quality and reduce medical costs for our members:

ConditionCare and *FutureMoms* are care management and maternity management programs that serve as adjuncts to physician care. Skilled nurse professionals with added support from our team of dietitians, social workers, pharmacists, health educators and other health professionals help participants understand their condition, their doctor's orders and how to become a better self-manager of their condition. We also offer members infertility consultation through our SpecialOffers@Anthem program, a comprehensive and integrated assembly of discounted health and wellness products and services from a variety of the nation's leading retailers.

24/7 NurseLine offers access to qualified, registered nurses anytime. This allows our members to make informed decisions about the appropriate level of care and avoid unnecessary worry. This program also includes a referral process to the nearest urgent care facility, a robust audio library, accessible by phone, with more than 600 health and wellness topics, as well as on-line health education topics designed to educate members about symptoms and treatment of many common health concerns.

Case Management is an advanced care management program that reaches out to participants with multiple health care issues who are at risk for frequent and high levels of medical care in order to offer support and assistance in managing their health care needs. *Case Management* identifies candidates through claims analysis using predictive modeling techniques, the use of health risk assessment data, utilization management reports and referrals from a physician or one of our other programs, such as the *24/7 NurseLine*.

MyHealth Advantage utilizes integrated information systems and sophisticated data analytics to help our members improve their compliance with evidence-based care guidelines, providing personal care notes that alert members to potential gaps in care, enable more prudent health care choices, and assist in the realization of member out-of-pocket cost savings. Key opportunities are also shared with physicians through Availity® at the time of membership eligibility verification. Availity® is an electronic data interchange system that allows for the exchange of health information among providers over a secure network.

MyHealth Coach provides our members with a professional guide who helps them navigate the health care system and make better decisions about their well-being. *MyHealth Coach* proactively reaches out to people who are at risk for potentially serious health issues or have complex health care needs. Our health coaches help participants understand and manage chronic conditions, handle any health and wellness related services they need and make smart lifestyle choices.

HealthyLifestyles helps employees transform unhealthy habits into positive ones by focusing on behaviors that can have a positive effect on their health and their employer's financial well-being. *HealthyLifestyles* programs include smoking cessation, weight management, stress management, physical activity, and diet and nutrition.

MyHealth@Anthem is our secure web-based solution, complementing other programs by reinforcing telephonic coaching and mail campaigns. The website engages participants in regularly assessing their health status, gives them feedback about their progress, and tracks important health measures such as blood pressure, weight and blood glucose levels.

Behavioral Health Case Management is an integrated component of the health plan, supporting a wide range of members who are impacted by their behavioral health condition including specialty areas such as eating disorders, anxiety, depression and substance use. The program assists members and their families with obtaining appropriate behavioral health treatment, offering community resources, providing education and telephonic support, and promoting provider collaboration.

Autism Spectrum Disorder is a specialized case management program staffed by a dedicated team of clinicians who have been trained on the unique challenges and needs of families with a member who has a diagnosis of autism spectrum disorder. These clinicians provide education, information on community resources to help with care and support, guidance on the appropriate usage of benefits, and assistance in exploring effective treatments, such as medical services, that may help the member and their families.

Employee Assistance Programs provide many resources that allow members to balance work and personal life by providing quick and easy access to confidential resources to help meet the challenges of daily life. Examples of services available in person as well as via telephone or Internet are counseling for child care, health and wellness, financial issues, legal issues, adoption and daily living.

Health Care Quality Initiatives

Increasingly, the health care industry is able to define quality health care based on preventive health measurements, outcomes of care and optimal care management for chronic disease. A key to our success has been our ability to work with our network physicians and hospitals to improve the quality and outcomes of the health care services provided to our members. Our ability to promote quality medical care has been recognized by NCQA, the largest and most respected national accreditation program for managed care health plans.

Several quality health care measures, including the Healthcare Effectiveness Data and Information Set, or HEDIS®, have been incorporated into NCQA's accreditation processes. HEDIS® measures range from preventive services, such as screening mammography and pediatric immunization, to elements of care, including decreasing the complications of diabetes and improving treatment for patients with heart disease. For health plans, NCQA's highest accreditation status of Excellent is granted only to those plans that demonstrate levels of service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement. Plans earning this accreditation level must also achieve HEDIS® results that are in the highest range of national or regional performance. Details for each of our plans' accreditation levels can be found at www.ncqa.org.

We have created an innovative program called the State Health Index, or SHI, to quantify and track our success in improving the health of our communities. SHI presents a comprehensive picture of a community's health within the states served by our affiliated health plans. It is compiled from public data and includes 18 health indicators in five domains:

Maternity and Prenatal Care, Preventive Care, Lifestyle, Disability and Behavioral Health, and Morbidity/Mortality. The metrics are utilized to identify opportunities for health improvement and leverage our strengths to collaborate with community coalitions, patient advocacy organizations, and local and state public health departments. We analyze states' performance measures and prioritize measures for focused improvement. Together with Anthem Foundation, Inc. and state leadership, we create or enhance programs that aim to improve the health of the entire population in these states – not just for our members.

Our wholly-owned health outcomes research subsidiary, HealthCore, Inc., or HealthCore, generates consistent and actionable evidence to support decision making while helping to guide fresh initiatives for a range of stakeholders in the healthcare industry. By leveraging a rich array of medical and pharmacy utilization data queried from administrative claims, patient surveys, medical charts and laboratory diagnostics, among other health records, HealthCore's multi-disciplinary research teams uncover a broad spectrum of safety, effectiveness, pharmacoepidemiology, and health economics evidence. HealthCore's real world evidence and comparative effectiveness research, among other data, has played roles in the product planning and development campaigns of biotechnology and pharmaceutical companies and today it lists most of the leading biologics and drug manufacturers as clients or alliance partners. Its health plan research has led to better insights into evidence-based treatment approaches, the development of value-based initiatives to drive access and adherence to treatment, and the crafting of incentives to modify patient and provider behavior. One of HealthCore's predominant initiatives is its governmental and academic collaborations that include cooperation with some of the country's top institutions and federal agencies, including the Food and Drug Administration, or FDA, Patient-Centered Outcomes Research Institute, and the National Institutes of Health. HealthCore is also an active contributor to the FDA's medical product safety surveillance Sentinel program. Additionally, HealthCore has taken a thought-leadership position in the development of pragmatic clinical trials. As a notable contributor to the health outcomes evidence base, HealthCore's research findings are broadly disseminated during presentations at national and international medical meetings and are published in a variety of respected peer-reviewed medical and health services journals.

Our AIM subsidiary supports quality by implementing clinical appropriateness and patient safety solutions for advanced imaging procedures, cardiology, sleep medicine, specialty pharmaceuticals, medical oncology, radiation therapy and musculoskeletal services. These programs, based on widely accepted and evidence-based clinical guidelines, promote the most appropriate use of clinical services to improve the quality of overall health care delivered to our members and members of other health plans that are covered under AIM's programs. To provide additional impact to its clinical appropriateness program, AIM has also implemented a provider assessment program, OptiNet®, which promotes more informed selection of diagnostic imaging and testing facilities by providing cost and facility information to physician offices at the point that a procedure is ordered. We have also leveraged AIM's provider network assessment information to proactively engage and educate our members about imaging providers and sleep testing choices based on site capabilities and cost differences. This program is another example of how we facilitate improvements in the quality of care provided to our members and promote cost effective medical care.

Pricing and Underwriting of Our Products

We price our products based on our assessment of current health care claim costs and emerging health care cost trends, combined with charges for administrative expenses, risk and profit, including charges for the ACA taxes and fees, where applicable. We continually review our product designs and pricing guidelines on a national and regional basis so that our products remain competitive and consistent with our profitability goals and strategies.

In applying our pricing to each employer group and customer, we maintain consistent, competitive, disciplined underwriting standards. We employ our proprietary accumulated actuarial and financial data in determining underwriting and pricing parameters for both our fully-insured and self-funded business.

In most circumstances, our pricing and underwriting decisions follow a prospective rating process in which a fixed premium is determined at the beginning of the contract period. For fully-insured business, any deviation, favorable or unfavorable, from the medical costs assumed in determining the premium is our responsibility. Some of our larger groups employ retrospective rating reviews, where positive experience is partially refunded to the group, and negative experience is charged against a rate stabilization fund established from the group's favorable experience, or charged against future favorable experience.

BCBSA Licenses

We are a party to license agreements with the BCBSA that entitle us to the exclusive, and in certain areas, non-exclusive use of the Blue Cross and Blue Shield names and marks in assigned geographic territories. BCBSA is a national trade association of Blue Cross and Blue Shield licensees, the primary function of which is to promote and preserve the integrity of the BCBS names and marks, as well as provide certain coordination among the member companies. Each BCBSA licensee is an independent legal organization and is not responsible for obligations of other BCBSA member organizations. We have no right to market products and services using the BCBS names and marks outside of the states in which we are licensed to sell BCBS products. We are required to pay an annual license fee to the BCBSA based on enrollment and also to comply with various operational, governance and financial standards set forth in the licenses.

We believe that we and our licensed affiliates are currently in compliance with these standards. The standards under the license agreements may be modified in certain instances by the BCBSA. See Part I, Item 1A "Risk Factors" in this Annual Report on Form 10-K for additional details of our licensing requirements and the impact if we were not to comply with these license agreements.

Regulation

General

Our operations are subject to comprehensive and detailed state, federal and international regulation throughout the jurisdictions in which we do business. As discussed below, the regulatory aspects of the U.S. health care system have been and will continue to be significantly affected by the ACA and subsequent legislative and regulatory changes at the federal and state levels. Supervisory agencies, including state health, insurance and corporation departments, have broad authority to:

- grant, suspend and revoke licenses to transact business;
- regulate our products and services in great detail;
- regulate, limit, or suspend our ability to market products, including the exclusion of our plans from participating on public exchanges;
- retroactively adjust premium rates;
- monitor our solvency and reserve adequacy;
- scrutinize our investment activities on the basis of quality, diversification and other quantitative criteria; and
- impose monetary and criminal sanctions for non-compliance with regulatory requirements.

To carry out these tasks, these regulators periodically examine our operations and accounts.

Regulation of Insurance Company and HMO Business Activity

The governments of the states in which we conduct business, as well as the federal government, have adopted laws and regulations that govern our business activities in various ways. Further, the ACA has resulted in increased federal regulation that significantly impacts our business. These laws and regulations, which vary significantly from state to state, restrict how we conduct our businesses and result in additional burdens and costs to us. These federal and state laws and regulations are subject to amendments and changing interpretations in each jurisdiction.

States generally require health insurers and HMOs to obtain a certificate of authority prior to commencing operations. If we were to establish a health insurance company or an HMO in any jurisdiction, we generally would have to obtain such a certificate or authorization to expand the operations permitted under an existing certificate if we already operate in the state. The time necessary to obtain such a certificate varies from jurisdiction to jurisdiction. Each health insurer and HMO must file periodic financial and operating reports with the states in which it does business. In addition, health insurers and HMOs are subject to state examination and periodic license renewal. The health benefits business also may be adversely impacted by court and regulatory decisions that expand the interpretations of existing statutes and regulations. It is uncertain whether we can recoup, through higher premiums or other measures, the increased costs of mandated benefits or other increased costs

caused by potential legislation, regulation or court rulings. See Part I, Item 1A "Risk Factors" in this Annual Report on Form 10-K.

Ongoing Requirements and Changes Stemming from the ACA

The ACA significantly changed health insurance markets by prohibiting lifetime limits, certain annual limits, member cost-sharing on specified preventive benefits and pre-existing condition exclusions. Further, the ACA implemented certain requirements for insurers including changes to Medicare Advantage payments and the minimum medical loss ratio, or MLR, provision that requires insurers to pay rebates to customers when insurers do not meet or exceed the specified MLR thresholds. In addition, the ACA also required a number of other changes with significant effects on both federal and state health insurance markets, including strict rules on how health insurance is rated, what benefits must be offered, the assessment of new taxes and fees (including annual fees on health insurance companies), the creation of public exchanges for Individuals and Small Groups, the availability of premium and cost-sharing subsidies for qualified individuals, and expansions in eligibility for Medicaid. Changes to our business environment are likely to continue for the next several years as elected officials at the national and state levels continue to propose and enact significant modifications to existing laws and regulations, including the reduction of the individual mandate to zero effective January 1, 2019, elimination of funding for cost-sharing subsidies made available for qualified individuals, and changes to taxes and fees.

In general, the Individual market risk pool that includes public exchange markets has become less healthy since its inception in 2014. The reduction of the individual mandate penalty to zero, effective in 2019, is also expected to result in further deterioration of the overall Individual market risk pool. In October 2017, the President signed an Executive Order that requires regulatory agencies to issue regulations loosening the restrictions on association health plans, short-term limited duration insurance and health reimbursement accounts. Pursuant to that Executive Order, in January 2018, the U.S. Department of Labor, or DOL, released a proposed rule on association health plans, and in February 2018, the DOL, the U.S. Department of Treasury, or TRE, and the U.S. Department of Health and Human Services, or HHS, issued a proposed rule on short-term limited duration insurance. The Executive Order and the regulations issued thereunder may provide additional opportunities for sole proprietors and small employers to access more affordable health coverage options, but may also result in additional adverse risk selection. Based on our experience in public exchange markets to date, we have made adjustments to our premium rates and significantly reduced our participation footprint, and we will continue to evaluate the performance of our public exchange plans going forward. In addition, insurers have faced uncertainties related to federal government funding for various ACA programs. These factors may have a material adverse effect on our results of operations if premiums are not adequate or do not appropriately reflect the acuity of these individuals. Any variation from our expectations regarding acuity, enrollment levels, adverse selection, or other assumptions utilized in setting premium rates could have a material adverse effect on our results of operations, financial position, and cash flows.

Further, implementation of the ACA brings with it significant oversight responsibilities by health insurers that may result in increased governmental audits, increased assertions of False Claims Act violations, and an increased risk of other litigation.

Federal regulatory agencies continue to modify regulations and guidance related to the ACA and markets more broadly. Some of the more significant rules are described below:

- The minimum MLR thresholds by line of business for the Commercial market, as defined by HHS, are as follows:

Line of Business	%
Large Group	85
Small Group	80
Individual	80

New York state regulations require us to meet a more restrictive MLR threshold of 82% for both Small Group and Individual lines of business. The minimum MLR thresholds disclosed above are based on definitions of an MLR calculation provided by HHS, or specific states, as applicable, and differ from our calculation of "benefit expense ratio" based on premium revenue and benefit expense as reported in accordance with U.S. generally accepted accounting principles, or GAAP. Furthermore, the definitions of the lines of business differ under the various federal and state regulations and may not correspond to our lines of business. Definitions under the MLR regulation also

impact insurers differently depending upon their organizational structure or tax status, which could result in a competitive advantage to some insurance providers that may not be available to us, resulting in an uneven playing field in the industry.

The ACA also imposed a separate minimum MLR threshold of 85% for Medicare Advantage and Medicare Part D plans. Medicare Advantage or Medicare Part D plans that do not meet this threshold will have to pay a minimum MLR rebate. If a plan's MLR is below 85% for three consecutive years beginning with 2014, enrollment will be restricted. A Medicare Advantage or Medicare Part D plan contract will be terminated if the plan's MLR is below 85% for five consecutive years.

HHS also finalized a rule in April 2016 that requires state Medicaid programs to set managed care capitation rates such that a minimum 85% MLR is projected to be achieved. However, this rule does not require states to collect remittances if the minimum MLR is not achieved.

Approximately 61.3% and 21.5% of our premium revenue and medical membership, respectively, were subject to the minimum MLR regulations as of and for the year ended December 31, 2017. Approximately 61.6% and 20.2% of our premium revenue and medical membership, respectively, were subject to the minimum MLR regulations as of and for the year ended December 31, 2016.

- The ACA created an incentive payment program for Medicare Advantage plans. CMS developed the Medicare Advantage Star Ratings System, which awards between 1.0 and 5.0 stars to Medicare Advantage plans based on performance in several categories, including quality of care and customer service. The star ratings are used by CMS to award quality-based bonus payments to plans that receive a rating of 4.0 or higher. The methodology and measures included in the star ratings system can be modified by CMS annually. As of December 31, 2017, all of our Medicare Advantage plans have received a rating of 3.0 or higher.
- Regulations require premium rate increases to be reviewed for Small Group and Individual products above specified thresholds, generally 10%, as may be adjusted from time to time. The regulations provide for state insurance regulators to conduct the reviews, except for cases where a state does not have an "effective" rate review program or in federal enforcement states, in which cases HHS will conduct the reviews for any rate increase.
- Prior to the implementation of the ACA, health insurers were permitted to use differential pricing, commonly referred to as "rating bands," based on factors such as health status, gender and age. The ACA precludes health insurers from using health status and gender in the determination of the insurance premium. In addition, rating bands for age cannot vary by more than 3 to 1 and rating bands for tobacco use cannot vary by more than 1.5 to 1. The ongoing use of the 3 to 1 rating bands may have a significant impact on the majority of Individual and Small Group customers and could lead to adverse selection in the market as well as increased variability in projecting future premiums for those customer markets.
- In 2014 significant new taxes and fees became effective for health insurers, some of which may or may not be passed through to customers. The most significant of the taxes and fees is the annual Health Insurance Provider Fee, or HIP Fee, on health insurers that write certain types of health insurance on U.S. risks. The annual HIP Fee is allocated to health insurers based on the ratio of the amount of an insurer's net premium revenues written during the preceding calendar year to an adjusted amount of health insurance for all U.S. health risk for those certain lines of business written during the preceding calendar year. We record our estimated liability for the HIP Fee in full at the beginning of the year with a corresponding deferred asset that is amortized on a straight-line basis to general and administrative expense. The final calculation and payment of the annual HIP Fee occurs in the third quarter each year. The HIP Fee is non-deductible for federal income tax purposes. We price our affected products to cover the increased general and administrative and tax expenses associated with the HIP Fee. The total amount due from allocations to health insurers was $11.3 billion for each of 2015 and 2016, was suspended for 2017, has resumed and increased to $14.3 billion for 2018 and is suspended for 2019.
- Medicare Advantage reimbursement rates will not increase as much as they would otherwise due to a new payment formula promulgated by the ACA that is expected to significantly reduce reimbursements in the future. We also expect further and ongoing regulatory guidance on a number of issues related to Medicare, evolving methodology

for ratings and quality bonus payments, and potential action on an audit methodology to review data submitted under "risk adjuster" programs.

Dodd-Frank Wall Street Reform and Consumer Protection Act

The Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, includes a number of financial reforms and regulations that affect our business and financial reporting, including margin requirements and reporting and clearing transactions for our investments in derivative instruments. In addition, the Dodd-Frank Act creates a Federal Insurance Office, with limited powers that include information-gathering and subpoena authority for certain parts of our business, including life insurance, but excluding health insurance. There remains uncertainty surrounding the manner in which the provisions of the Dodd-Frank Act will ultimately be implemented by the various regulatory agencies, and the full extent of the impact of the requirements on our operations is unclear, especially in light of the Trump administration's January 2017 executive order calling for a full review of the Dodd-Frank Act and the regulations promulgated thereunder.

HIPAA and Gramm-Leach-Bliley Act

The federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, imposes obligations for issuers of health insurance coverage and health benefit plan sponsors. This law requires guaranteed renewability of health care coverage for most group health plans and certain individuals. Also, the law limited exclusions based on preexisting medical conditions.

The administrative simplification provisions of HIPAA imposed a number of requirements on covered entities (including insurers, HMOs, group health plans, providers and clearinghouses). These requirements include uniform standards of common electronic health care transactions; privacy and security regulations; and unique identifier rules for employers, health plans and providers. Additional federal privacy and security requirements, including breach notification, improved enforcement, and additional limitations on use and disclosure of protected health information were passed through the Health Information Technology for Economic and Clinical Health, or HITECH, Act provisions of the American Recovery and Reinvestment Act of 2009 and corresponding implementing regulations.

The federal Gramm-Leach-Bliley Act generally places restrictions on the disclosure of non-public information to non-affiliated third parties, and requires financial institutions, including insurers, to provide customers with notice regarding how their non-public personal information is used, including an opportunity to "opt out" of certain disclosures. State departments of insurance and certain federal agencies adopted implementing regulations as required by federal law. In addition, a number of states have adopted data security laws and/or regulations regulating data security and/or requiring security breach notification, which may apply to us in certain circumstances.

Employee Retirement Income Security Act of 1974

The provision of services to certain employee welfare benefit plans is subject to the Employee Retirement Income Security Act of 1974, as amended, or ERISA, a complex set of laws and regulations subject to interpretation and enforcement by the Internal Revenue Service and the DOL. ERISA regulates certain aspects of the relationships between us, the employers that maintain employee welfare benefit plans subject to ERISA and participants in such plans. Some of our administrative services and other activities may also be subject to regulation under ERISA. In addition, certain states require licensure or registration of companies providing third party claims administration services for benefit plans. We provide a variety of products and services to employee welfare benefit plans that are covered by ERISA. Plans subject to ERISA can also be subject to state laws and the question of whether and to what extent ERISA preempts a state law has been, and will continue to be, interpreted by many courts.

HMO and Insurance Holding Company Laws, including Risk-Based Capital Requirements

We are regulated as an insurance holding company and are subject to the insurance holding company acts of the states in which our insurance company and HMO subsidiaries are domiciled. These acts contain certain reporting requirements as well as restrictions on transactions between an insurer or HMO and its affiliates. These holding company laws and regulations generally require insurance companies and HMOs within an insurance holding company system to register with the insurance department of each state where they are domiciled and to file with those states' insurance departments certain reports describing capital structure, ownership, financial condition, certain intercompany transactions, enterprise risks, corporate

governance and general business operations. In addition, various notice and reporting requirements generally apply to transactions between insurance companies and HMOs and their affiliates within an insurance holding company system, depending on the size and nature of the transactions. Some insurance holding company laws and regulations require prior regulatory approval or, in certain circumstances, prior notice of certain material intercompany transfers of assets as well as certain transactions between insurance companies, HMOs, their parent holding companies and affiliates. Among other provisions, state insurance and HMO laws may restrict the ability of our regulated subsidiaries to pay dividends.

Additionally, the holding company acts of the states in which our subsidiaries are domiciled restrict the ability of any person to obtain control of an insurance company or HMO without prior regulatory approval. Under those statutes, without such approval (or an exemption), no person may acquire any voting security of an insurance holding company, which controls an insurance company or HMO, or merge with such a holding company, if as a result of such transaction such person would "control" the insurance holding company. "Control" is generally defined as the direct or indirect power to direct or cause the direction of the management and policies of a person and is presumed to exist if a person directly or indirectly owns or controls 10% or more of the voting securities of another person. Dispositions of control generally are also regulated under the state holding company acts.

The states of domicile of our regulated subsidiaries have statutory risk-based capital, or RBC, requirements for health and other insurance companies and HMOs based on the Risk-Based Capital (RBC) For Health Organizations Model Act, or RBC Model Act. These RBC requirements are intended to assess the capital adequacy of life and health insurers and HMOs, taking into account the risk characteristics of a company's investments and products. In general, under these laws, an insurance company or HMO must submit a report of its RBC level to the insurance department or insurance commissioner of its state of domicile for each calendar year. The law requires increasing degrees of regulatory oversight and intervention as a company's RBC declines. As of December 31, 2017, the RBC levels of our insurance and HMO subsidiaries exceeded all RBC requirements.

Guaranty Fund Assessments

Under insolvency or guaranty association laws in most states, insurance companies can be assessed for amounts paid by guaranty funds for policyholder losses incurred when an insurance company becomes insolvent. Most state insolvency or guaranty association laws currently provide for assessments based upon the amount of premiums received on insurance underwritten within such state (with a minimum amount payable even if no premium is received). Under many of these guaranty association laws, assessments against insurance companies that issue policies of accident or sickness insurance are made retrospectively. Some states permit insurers to recover assessments paid through full or partial premium tax offsets or through future policyholder assessments.

As discussed in Note 13, "Commitments and Contingencies," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K, we are exposed to guaranty fund assessments related to the insolvency of Penn Treaty Network America Insurance Company and its subsidiary American Network Insurance Company. The amount and timing of any future assessments cannot be predicted with certainty; however, future assessments are likely to occur.

Employees

At December 31, 2017, we had approximately 56,000 full-time employees. Our employees are an important asset, and we seek to develop them to their full potential. We believe that our relationship with our employees is good.

Available Information

We are a large accelerated filer (as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended, or the Exchange Act) and are required, pursuant to Item 101 of Regulation S-K, to provide certain information regarding our website and the availability of certain documents filed with or furnished to the U.S. Securities and Exchange Commission, or SEC. Our Internet website is www.antheminc.com. We have included our Internet website address throughout this Annual Report on Form 10-K as a textual reference only. The information contained on, or accessible through, our Internet website is not incorporated into this Annual Report on Form 10-K. We make available, free of charge, by mail or through our Internet website, our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable

after we electronically file such material with or furnish it to the SEC. We also include on our Internet website our Corporate Governance Guidelines, our Standards of Ethical Business Conduct and the charter of each standing committee of our Board of Directors. In addition, we intend to disclose on our Internet website any amendments to, or waivers from, our Standards of Ethical Business Conduct that are required to be publicly disclosed pursuant to rules of the SEC and the New York Stock Exchange, or NYSE. Anthem, Inc. is an Indiana corporation incorporated on July 17, 2001.

ITEM 1A. RISK FACTORS.

The following is a description of significant factors that could cause our actual results to differ materially from those contained in forward-looking statements made in this Annual Report on Form 10-K and presented elsewhere by management from time to time. Such factors may have a material adverse effect on our business, financial condition, and results of operations, and you should carefully consider them and not place undue reliance on any forward-looking statements. It is not possible to predict or identify all such factors. Consequently, you should not consider any such list to be a complete statement of all our potential risks or uncertainties. Because of these and other factors, past performance should not be considered an indication of future performance.

The ACA and ongoing changes in federal and state laws and regulations could adversely affect our business, cash flows, financial condition and results of operations.

The ongoing changes in federal and state laws and regulations stemming from the ACA continue to represent significant challenges to the U.S. health care system. In addition, these laws impose significant fees, assessments and taxes on us and other health insurers, health plans and other industry participants.

One of our most significant costs under the ACA is the annual industry-wide HIP Fee. The total amount due from allocations to health insurers was $11.3 billion for each of 2015 and 2016, was suspended for 2017, has resumed and increased to $14.3 billion for 2018 and is suspended for 2019. We recognized $1.2 billion as our portion of the HIP Fee in each of 2015 and 2016. The HIP Fee is not deductible for income tax purposes and is allocated pro rata among us and other industry participants based on net premiums written. As we are one of the nation's largest health benefits companies, we expect our share of the ACA fees, assessments and taxes will continue to be significant. We may not be able to include or recoup all or a portion of these fees, assessments and taxes in our premium or public program rates.

Current federal law stemming from the ACA imposes regulations on the health insurance sector, including, but not limited to, guaranteed coverage and expanded benefit requirements; prohibitions on some annual and all lifetime limits on amounts paid on behalf of or to our members; minimum MLR and customer rebate requirements; a federal rate review process; a requirement to cover preventive services on a first dollar basis; the utilization of public exchanges to offer Individual and Small Group products; and greater limitations on how we price certain of our products. In addition, the legislation reduces the reimbursement levels for our health plans participating in the Medicare Advantage program over time and limits the amount of executive compensation that is deductible for income tax purposes.

In general, the Individual market risk pool that includes public exchange markets has become less healthy since its inception in 2014. The reduction of the individual mandate penalty to zero, effective in 2019, is also expected to result in further deterioration of the overall Individual market risk pool. Additionally, the President signed an Executive Order on October 12, 2017 that requires regulatory agencies to issue regulations loosening the restrictions on association health plans, short-term limited duration insurance and health reimbursement accounts. Pursuant to that Executive Order, in January 2018, the DOL released a proposed rule on association health plans, and in February 2018, the DOL, TRE and HHS issued a proposed rule on short-term limited duration insurance. The Executive Order and the regulations issued thereunder may provide additional opportunities for sole proprietors and small employers to access more affordable health coverage options, but may also result in additional adverse risk selection. Based on our experience in public exchange markets to date, we have made adjustments to our premium rates and geographic participation, and we will continue to evaluate the performance of our public exchange plans going forward. In addition, insurers have faced uncertainties related to federal government funding for various ACA programs. These factors may have a material adverse effect on our results of operations if premiums are not adequate or do not appropriately reflect the acuity of these individuals. Any variation from our expectations regarding acuity, enrollment levels, adverse selection, or other assumptions utilized in setting premium rates could have a material adverse effect on our results of operations, financial position, and cash flows.

Although the ACA has been substantially implemented, further regulations and modifications to the ACA at the federal or state level will likely have significant effects on our business and future operations, some of which may adversely affect our results of operations.

Finally, federal and state regulatory agencies may further restrict our ability to obtain new product approvals, implement changes in premium rates or impose additional restrictions under new or existing laws that could adversely affect our business, cash flows, financial condition and results of operations.

We are subject to significant government regulation, and changes in the regulation of our business by federal and state regulators may adversely affect our business, cash flows, financial condition and results of operations.

Our business is subject to regulation at the federal and state level. In addition to the ACA and efforts to significantly modify the ACA, we face regulation associated with many aspects of our business, including, but not limited to, licensing, premiums, marketing activities, provider contracting, access and payment standards, and corporate governance and financial reporting matters.

Our insurance, managed health care and HMO subsidiaries are subject to extensive regulation and supervision by regulatory authorities in each state in which they are licensed or authorized to do business, in addition to regulation by federal agencies. Future regulatory action by state or federal authorities could have a material adverse effect on the profitability or marketability of our health benefits or managed care products or on our business, financial condition and results of operations. In addition, because of our participation in government-sponsored programs such as Medicare and Medicaid, a number of our subsidiaries are also subject to regulation by CMS and state Medicaid agencies, and to changes in government regulations or policy with respect to, among other things, reimbursement levels, eligibility requirements, benefit coverage requirements and additional governmental participation which could also adversely affect our business, cash flows, financial condition and results of operations.

State legislatures will continue to focus on health care delivery and financing issues, especially given proposals to modify, repeal or replace the ACA. State ballot initiatives can also be put to voters that would substantially impair our operating environment, such as the "single payer" ballot initiative that was defeated in Colorado in 2016. Most states are very focused on how to manage and reduce their budgets and are exploring ways to mitigate cost increases. As such, some states have acted to reduce or limit increases to premium payments. Others have enacted, or are contemplating, significant reform of their health insurance markets to include provisions affecting both public programs and privately-financed health insurance arrangements. If enacted into law, these state proposals could have a material adverse impact on our business, cash flows, operations or financial condition.

A number of states in which we offer Medicaid products have indicated their current decision to opt out of Medicaid expansion under the ACA, at least for the present time. Where states allow certain programs to expire or opt out of Medicaid expansion, we could experience reduced Medicaid enrollment and reduced growth opportunities. If future modifications to laws and regulations significantly reduce the Medicaid expansion program, this will negatively impact our Medicaid business.

Additionally, from time to time, Congress has considered, and may consider in the future, various forms of managed care reform legislation which, if adopted, could fundamentally alter the treatment of coverage decisions under ERISA. There have been legislative attempts to limit ERISA’s preemptive effect on state laws and litigants’ ability to seek damages beyond the benefits offered under their plans. If adopted, such limitations could increase our liability exposure, could permit greater state regulation of our operations, and could expand the scope of damages, including punitive damages, litigants could be awarded. While we cannot predict if any of these initiatives will ultimately become effective or, if enacted, what their terms will be, their enactment could increase our costs, expose us to expanded liability or require us to revise the ways in which we conduct business.

Our inability to predict and contain health care costs, implement increases in premium rates on a timely basis, appropriately price our public exchange products, maintain adequate reserves for policy benefits or maintain cost effective provider agreements may adversely affect our business, cash flows, financial condition and results of operations.

Our profitability depends in large part on accurately predicting health care costs and on our ability to manage future health care costs through medical management, product design, negotiation of favorable provider contracts and underwriting criteria. Government-imposed limitations on Medicare and Medicaid reimbursement have also caused the private sector to bear a greater share of increasing health care costs. Changes in health care practices, demographic characteristics including the aging population, inflation, new technologies and therapies, increases in the cost and number of prescription drugs, clusters of high cost cases, changes in the regulatory environment and numerous other factors affecting the cost of health care may adversely affect our ability to predict and manage health care costs, as well as our business, cash flows, financial condition and results of operations.

Relatively small differences between predicted and actual health care costs as a percentage of premium revenues can result in significant changes in our results of operations. In addition, public exchange markets are currently experiencing significant disruptions, as many insurers have incurred significant losses, and we and other insurers have announced our withdrawal from all or a portion of the public exchange markets in a number of states. For 2017, we experienced lower profits than our long-term projections in our public exchange business, as this market continues to draw individuals who have a higher risk profile or utilization rate than the pool of participants anticipated by the effected pricing for these public exchange products. Although we increased our public exchange premiums for 2018, reduced our geographic participation and modified our products, there can be no assurance that these changes will adequately address the risk that our products continue to be selected by individuals who utilize medical services at a greater rate than anticipated or that we will incur losses in public exchange markets.

In general, health care benefit costs in excess of our cost projections reflected in our fully insured product pricing cannot be recovered in the current premium period through higher premiums. Although federal and state premium and risk adjustment mechanisms could help offset health care benefit costs in excess of our projections if our assumptions (including assumptions for government premium and risk adjustment payments) utilized in setting our premium rates are significantly different than actual results, our income statement and financial position could be adversely affected. Future modifications to or enactment of laws and regulations that impact our product pricing and required product benefits can impact our profitability in future periods.

In addition to the challenge of managing health care costs, we face pressure to contain premium rates. Our customers may renegotiate their contracts to seek to contain their costs or may move to a competitor to obtain more favorable premiums. Further, federal and state regulatory agencies may restrict our ability to implement changes in premium rates. For example, we must submit data on all proposed rate increases to HHS for monitoring purposes on many of our products. In addition, the ACA includes an annual rate review requirement to prohibit unreasonable rate increases, and our plans may be excluded from participating in the public exchanges if they are deemed to have a history of "unreasonable" rate increases. Fiscal concerns regarding the continued viability of programs such as Medicare and Medicaid may cause decreasing reimbursement rates, including retroactive decreases in Medicaid reimbursement rates, delays in premium payments or reimbursement rate increases for government-sponsored programs that are lower than the increase in cost of care trends. A limitation on our ability to increase or maintain our premium or reimbursement levels or a significant loss of membership resulting from our need to increase or maintain premium or reimbursement levels could adversely affect our business, cash flows, financial condition and results of operations.

The reserves that we establish for health insurance policy benefits and other contractual rights and benefits are based upon assumptions concerning a number of factors, including trends in health care costs, expenses, general economic conditions and other factors. To the extent the actual claims experience is unfavorable as compared to our underlying assumptions, our incurred losses would increase and future earnings could be adversely affected.

Our profitability is dependent in part upon our ability to contract on favorable terms with hospitals, physicians, PBM service providers and other health care providers. Physicians, hospitals and other health care providers may elect not to contract with us, and the failure to secure or maintain cost-effective health care provider contracts on competitive terms may result in a loss of membership or higher medical costs, which could adversely affect our business. In addition, consolidation

among health care providers, ACO practice management companies, which aggregate physician practices for administrative efficiency and marketing leverage, and other organizational structures that physicians, hospitals and other care providers choose may change the way that these providers interact with us and may change the competitive landscape. Such organizations or groups of physicians may compete directly with us, which may impact our relationship with these providers or affect the way that we price our products and estimate our costs and may require us to incur costs to change our operations, and our business, cash flows, financial condition and results of operations could be adversely affected.

Our inability to contract with providers, or if providers attempt to use their market position to negotiate more favorable contracts or place us at a competitive disadvantage, or the inability of providers to provide adequate care, could adversely affect our business. In addition, we do not have contracts with all providers that render services to our members and, as a result, may not have a pre-established agreement about the amount of compensation those out-of-network providers will accept for the services they render, which can result in significant litigation or arbitration proceedings, or provider attempts to obtain payment from our members for the difference between the amount we have paid and the amount they have charged.

A significant reduction in the enrollment in our health benefits programs could have an adverse effect on our business, cash flows, financial condition and results of operations.

A significant reduction in the number of enrollees in our health benefits programs could adversely affect our business, cash flows, financial condition and results of operations. Factors that could contribute to a reduction in enrollment include: reductions in workforce by existing customers; a general economic downturn that results in business failures and high unemployment rates; employers no longer offering certain health care coverage as an employee benefit or electing to offer coverage on a voluntary, employee-funded basis; participation on public exchanges; federal and state regulatory changes, including the reduction of the individual mandate to zero effective January 1, 2019; failure to obtain new customers or retain existing customers; premium increases and benefit changes; our exit from a specific market; negative publicity and news coverage; and failure to attain or maintain nationally recognized accreditations.

There are various risks associated with participating in Medicaid and Medicare programs, including dependence upon government funding and the timing of payments, compliance with government contracts and increased regulatory oversight.

We contract with various federal and state agencies, including CMS, to provide managed health care services, such as Medicare Advantage, Medicare Part D, Medicare Supplement, Medicaid, TANF, SPD, LTSS, CHIP, ACA-related Medicaid expansion programs and various specialty programs. We also provide various administrative services for several other entities offering medical and/or prescription drug plans to their Medicaid or Medicare eligible members through our affiliated companies and we offer employer group waiver plans which provide medical and/or prescription drug coverage to retirees. We are also participating in MMPs in several states. These programs in our Government Business segment have been the subject of recent regulatory reform initiatives, including the ACA. It is difficult to predict the future impact of the ACA on our Government Business segment due to the ACA's potential for further modifications. Regulatory reform initiatives or additional changes in existing laws or regulations, or their interpretations, could have a material adverse effect on our business, cash flows, financial condition and results of operations.

Revenues from the Medicare and Medicaid programs are dependent, in whole or in part, upon annual funding from the federal government and/or applicable state governments. The base premium rate paid by each state or federal agency differs depending upon a combination of various factors such as defined upper payment limits, a member's health status, age, gender, county or region, benefit mix, member eligibility category and risk scores. Future Medicare and Medicaid rates may be affected by continued government efforts to contain costs as well as federal and state budgetary constraints. If the federal government or any state in which we operate were to decrease rates paid to us, pay us less than the amount necessary to keep pace with our cost trends or seek an adjustment to previously negotiated rates, it could have a material adverse effect on our business, cash flows, financial condition and results of operations. Further, certain state contracts are subject to cancellation in the event of the unavailability of state funds. In addition, various states' MMPs are still subject to uncertainty surrounding payment rates and other requirements, which could affect where we seek to participate in these programs. An unexpected reduction, inadequate government funding or significantly delayed payments for these programs may adversely affect our business, cash flows, financial condition and results of operations.

A portion of our premium revenue comes from CMS through our Medicare Advantage and Medicare Part D contracts. As a consequence, our Medicare Advantage and Medicare Part D plans are dependent on federal government funding. The premium rates paid to Medicare plans are established based on benchmarks which are now tied to a percentage of Medicare fee for service rates, although the rates differ depending on a combination of factors, including upper payment limits established by CMS, a member's health profile and status, age, gender, county or region, benefit mix, member eligibility categories and risk scores. In addition, Medicare Advantage, Medicare Part D plans and MMPs are subject to MLR rules. Continuing government efforts to contain health care related expenditures, including prescription drug cost, and other federal budgetary constraints that result in changes in the Medicare program, including changes with respect to funding, could lead to reductions in the amount of reimbursement, or other changes that could have a material adverse effect on our business, cash flows, financial condition and results of operations. Examples of risks that may be associated with the Medicare Advantage and Medicare Part D plans include increased medical or pharmaceutical costs, overpayments identified as a result of ongoing auditing and monitoring activities, potential uncollectability of receivables resulting from processing and/or verifying enrollment, inadequacy of underwriting assumptions, inability to receive and process correct information (including inability due to systems issues by the federal government, the applicable state government or us), uncollectability of premiums from members, and limited enrollment periods. While we believe we have adequately reviewed our assumptions and estimates regarding these complex and wide-ranging programs under Medicare Advantage and Medicare Part D, including those related to collectability of receivables and establishment of liabilities, actual results may be materially different than our assumptions and estimates and could have a material adverse effect on our business, financial condition and results of operations. There is also the possibility that Special Needs Plans, which are authorized through December 31, 2018, will not be re-authorized by Congress. If Special Needs Plans are not re-authorized, there could be a loss of revenue and it would become more difficult to coordinate Medicare benefits with other coverage. Finally, there is the possibility that the Medicare Advantage program could be significantly impacted by any future modification, repeal or replacement of the ACA.

Our revenue on Medicare policies is based on bids submitted in June the year before the contract year. Although we base the premiums we charge and our Medicare bids on our estimates of future medical costs over the fixed contract period, many factors may cause actual costs to exceed those estimated and reflected in premiums or bids. Relatively small differences between predicted and actual medical costs or utilization rates as a percentage of revenues can result in significant changes in our financial results.

Our contracts with CMS and state governmental agencies contain certain provisions regarding data submission, provider network maintenance, quality measures, claims payment, encounter data, continuity of care, call center performance and other requirements specific to federal and state program regulations. If we fail to comply with these requirements, we may be subject to fines, penalties, liquidated damages and retrospective adjustments in payments made to our health plans that could impact our profitability. In addition, we could be required to file a corrective plan of action with additional penalties for noncompliance, including a negative impact on future membership enrollment levels. Further, certain of our CMS and state Medicaid contracts are subject to a competitive procurement process. If our existing contracts are not renewed, if we are not awarded new contracts as a result of the competitive procurement process, or if we lose members under an existing contract as a result of a post-award challenge, it could have a material adverse effect on our business, cash flows, financial condition and results of operations.

Further, the Medicare Advantage Star Rating System utilized by CMS to evaluate Medicare Advantage Plans may have a significant effect on our results of operations, as higher rated plans tend to experience increased enrollment and plans with a star rating of 4.0 or higher are eligible for quality-based bonus payments. Our star ratings may be negatively impacted if we fail to meet the quality, performance and regulatory compliance criteria established by CMS. If our star ratings fall below 4.0 for a significant portion of our Medicare Advantage membership, fail to meet or exceed our competitors' ratings or fall short of our expectations, or if quality-based bonus payments associated with star ratings are reduced or eliminated, our financial performance may be adversely impacted.

In addition to the contractual requirements affecting our participation in Medicaid and Medicare programs, we are also subject to various federal and state health care laws and regulations, including those directed at preventing fraud, abuse and discrimination in government funded programs. Failure to comply with these laws and regulations could result in investigations, litigation, fines, restrictions on, or exclusions from, program participation, the imposition of corporate integrity agreements or other agreements with a federal or state governmental agency that could adversely impact our business, cash flows, financial condition and results of operations.

We are regularly subject to CMS audits of our Medicare Advantage Plans to validate the diagnostic data and patient claims, as well as audits of our Medicare Part D plans by the Medicare Part D Recovery Audit Contractor, or RAC. These audits could result in retrospective adjustments in payments made to our health plans. In addition to these federal programs, a number of states have implemented Medicaid RAC programs which were authorized by the ACA. State RAC programs could increase the number of audits and any subsequent recoupment by the federal and state governments, which could adversely affect our financial condition and results of operations. If we fail to report and correct errors discovered through our own auditing procedures or during a CMS or RAC audit, or otherwise fail to comply with applicable laws and regulations, we could be subject to fines, civil penalties or other sanctions which could have a material adverse effect on our ability to participate in these programs, and on our financial condition, cash flows and results of operations.

Our Medicare and Medicaid contracts are also subject to minimum MLR audits. If a Medicare Advantage, MMP or Medicare Part D contract pays minimum MLR rebates for three consecutive years it will become ineligible to participate in open enrollment. If a Medicare Advantage or Medicare Part D contract pays such rebates for five consecutive years it will be terminated by CMS.

In addition, there are an increasing number of investigations regarding compliance with various provisions of the ACA. These investigations are being conducted by both CMS and state regulators. As a result, we could be subject to multiple investigations of the same issue. These investigations, and any possible enforcement actions, could result in penalties and the imposition of corrective action plans and/or changes to industry practices, which could adversely affect our ability to market our products.

We face competition in many of our markets and customers and brokers have flexibility in moving between competitors.

As a health benefits company, we operate in a highly competitive environment and in an industry that is subject to significant changes from legislative reform, business consolidations, new strategic alliances, aggressive marketing practices by other health benefits organizations and market pressures brought about by an informed and organized customer base, particularly among large employers. These factors have produced and will likely continue to produce significant pressures on our profitability.

We also will have to respond to pricing and other actions taken by existing competitors and potentially disruptive new entrants. Due to the price transparency provided by public exchanges, we face competitive pressures from new and existing competitors in the market for individual health insurance. These risks may be enhanced if employers shift to defined contribution health care benefits plans and make greater utilization of private insurance exchanges or encourage their employees to purchase health insurance on the public exchanges. We can provide no assurance that we will be able to compete successfully on these public exchanges or that we will be able to benefit from any opportunities presented by such exchanges. If we are not competitive on these public exchanges or are unsuccessful in reducing our cost structure, our future growth and profitability may be adversely impacted.

We are currently dependent on the non-exclusive services of independent agents and brokers in the marketing of our health care products, particularly with respect to individuals, seniors and small employer group customers. We face intense competition for the services and allegiance of these independent agents and brokers, who may also market the products of our competitors. Our relationship with our brokers and independent agents could be adversely impacted by changes in our business practices to address the ACA and other legislation, including potential reductions in commissions and consulting fees paid to agents and brokers. We cannot ensure that we will be able to compete successfully against current and future competitors or that competitive pressures faced by us will not materially and adversely affect our business, cash flows, financial condition and results of operations.

A change in our health care product mix may impact our profitability.

Our health care products that involve greater potential risk generally tend to be more profitable than administrative services products and those health care products where the employer groups assume the underwriting risks. Individuals and small employer groups are more likely to purchase our higher-risk health care products because such purchasers are generally unable or unwilling to bear greater liability for health care expenditures. Typically, government-sponsored programs also involve our higher-risk health care products. In addition, our products sold on the public exchanges have been less profitable

than our other insurance products. A shift of enrollees from more profitable products to less profitable products could have a material adverse effect on our cash flows, financial condition and results of operations.

If we fail to adequately adapt to changes in our industry and develop and implement strategic growth opportunities, our ability to grow may be adversely affected.

As a result of significant changes to traditional health insurance in recent years brought about by the ACA and other factors, the health insurance industry has experienced a significant shift in membership to insurance products with lower margins. Moreover, the significant modification, repeal or replacement of the ACA could have far-reaching consequences for our business. In order to profitably grow our business in the future, we need to not only grow our profitable medical membership, but also continue to diversify our sources of revenue and earnings, including through the increased sale of our specialty products, such as dental, vision and other supplemental products, expansion of our non-insurance assets and establishment of new cost of care solutions, including innovations in PBM services. If we are unable to acquire or develop and successfully manage new opportunities that further our strategic objectives and differentiate our products from our competitors, our ability to profitably grow our business could be adversely affected.

We face risks related to litigation.

We are, or may in the future, be a party to a variety of legal actions that may affect our business, such as employment and employment discrimination-related suits, administrative charges before government agencies, employee benefit claims, breach of contract actions, tort claims and intellectual property-related litigation. In addition, because of the nature of our business, we are subject to a variety of legal actions relating to our business operations, including the design, administration and offering of our products and services. These could include claims relating to the denial or limitation of health care benefits; the rescission of health insurance policies; development or application of medical policies; medical malpractice actions; product liability claims; allegations of anti-competitive and unfair business activities; provider disputes over reimbursement; provider tiering programs; narrow networks; termination of provider contracts; the recovery of overpayments from providers; self-funded business; disputes over co-payment calculations; reimbursement of out-of-network claims; the failure to disclose certain business or corporate governance practices; the failure to comply with various state or federal laws, including but not limited to, ERISA and the Mental Health Parity Act; and customer audits and contract performance, including government contracts. These actions or proceedings could have a material adverse effect on our business, cash flows, financial condition and results of operations.

In addition, we are also involved in, or may in the future be party to, pending or threatened litigation of the character incidental to the business transacted or arising out of our operations, including, but not limited to, breaches of security and violations of privacy requirements, shareholder actions, compliance with federal and state laws and regulations (including *qui tam* or "whistleblower" actions), or sales and acquisitions of businesses or assets (including as a result of the terminated Cigna Merger Agreement, or as more fully described under Note 13, Commitments and Contingencies - *Litigation*, to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K). From time to time, we are involved as a party in various governmental investigations, audits, reviews and administrative proceedings, including challenges to the award of government contracts by disappointed bidders. These investigations, audits and reviews include routine and special investigations by various state insurance departments, state attorneys general and the U.S. Attorney General. Following an investigation, we may be subject to civil or criminal fines, penalties and other sanctions if we are determined to be in violation of applicable laws or regulations. Liabilities that may result from these actions could have a material adverse effect on our cash flows, results of operations and financial condition.

Recent court decisions and legislative activity may increase our exposure for any of these types of claims. In some cases, substantial non-economic (including injunctive relief), treble or punitive damages may be sought. Although we maintain insurance coverage for some of these potential liabilities, some liabilities and damages may not be covered by insurance, insurers may dispute coverage or the amount of insurance may not be enough to cover the damages awarded. In addition, insurance coverage for all or certain forms of liability may become unavailable or prohibitively expensive in the future. Any adverse judgment against us resulting in such damage awards could result in negative publicity and have an adverse effect on our cash flows, results of operations and financial condition.

Further, litigation brought against the federal and some state governments over the ACA could have a material adverse effect on our business, cash flows, financial condition and results of operations as changes to the ACA resulting from this

litigation create uncertainty over the applicability and enforceability of portions of the law and the various regulations, which impacts our strategy and could negatively impact our future growth opportunities.

Cigna's pursuit of litigation in connection with the Cigna Merger Agreement, together with our own litigation against Cigna, could cause us to incur substantial costs, may present material distractions and, if decided adverse to Anthem, could negatively impact our financial position.

As described in Note 13, Commitments and Contingencies - *Litigation*, to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K, on February 14, 2017, Cigna commenced litigation against us in the Delaware Court for a declaratory judgment that its purported termination of the Cigna Merger Agreement was lawful and seeking damages against us. We promptly filed our own litigation against Cigna seeking to compel Cigna's specific performance of the Cigna Merger Agreement and damages against Cigna. On May 11, 2017, the Delaware Court denied our motion to enjoin Cigna from terminating the Cigna Merger Agreement. On May 12, 2017, we delivered to Cigna a notice terminating the Cigna Merger Agreement. The litigation in Delaware continues. These lawsuits could result in substantial costs to us, including litigation costs and potential settlement and judgment costs. Further, due to the potential significance of the allegations and damages claimed by Cigna, we expect that our officers will spend substantial time focused on the litigation. Our defense against Cigna's claims, the pursuit of our claims or the settlement, or failure to reach a settlement, for any claims may result in negative media attention, and may adversely affect our business, reputation, financial condition, results of operations and cash flows.

As a holding company, we are dependent on dividends from our subsidiaries. These dividends are necessary to pay our outstanding indebtedness. Our regulated subsidiaries are subject to state regulations, including restrictions on the payment of dividends, maintenance of minimum levels of capital and restrictions on investment portfolios.

We are a holding company whose assets include the outstanding shares of common stock (or other ownership interest) of our subsidiaries including our intermediate holding companies and regulated insurance and HMO subsidiaries. Our subsidiaries are separate legal entities. As a holding company, we depend on dividends and administrative expense reimbursements from our subsidiaries. Furthermore, our subsidiaries are not obligated to make funds available to us, and creditors of our subsidiaries will have a superior claim to certain of our subsidiaries' assets. Among other restrictions, state insurance and HMO laws may restrict the ability of our regulated subsidiaries to pay dividends. In some states, we have made special undertakings that may limit the ability of our regulated subsidiaries to pay dividends. In addition, our subsidiaries' ability to make any payments to us will also depend on their earnings, the terms of their indebtedness, business and tax considerations and other legal restrictions. Our ability to repurchase shares or pay dividends in the future to our shareholders and meet our obligations, including paying operating expenses and debt service on our outstanding and future indebtedness, will depend upon the receipt of dividends from our subsidiaries. An inability of our subsidiaries to pay dividends in the future in an amount sufficient for us to meet our financial obligations may materially adversely affect our business, cash flows, financial condition and results of operations.

Most of our regulated subsidiaries are subject to RBC standards, imposed by their states of domicile. These laws are based on the RBC Model Act adopted by the National Association of Insurance Commissioners, or NAIC, and require our regulated subsidiaries to report their results of risk-based capital calculations to the departments of insurance and the NAIC. Failure to maintain the minimum RBC standards could subject our regulated subsidiaries to corrective action, including state supervision or liquidation. As discussed in more detail below, we are a party to license agreements with the BCBSA which contain certain requirements and restrictions regarding our operations, including minimum capital and liquidity requirements, which could restrict the ability of our regulated subsidiaries to pay dividends.

Our regulated subsidiaries are subject to state laws and regulations that require diversification of their investment portfolios and limit the amount of investments in certain riskier investment categories, such as below-investment-grade fixed maturity securities, mortgage loans, real estate and equity investments, which could generate higher returns on our investments. Failure to comply with these laws and regulations might cause investments exceeding regulatory limitations to be treated as non-admitted assets for purposes of measuring statutory surplus and risk-based capital, and, in some instances, require the sale of those investments.

We have substantial indebtedness outstanding and may incur additional indebtedness in the future in connection with acquisitions or otherwise. Such indebtedness could also adversely affect our ability to pursue desirable business opportunities.

Our debt service obligations require us to use a portion of our cash flow to pay interest and principal on debt instead of for other corporate purposes, including funding future expansion. If our cash flow and capital resources are insufficient to service our debt obligations, we may be forced to seek extraordinary dividends from our subsidiaries, sell assets, seek additional equity or debt capital or restructure our debt. However, these measures might be unsuccessful or inadequate in permitting us to meet scheduled debt service obligations, or may not be available on commercially reasonable terms.

We may also incur future debt obligations, in connection with acquisitions or otherwise, that might subject us to restrictive covenants that could affect our financial and operational flexibility. Our breach or failure to comply with any of these covenants could result in a default under our credit facilities or other indebtedness. If we default under our credit agreement, the lenders could cease to make further extensions of credit or cause all of our outstanding debt obligations under our credit agreement to become immediately due and payable, together with accrued and unpaid interest. If the indebtedness under our notes or our credit agreement or our other indebtedness is accelerated, we may be unable to repay or finance the amounts due, on commercially reasonable terms, or at all.

A downgrade in our credit ratings could have an adverse effect on our business, cash flows, financial condition and results of operations.

Claims-paying ability and financial strength and debt ratings by nationally recognized statistical rating organizations are an important factor in establishing the competitive position of insurance companies and health benefits companies. We believe our strong credit ratings are an important factor in marketing our products to customers, since credit ratings information is broadly disseminated and generally used by customers and creditors. In addition, if our credit ratings are downgraded or placed under review, our business, cash flows, financial condition and results of operations could be adversely impacted by limitations on future borrowings and a potential increase in our borrowing costs. Our ratings reflect each rating agency's opinion of our financial strength, operating performance and ability to meet our obligations to policyholders and creditors, and are not evaluations directed toward the protection of investors in our common stock. Each of the ratings organizations reviews our ratings periodically, and there can be no assurance that our current ratings will be maintained in the future.

The health benefits industry is subject to negative publicity, which could adversely affect our business cash flows, financial condition and results of operations.

The health benefits industry is subject to negative publicity, which can arise from, among other things, the ongoing debate over the ACA, industry consolidation, increases in premium rates and the decision of many insurers to withdraw from, or significantly curtail participation in, public exchanges. Negative publicity may result in increased regulation and legislative review of industry practices, which may further increase our costs of doing business and adversely affect our profitability by adversely affecting our ability to market our products and services, requiring us to change our products and services, or increasing the regulatory oversight under which we operate. In addition, as long as we use the BCBS names and marks in marketing our health benefits products and services, any negative publicity concerning the BCBSA or other BCBSA licensees may adversely affect us and the sale of our health benefits products and services. Negative public perception or publicity of the health benefits industry in general, BCBSA, or other BCBSA licenses, or us or our key vendors in particular, could adversely affect our business, cash flows, financial condition and results of operations.

An unauthorized disclosure of sensitive or confidential member or employee information, including by cyber attack or other security breach, could cause a loss of data, give rise to remediation or other expenses, expose us to liability under federal and state laws, and subject us to litigation and investigations, which could have an adverse effect on our business, cash flows, financial condition and results of operations.

As part of our normal operations, we collect, process and retain certain sensitive and confidential information. We are subject to various federal, state and international laws and rules regarding the use and disclosure of certain sensitive or confidential information, including HIPAA, the HITECH Act, the Gramm-Leach-Bliley Act, and numerous state laws governing personal information. Despite the security measures we have in place to help ensure data security and compliance

with applicable laws and rules, our facilities and systems, and those of our third party service providers, may be vulnerable to cyber attacks, security breaches, acts of vandalism, computer viruses, misplaced or lost data, programming and/or human errors or other similar events.

In February 2015, we reported the discovery that certain of our information technology systems had been the target of an external cyber attack, as more fully described under Note 13, "Commitments and Contingencies - *Cyber Attack Incident,*" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K. The attackers gained unauthorized access to certain of our information technology systems and obtained personal information related to many individuals and employees. We have incurred expenses to investigate and remediate this matter and expect to continue to incur expenses of this nature in the foreseeable future. Actions have been filed in various federal and state courts and other claims have been or may be asserted against us, allegedly arising out of the cyber attack. Further, we may be subject to additional litigation and governmental investigations which could divert the attention of management from the operation of our business, result in reputational damage and have a material adverse impact on our business, cash flows, financial condition and results of operations. While we have contingency plans and insurance coverage for potential liabilities of this nature, these may not be sufficient to cover all claims and liabilities.

In addition, we cannot ensure that we will be able to identify, prevent or contain the effects of additional cyber attacks or other cybersecurity risks in the future that bypass our security measures or disrupt our information technology systems or business. As a result, cybersecurity and the continued development and enhancement of our controls, processes and practices designed to protect our systems, computers, software, data and networks from attack, damage and unauthorized access, remain a priority for us. Noncompliance with any privacy or security laws and regulations, or any security breach, cyber attack or cybersecurity breach, and any incident involving the misappropriation, loss or other unauthorized disclosure or use of, or access to, sensitive or confidential member information, whether by us or by one of our third-party service providers, could require us to expend significant resources to continue to modify or enhance our protective measures and to remediate any damage. In addition, this could result in interruptions to our operations and damage our reputation, and could also result in regulatory enforcement actions, material fines and penalties, litigation or other actions that could have a material adverse effect on our business, cash flows, financial condition and results of operations.

The failure to effectively maintain and upgrade our information systems could adversely affect our business.

Our business depends significantly on effective information systems, and we have many different information systems for our various businesses. As a result of our merger and acquisition activities, we have acquired additional systems. Our information systems require an ongoing commitment of significant resources to maintain and enhance existing systems and develop new systems in order to keep pace with continuing changes in information processing technology, emerging cybersecurity risks and threats, evolving industry and regulatory standards including public exchanges and other aspects of the ACA, compliance with legal requirements, private insurance exchanges and changing customer preferences. In addition, we may from time to time obtain significant portions of our systems-related or other services or facilities from independent third parties, which may make our operations vulnerable if such third parties fail to perform adequately.

Failure to adequately implement and maintain effective and efficient information systems with sufficiently advanced technological capabilities, or our failure to efficiently and effectively consolidate our information systems to eliminate redundant or obsolete applications, could result in competitive and cost disadvantages to us compared to our competitors, a diversion of management's time and could have a material adverse effect on our business, financial condition and results of operations. If the information we rely upon to run our business were found to be inaccurate or unreliable or if we fail to adequately maintain our information systems and data integrity effectively, we could experience problems in determining medical cost estimates and establishing appropriate pricing and reserves, have disputes with customers and providers, face regulatory problems, including sanctions and penalties, incur increases in operating expenses or suffer other adverse consequences, including a decrease in membership.

We are dependent on the success of our relationships with third parties for various services and functions, including PBM services.

We contract with various third parties to perform certain functions and services and provide us with certain information technology systems. Certain of these third parties provide us with significant portions of our business infrastructure and operating requirements, and we could become overly dependent on key vendors, which could cause us to lose core competencies. A termination of our agreements with, or disruption in the performance of, one or more of these service

providers could result in service disruptions or unavailability, reduced service quality and effectiveness, increased or duplicative costs or an inability to meet our obligations to our customers. In addition, we may also have to seek alternative service providers, which may be unavailable or only available on less favorable contract terms. Any of these outcomes could adversely affect our business, reputation, cash flows, financial condition and operating results.

In particular, we are a party to an agreement with Express Scripts whereby Express Scripts is the exclusive provider of certain PBM services to our plans, currently excluding our HealthSun and America's 1st Choice subsidiaries, our CareMore operations in the state of Arizona and certain self-insured members, who have agreements with different PBM service providers. The Express Scripts PBM services include, but are not limited to, pharmacy network management, mail order and specialty drug fulfillment, claims processing, rebate management and specialty pharmaceutical management services. Accordingly, the agreement contains certain financial and operational requirements obligating both Express Scripts and us. Our failure to meet certain minimum script volume requirements would result in financial penalties that could have a material adverse effect on our results of operations. The failure of either party to meet the respective requirements could potentially serve as a basis for early termination of the contract. As more fully described under Note 13, "Commitments and Contingencies - *Litigation,*" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K, we filed suit against Express Scripts in March 2016 alleging breaches of the agreement, and Express Scripts filed a countersuit.

In connection with the expiration of the Express Scripts agreement and the transition of PBM services to CVS Health commencing on January 1, 2020, if Express Scripts fails to provide adequate transition and post-termination services as required by the Express Scripts agreement, we may not be able to meet the full demands of our customers, which could have a material adverse effect on our business, reputation and results of operations. For additional information on the agreement with CVS Health, see "General," in Part I, Item 1 of this Annual Report on Form 10-K.

Our future obligations for state guaranty association assessments could increase in the event of increased insolvencies of health insurance plans.

Under insolvency or guaranty association laws in most states, insurance companies can be assessed for amounts paid by guaranty funds for policyholder losses incurred when a health insurance issuer becomes insolvent. Most state insolvency or guaranty association laws provide for assessments based upon the amount of premiums received on insurance underwritten within such state. Although health insurance company insolvencies have been infrequent, we have experienced increased assessments in recent years after a number of smaller health insurance companies and Consumer Operated and Oriented Plans failed to establish premiums that were sufficient to cover the cost of care for their members. We may continue to experience increased assessments in the future if premiums established by other companies for their health insurance products, including certain long-term care products, are inadequate to cover the cost of care. We are not currently able to estimate our potential financial obligations, losses, or the availability of potential offsets associated with potential increases in guaranty association assessments; however, any significant increase in guaranty association assessments could have a material adverse effect on our business, cash flows, financial condition and results of operations.

There are various risks associated with providing healthcare services.

The direct provision of health care services by certain of our subsidiaries involves risks of additional litigation arising from medical malpractice actions based on our treatment decisions or brought against us or our physician associates for alleged malpractice or professional liability claims arising out of the delivery of health care and related services. In addition, liability may arise from maintaining health care premises that serve the public. If we fail to maintain adequate insurance coverage for these liabilities, or if such insurance is not available, the resulting costs could adversely affect our business, cash flows, financial condition and results of operations.

Additionally, many states in which certain of our subsidiaries operate limit the practice of medicine to licensed individuals or professional organizations comprised of licensed individuals. Business corporations generally may not exercise control over the medical decisions of physicians and we are not licensed to practice medicine. Rules and regulations relating to the practice of medicine, fee-splitting between physicians and referral sources, and similar issues vary from state to state. Further, certain federal and state laws, including those covering our Medicare and Medicaid plans, prohibit the offer, payment, solicitation, or receipt of any form of remuneration to induce, or in return for, the referral of patient care opportunities, including, but not limited to, Medicare patients, and also generally prohibit physicians from making referrals to

any entity providing certain designated health services if the referring physician or related person has an ownership or financial interest in the entity. Any enforcement actions by governmental officials alleging non-compliance with these rules and regulations could adversely affect our business, cash flows, financial condition and results of operations.

We are a party to license agreements with the BCBSA that entitle us to the exclusive and, in certain areas, non-exclusive use of the BCBS names and marks in our geographic territories. The termination of these license agreements or changes in the terms and conditions of these license agreements could adversely affect our business, cash flows, financial condition and results of operations.

We use the BCBS names and marks as identifiers for our products and services under licenses from the BCBSA. Our license agreements with the BCBSA contain certain requirements and restrictions regarding our operations and our use of the BCBS names and marks, including: minimum capital and liquidity requirements; enrollment and customer service performance requirements; participation in programs that provide portability of membership between plans; disclosures to the BCBSA relating to enrollment and financial conditions; disclosures as to the structure of the BCBS system in contracts with third parties and in public statements; plan governance requirements; cybersecurity requirements; a requirement that at least 80% (or, in the case of Blue Cross of California, substantially all) of a licensee's annual combined local net revenue, as defined by the BCBSA, attributable to health care plans and related services within its service areas must be sold, marketed, administered or underwritten under the BCBS names and marks; a requirement that at least two-thirds of a licensee's annual combined national net revenue, as defined by the BCBSA, attributable to health care plans and related services must be sold, marketed, administered or underwritten under the BCBS names and marks; a requirement that neither a plan nor any of its licensed affiliates may permit an entity other than a plan or a licensed affiliate to obtain control of the plan or the licensed affiliate or to acquire a substantial portion of its assets related to licensable services; a requirement that we divide our Board of Directors into three classes serving staggered three-year terms; a requirement that we guarantee certain contractual and financial obligations of our licensed affiliates; and a requirement that we indemnify the BCBSA against any claims asserted against it resulting from the contractual and financial obligations of any subsidiary that serves as a fiscal intermediary providing administrative services for Medicare Parts A and B. Failure to comply with the foregoing requirements could result in a termination of the license agreements.

The standards under the license agreements may be modified in certain instances by the BCBSA. For example, from time to time there have been proposals considered by the BCBSA to modify the terms of the license agreements to restrict various potential business activities of licensees. These proposals have included, among other things, a limitation on the ability of a licensee to make its provider networks available to insurance carriers or other entities not holding a Blue Cross or Blue Shield license. To the extent that such amendments to the license agreements are adopted in the future, they could have a material adverse effect on our future expansion plans or results of operations. Further, BCBS licensees have certain requirements to perform administrative services for members of other BCBS licensees. As of December 31, 2017, we provided services to approximately 30.6 million Blue Cross and/or Blue Shield enrollees. If we or another BCBS licensee are not in compliance with all legal requirements or are unable to perform administrative services as required, this could have an adverse effect on our members and our ability to maintain our licenses, which could have a material adverse effect on our business, cash flows, financial condition and results of operations.

Upon the occurrence of an event causing termination of the license agreements, we would no longer have the right to use the BCBS names and marks or to sell BCBS health insurance products and services in one or more of our service areas. Furthermore, the BCBSA would be free to issue a license to use the BCBS names and marks in these service areas to another entity. Our existing BCBS members would be provided with instructions for obtaining alternative products and services licensed by the BCBSA. Events that could cause the termination of a license agreement with the BCBSA include, without limitation, failure to comply with minimum capital requirements imposed by the BCBSA, failure to comply with governance requirements such as maintaining a classified board structure, a change of control or violation of the BCBSA ownership limitations on our capital stock, impending financial insolvency and the appointment of a trustee or receiver or the commencement of any action against a licensee seeking its dissolution. We believe that the BCBS names and marks are valuable identifiers of our products and services in the marketplace.

Upon termination of a license agreement, the BCBSA would have the right to impose a "Re-establishment Fee" upon us, which would be used in part to fund the establishment of a replacement Blue Cross and/or Blue Shield licensee in the vacated service area. The fee is set at $98.33 per licensed enrollee. If the Re-establishment Fee was applied to our total Blue Cross and/or Blue Shield enrollees, we would be assessed approximately $3.0 billion by the BCBSA. As a result, termination of the

license agreements would have a material adverse effect on our business, cash flows, financial condition and results of operations.

Regional concentrations of our business may subject us to economic downturns in those regions.

The states in which we operate that have the largest concentrations of revenues include California, Georgia, Indiana, New York, Ohio, Texas and Virginia. Due to this concentration of business in these states, we are exposed to potential losses resulting from the risk of state specific or regional economic downturns impacting these states. If such negative economic conditions do not improve, we may experience a reduction in existing and new business, which could have a material adverse effect on our business, cash flows, financial condition and results of operations.

Large-scale medical emergencies may have a material adverse effect on our business, cash flows, financial condition and results of operations.

Large-scale medical emergencies can take many forms and can cause widespread illness and death. For example, federal and state law enforcement officials have issued warnings about potential terrorist activity involving biological and other weapons. In addition, natural disasters such as hurricanes and the potential for a widespread pandemic of influenza coupled with the lack of availability of appropriate preventative medicines can have a significant impact on the health of the population of widespread areas. If the United States were to experience widespread bioterrorism or other attacks, large-scale natural disasters in our concentrated coverage areas or a large-scale pandemic or epidemic, our covered medical expenses could rise and we could experience a material adverse effect on our business, cash flows, financial condition and results of operations or, in the event of extreme circumstances, our viability could be threatened.

We have built a significant portion of our current business through mergers and acquisitions, joint ventures and strategic alliances and we expect to pursue such opportunities in the future.

The following are some of the risks associated with mergers, acquisitions, joint ventures and strategic alliances, referred to collectively as business combinations, that could have a material adverse effect on our business, cash flows, financial condition and results of operations:

- some of the business combinations may not achieve anticipated revenues, earnings or cash flow, business opportunities, synergies, growth prospects and other anticipated benefits;
- the goodwill or other intangible assets established as a result of our business combinations may be incorrectly valued or become non-recoverable;
- we may assume liabilities that were not disclosed to us or which were under-estimated;
- we may experience difficulties in integrating business combinations, be unable to integrate business combinations successfully or as quickly as expected, and be unable to realize anticipated economic, operational and other benefits in a timely manner, which could result in substantial costs and delays or other operational, technical or financial problems;
- business combinations, and proposed business combinations that are not completed, could disrupt our ongoing business, lead to the incurrence of significant fees, distract management, result in the loss of key employees, divert resources, result in tax costs or inefficiencies and make it difficult to maintain our current business standards, controls, information technology systems, policies and procedures;
- we may finance future business combinations by issuing common stock for some or all of the purchase price, which could dilute the ownership interests of our shareholders;
- we may also incur additional debt related to future business combinations;
- we would be competing with other firms, some of which may have greater financial and other resources, to acquire attractive companies; and
- future business combinations may make it difficult to comply with the requirements of the BCBSA and lead to an increased risk that our BCBSA license agreements may be terminated.

The value of our intangible assets may become impaired.

Due largely to our past mergers, acquisitions and divestitures, goodwill and other intangible assets represent a substantial portion of our assets. If we make additional acquisitions, it is likely that we will record additional intangible assets on our consolidated balance sheets. The value we place on intangible assets may be adversely impacted if business combinations fail to perform in a manner consistent with our assumptions.

In accordance with applicable accounting standards, we periodically evaluate our goodwill and other intangible assets to determine whether all or a portion of their carrying values may no longer be recoverable, in which case a charge to income may be necessary. This impairment testing requires us to make assumptions and judgments regarding the estimated fair value of our reporting units, including goodwill and other intangible assets. In addition, certain other intangible assets with indefinite lives, such as trademarks, are also tested separately. Estimated fair values developed based on our assumptions and judgments might be significantly different if other reasonable assumptions and estimates were to be used. If estimated fair values are less than the carrying values of goodwill and other intangible assets with indefinite lives in future impairment tests, or if significant impairment indicators are noted relative to other intangible assets subject to amortization, we may be required to record impairment losses against future income.

Any future evaluations requiring an impairment of our goodwill and other intangible assets could materially affect our results of operations and shareholders' equity in the period in which the impairment occurs. A material decrease in shareholders' equity could, in turn, negatively impact our debt ratings or potentially impact our compliance with existing debt covenants.

In addition, the estimated value of our reporting units may be impacted as a result of business decisions we make associated with any future changes to laws and regulations. Such decisions, which could unfavorably affect our ability to support the carrying value of certain goodwill and other intangible assets, could result in impairment charges in future periods.

Adverse securities and credit market conditions may significantly affect our ability to meet liquidity needs.

During periods of increased volatility, adverse securities and credit markets may exert downward pressure on the availability of liquidity and credit capacity for certain issuers. We need liquidity to pay our operating expenses, make payments on our indebtedness and pay capital expenditures. The principal sources of our cash receipts are premiums, administrative fees, investment income, other revenue, proceeds from the sale or maturity of our investment securities, proceeds from borrowings and proceeds from the issuance of common stock under our employee stock plans.

Our access to additional financing will depend on a variety of factors such as market conditions, the general availability of credit, the volume of trading activities, the availability of credit to our industry, our credit ratings and credit capacity, as well as the possibility that customers or lenders could develop a negative perception of our long- or short-term financial prospects. Similarly, our access to funds may be impaired if regulatory authorities or rating agencies take negative actions against us. If one or a combination of these factors were to occur, our internal sources of liquidity may prove to be insufficient, and in such case, we may not be able to successfully obtain additional financing on favorable terms, or at all.

The value of our investments is influenced by varying economic and market conditions, and a decrease in value may result in a loss charged to income.

The market values of our investments vary from time to time depending on economic and market conditions. For various reasons, we may sell certain of our investments at prices that are less than the carrying value of the investments. During periods in which interest rates are relatively low, as in recent years, our investment income could be adversely impacted. In addition, in periods of declining interest rates, bond calls and mortgage loan prepayments generally increase, resulting in the reinvestment of these funds at the then lower market rates. In periods of rising interest rates, the market values of our fixed maturity securities will generally decrease, which could result in material unrealized or realized losses on investments in future periods. In addition, defaults by issuers, primarily from investments in corporate and municipal bonds, who fail to pay or perform their obligations, could reduce net investment income, which would adversely affect our profitability. We cannot assure you that our investment portfolios will produce positive returns or maintain their present values.

In accordance with FASB guidance for debt and equity investments, we classify fixed maturity and equity securities in our investment portfolio as "available-for-sale" or "trading" and report those securities at fair value. Current and long-term available-for-sale investment securities represented a significant percentage of our total consolidated assets at December 31, 2017.

Changes in the economic environment, including periods of increased volatility of the securities markets, can increase the difficulty of assessing investment impairment and the same influences tend to increase the risk of potential impairment of these assets. Over time, the economic and market environment may provide additional insight into the value of our investment securities, which could change our judgment regarding the fair value of certain securities and/or impairment. Given the sometimes rapidly changing market conditions and the significant judgments involved, there is continuing risk that further declines in fair value may occur and material other-than-temporary impairments may be charged to income in future periods, resulting in realized losses.

Changes in U.S. tax laws and regulations could have a material adverse effect on our business, cash flow, financial condition and results of operations.

Changes in tax laws and regulations, or changes in the interpretation of tax laws and regulations by federal and/or state authorities may have a material adverse effect on our business, cash flows, financial condition or results of operations. The federal government recently enacted H.R.1, *An act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018*, or the Tax Cuts and Jobs Act, which contains many significant changes to federal income tax laws, the consequences of which have not yet been fully determined. For additional discussion of the Tax Cuts and Jobs Act, see Note 7, "Income Taxes," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Changes in corporate tax rates and the deductibility of expenses contained in the Tax Cuts and Jobs Act or other tax reform legislation could have a material impact on the future value of our deferred tax assets and deferred tax liabilities, could result in significant one-time charges in the current or future taxable years, and could increase our future U.S. tax expense. The foregoing items could have a material adverse effect on our business, cash flow, financial condition and results of operations.

We may not be able to realize the value of our deferred tax assets.

In accordance with applicable accounting standards, we separately recognize deferred tax assets and deferred tax liabilities. Such deferred tax assets and deferred tax liabilities represent the tax effect of temporary differences between financial reporting and tax reporting measured at tax rates enacted at the time the deferred tax asset or liability is recorded. At each financial reporting date, we evaluate our deferred tax assets to determine the likely realization of the benefit of the temporary differences. Our evaluation includes a review of the types of temporary differences that created the deferred tax asset; the amount of taxes paid on both capital gains and ordinary income in prior periods and available for a carry-back claim; the forecasted future taxable income, and therefore, the likely future deduction of the deferred tax item; and any other significant issues that might impact the realization of the deferred tax asset. If it is more likely than not that all or a portion of the deferred tax asset may not be realized, we establish a valuation allowance. Significant judgment is required in determining an appropriate valuation allowance.

Any future increase in our valuation allowance would result in additional income tax expense and a decrease in shareholders' equity, which could materially affect our financial position and results of operations in the period in which the increase occurs. A material decrease in shareholders' equity could, in turn, negatively impact our debt ratings or potentially impact our compliance with existing debt covenants.

We face intense competition to attract and retain employees. Further, managing key executive transition, succession and retention is critical to our success.

Our success depends on our ability to attract and retain qualified employees to meet current and future needs, integrating and engaging employees who have joined us through acquisitions and achieving productivity gains from our investment in technology. We face intense competition for qualified employees, and there can be no assurance that we will be able to attract and retain such employees or that such competition among potential employers will not result in increasing salaries. An

inability to retain existing employees or attract additional employees could have a material adverse effect on our business, cash flows, financial condition and results of operations.

We would be adversely affected if we fail to adequately plan for succession of our Chairman, President and Chief Executive Officer and other senior management and retention of key executives. While we have succession plans in place for members of our senior management, and continue to review and update those plans, and we have employment arrangements with certain key executives, these plans and arrangements do not guarantee that the services of our senior executives will continue to be available to us or that we will be able to attract, transition and retain suitable successors.

Indiana law, other applicable laws, our articles of incorporation and bylaws, and provisions of our BCBSA license agreements may prevent or discourage takeovers and business combinations that our shareholders might consider to be in their best interest.

Indiana law and our articles of incorporation and bylaws may delay, defer, prevent or render more difficult a takeover attempt that our shareholders might consider in their best interests. For instance, they may prevent our shareholders from receiving the benefit from any premium to the market price of our common stock offered by a bidder in a takeover context. Even in the absence of a takeover attempt, the existence of these provisions may adversely affect the prevailing market price of our common stock if they are viewed as discouraging takeover attempts in the future.

We are regulated as an insurance holding company and subject to the insurance holding company acts of the states in which our insurance company subsidiaries are domiciled, as well as similar provisions included in the health statutes and regulations of certain states where these subsidiaries are regulated as managed care companies or HMOs. The insurance holding company acts and regulations and these similar health provisions restrict the ability of any person to obtain control of an insurance company or HMO without prior regulatory approval. Under those statutes and regulations, without such approval or an exemption, no person may acquire any voting security of a domestic insurance company or HMO, or an insurance holding company which controls an insurance company or HMO, or merge with such a holding company, if as a result of such transaction such person would "control" the insurance holding company, insurance company or HMO. "Control" is generally defined as the direct or indirect power to direct or cause the direction of the management and policies of a person and is presumed to exist if a person directly or indirectly owns or controls 10% or more of the voting securities of another person. Further, the Indiana Business Corporation Law contains business combination provisions that, in general, prohibit for five years any business combination with a beneficial owner of 10% or more of our common stock unless the holder's acquisition of the stock was approved in advance by our Board of Directors.

Our articles of incorporation restrict the beneficial ownership of our capital stock in excess of specific ownership limits. The ownership limits restrict beneficial ownership of our voting capital stock to less than 10% for institutional investors and less than 5% for non-institutional investors, both as defined in our articles of incorporation. Additionally, no person may beneficially own shares of our common stock representing a 20% or more ownership interest in us. These restrictions are intended to ensure our compliance with the terms of our licenses with the BCBSA. Our articles of incorporation prohibit ownership of our capital stock beyond these ownership limits without prior approval of a majority of our continuing directors (as defined in our articles of incorporation). In addition, as discussed above in the risk factor describing our license agreements with the BCBSA, such license agreements are subject to termination upon a change of control and a re-establishment fee would be imposed upon termination of the license agreements.

Certain other provisions included in our articles of incorporation and bylaws may also have anti-takeover effects and may delay, defer or prevent a takeover attempt that our shareholders might consider to be in their best interests. In particular, our articles of incorporation and bylaws: divide our Board of Directors into three classes serving staggered three-year terms (which is required by our license agreement with the BCBSA); permit our Board of Directors to determine the terms of and issue one or more series of preferred stock without further action by shareholders; restrict the maximum number of directors; limit the ability of shareholders to remove directors; impose restrictions on shareholders' ability to fill vacancies on our Board of Directors; prohibit shareholders from calling special meetings of shareholders; impose advance notice requirements for shareholder proposals and nominations of directors to be considered at meetings of shareholders; and prohibit shareholders from amending certain provisions of our bylaws.

We also face other risks that could adversely affect our business, financial condition or results of operations, which include:

- any requirement to restate financial results in the event of inappropriate application of accounting principles;
- a significant failure of our internal control over financial reporting;
- failure of our prevention and control systems related to employee compliance with internal policies, including data security;
- provider fraud that is not prevented or detected and impacts our medical costs or those of self-insured customers;
- failure to protect our proprietary information; and
- failure of our corporate governance policies or procedures.

ITEM 1B. UNRESOLVED SEC STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

Our principal executive offices are located at 120 Monument Circle, Indianapolis, Indiana. In addition to this location, we have operating facilities located in each state where we operate as licensees of the BCBSA, in each state where Amerigroup conducts business and in certain other states where our other subsidiaries operate. A majority of these locations are leased properties. Our facilities support our various business segments. We believe that our properties are adequate and suitable for our business as presently conducted as well as for the foreseeable future.

ITEM 3. LEGAL PROCEEDINGS.

For information regarding our legal proceedings, see the "*Litigation,*" "*Cyber Attack Incident*" and "*Other Contingencies*" sections of Note 13, "Commitments and Contingencies" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

ITEM 4. MINE SAFETY DISCLOSURES.

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

Market Prices

Our common stock, par value $0.01 per share, is listed on the NYSE under the symbol "ANTM." On February 9, 2018, the closing price on the NYSE was $231.71. As of February 9, 2018, there were 63,695 shareholders of record of our common stock. The following table presents high and low sales prices for our common stock on the NYSE for the periods indicated.

	High	Low
2017		
First Quarter	$ 170.79	$ 140.50
Second Quarter	194.94	163.87
Third Quarter	198.98	179.40
Fourth Quarter	236.39	182.31
2016		
First Quarter	$ 144.69	$ 115.63
Second Quarter	148.00	122.91
Third Quarter	143.18	122.52
Fourth Quarter	148.26	114.85

Dividends

The cash dividend declared by our Board of Directors was $0.650 per share for each of the first and second quarters of 2017 and $0.700 per share for each of the third and fourth quarters of 2017. The quarterly cash dividend declared by our Board of Directors was $0.650 and $0.625 per share in 2016 and 2015, respectively. On January 30, 2018, our Board of Directors declared a quarterly cash dividend to shareholders of $0.750 per share.

We regularly review the appropriate use of capital, including acquisitions, common stock and debt security repurchases and dividends to shareholders. The declaration and payment of any dividends or repurchases of our common stock or debt is at the discretion of our Board of Directors and depends upon our financial condition, results of operations, future liquidity needs, regulatory and capital requirements and other factors deemed relevant by our Board of Directors. Further, our ability to pay dividends to our shareholders, if authorized by our Board of Directors, is significantly dependent upon the receipt of dividends from our subsidiaries, including Anthem Insurance Companies, Inc., Anthem Southeast, Inc., Anthem Holding Corp., WellPoint Holding Corp., WellPoint Acquisition, LLC, WellPoint Insurance Services, Inc., ATH Holding Company, LLC, Anthem Partnership Holding Company, LLC, SellCore, Inc., Legato Holdings I, Inc. and Newco Holdings, Inc. The payment of dividends by our insurance subsidiaries without prior approval of the insurance department of each subsidiary's domiciliary jurisdiction is limited by formula. Dividends in excess of these amounts are subject to prior approval by the respective insurance departments.

Securities Authorized for Issuance under Equity Compensation Plans

The information required by this Item concerning securities authorized for issuance under our equity compensation plans is set forth in or incorporated by reference into Part III, Item 12 "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" in this Annual Report on Form 10-K.

Issuer Purchases of Equity Securities

The following table presents information related to our repurchases of common stock for the periods indicated:

Period	Total Number of Shares Purchased[1]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs[2]	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Programs
(In millions, except share and per share data)				
October 1, 2017 to October 31, 2017	991,701	$ 190.43	989,900	$ 2,352.0
November 1, 2017 to November 30, 2017	250,400	219.60	249,900	2,297.1
December 1, 2017 to December 31, 2017	524,817	226.95	524,244	7,178.1
	1,766,918		1,764,044	

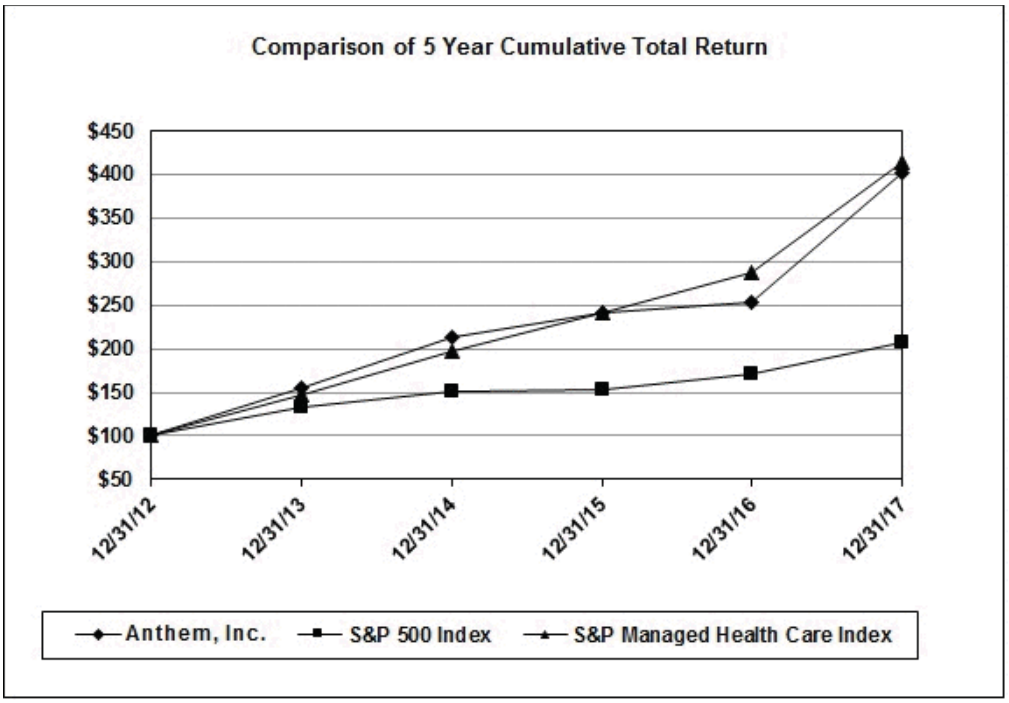
1 Total number of shares purchased includes 2,874 shares delivered to or withheld by us in connection with employee payroll tax withholding upon exercise or vesting of stock awards. Stock grants to employees and directors and stock issued for stock option plans and stock purchase plans in the consolidated statements of shareholders' equity are shown net of these shares purchased.

2 Represents the number of shares repurchased through the common stock repurchase program authorized by our Board of Directors, which the Board evaluates periodically. During the year ended December 31, 2017, we repurchased 10,518,545 shares at a cost of $1,997.7 under the program, including the cost of options to purchase shares. The Board of Directors has authorized our common stock repurchase program since 2003. The Board's most recent authorized increase to the program was $5,000.0 on December 7, 2017. Between January 1, 2018 and February 9, 2018, we repurchased 660,010 shares at a cost of $156.6, bringing our current availability to $7,021.5 at February 9, 2018. No duration has been placed on our common stock repurchase program and we reserve the right to discontinue the program at any time.

Performance Graph

The following Performance Graph and related information compares the cumulative total return to shareholders of our common stock for the period from December 31, 2012 through December 31, 2017, with the cumulative total return over such period of (i) the Standard & Poor's 500 Stock Index (the "S&P 500 Index") and (ii) the Standard & Poor's Managed Health Care Index (the "S&P Managed Health Care Index"). The graph assumes an investment of $100 on December 31, 2012 in each of our common stock, the S&P 500 Index and the S&P Managed Health Care Index (and the reinvestment of all dividends).

The comparisons shown in the graph below are based on historical data and we caution that the stock price performance shown in the graph below is not indicative of, and is not intended to forecast, the potential future performance of our common stock. Information used in the graph was obtained from S&P Capital IQ, a source believed to be reliable, but we are not responsible for any errors or omissions in such information. The following graph and related information shall not be deemed "soliciting materials" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Exchange Act, except to the extent that we specifically incorporate it by reference into such filing.



	December 31,					
	2012	2013	2014	2015	2016	2017
Anthem, Inc.	$ 100	$ 155	$ 213	$ 241	$ 253	$ 402
S&P 500 Index	100	132	151	153	171	208
S&P Managed Health Care Index	100	148	198	241	288	415

Based upon an initial investment of $100 on December 31, 2012 with dividends reinvested.

ITEM 6. SELECTED FINANCIAL DATA.

The table below provides selected consolidated financial data of Anthem. The information has been derived from our consolidated financial statements for each of the years in the five year period ended December 31, 2017. You should read this selected consolidated financial data in conjunction with the audited consolidated financial statements and notes as of and for the year ended December 31, 2017 included in Part II, Item 8 "Financial Statements and Supplementary Data," and Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in this Annual Report on Form 10-K.

	As of and for the Years Ended December 31				
	2017 [1]	2016	2015 [1]	2014 [2]	2013 [2]
(in millions, except where indicated and except per share data)					
Income Statement Data					
Total operating revenue[3]	$ 89,061.2	$ 84,194.0	$ 78,404.8	$ 73,021.7	$ 70,191.4
Total revenues	90,039.4	84,863.0	79,156.5	73,874.1	71,023.5
Income from continuing operations	3,842.8	2,469.8	2,560.0	2,560.1	2,634.3
Net income	3,842.8	2,469.8	2,560.0	2,569.7	2,489.7
Per Share Data					
Basic net income per share - continuing operations	$ 14.70	$ 9.39	$ 9.73	$ 9.28	$ 8.83
Diluted net income per share - continuing operations	14.35	9.21	9.38	8.96	8.67
Dividends per share	2.70	2.60	2.50	1.75	1.50
Other Data (unaudited)					
Benefit expense ratio[4]	86.4%	84.8%	83.3%	83.1%	85.1%
Selling, general and administrative expense ratio[5]	14.2%	14.9%	16.0%	16.1%	14.2%
Income from continuing operations before income tax expense as a percentage of total revenues	4.4%	5.4%	5.9%	5.9%	5.4%
Net income as a percentage of total revenues	4.3%	2.9%	3.2%	3.5%	3.5%
Medical membership (*in thousands*)	40,244	39,919	38,599	37,499	35,653
Balance Sheet Data					
Cash and investments[6]	$ 25,179.0	$ 23,262.7	$ 21,064.5	$ 22,061.6	$ 21,107.0
Total assets	70,540.0	65,083.1	61,717.8	61,676.3	59,095.3
Long-term debt, less current portion	17,382.2	14,358.5	15,324.5	14,019.6	13,477.4
Total liabilities	44,037.1	39,982.7	38,673.7	37,425.0	34,330.1
Total shareholders' equity	26,502.9	25,100.4	23,044.1	24,251.3	24,765.2

1 The net assets of and results of operations for HealthSun and Simply Healthcare are included from their respective acquisition dates of December 21, 2017 and February 17, 2015, respectively.
2 The operating results of 1-800 CONTACTS, Inc. are reported as discontinued operations at December 31, 2014 and 2013 as a result of the divestiture completed on January 31, 2014. Included in net income for the year ended December 31, 2014 is income from discontinued operations, net of tax, of $9.6. Included in net income for the year ended December 31, 2013 is a loss from discontinued operations, net of tax, of $144.6.
3 Operating revenue is obtained by adding premiums, administrative fees and other revenue.
4 The benefit expense ratio represents benefit expenses as a percentage of premium revenue.
5 The selling, general and administrative expense ratio represents selling, general and administrative expenses as a percentage of total operating revenue.
6 Cash and investments is obtained by adding cash and cash equivalents, current and long-term fixed maturity securities and current and long-term equity securities.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

(In Millions, Except Per Share Data or As Otherwise Stated Herein)

References in this Annual Report on Form 10-K to the terms "we," "our," "us," "Anthem" or the "Company" refer to Anthem, Inc., an Indiana corporation, and, unless the context otherwise requires, its direct and indirect subsidiaries. References to the term "states" include the District of Columbia, unless the context otherwise requires.

This Management's Discussion and Analysis, or MD&A, should be read in conjunction with our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Overview

We manage our operations through three reportable segments: Commercial & Specialty Business, Government Business and Other. We regularly evaluate the appropriateness of our reportable segments, particularly in light of organizational changes, merger and acquisition activity and changing laws and regulations. As a result, these reportable segments may change in the future.

Our Commercial & Specialty Business segment includes our Local Group, National Accounts, Individual and Specialty businesses. Business units in the Commercial & Specialty Business segment offer fully-insured health products; provide a broad array of managed care services to self-funded customers including claims processing, underwriting, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services; and provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits, radiology benefit management and analytics-driven personal healthcare guidance.

Our Government Business segment includes our Medicare and Medicaid businesses, National Government Services, or NGS, and services provided to the federal government in connection with FEP®. Medicaid makes federal matching funds available to all states for the delivery of healthcare benefits to eligible individuals, principally those with incomes below specified levels who meet other state-specified requirements. Medicaid is structured to allow each state to establish its own eligibility standards, benefits package, payment rates and program administration under broad federal guidelines. Our Medicare customers are Medicare-eligible individual members age 65 and over who have enrolled in Medicare Advantage, a managed care alternative for the Medicare program, who have purchased Medicare Supplement benefit coverage, some disabled members under age 65, or members of all ages with end stage renal disease. Medicare Supplement policies are sold to Medicare recipients as supplements to the benefits they receive from the Medicare program. Rates are filed with, and in some cases approved by, state insurance departments. Most of the premium for Medicare Advantage is paid directly by the federal government on behalf of the participant who may also be charged a small premium. Additionally, through our alliance partnership engagements with larger provider groups and BCBS plans, we offer a variety of Medicaid services that include joint ventures, administrative service offerings, and full-risk arrangements. NGS acts as a Medicare contractor for the federal government in several regions across the nation.

Our Other segment includes other businesses that do not individually meet the quantitative thresholds for an operating segment as defined by Financial Accounting Standards Board, or FASB, guidance, as well as corporate expenses not allocated to either of our other reportable segments.

Our operating revenue consists of premiums, administrative fees and other revenue. Premium revenue comes from fully-insured contracts where we indemnify our policyholders against costs for covered health and life benefits. Administrative fees come from contracts where our customers are self-insured, or where the fee is based on either processing of transactions or a percent of network discount savings realized. Additionally, we earn administrative fee revenues from our Medicare processing business and from other health-related businesses including disease management programs. Other revenue includes miscellaneous income other than premium revenue and administrative fees.

Our benefit expense primarily includes costs of care for health services consumed by our fully-insured members, such as outpatient care, inpatient hospital care, professional services (primarily physician care) and pharmacy benefit costs. All four components are affected both by unit costs and utilization rates. Unit costs include the cost of outpatient medical procedures

per visit, inpatient hospital care per admission, physician fees per office visit and prescription drug prices. Utilization rates represent the volume of consumption of health services and typically vary with the age and health status of our members and their social and lifestyle choices, along with clinical protocols and medical practice patterns in each of our markets. A portion of benefit expense recognized in each reporting period consists of actuarial estimates of claims incurred but not yet paid by us. Any changes in these estimates are recorded in the period the need for such an adjustment arises. While we offer a diversified mix of managed care products and services through our managed care plans, our aggregate cost of care can fluctuate based on a change in the overall mix of these products and services. Our managed care plans include: Preferred Provider Organizations, or PPOs; Health Maintenance Organizations, or HMOs; Point-of-Service plans, or POS plans; traditional indemnity plans and other hybrid plans, including Consumer-Driven Health Plans, or CDHPs; and hospital only and limited benefit products.

We classify certain claims-related costs as benefit expense to reflect costs incurred for our members' traditional medical care, as well as those expenses which improve our members' health and medical outcomes. These claims-related costs may be comprised of expenses incurred for: (i) medical management, including case and utilization management; (ii) health and wellness, including disease management services for such conditions as diabetes, high-risk pregnancies, congestive heart failure and asthma management and wellness initiatives like weight-loss programs and smoking cessation treatments; and (iii) clinical health policy. These types of claims-related costs are designed to ultimately lower our members' cost of care.

Our selling expense consists of external broker commission expenses, and generally varies with premium or membership volume. Our general and administrative expense consists of fixed and variable costs. Examples of fixed costs are depreciation, amortization and certain facilities expenses. Certain variable costs, such as premium taxes, vary directly with premium volume. Other variable costs, such as salaries and benefits, do not vary directly with changes in premium but are more aligned with changes in membership. The acquisition or loss of a significant block of business would likely impact staffing levels and thus, associated compensation expense. Other variable costs include professional and consulting expenses and advertising. Other factors can impact our administrative cost structure, including systems efficiencies, inflation and changes in productivity.

Our results of operations depend in large part on our ability to accurately predict and effectively manage healthcare costs through effective contracting with providers of care to our members and our medical management and health and wellness programs. Several economic factors related to healthcare costs, such as regulatory mandates of coverage as well as direct-to-consumer advertising by providers and pharmaceutical companies, have a direct impact on the volume of care consumed by our members. The potential effect of escalating healthcare costs, any changes in our ability to negotiate competitive rates with our providers and any regulatory or market driven restrictions on our ability to obtain adequate premium rates to offset overall inflation in healthcare costs, including increases in unit costs and utilization resulting from the aging of the population and other demographics, as well as advances in medical technology, may impose further risks to our ability to profitably underwrite our business, and may have a material adverse impact on our results of operations.

On December 22, 2017, the federal government enacted a tax bill, H.R.1, *An act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018*, or the Tax Cuts and Jobs Act. The Tax Cuts and Jobs Act contains significant changes to corporate taxation, including, but not limited to, reducing the U.S. federal corporate income tax rate from 35% to 21% and modifying or limiting many business deductions. At December 31, 2017, we had not completed our accounting for the tax effects resulting from the enactment of the Tax Cuts and Jobs Act; however, we have made a reasonable estimate of the effects on our existing deferred tax balances. We remeasured deferred tax assets and liabilities based on the rates at which they are expected to be utilized in the future, which is generally 21%. However, we are still analyzing certain aspects of the Tax Cuts and Jobs Act and refining our calculations, which could potentially affect the measurement of those balances or give rise to new deferred tax amounts. The provisional amount recorded related to the remeasurement of our deferred tax balance was a non-recurring benefit of $1,108.3 and is included as a component of income tax expense.

On February 15, 2018, we completed our acquisition of Freedom Health, Inc., Optimum HealthCare, Inc., America's 1st Choice of South Carolina, Inc. and related entities, or collectively, America's 1st Choice, a Medicare Advantage organization that offers HMO products, including Chronic Special Needs Plans and Dual-Eligible Special Needs Plans under its Freedom Health and Optimum HealthCare brands in Florida and its America's 1st Choice of South Carolina brand in South Carolina. Through its Medicare Advantage Plans, America's 1st Choice currently serves approximately one hundred and thirty

thousand members in twenty-five Florida and three South Carolina counties. The acquisition of America's 1st Choice aligns with our plans for continued growth in the Medicare Advantage and Special Needs populations.

On December 21, 2017, we completed our acquisition of HealthSun Health Plans, Inc., or HealthSun, which serves approximately forty thousand members in the state of Florida through its Medicare Advantage Plans, which received a five-star rating from the Centers for Medicare & Medicaid Services, or CMS. The HealthSun acquisition aligns with our plans for continued growth in the Medicare Advantage and dual-eligible populations.

In March 2016, we filed a lawsuit against our vendor for pharmacy benefit management services, Express Scripts, Inc., or Express Scripts, seeking to recover damages for pharmacy pricing that is higher than competitive benchmark pricing and damages related to operational breaches, as well as various declarations under the agreement between the parties. In April 2016, Express Scripts filed an answer to the lawsuit disputing our contractual claims and alleging various defenses and counterclaims. For additional information regarding this lawsuit, see Note 13, "Commitments and Contingencies - *Litigation,*" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K. In October 2017, we announced that we are establishing a new pharmacy benefits manager, or PBM, called IngenioRx, and have entered into a five-year agreement with CaremarkPCS Health, L.L.C., or CVS Health, to begin offering a full suite of PBM solutions starting on January 1, 2020, which coincides with the conclusion of our current agreement with Express Scripts.

On July 24, 2015, we and Cigna Corporation, or Cigna, announced that we entered into an Agreement and Plan of Merger, or Cigna Merger Agreement, dated as of July 23, 2015, to acquire all outstanding shares of Cigna. In July 2016, the U.S. Department of Justice, along with certain state attorneys general, filed a civil antitrust lawsuit in the U.S. District Court for the District of Columbia, or District Court, seeking to block the merger. On February 14, 2017, Cigna purported to terminate the Cigna Merger Agreement and commenced litigation against us in the Delaware Court of Chancery, or Delaware Court, seeking damages, including the $1,850.0 termination fee pursuant to the terms of the Cigna Merger Agreement, and a declaratory judgment that its purported termination of the Cigna Merger Agreement was lawful, among other claims, which is captioned *Cigna Corp. v. Anthem Inc.* We believe Cigna's allegations are without merit. Also on February 14, 2017, we initiated our own litigation against Cigna in the Delaware Court seeking a temporary restraining order to enjoin Cigna from terminating the Cigna Merger Agreement, specific performance compelling Cigna to comply with the Cigna Merger Agreement and damages, which is captioned *Anthem Inc. v. Cigna Corp*. On April 28, 2017, the U.S. Circuit Court of Appeals for the District of Columbia affirmed the ruling of the District Court, which blocked the merger. On May 11, 2017, the Delaware Court denied our motion to enjoin Cigna from terminating the Cigna Merger Agreement. On May 12, 2017, we delivered to Cigna a notice terminating the Cigna Merger Agreement. For additional information about these lawsuits, see Note 13, "Commitments and Contingencies - *Litigation,*" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

On February 17, 2015, we completed our acquisition of Simply Healthcare Holdings, Inc., or Simply Healthcare, a leading managed care company for people enrolled in Medicaid and Medicare programs in the state of Florida. This acquisition aligns with our strategy for continued growth in our Government Business segment.

For additional information related to the acquisitions of America's 1st Choice, HealthSun and Simply Healthcare, see Note 3, "Business Acquisitions" included in Part II, Item 8 of this Annual Report on Form 10-K.

The future results of our operations will also be impacted by certain external forces and resulting changes in our business model and strategy. The Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, as amended, or collectively, the ACA, has changed and may continue to make broad-based changes to the U.S. healthcare system. The ACA presented us with new growth opportunities, but also introduced new risks, regulatory challenges and uncertainties, and required changes in the way products are designed, underwritten, priced, distributed and administered. Changes to our business are likely to continue for the next several years as elected officials at the national and state levels have proposed significant modifications to existing laws and regulations, including the potential repeal or replacement of the ACA and the reduction or elimination of federal subsidies made available through the ACA for certain public exchange Individual products, including the discontinuance of the cost-sharing reduction subsidy effective October 2017. As a result of the complexity of the ACA, its impact on healthcare in the United States and the continuing modification and interpretation of the ACA rules, we will continue to evaluate the impact of the ACA as additional guidance is made

available. For additional discussion, see Part I, Item 1 “Business - Regulation,” and Part I, Item 1A “Risk Factors” in this Annual Report on Form 10-K.

Product pricing remains competitive and we strive to price our healthcare benefit products consistent with anticipated underlying medical trends. We believe our pricing strategy, based on predictive modeling, proprietary research and data-driven processes has positioned us to benefit from the potential growth opportunities available through entry into new markets, expansions in existing markets and as a result of any subsequent changes to the current regulatory scheme. We believe that our pricing strategy, brand name and network quality will provide a strong foundation for membership growth opportunities in the future.

In the Individual and Small Group markets, we offer on-exchange products through state or federally facilitated marketplaces, referred to as public exchanges, and off-exchange products. Federal subsidies are available for certain members, subject to income and family size, who purchase public exchange products. During 2017, we notified various state regulators of our decision to dramatically reduce our participation in the Individual ACA-compliant marketplaces within their respective states. The uncertainty around, and subsequent termination of, the federal funding of the cost-sharing reduction subsidy available through the ACA was an important factor as we evaluated the appropriate level of our marketplace participation. Our strategy has been, and will continue to be, to only participate in rating regions where we have an appropriate level of confidence that these markets are on a path toward sustainability, including, but not limited to, factors such as expected financial performance, regulatory environment, and underlying market characteristics. In 2018, we will continue to offer Individual ACA-compliant products in 56 of the 143 rating regions in which we operate.

Private exchanges have gained visibility in the marketplace based on the promise of helping employers reduce costs, increase consumer engagement and manage the complexities created by the ACA and other market forces. While private exchanges have been a distribution channel in the Medicare and Individual markets for some time, in more recent years the Commercial market has received an increased level of attention from the consulting and broker communities as well as health insurance carriers. In response, we have continued our broad-based strategy of offering our own private exchange, Anthem Health Marketplace, consumer experience platform to groups, while also participating in four large national consultant-led exchanges, several regional broker-led exchanges and various Individual, Commercial and Medicare exchanges. To date, adoption levels in the Commercial market overall have been lower than analyst predictions. While the ultimate volume, pace of growth and winning business models remain highly uncertain in this space, we continue to believe we are well positioned to adapt with the market as it evolves.

Current federal law stemming from the ACA imposes regulations on the health insurance sector, including, but not limited to, guaranteed coverage and expanded benefit requirements; prohibitions on some annual and all lifetime limits on amounts paid on behalf of or to our members; minimum medical loss ratio, or MLR, and customer rebate requirements; establishment of a mandatory annual Health Insurance Provider Fee, or HIP Fee; a federal rate review process; a requirement to cover preventive services on a first dollar basis; the utilization of public exchanges to offer Individual and Small Group products; and greater limitations on how we price certain of our products. In addition, the legislation reduces the reimbursement levels for our health plans participating in the Medicare Advantage program over time and limits the amount of executive compensation that is deductible for income tax purposes.

As a result of the ACA, the U.S. Department of Health and Human Services, or HHS, issued MLR regulations that require us to meet minimum MLR thresholds for Large Group, Small Group and Individual lines of business. Plans that do not meet the minimum thresholds will have to pay a MLR rebate. For purposes of determining MLR rebates, HHS has defined the types of costs that should be included in the MLR rebate calculation. However, certain components of the MLR calculation as defined by HHS cannot be classified consistently under U.S. generally accepted accounting principles, or GAAP. While considered benefit expense or a reduction of premium revenue by HHS, certain of these costs are classified as other types of expense, such as income tax expense or general and administrative expense, in our GAAP basis financial statements. Accordingly, the benefit expense ratio determined using our consolidated GAAP operating results is not comparable to the MLR calculated under HHS regulations.

The ACA also imposed a separate minimum MLR threshold of 85% for Medicare Advantage and Medicare Part D prescription drug plans, or Medicare Part D. Medicare Advantage or Medicare Part D plans that do not meet this threshold will have to pay a minimum MLR rebate. If a plan’s MLR is below 85% for three consecutive years beginning with 2014,

enrollment will be restricted. A Medicare Advantage or Medicare Part D plan contract will be terminated if the plan's MLR is below 85% for five consecutive years.

The ACA imposed an annual HIP Fee on health insurers that write certain types of health insurance on U.S. risks. The annual HIP Fee is allocated to health insurers based on the ratio of the amount of an insurer's net premium revenues written during the preceding calendar year to an adjusted amount of health insurance for all U.S. health risk for those certain lines of business written during the preceding calendar year. We record our estimated liability for the HIP Fee in full at the beginning of the year with a corresponding deferred asset that is amortized on a straight-line basis to general and administrative expense. The final calculation and payment of the annual HIP Fee occurs in the third quarter each year. The HIP Fee is non-deductible for federal income tax purposes. We price our affected products to cover the increased general and administrative and tax expenses associated with the HIP Fee. The total amount due from allocations to health insurers was $11,300.0 for each of 2015 and 2016, was suspended for 2017, has resumed and increased to $14,300.0 for 2018 and is suspended for 2019. For the years ended December 31, 2016 and 2015, we recognized $1,176.3 and $1,207.5, respectively, as general and administrative expense related to the HIP Fee. There was no corresponding expense for 2017 due to the suspension of the HIP Fee for 2017.

These and other provisions of the ACA are likely to have significant effects on our future operations, which, in turn, could impact the value of our business model and results of operations, including potential impairments of our goodwill and other intangible assets. We will continue to evaluate the impact of the ACA including any substantial changes to existing laws or regulations that may impact our business. For additional discussion regarding the ACA, see Part I, Item 1 “Business—Regulation” and Part I, Item 1A “Risk Factors” in this Annual Report on Form 10-K.

Finally, federal and state regulatory agencies may further restrict our ability to obtain new product approvals, implement changes in premium rates, impose new taxes or impose additional restrictions, under new or existing laws that could adversely affect our business, cash flows, financial condition and results of operations.

The National Organization of Life & Health Insurance Guaranty Associations, or NOLHGA, is a voluntary organization consisting of the state life and health insurance guaranty associations located throughout the U.S. Such associations, working together with NOLHGA, provide a safety net for their state’s policyholders, ensuring that they continue to receive coverage, subject to state maximum limits, even if their insurer is declared insolvent. In March 2017, long term care insurance writers Penn Treaty Network America Insurance Company and its subsidiary, American Network Insurance Company (collectively, Penn Treaty), were ordered to be liquidated by the Pennsylvania state court, which had jurisdiction over the Penn Treaty rehabilitation proceeding. We and other insurers will be obligated to pay a portion of their policyholder claims through state guaranty association assessments in future periods. We estimated our portion of these net assessments for the insolvency of Penn Treaty to be approximately $253.8 and recorded the estimate as a general and administrative expense. Payment of the assessments will be largely recovered through premium billing surcharges and premium tax credits over future years.

In addition to the external forces discussed in the preceding paragraphs, our results of operations are impacted by levels and mix of membership. In recent years, we have experienced membership growth due to the quality and pricing of our health benefits products and services, improved economic conditions, decreases in unemployment, acquisitions, entry into new markets and expansions in existing markets. In addition, we believe the self-insured portion of our group membership base will continue to increase as a percentage of total group membership. However, these membership trends could be negatively impacted by various factors that could have a material adverse effect on our future results of operations such as general economic downturns that result in business failures, failure to obtain new customers or retain existing customers, premium increases, benefit changes or our exit from a specific market. Further, our mix of membership may include more individuals with a higher acuity level obtaining coverage through our products available on the public exchanges, which may not be appropriately adjusted for in our premium rates.

In February 2015, we reported that we were the target of a sophisticated external cyber attack. The attackers gained unauthorized access to certain of our information technology systems and obtained personal information related to many individuals and employees. We have continued to implement security enhancements since this incident. For additional information about the cyber attack, see Note 13, “Commitments and Contingencies - *Cyber Attack Incident*,” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Also see Part I, Item 1A "Risk Factors" in this Annual Report on Form 10-K, for a discussion of the factors identified above and other risk factors that could cause actual results to differ materially from those contained in forward-looking statements made in this Annual Report on Form 10-K and presented elsewhere by management from time to time.

Executive Summary

We are one of the largest health benefits companies in the United States in terms of medical membership, serving 40.2 medical members through our affiliated health plans as of December 31, 2017. We are an independent licensee of the Blue Cross and Blue Shield Association, or BCBSA, an association of independent health benefit plans. We serve our members as the Blue Cross licensee for California and as the Blue Cross and Blue Shield, or BCBS, licensee for Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri (excluding 30 counties in the Kansas City area), Nevada, New Hampshire, New York (in varying counties as BCBS, Blue Cross or Empire BlueCross BlueShield HealthPlus), Ohio, Virginia (excluding the Northern Virginia suburbs of Washington, D.C.) and Wisconsin. In a majority of these service areas we do business as Anthem Blue Cross, Anthem Blue Cross and Blue Shield, Blue Cross and Blue Shield of Georgia, and Empire Blue Cross Blue Shield or Empire Blue Cross (in our New York service areas). We also conduct business through arrangements with other BCBS licensees in Louisiana, South Carolina and western New York. Through our AMERIGROUP Corporation, or Amerigroup, subsidiary and other subsidiaries, we conduct business in Florida, Georgia, Iowa, Kansas, Maryland, Nevada, New Jersey, New Mexico, Tennessee, Texas, Washington and Washington, D.C. In addition, we conduct business through our Simply Healthcare and HealthSun subsidiaries in Florida. We also serve customers throughout the country as HealthLink, UniCare, and in certain Arizona, California, Connecticut, Iowa, Nevada, Tennessee and Virginia markets through our CareMore Health Group, Inc., or CareMore, subsidiary. We are licensed to conduct insurance operations in all 50 states and the District of Columbia through our subsidiaries.

Operating revenue for the year ended December 31, 2017 was $89,061.2, an increase of $4,867.2, or 5.8%, from the year ended December 31, 2016. The increase in operating revenue was primarily a result of higher premium revenue in both our Government Business and Commercial & Specialty Business segments, and, to a lesser extent, increased administrative fee revenue in our Commercial & Specialty Business segment.

Net income for the year ended December 31, 2017 was $3,842.8, an increase of $1,373.0, or 55.6%, from the year ended December 31, 2016. The increase in net income was primarily a result of lower income tax expense and an increase in net earnings from investment activities. The increase in net income was partially offset by lower operating results in both our Government Business and Commercial & Specialty Business segments and losses realized on extinguishment of debt.

Our diluted earnings per share, or EPS, for the year ended December 31, 2017 was $14.35, an increase of $5.14, or 55.8%, from the year ended December 31, 2016. Our diluted shares for the year ended December 31, 2017 were 267.8, a decrease of 0.3, or 0.1% compared to the year ended December 31, 2016. The increase in EPS resulted from the increase in net income, and to a lesser extent, the lower number of shares outstanding in 2017.

Operating cash flow for the year ended December 31, 2017 was $4,184.8, or 1.1 times net income. Operating cash flow for the year ended December 31, 2016 was $3,270.2, or 1.3 times net income. The increase in operating cash flow from 2016 of $914.6 was primarily attributable to an increase in premium receipts as a result of both rate increases across our businesses designed to cover overall cost trends, and growth in membership. The increase in cash flow was partially offset by an increase in claims payments due to higher medical cost experience and growth in membership. The increase was further offset by an increase in spend to support our growth initiatives, the timing of provider capitation payments for pass-through funding under the California Medicaid contract and the timing of certain state Medicaid payments.

Our results of operations discussed throughout this MD&A are determined in accordance with GAAP. We also calculate operating gain, a non-GAAP measure, to further aid investors in understanding and analyzing our core operating results and comparing them among periods. We define operating revenue as premium income, administrative fees and other revenues. Operating gain is calculated as total operating revenue less benefit expense, and selling, general and administrative expense. We use these measures as a basis for evaluating segment performance, allocating resources, forecasting future operating periods and setting incentive compensation targets. This information is not intended to be considered in isolation or as a substitute for income before income tax expense, net income or EPS prepared in accordance with GAAP, and may not be comparable to similarly titled measures reported by other companies. For additional details on operating gain, see our "Reportable Segments Results of Operations" discussion included in this MD&A. For a reconciliation of reportable segment

operating revenue to the amounts of total revenue included in the consolidated statements of income and a reconciliation of reportable segment operating gain to income before income tax expense, see Note 19, "Segment Information," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

We intend to expand through a combination of organic growth, strategic acquisitions and efficient use of capital in both existing and new markets. Our growth strategy is designed to enable us to take advantage of additional economies of scale, as well as providing us access to new and evolving technologies and products. In addition, we believe geographic and product diversity reduces our exposure to local or regional regulatory, economic and competitive pressures and provides us with increased opportunities for growth. While we have achieved strong growth as a result of strategic mergers and acquisitions, we have also achieved organic growth in our existing markets over time by delivering excellent service, offering competitively priced products, providing access to high quality provider networks and effectively capitalizing on the brand strength of the Blue Cross and Blue Shield names and marks.

Significant Transactions

The significant transactions that have occurred over the last three years that have impacted or will impact our capital structure or that have or will influence how we conduct our business operations include:

- Acquisition of America's 1st Choice (2018);
- Acquisition of HealthSun (2017);
- Acquisition of Simply Healthcare (2015); and
- Board of Directors declaration of dividends on common stock (2013 through January 2018); authorization for repurchases of our common stock (2017 and prior); and debt repurchases and new debt issuance (2017 and prior).

For additional information regarding these transactions, see Note 3, “Business Acquisitions,” Note 12, "Debt" and Note 14, “Capital Stock,” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Membership

Our medical membership includes seven different customer types: Local Group, Individual, National Accounts, BlueCard®, Medicare, Medicaid and FEP®. BCBS-branded business generally refers to members in our service areas licensed by the BCBSA. Non-BCBS-branded business refers to Amerigroup, CareMore, HealthSun and Simply Healthcare members as well as HealthLink and UniCare members predominantly outside of our BCBSA service areas, and effective February 12, 2018, our America's 1st Choice members.

- Local Group consists of those employer customers with less than 5% of eligible employees located outside of the headquarter state, as well as customers with more than 5% of eligible employees located outside of the headquarter state with up to 5,000 eligible employees. In addition, Local Group includes UniCare members and Employer Group Medicare Advantage members, or retired members of Local Group accounts who have selected a Medicare Advantage product. Local Group accounts are generally sold through brokers or consultants working with industry specialists from our in-house sales force and are offered both on and off the public exchanges. Local Group insurance premiums may be based on claims incurred by the group or sold on a self-insured basis. The customer’s buying decision is typically based upon the size and breadth of our networks, customer service, the quality of our medical management services, the administrative cost included in our quoted price, our financial stability, our reputation and our ability to effectively service large complex accounts. Local Group accounted for 39.4%, 38.7% and 39.5% of our medical members at December 31, 2017, 2016 and 2015, respectively.
- Individual consists of individual customers under age 65 and their covered dependents. Individual policies are generally sold through independent agents and brokers, retail partnerships, our in-house sales force or via the exchanges. Individual business is sold on a fully-insured basis. We offer on-exchange products through public exchanges and off-exchange products. Federal premium subsidies are available only for certain public exchange Individual products. Unsubsidized Individual customers are generally more sensitive to product pricing and, to a lesser extent, the configuration of the network, and the efficiency of administration. Customer turnover is generally

higher with Individual as compared to Local Group. Individual business accounted for 3.9%, 4.2% and 4.3% of our medical members at December 31, 2017, 2016 and 2015, respectively.

- National Accounts generally consist of multi-state employer groups primarily headquartered in an Anthem service area with at least 5% of the eligible employees located outside of the headquarter state and with more than 5,000 eligible employees. Some exceptions are allowed based on broker and consultant relationships. Service area is defined as the geographic area in which we are licensed to sell BCBS products. National Accounts are generally sold through independent brokers or consultants retained by the customer working with our in-house sales force. We believe we have an advantage when competing for very large National Accounts due to the size and breadth of our networks and our ability to access the national provider networks of BCBS companies at their competitive local market rates. In addition, Employer Group Medicare Advantage members related to National Accounts groups are reported as part of National Accounts membership. National Accounts represented 19.1%, 19.4% and 19.1% of our medical members at December 31, 2017, 2016 and 2015, respectively.
- BlueCard® host customers represent enrollees of Blue Cross and/or Blue Shield plans not owned by Anthem who receive healthcare services in our BCBSA licensed markets. BlueCard® membership consists of estimated host members using the national BlueCard® program. Host members are generally members who reside in or travel to a state in which an Anthem subsidiary is the Blue Cross and/or Blue Shield licensee and who are covered under an employer-sponsored health plan issued by a non-Anthem controlled BCBSA licensee (i.e., the "home plan"). We perform certain administrative functions for BlueCard® members, for which we receive administrative fees from the BlueCard® members' home plans. Other administrative functions, including maintenance of enrollment information and customer service, are performed by the home plan. Host members are computed using, among other things, the average number of BlueCard® claims received per month. BlueCard® host membership accounted for 13.7%, 13.9% and 14.0% of our medical members at December 31, 2017, 2016 and 2015, respectively.
- Medicare customers are Medicare-eligible individual members age 65 and over who have enrolled in Medicare Supplement plans; Medicare Advantage, including Special Needs Plans; Medicare Part D; and dual-eligible programs through Medicare-Medicaid Plans, or MMPs. Medicare Supplement plans typically pay the difference between healthcare costs incurred by a beneficiary and amounts paid by Medicare. Medicare Advantage plans provide Medicare beneficiaries with a managed care alternative to traditional Medicare and often include a Medicare Part D benefit. In addition, our Medicare Advantage Special Needs Plans provide tailored benefits to Medicare beneficiaries who have chronic diseases and also cover certain dual-eligible customers, who are low-income seniors and persons under age 65 with disabilities. Medicare Part D offers a prescription drug plan to Medicare and MMP beneficiaries. MMP is a demonstration program focused on serving members who are dually eligible for Medicaid and Medicare, which was established as a result of the passage of the ACA. Medicare Supplement and Medicare Advantage products are marketed in the same manner, primarily through independent agents and brokers. Medicare business accounted for 3.8%, 3.6% and 3.7% of our medical members at December 31, 2017, 2016 and 2015, respectively.
- Medicaid membership represents eligible members who receive healthcare benefits through publicly funded healthcare programs, including Medicaid, ACA-related Medicaid expansion programs, Temporary Assistance for Needy Families, programs for seniors and people with disabilities, Children's Health Insurance Programs, and specialty programs such as those focused on long-term services and support, HIV/AIDS, foster care, behavioral health and/or substance abuse disorders, and intellectual disabilities or developmental disabilities, among others. Total Medicaid program business accounted for 16.1%, 16.4% and 15.3% of our medical members at December 31, 2017, 2016 and 2015, respectively.
- FEP® members consist of United States government employees and their dependents within our geographic markets through our participation in the national contract between the BCBSA and the U.S. Office of Personnel Management. FEP® business accounted for 3.9%, 3.9% and 4.1% of our medical members at December 31, 2017, 2016 and 2015, respectively.

In addition to reporting our medical membership by customer type, we report by funding arrangement according to the level of risk that we assume in the product contract. Our two principal funding arrangement categories are fully-insured and self-funded. Fully-insured products are products in which we indemnify our policyholders against costs for health benefits. Self-funded products are offered to customers, generally larger employers, who elect to retain most or all of the financial risk

associated with their employees' healthcare costs. Some self-funded customers choose to purchase stop loss coverage to limit their retained risk.

The following table presents our medical membership by customer type, funding arrangement and reportable segment as of December 31, 2017, 2016 and 2015. Also included below is other membership by product. The medical membership and other membership presented are unaudited and in certain instances include estimates of the number of members represented by each contract at the end of the period.

	December 31			2017 vs. 2016		2016 vs. 2015	
(In thousands)	2017	2016	2015	Change	% Change	Change	% Change
Medical Membership							
Customer Type							
Local Group	15,870	15,429	15,241	441	2.9 %	188	1.2 %
Individual	1,588	1,664	1,675	(76)	(4.6)%	(11)	(0.7)%
National:							
National Accounts	7,683	7,741	7,355	(58)	(0.7)%	386	5.2 %
BlueCard®	5,521	5,550	5,407	(29)	(0.5)%	143	2.6 %
Total National	13,204	13,291	12,762	(87)	(0.7)%	529	4.1 %
Medicare	1,545	1,438	1,439	107	7.4 %	(1)	(0.1)%
Medicaid	6,475	6,527	5,914	(52)	(0.8)%	613	10.4 %
FEP®	1,562	1,570	1,568	(8)	(0.5)%	2	0.1 %
Total Medical Membership	40,244	39,919	38,599	325	0.8 %	1,320	3.4 %
Funding Arrangement							
Self-Funded	24,966	24,688	23,666	278	1.1 %	1,022	4.3 %
Fully-Insured	15,278	15,231	14,933	47	0.3 %	298	2.0 %
Total Medical Membership	40,244	39,919	38,599	325	0.8 %	1,320	3.4 %
Reportable Segment							
Commercial & Specialty Business	30,662	30,384	29,678	278	0.9 %	706	2.4 %
Government Business	9,582	9,535	8,921	47	0.5 %	614	6.9 %
Total Medical Membership	40,244	39,919	38,599	325	0.8 %	1,320	3.4 %
Other Membership							
Life and Disability Members	4,700	4,732	4,849	(32)	(0.7)%	(117)	(2.4)%
Dental Members	5,864	5,486	5,206	378	6.9 %	280	5.4 %
Dental Administration Members	5,342	5,294	5,282	48	0.9 %	12	0.2 %
Vision Members	6,867	6,388	5,641	479	7.5 %	747	13.2 %
Medicare Advantage Part D Members	702	629	622	73	11.6 %	7	1.1 %
Medicare Part D Standalone Members	318	350	371	(32)	(9.1)%	(21)	(5.7)%

December 31, 2017 Compared to December 31, 2016

Medical Membership (in thousands)

During the year ended December 31, 2017, total medical membership increased 325, or 0.8%, primarily due to increases in our Local Group and Medicare membership, partially offset by decreases in our Individual, National Accounts, Medicaid and BlueCard® membership.

Self-funded medical membership increased 278, or 1.1%, primarily due to new sales and growth in our existing Large Group accounts, partially offset by lower activity from BlueCard® membership and the loss of a large multi-state employer group contract in our National Accounts.

Fully-insured membership increased 47, or 0.3%, primarily due to higher sales during Medicare open enrollment, new sales in Large Group accounts and Medicare membership acquired through the acquisition of HealthSun. These increases were partially offset by attrition in both our non-ACA-compliant and ACA-compliant off-exchange Individual product offerings.

Local Group membership increased 441, or 2.9%, primarily due to new sales and growth in our existing Large Group accounts.

Individual membership decreased 76, or 4.6%, primarily due to attrition in both our non-ACA-compliant and ACA-compliant off-exchange product offerings, partially offset by growth in our ACA-compliant on-exchange product offerings.

National Accounts membership decreased 58, or 0.7%, primarily due to the loss of a large multi-state employer group contract, partially offset by new sales.

BlueCard® membership decreased 29, or 0.5%, primarily due to lower membership activity at other BCBSA plans whose members reside in or travel to our licensed areas.

Medicare membership increased 107, or 7.4%, primarily due to higher sales during open enrollment, membership acquired through the acquisition of HealthSun and growth in certain existing Medicare Advantage markets.

Medicaid membership decreased 52, or 0.8%, primarily due to membership reverification processes and the impact of a new entrant in one of our existing markets, partially offset by new business expansions.

FEP® membership decreased 8, or 0.5%, primarily due to reduced federal hiring to replace retirees.

Other Membership (in thousands)

Our Other products are often ancillary to our health business and can therefore be impacted by corresponding changes in our medical membership.

Life and disability membership decreased 32, or 0.7%, primarily due to higher lapses in our fully-insured Local Group business.

Dental membership increased 378, or 6.9%, primarily due to new sales and increased penetration in our Local Group and National Account businesses.

Dental administration membership increased 48, or 0.9%, primarily due to membership expansion under current contracts.

Vision membership increased 479, or 7.5%, primarily due to new sales and increased penetration in our National Accounts, Local Group and Medicare product offerings.

Medicare Advantage Part D membership increased 73, or 11.6%, primarily due to membership acquired through the acquisition of HealthSun and higher sales during open enrollment.

Medicare Part D standalone membership decreased 32, or 9.1%, primarily due to our product repositioning strategies in certain markets.

December 31, 2016 Compared to December 31, 2015

Medical Membership (in thousands)

During the year ended December 31, 2016, total medical membership increased 1,320, or 3.4%, primarily due to increases in our Medicaid, National Accounts, Local Group and BlueCard® membership.

Self-funded medical membership increased 1,022, or 4.3%, primarily due to increases in our National Accounts, Large Group accounts and BlueCard® membership.

Fully-insured membership increased 298, or 2.0%, primarily due to growth in our Medicaid business, partially offset by declines in Local Group fully-insured membership.

Local Group membership increased 188, or 1.2%, primarily due to growth in our Large Group self-funded accounts as a result of new sales and conversions of fully-insured contracts to self-funded administrative service only, or ASO contracts. The increase was partially offset by attrition in our fully-insured product offerings resulting from competitive pressures and conversions to self-funded ASO contracts.

Individual membership decreased 11, or 0.7%, primarily due to attrition in non-ACA-compliant product offerings, partially offset by growth in ACA-compliant off- and on-exchange product offerings.

National Accounts membership increased 386, or 5.2%, primarily due to the implementation of new large multi-state employer group contracts and expansion in existing employer group accounts.

BlueCard® membership increased 143, or 2.6%, primarily due to higher membership activity at other BCBSA plans whose members reside in or travel to our licensed areas.

Medicare membership decreased 1, or 0.1%, primarily due to membership losses from strategic market exits, partially offset by growth in certain existing markets.

Medicaid membership increased 613, or 10.4%, primarily due to new business expansions and organic growth in existing markets.

FEP® membership increased 2, or 0.1%, primarily due to higher sales during the open enrollment.

Other Membership (in thousands)

Our Other products are often ancillary to our health business and can therefore be impacted by corresponding changes in our medical membership.

Life and disability membership decreased 117, or 2.4%, primarily due to higher lapses in our fully-insured Local Group business.

Dental membership increased 280, or 5.4%, primarily due to new sales and growth in our Local Group and ACA-compliant Individual product offerings.

Dental administration membership increased 12, or 0.2%, primarily due to membership expansion under current contracts.

Vision membership increased 747, or 13.2%, primarily due to growth in our Local Group, National accounts and ACA-compliant Individual product offerings.

Medicare Advantage Part D membership increased 7, or 1.1%, primarily due to higher sales during the open enrollment period.

Medicare Part D standalone membership decreased 21, or 5.7%, primarily due to our product repositioning strategies and select strategic actions in certain markets.

Cost of Care

The following discussion summarizes our aggregate underlying cost of care trends for the year ended December 31, 2017 for our Local Group fully-insured business only.

For the full year 2017, underlying Local Group medical cost trend was approximately 6.5%. We are updating the reporting of our underlying Local Group medical cost trend in 2018 to reflect the "allowed amount", or contractual rate, paid

to providers. The previous methodology was based on the "paid amount," which is the "allowed amount" less copays and deductibles. We believe using the allowed amount is a better indicator of overall healthcare trend and therefore a more informative metric. Under the "allowed amount," we anticipate the Local Group medical cost trend will be in the range of 5.5% to 6.5% in 2018. If 2017 was calculated on a consistent basis with the updated methodology in 2018, Local Group medical cost trends would have been approximately 5.5%.

Our medical cost trends are primarily driven by increases in the utilization of services across all provider types and the unit cost increases of these services. We work to mitigate these trends through various medical management programs such as utilization management, condition management, program integrity and specialty pharmacy management, as well as benefit design changes. There are many drivers of medical cost trend which can cause variance from our estimates, such as changes in the level and mix of services utilized, regulatory changes, aging of the population, health status and other demographic characteristics of our members, epidemics, advances in medical technology, new high cost prescription drugs, and healthcare provider or member fraud.

Consolidated Results of Operations

Our consolidated summarized results of operations for the years ended December 31, 2017, 2016 and 2015 are discussed in the following section.

	Years Ended December 31			Change			
				2017 vs. 2016		2016 vs. 2015	
	2017	2016	2015	$	%	$	%
Total operating revenue	$ 89,061.2	$ 84,194.0	$ 78,404.8	$ 4,867.2	5.8 %	$ 5,789.2	7.4 %
Net investment income	866.5	779.5	677.6	87.0	11.2 %	101.9	15.0 %
Net realized gains on financial instruments	144.8	4.9	157.5	139.9	2,855.1 %	(152.6)	(96.9)%
Other-than-temporary impairment losses on investments	(33.1)	(115.4)	(83.4)	82.3	71.3 %	(32.0)	(38.4)%
Total revenues	90,039.4	84,863.0	79,156.5	5,176.4	6.1 %	5,706.5	7.2 %
Benefit expense	72,236.2	66,834.4	61,116.9	5,401.8	8.1 %	5,717.5	9.4 %
Selling, general and administrative expense	12,649.6	12,557.9	12,534.8	91.7	0.7 %	23.1	0.2 %
Other expense[1]	1,189.8	915.3	873.8	274.5	30.0 %	41.5	4.7 %
Total expenses	86,075.6	80,307.6	74,525.5	5,768.0	7.2 %	5,782.1	7.8 %
Income before income tax expense	3,963.8	4,555.4	4,631.0	(591.6)	(13.0)%	(75.6)	(1.6)%
Income tax expense	121.0	2,085.6	2,071.0	(1,964.6)	(94.2)%	14.6	0.7 %
Net income	$ 3,842.8	$ 2,469.8	$ 2,560.0	$ 1,373.0	55.6 %	$ (90.2)	(3.5)%
Average diluted shares outstanding	267.8	268.1	272.9	(0.3)	(0.1)%	(4.8)	(1.8)%
Diluted net income per share	$ 14.35	$ 9.21	$ 9.38	$ 5.14	55.8 %	$ (0.17)	(1.8)%
Benefit expense ratio[2]	86.4%	84.8%	83.3%		160bp[3]		150bp[3]
Selling, general and administrative expense ratio[4]	14.2%	14.9%	16.0%		(70)bp[3]		(110)bp[3]
Income before income tax expense as a percentage of total revenues	4.4%	5.4%	5.9%		(100)bp[3]		(50)bp[3]
Net income as a percentage of total revenues	4.3%	2.9%	3.2%		140bp[3]		(30)bp[3]

Certain of the following definitions are also applicable to all other results of operations tables in this discussion:

1 Includes interest expense, amortization of other intangible assets and gain/loss on extinguishment of debt.
2 Benefit expense ratio represents benefit expense as a percentage of premium revenue. Premiums for the years ended December 31, 2017, 2016 and 2015 were $83,647.7, $78,860.1 and $73,385.1, respectively. Premiums are included in total operating revenue presented above.
3 bp = basis point; one hundred basis points = 1%.
4 Selling, general and administrative expense ratio represents selling, general and administrative expense as a percentage of total operating revenue.

Year Ended December 31, 2017 Compared to the Year Ended December 31, 2016

Total operating revenue increased $4,867.2, or 5.8%, to $89,061.2 in 2017, resulting primarily from higher premiums, and, to a lesser extent, increased administrative fees. Higher premiums were due, in part, to rate increases across our businesses designed to cover overall cost trends. The increase was further attributable to membership growth in our Medicare Advantage and Large Group product offerings. The increase in premiums was partially offset by the impact of the HIP Fee suspension for 2017, as we did not price affected products to cover any HIP Fee related expense in the current year. Additionally, declines in membership in both our non-ACA-compliant and ACA-compliant off-exchange Individual businesses, lower favorable adjustments to prior year estimates for the ACA risk adjustment premium stabilization program and declines in membership in our National Accounts business partially offset the overall increase in premiums. The increase in administrative fees primarily resulted from membership growth in our self-funded Large Group business.

Net investment income increased $87.0, or 11.2%, to $866.5 in 2017, primarily due to higher income from alternative investments and higher investment yields on fixed maturity securities, partially offset by lower dividend yields on equity securities.

Net realized gains on financial instruments increased $139.9, or 2,855.1%, to $144.8 in 2017, primarily due to a decrease in net realized losses on derivative financial instruments and an increase in net realized gains on sales of fixed maturity securities, partially offset by a decrease in net realized gains on sales of equity securities.

Other-than-temporary impairment losses on investments decreased $82.3, or 71.3%, to $33.1 in 2017, primarily due to a decrease in impairment losses on fixed maturity securities.

Benefit expense increased $5,401.8, or 8.1%, to $72,236.2 in 2017, primarily due to increased costs as a result of overall cost trends across our businesses. The increase was further attributable to membership growth in our Medicare Advantage and Large Group business product offerings. These increases were partially offset by the impact of membership declines in both our non-ACA-compliant and ACA-compliant off-exchange Individual product offerings.

Our benefit expense ratio increased 160 basis points to 86.4% in 2017. The increase in the ratio was largely driven by the loss of revenue associated with the HIP Fee suspension for 2017, higher medical cost experience in our Medicare business and adjustments to prior year estimates for the ACA risk adjustment premium stabilization program. The increase in the ratio was partially offset by improved medical cost experience in our Individual business.

Selling, general and administrative expense increased $91.7, or 0.7%, to $12,649.6 in 2017. The increase in expense was due, in part, to an increase in spend to support our growth initiatives, the recognition of a guaranty fund assessment related to the liquidation order of Penn Treaty, an increase in performance-based incentive compensation and a legal settlement accrual related to settlement of the 2015 cyber attack class action litigation. For additional information regarding the Penn Treaty liquidation and the cyber attack and related settlement, see Note 13, “Commitments and Contingencies - *Other Contingencies*,” and “Commitments and Contingencies - *Cyber Attack Incident,*” respectively, to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K. These increases were partially offset by lower ACA fees, primarily as a result of the suspension of the HIP Fee for 2017 and, to a lesser extent, the expiration of the fees for the ACA temporary reinsurance premium stabilization program that ended on December 31, 2016. The increases were further offset by lower selling, general and administrative costs related to expense efficiency initiatives and lower transaction costs related to the terminated Cigna Merger Agreement.

Our selling, general and administrative expense ratio decreased 70 basis points to 14.2% in 2017. The decrease in the ratio was due, in part, to the lower ACA fees discussed above, lower selling, general and administrative costs related to expense efficiency initiatives and growth in operating revenue. These decreases were partially offset by an increase in spend to support our growth initiatives, the impact of the Penn Treaty guaranty fund assessment, an increase in performance-based incentive compensation and the accrual related to the settlement of the 2015 cyber attack class action litigation.

Other expense increased $274.5, or 30.0%, to $1,189.8 in 2017, primarily due to losses on debt extinguishment. For additional information related to our borrowings, refer to the subsequent section herein titled "Liquidity and Capital Resources - *Debt*."

Income tax expense decreased $1,964.6, or 94.2%, to $121.0 in 2017, primarily due to the effect of the Tax Cuts and Jobs Act, the suspension of the non-tax deductible HIP Fee for 2017 and the favorable impact of our recognition of tax benefits for prior acquisition costs incurred related to the terminated Cigna Merger Agreement. For the year ended December 31, 2017, we recognized a non-recurring income tax benefit of $1,108.3 related to the remeasurement of our deferred tax balance pursuant to the Tax Cuts and Jobs Act. For the year ended December 31, 2016, we recognized additional income tax expense of $411.7 related to the HIP Fee. The decrease in income tax expense was further due to the recognition of excess tax benefits during the year ended December 31, 2017 from the adoption of Accounting Standards Update No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting,* or ASU 2016-09. For additional information related to the adoption of ASU 2016-09, see Note 2, “Basis of Presentation of Significant Accounting Policies - *Recently Adopted Accounting Guidance*” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K. Additionally, during the year ended December 31, 2016, we recognized additional California deferred state tax expense resulting from specific California legislation related to Managed Care Organizations that did not recur in 2017.

The effective tax rates in 2017 and 2016 were 3.1% and 45.8%, respectively. The decrease in the effective tax rate was primarily due to the effect of the Tax Cuts and Jobs Act, suspension of the HIP Fee, the deduction of the prior acquisition costs incurred related to the terminated Cigna Merger Agreement, the excess tax benefits from the adoption of ASU 2016-09 and the additional 2016 California deferred state tax expense, discussed above.

Our net income as a percentage of total revenue increased 140 basis points to 4.3% in 2017 as compared to 2016 as a result of all factors discussed above.

Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015

Total operating revenue increased $5,789.2, or 7.4% to $84,194.0 in 2016, resulting primarily from higher premiums, and, to a lesser extent, increased administrative fees. Higher premiums were largely due to rate increases across our businesses designed to cover overall cost trends. The increase was further attributable to membership increases in our Medicaid and ACA-compliant off- and on-exchange Individual business product offerings. Additionally, adjustments to accruals for the ACA risk adjustment premium stabilization program and increased reimbursed benefit utilization in our FEP® business contributed to the increase in premiums. The increase in premiums was partially offset by declines in fully-insured membership in our Small Group business and lapses in non-ACA-compliant Individual business product offerings. The increase in administrative fees primarily resulted from membership growth and rate increases for self-funded members in our National Accounts and Large Group businesses.

Net investment income increased $101.9, or 15.0%, to $779.5 in 2016, primarily due to higher income from alternative investments.

Net realized gains on financial instruments decreased $152.6, or 96.9%, to $4.9 in 2016, primarily due to an increase in net realized losses on derivative financial instruments, largely as a result of losses recognized on options entered in to economically hedge the variability of cash flows in the interest payments on anticipated future financings. The decrease was further due to lower net realized gains on sales of equity securities. These decreases were partially offset by an increase in net realized gains on sales of fixed maturity securities.

Other-than-temporary impairment losses on investments increased $32.0, or 38.4%, to $115.4 in 2016, primarily due to an increase in impairment losses on fixed maturity securities, partially offset by a decrease in impairment losses on equity securities.

Benefit expense increased $5,717.5, or 9.4%, to $66,834.4 in 2016, primarily due to increased costs as a result of overall cost trends across our businesses. The increase was further attributable to membership growth in our Medicaid business and ACA-compliant off- and on-exchange Individual business product offerings. These increases were partially offset by the declines in fully-insured membership in our Small Group business and non-ACA-compliant Individual business product offerings.

Our benefit expense ratio increased 150 basis points to 84.8% in 2016. The increase in the ratio was largely driven by our Medicaid business due to increases in medical cost experience that exceeded the impact of premium rate adjustments, higher than expected medical cost experience in the Iowa market, which we began serving in 2016, and increases in membership as our Medicaid business has a higher benefit expense ratio than our consolidated average. The increase in the ratio was further due to higher medical costs experience in our Individual and Local Group businesses. These increases were partially offset by adjustments to estimates of prior year accruals related to the ACA risk adjustment premium stabilization program and improved medical cost performance in our Medicare business.

Selling, general and administrative expense was $12,557.9 and $12,534.8 in 2016 and 2015, respectively. Our selling, general and administrative expense ratio decreased 110 basis points to 14.9% in 2016. The decrease in the ratio was primarily a result of lower costs related to expense efficiency initiatives and the increase in operating revenue, including the impact of Medicaid membership growth in our Government Business segment, which has a lower selling, general and administrative expense ratio than our consolidated average.

Other expense increased $41.5, or 4.7%, to $915.3 in 2016, primarily due to higher interest expense in 2016 driven by amortization of the fees incurred for the bridge facility commitment letter and joinder agreement entered into during the third

quarter of 2015 to partially fund a portion of the consideration under the now terminated Cigna Merger Agreement. The increase in interest expense was partially offset by a decrease in amortization of intangible assets.

Income tax expense increased $14.6, or 0.7%, to $2,085.6 in 2016. The effective tax rates in 2016 and 2015 were 45.8% and 44.7%, respectively. The increase in income tax expense and the effective tax rate was primarily due to the increase in non-deductible pre-acquisition costs incurred in connection with the now terminated Cigna Merger Agreement and the increase in our California deferred state tax expense resulting from new legislation in 2016 related to California Managed Care Organizations. The increase was further due to favorable 2015 tax adjustments related to state audit settlements. These increases were partially offset by the non-recurring impact of an adverse California franchise tax ruling recognized in 2015 and a decrease in income before income tax expense.

Our net income as a percentage of total revenue decreased 30 basis points to 2.9% in 2016 as compared to 2015 as a result of all factors discussed above.

Reportable Segments Results of Operations

We use operating gain to evaluate the performance of our reportable segments, which are Commercial & Specialty Business, Government Business, and Other. Operating gain, which is a non-GAAP measure, is calculated as total operating revenue less benefit expense and selling, general and administrative expense. It does not include net investment income, net realized gains on financial instruments, other-than-temporary impairment losses recognized in income, interest expense, amortization of other intangible assets, loss (gain) on extinguishment of debt or income taxes, as these items are managed in a corporate shared service environment and are not the responsibility of operating segment management.

The discussion of segment results for the years ended December 31, 2017, 2016 and 2015 presented below are based on operating gain, as described above, and operating margin, which is calculated as operating gain divided by operating revenue. Our definitions of operating gain and operating margin may not be comparable to similarly titled measures reported by other companies. For additional information, including a reconciliation of non-GAAP financial measures, see Note 19, "Segment Information," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Our Commercial & Specialty Business, Government Business, and Other segments' summarized results of operations for the years ended December 31, 2017, 2016 and 2015 are as follows:

	Years Ended December 31			Change			
				2017 vs. 2016		2016 vs. 2015	
	2017	2016	2015	$	%	$	%
Commercial & Specialty Business							
Operating revenue	$ 40,754.1	$ 38,692.1	$ 37,570.8	$ 2,062.0	5.3 %	$ 1,121.3	3.0 %
Operating gain	$ 2,876.1	$ 3,195.2	$ 2,854.0	$ (319.1)	(10.0)%	$ 341.2	12.0 %
Operating margin	7.1%	8.3%	7.6%		(120)bp		70bp
Government Business							
Operating revenue	$ 48,276.2	$ 45,477.7	$ 40,813.0	$ 2,798.5	6.2 %	$ 4,664.7	11.4 %
Operating gain	$ 1,430.2	$ 1,784.3	$ 1,978.5	$ (354.1)	(19.8)%	$ (194.2)	(9.8)%
Operating margin	3.0%	3.9%	4.8%		(90)bp		(90)bp
Other							
Operating revenue[1]	$ 30.9	$ 24.2	$ 21.0	$ 6.7	27.7 %	$ 3.2	15.2 %
Operating loss[2]	$ (130.9)	$ (177.8)	$ (79.4)	$ 46.9	(26.4)%	$ (98.4)	123.9 %

1 Fluctuations not material.

2 Fluctuations are primarily a result of changes in unallocated corporate expenses. The increase in 2016 was primarily due to transaction costs incurred associated with the Cigna Merger Agreement. The decrease in 2017 was primarily due to lower transaction costs incurred associated with the Cigna Merger Agreement as a result of the termination of the Cigna Merger Agreement in May 2017.

Year Ended December 31, 2017 Compared to the Year Ended December 31, 2016

Commercial & Specialty Business

Operating revenue increased $2,062.0, or 5.3%, to $40,754.1 in 2017, primarily due to premium rate increases designed to cover overall cost trends in our Individual and Local Group businesses. The increase was further attributable to membership growth in our fully-insured Large Group business and an increase in administrative fees. The increase in administrative fees was primarily due to membership growth in our self-insured Large Group business. The increase in operating revenue was partially offset by the impact of the HIP Fee suspension for 2017, declines in membership in our non-ACA-compliant and ACA-compliant off-exchange Individual businesses, lower favorable adjustments to prior year estimates for the ACA risk adjustment premium stabilization program and declines in membership in our National Accounts business.

Operating gain decreased $319.1, or 10.0%, to $2,876.1 in 2017, primarily due to the recognition of the guaranty fund assessment related to the Penn Treaty liquidation, an increase in spend to support our growth initiatives and adjustments to prior year estimates for the ACA risk adjustment premium stabilization program. The decrease in operating gain was further due to an increase in performance-based incentive compensation and the settlement accrual for the class action litigation related to the 2015 cyber attack. The decrease in operating gain was partially offset by lower selling, general and administrative costs related to expense efficiency initiatives and fixed costs leverage from higher operating revenue. The decrease in operating gain was further offset by improved medical cost experience in our Individual businesses.

The operating margin in 2017 was 7.1%, a 120 basis point decrease from 2016, primarily due to the factors discussed in the preceding two paragraphs.

Government Business

Operating revenue increased $2,798.5, or 6.2%, to $48,276.2 in 2017. The increase in operating revenue was primarily due to premium rate increases designed to cover overall cost trends in our Medicaid and Medicare businesses. The increase was further due to new Medicaid business expansions and membership growth in our Medicare Advantage business. These increases were partially offset by the impact of the HIP Fee suspension for 2017 and Medicaid membership declines resulting from membership reverification processes and the impact of a new entrant in an existing market.

Operating gain decreased $354.1, or 19.8%, to $1,430.2 in 2017, primarily due to the impact of the HIP Fee suspension for 2017 and higher medical cost experience in our Medicare business. The decrease was further due to an increase in performance-based incentive compensation and an increase in spend to support our growth initiatives. These decreases were partially offset by lower selling, general and administrative costs related to expense efficiency initiatives and fixed costs leverage from higher operating revenue.

The operating margin in 2017 was 3.0%, a 90 basis point decrease from 2016, primarily due to the factors discussed in the preceding two paragraphs.

Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015

Commercial & Specialty Business

Operating revenue increased $1,121.3, or 3.0%, to $38,692.1 in 2016, primarily due to premium rate increases designed to cover overall cost trends in our Local Group and Individual businesses. The increase was further attributable to adjustments to accruals for the ACA risk adjustment premium stabilization program, membership growth in our ACA-compliant off- and on-exchange Individual business product offerings and increased administrative fees. The increase in administrative fees was primarily due to membership growth and rate increases for self-funded members in our National Accounts and self-funded Large Group businesses. The increase in operating revenue was partially offset by declines in fully-insured membership in our Small Group business and lapses in non-ACA-compliant Individual business product offerings.

Operating gain increased $341.2, or 12.0%, to $3,195.2 in 2016, primarily due to adjustments to accruals for the ACA risk adjustment premium stabilization program and lower selling, general and administrative expense related to expense efficiency initiatives. The increase was further attributable to membership growth in our National Accounts and self-funded

Large Group businesses. These increases were partially offset by higher medical cost experience in our Individual and Local Group businesses and decreases in fully-insured Small Group membership.

The operating margin in 2016 was 8.3%, a 70 basis point increase over 2015, primarily due to the factors discussed in the preceding two paragraphs.

Government Business

Operating revenue increased $4,664.7, or 11.4%, to $45,477.7 in 2016. The increase in operating revenue was primarily due to increased premiums in our Medicaid business as a result of membership growth through new business expansions and organic growth in existing markets. The increase in operating revenue was also due to rate increases designed to cover overall cost trends in our Medicaid and Medicare businesses and increased premiums in our FEP® business, due to increased reimbursed benefit utilization.

Operating gain decreased $194.2, or 9.8%, to $1,784.3 in 2016, primarily due to increases in medical cost experience in our Medicaid business that exceeded the impact of premium rate adjustments and higher than expected medical cost experience in the Iowa Medicaid market, which we began serving in 2016. These decreases were partially offset by lower selling, general and administrative expense related to expense efficiency initiatives, improved medical cost performance in our Medicare business and the favorable impact of a retroactive change in the minimum MLR calculation under California's Medicaid expansion program.

The operating margin in 2016 was 3.9%, a 90 basis point decrease from 2015, primarily due to the factors discussed in the preceding two paragraphs.

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in conformity with GAAP. Application of GAAP requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes and within this MD&A. We consider our most important accounting policies that require significant estimates and management judgment to be those policies with respect to liabilities for medical claims payable, income taxes, goodwill and other intangible assets, investments and retirement benefits, which are discussed below. Our other significant accounting policies are summarized in Note 2, “Basis of Presentation and Significant Accounting Policies,” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

We continually evaluate the accounting policies and estimates used to prepare the consolidated financial statements. In general, our estimates are based on historical experience, evaluation of current trends, information from third party professionals and various other assumptions that we believe to be reasonable under the known facts and circumstances. Estimates can require a significant amount of judgment and a different set of assumptions could result in material changes to our reported results.

Medical Claims Payable

The most subjective accounting estimate in our consolidated financial statements is our liability for medical claims payable. At December 31, 2017, this liability was $7,991.5 and represented 18.1% of our total consolidated liabilities. We record this liability and the corresponding benefit expense for incurred but not paid claims, including the estimated costs of processing such claims. Incurred but not paid claims include (1) an estimate for claims that are incurred but not reported, as well as claims reported to us but not yet processed through our systems, which approximated 95.7%, or $7,650.8, of our total medical claims liability as of December 31, 2017; and (2) claims reported to us and processed through our systems but not yet paid, which approximated 4.3%, or $340.7, of the total medical claims payable as of December 31, 2017. The level of claims payable processed through our systems but not yet paid may fluctuate from one period-end to the next, from approximately 1% to 5% of our total medical claims liability, due to timing of when claim payments are made.

Liabilities for both claims incurred but not reported and reported but not yet processed through our systems are determined in the aggregate, employing actuarial methods that are commonly used by health insurance actuaries and meet Actuarial Standards of Practice. Actuarial Standards of Practice require that the claim liabilities be appropriate under moderately adverse circumstances. We determine the amount of the liability for incurred but not paid claims by following a

detailed actuarial process that uses both historical claim payment patterns as well as emerging medical cost trends to project our best estimate of claim liabilities. Under this process, historical paid claims data is formatted into "claim triangles," which compare claim incurred dates to the dates of claim payments. This information is analyzed to create "completion factors" that represent the average percentage of total incurred claims that have been paid through a given date after being incurred. Completion factors are applied to claims paid through the period-end date to estimate the ultimate claim expense incurred for the period. Actuarial estimates of incurred but not paid claim liabilities are then determined by subtracting the actual paid claims from the estimate of the ultimate incurred claims.

For the most recent incurred months (typically the most recent two months), the percentage of claims paid for claims incurred in those months is generally low. This makes the completion factor methodology less reliable for such months. Therefore, incurred claims for recent months are not projected from historical completion and payment patterns; rather, they are projected by estimating the claims expense for those months based on recent claims expense levels and healthcare trend levels, or "trend factors."

Because the reserve methodology is based upon historical information, it must be adjusted for known or suspected operational and environmental changes. These adjustments are made by our actuaries based on their knowledge and their estimate of emerging impacts to benefit costs and payment speed. Circumstances to be considered in developing our best estimate of reserves include changes in utilization levels, unit costs, mix of business, benefit plan designs, provider reimbursement levels, processing system conversions and changes, claim inventory levels, claim processing patterns, claim submission patterns and operational changes resulting from business combinations. A comparison of prior period liabilities to re-estimated claim liabilities based on subsequent claims development is also considered in making the liability determination. In our comparison to prior periods, the methods and assumptions are not changed as reserves are recalculated; rather, the availability of additional paid claims information drives changes in the re-estimate of the unpaid claim liability. To the extent appropriate, changes in such development are recorded as a change to current period benefit expense.

We regularly review and set assumptions regarding cost trends and utilization when initially establishing claim liabilities. We continually monitor and adjust the claims liability and benefit expense based on subsequent paid claims activity. If it is determined that our assumptions regarding cost trends and utilization are materially different than actual results, our income statement and financial position could be impacted in future periods. Adjustments of prior year estimates may result in additional benefit expense or a reduction of benefit expense in the period an adjustment is made. Further, due to the considerable variability of healthcare costs, adjustments to claim liabilities occur each period and are sometimes significant as compared to the net income recorded in that period. Prior period development is recognized immediately upon the actuary's judgment that a portion of the prior period liability is no longer needed or that an additional liability should have been accrued. That determination is made when sufficient information is available to ascertain that the re-estimate of the liability is reasonable.

While there are many factors that are used as a part of the estimation of our medical claims payable liability, the two key assumptions having the most significant impact on our incurred but not paid claims liability as of December 31, 2017 were the completion and trend factors. As discussed above, these two key assumptions can be influenced by utilization levels, unit costs, mix of business, benefit plan designs, provider reimbursement levels, processing system conversions and changes, claim inventory levels, claim processing patterns, claim submission patterns and operational changes resulting from business combinations.

There is variation in the reasonable choice of completion factors by duration for durations of three months through twelve months where the completion factors have the most significant impact. As previously discussed, completion factors tend to be less reliable for the most recent months and therefore are not specifically utilized for months one and two. In our analysis for the claim liabilities at December 31, 2017, the variability in months three to five was estimated to be between 40 and 90 basis points, while months six through twelve have much lower estimated variability ranging from 0 to 30 basis points.

The difference in completion factor assumptions, assuming moderately adverse experience, results in variability of 2%, or approximately $191.0, in the December 31, 2017 incurred but not paid claims liability, depending on the completion factors chosen. It is important to note that the completion factor methodology inherently assumes that historical completion rates will be reflective of the current period. However, it is possible that the actual completion rates for the current period will develop differently from historical patterns and therefore could fall outside the possible variations described herein.

The other major assumption used in the establishment of the December 31, 2017 incurred but not paid claim liability was the trend factors. In our analysis for the period ended December 31, 2017, there was a 320 basis point differential in the high and low trend factors assuming moderately adverse experience. This range of trend factors would imply variability of 5%, or approximately $376.0, in the incurred but not paid claims liability, depending upon the trend factors used. Because historical trend factors are often not representative of current claim trends, the trend experience for the most recent six to nine months, plus knowledge of recent events likely affecting current trends, have been taken into consideration in establishing the incurred but not paid claims liability at December 31, 2017.

See Note 11, "Medical Claims Payable," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K, for a reconciliation of the beginning and ending balance for medical claims payable for the years ended December 31, 2017, 2016 and 2015. Components of the total incurred claims for each year include amounts accrued for current year estimated claims expense as well as adjustments to prior year estimated accruals. In Note 11, "Medical Claims Payable," the line labeled "Net incurred medical claims: Prior years redundancies" accounts for those adjustments made to prior year estimates. The impact of any reduction of "Net incurred medical claims: Prior years redundancies" may be offset as we establish the estimate of "Net incurred medical claims: Current year." Our reserving practice is to consistently recognize the actuarial best estimate of our ultimate liability for our claims. When we recognize a release of the redundancy, we disclose the amount that is not in the ordinary course of business, if material.

The ratio of current year medical claims paid as a percent of current year net medical claims incurred was 89.4% for 2017 and 89.1% for both 2016 and 2015. This ratio serves as an indicator of claims processing speed whereby claims were processed slightly faster during 2017 than in both 2016 and 2015.

We calculate the percentage of prior year redundancies in the current year as a percent of prior year net incurred claims payable less prior year redundancies in the current year in order to demonstrate the development of the prior year reserves. For the year ended December 31, 2017, this metric was 18.8%, largely driven by favorable trend factor development at the end of 2016 as well as favorable completion factor development from 2016. For the year ended December 31, 2016, this metric was 14.0%, largely driven by favorable trend factor development at the end of 2015. For the year ended December 31, 2015, this metric was 15.1%, largely driven by favorable trend factor development at the end of 2014 as well as favorable completion factor development from 2014.

We calculate the percentage of prior year redundancies in the current period as a percent of prior year net incurred medical claims to indicate the percentage of redundancy included in the preceding year calculation of current year net incurred medical claims. We believe this calculation supports the reasonableness of our prior year estimate of incurred medical claims and the consistency in our methodology. For the year ended December 31, 2017, this metric was 1.8%, which was calculated using the redundancy of $1,164.6. This metric was 1.4% for both 2016 and 2015. These metrics demonstrate a generally consistent level of reserve conservatism.

The following table shows the variance between total net incurred medical claims as reported in Note 11, "Medical Claims Payable," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K, for each of 2016 and 2015 and the incurred claims for such years had it been determined retrospectively (computed as the difference between "net incurred medical claims – current year" for the year shown and "net incurred medical claims – prior years redundancies" for the immediately following year):

	Years Ended December 31	
	2016	2015
Total net incurred medical claims, as reported	$ 65,521.0	$ 59,908.2
Retrospective basis, as described above	65,206.8	59,858.0
Variance	$ 314.2	$ 50.2
Variance to total net incurred medical claims, as reported	0.5%	0.1%

Given that our business is primarily short tailed (which means that medical claims are generally paid within twelve months of the member receiving service from the provider), the variance to total net incurred medical claims, as reported above, is used to assess the reasonableness of our estimate of ultimate incurred medical claims for a given calendar year with

the benefit of one year of experience. We expect that substantially all of the development of the 2017 estimate of medical claims payable will be known during 2018.

The 2016 variance to total net incurred medical claims, as reported of 0.5% was greater than the 2015 percentage of 0.1%. The lower 2015 variance was driven by a similar level of prior year redundancies in 2016 associated with 2015 claim payments to the prior year redundancies in 2015 associated with 2014 claims payments. Prior year redundancies in 2017 associated with 2016 claim payments were higher by comparison to the previous year, thus creating a higher 2016 variance.

Income Taxes

We account for income taxes in accordance with FASB guidance, which requires, among other things, the separate recognition of deferred tax assets and deferred tax liabilities. Such deferred tax assets and deferred tax liabilities represent the tax effect of temporary differences between financial reporting and tax reporting measured at tax rates enacted at the time the deferred tax asset or liability is recorded. A valuation allowance must be established for deferred tax assets if it is "more likely than not" that all or a portion may be unrealized. Our judgment is required in determining an appropriate valuation allowance.

At each financial reporting date, we assess the adequacy of the valuation allowance by evaluating each of our deferred tax assets based on the following:

- the types of temporary differences that created the deferred tax asset;
- the amount of taxes paid in prior periods and available for a carry-back claim;
- the tax rate at which the deferred tax assets will likely be utilized at in the future;
- the forecasted future taxable income, and therefore, likely future deduction of the deferred tax item; and
- any significant other issues impacting the likely realization of the benefit of the temporary differences.

We, like other companies, frequently face challenges from tax authorities regarding the amount of taxes due. These challenges include questions regarding the timing and amount of deductions that we have taken on our tax returns. In evaluating any additional tax liability associated with various positions taken in our tax return filings, we record additional liabilities for potential adverse tax outcomes. Based on our evaluation of our tax positions, we believe we have appropriately accrued for uncertain tax benefits, as required by the guidance. To the extent we prevail in matters we have accrued for, our future effective tax rate would be reduced and net income would increase. If we are required to pay more than accrued, our future effective tax rate would increase and net income would decrease. Our effective tax rate and net income in any given future period could be materially impacted.

In the ordinary course of business, we are regularly audited by federal and other tax authorities, and from time to time, these audits result in proposed assessments. We believe our tax positions comply with applicable tax law and we intend to defend our positions vigorously through the federal, state and local appeals processes. We believe we have adequately provided for any reasonably foreseeable outcome related to these matters. Accordingly, although their ultimate resolution may require additional tax payments, we do not anticipate any material impact on our results of operations or financial condition from these matters.

For additional information, see Note 7, "Income Taxes," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Goodwill and Other Intangible Assets

Our consolidated goodwill at December 31, 2017 was $19,231.2 and other intangible assets were $8,368.4. The sum of goodwill and other intangible assets represented 39.1% of our total consolidated assets and 104.1% of our consolidated shareholders' equity at December 31, 2017.

We follow FASB guidance for business combinations and goodwill and other intangible assets, which specifies the types of acquired intangible assets that are required to be recognized and reported separately from goodwill. Under the guidance, goodwill and other intangible assets (with indefinite lives) are not amortized but are tested for impairment at least annually.

Furthermore, goodwill and other intangible assets are allocated to reporting units for purposes of the annual impairment test. Our impairment tests require us to make assumptions and judgments regarding the estimated fair value of our reporting units, which include goodwill and other intangible assets. In addition, certain other intangible assets with indefinite lives, such as trademarks, are also tested separately.

We complete our annual impairment tests of existing goodwill and other intangible assets with indefinite lives during the fourth quarter of each year. These tests involve the use of estimates related to the fair value of goodwill at the reporting unit level and other intangible assets with indefinite lives, and require a significant degree of management judgment and the use of subjective assumptions. Certain interim impairment tests are also performed when potential impairment indicators exist or changes in our business or other triggering events occur.

Fair value is estimated using the projected income and market valuation approaches for goodwill at the reporting unit level and the projected income approach for our indefinite lived intangible assets. Use of the projected income and market valuation approaches for our goodwill impairment test reflects our view that both valuation methodologies provide a reasonable estimate of fair value. The projected income approach is developed using assumptions about future revenue, expenses and net income derived from our internal planning process. These estimated future cash flows are then discounted. Our assumed discount rate is based on our industry's weighted-average cost of capital. Market valuations are based on observed multiples of certain measures including revenue, EBITDA, and book value of invested capital (debt and equity) and include market comparisons to publicly traded companies in our industry.

We did not incur any impairment losses as a result of our 2017 annual impairment tests, as the estimated fair values of our reporting units were substantially in excess of the carrying values as of December 31, 2017. Additionally, we do not believe that the estimated fair values of our reporting units are at risk of becoming impaired in the next twelve months. However, as a result of certain provisions of the ACA, we have experienced lower operating margins in certain lines of business. Those margins could become further compressed with adverse changes in federal and state laws and regulations. As a result, the estimated fair values of certain of our reporting units with goodwill could fall below their carrying values in future periods and if that were to occur, we would be required to record impairment losses at that time.

While we believe we have appropriately allocated the purchase price of our acquisitions, this allocation requires many assumptions to be made regarding the fair value of assets and liabilities acquired. In addition, estimated fair values developed based on our assumptions and judgments might be significantly different if other reasonable assumptions and estimates were to be used. If estimated fair values are less than the carrying values of goodwill and other intangibles with indefinite lives in future annual impairment tests, or if significant impairment indicators are noted relative to other intangible assets subject to amortization, we may be required to record impairment losses against future income.

For additional information, see Note 3, "Business Acquisitions" and Note 9, "Goodwill and Other Intangible Assets," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Investments

Current and long-term available-for-sale investment securities were $21,570.1 at December 31, 2017 and represented 30.6% of our total consolidated assets at December 31, 2017. We classify fixed maturity and equity securities in our investment portfolio as "available-for-sale" or "trading" and report those securities at fair value. Certain fixed maturity securities are available to support current operations and, accordingly, we classify such investments as current assets without regard to their contractual maturity. Investments used to satisfy contractual, regulatory or other requirements are classified as long-term, without regard to contractual maturity.

We review investment securities to determine if declines in fair value below cost are other-than-temporary. This review is subjective and requires a high degree of judgment. We conduct this review on a quarterly basis, using both qualitative and quantitative factors, to determine whether a decline in value is other-than-temporary. Such factors considered include the length of time and the extent to which a security's market value has been less than its cost, the reasons for the decline in value (i.e., credit event compared to liquidity, general credit spread widening, currency exchange rate or interest rate factors), financial condition and near term prospects of the issuer, including the credit ratings and changes in the credit ratings of the issuer, recommendations of investment advisors, and forecasts of economic, market or industry trends. In addition, for equity securities, we determine whether we have the intent and ability to hold the security for a period of time to allow for a

recovery of its fair value above its carrying amount. If any declines of equity securities are determined to be other-than-temporary, we charge the losses to income when that determination is made.

Certain FASB other-than-temporary impairment, or OTTI, guidance applies to fixed maturity securities and provides guidance on the recognition, presentation of, and disclosures for OTTIs. If a fixed maturity security is in an unrealized loss position and we have the intent to sell the fixed maturity security, or it is more likely than not that we will have to sell the fixed maturity security before recovery of its amortized cost basis, the decline in value is deemed to be other-than-temporary and is presented within the other-than-temporary impairment losses recognized in income line item on our consolidated statements of income. For impaired fixed maturity securities that we do not intend to sell or it is more likely than not that we will not have to sell such securities, but we expect that we will not fully recover the amortized cost basis, the credit component of the OTTI is presented within the other-than-temporary impairment losses recognized in income line item on our consolidated statements of income and the non-credit component of the OTTI is recognized in other comprehensive income. Furthermore, unrealized losses entirely caused by non-credit related factors related to fixed maturity securities for which we expect to fully recover the amortized cost basis continue to be recognized in accumulated other comprehensive loss.

The credit component of an OTTI is determined primarily by comparing the net present value of projected future cash flows with the amortized cost basis of the fixed maturity security. The net present value is calculated by discounting our best estimate of projected future cash flows at the effective interest rate implicit in the fixed maturity security at the date of acquisition. For mortgage-backed and asset-backed securities, cash flow estimates are based on assumptions regarding the underlying collateral including prepayment speeds, vintage, type of underlying asset, geographic concentrations, default rates, recoveries and changes in value. For all other securities, cash flow estimates are driven by assumptions regarding probability of default, including changes in credit ratings, and estimates regarding timing and amount of recoveries associated with a default.

We have a committee of accounting and investment associates and management that is responsible for managing the impairment review process. We believe we have adequately reviewed our investment securities for impairment and that our investment securities are carried at fair value. However, over time, the economic and market environment may provide additional insight regarding the fair value of certain securities, which could change our judgment regarding impairment. This could result in OTTI losses on investments being charged against future income. Given the uncertainty of future market conditions, as well as the significant judgments involved, there is continuing risk that declines in fair value may occur and material OTTI losses on investments may be recorded in future periods.

In addition to available-for-sale investment securities, we held additional long-term investments of $3,343.8, or 4.7% of total consolidated assets, at December 31, 2017. These long-term investments consisted primarily of certain other equity investments, the cash surrender value of corporate-owned life insurance policies and real estate. Due to their less liquid nature, these investments are classified as long-term.

Through our investing activities, we are exposed to financial market risks, including those resulting from changes in interest rates and changes in equity market valuations. We manage market risks through our investment policy, which establishes credit quality limits and limits on investments in individual issuers. Ineffective management of these risks could have an impact on our future results of operations and financial condition. Our investment portfolio includes fixed maturity securities with a fair value of $17,938.1 at December 31, 2017. The weighted-average credit rating of these securities was “A” as of December 31, 2017. Included in this balance are investments in fixed maturity securities of states, municipalities and political subdivisions, investments in mortgage-backed securities and investments in corporate securities of $1,205.1, $0.8 and $0.7, respectively, that are guaranteed by third parties. With the exception of nineteen securities with a fair value of $17.5, these securities are all investment-grade and carry a weighted-average credit rating of “A” as of December 31, 2017. The securities are guaranteed by a number of different guarantors, and we do not have any material exposure to any single guarantor, neither indirectly through the guarantees, nor directly through investment in the guarantor. Further, due to the high underlying credit rating of the issuers, the weighted-average credit rating of the fixed maturity securities without a guarantee, for which such information is available, was “A” as of December 31, 2017.

Fair values of available-for-sale fixed maturity and equity securities are based on quoted market prices, where available. These fair values are obtained primarily from third party pricing services, which generally use Level I or Level II inputs for the determination of fair value in accordance with FASB guidance for fair value measurements and disclosures. We have

controls in place to review the pricing services' qualifications and procedures used to determine fair values. In addition, we periodically review the pricing services' pricing methodologies, data sources and pricing inputs to ensure the fair values obtained are reasonable.

We obtain only one quoted price for each security from the pricing services, which are derived through recently reported trades for identical or similar securities making adjustments through the reporting date based upon available market observable information. For securities not actively traded, the pricing services may use quoted market prices of comparable instruments or discounted cash flow analyses, incorporating inputs that are currently observable in the markets for similar securities. Inputs that are often used in these valuation methodologies include, but are not limited to, broker quotes, benchmark yields, credit spreads, default rates and prepayment speeds. As we are responsible for the determination of fair value, we perform monthly analysis on the prices received from the pricing services to determine whether the prices are reasonable estimates of fair value. Our analysis includes a review of month-to-month price fluctuations. If unusual fluctuations are noted in this review, we may obtain additional information from other pricing services to validate the quoted price. There were no adjustments to quoted market prices obtained from the pricing services during the years ended December 31, 2017 and 2016.

In certain circumstances, it may not be possible to derive pricing model inputs from observable market activity, and therefore, such inputs are estimated internally. Such securities are designated Level III in accordance with FASB guidance. Securities designated Level III at December 31, 2017 totaled $537.5 and represented approximately 2.2% of our total assets measured at fair value on a recurring basis. Our Level III securities primarily consisted of certain corporate securities, equity securities and structured securities for which observable inputs were not always available and the fair values of these securities were estimated using internal estimates for inputs including, but not limited to, prepayment speeds, credit spreads, default rates and benchmark yields.

For additional information, see Part II, Item 7A "Quantitative and Qualitative Disclosures about Market Risk," and Part II, Item 8, Note 2, "Basis of Presentation and Significant Accounting Policies," Note 4, "Investments," and Note 6, "Fair Value," to our audited consolidated financial statements included in this Annual Report on Form 10-K.

Retirement Benefits

Pension Benefits

We sponsor defined benefit pension plans for some of our employees. These plans are accounted for in accordance with FASB guidance for retirement benefits, which requires that amounts recognized in financial statements be determined on an actuarial basis. As permitted by the guidance, we calculate the value of plan assets as described below. Further, the difference between our expected rate of return and the actual performance of plan assets, as well as certain changes in pension liabilities, are amortized over future periods.

An important factor in determining our pension expense is the assumption for expected long-term return on plan assets. As of our December 31, 2017 measurement date, we selected a weighted-average long-term rate of return on plan assets of 7.83%. We use a total portfolio return analysis in the development of our assumption. Factors such as past market performance, the long-term relationship between fixed maturity and equity securities, interest rates, inflation and asset allocations are considered in the assumption. The assumption includes an estimate of the additional return expected from active management of the investment portfolio. Peer data and an average of historical returns are also reviewed for appropriateness of the selected assumption. We believe our assumption of future returns is reasonable. However, if we lower our expected long-term return on plan assets, future contributions to the pension plan and pension expense would likely increase.

This assumed long-term rate of return on assets is applied to a calculated value of plan assets, which recognizes changes in the fair value of plan assets in a systematic manner over three years, producing the expected return on plan assets that is included in the determination of pension expense. We apply a corridor approach to amortize unrecognized actuarial gains or losses. Under this approach, only accumulated net actuarial gains or losses in excess of 10% of the greater of the projected benefit obligation or the fair value of plan assets are amortized over the average remaining service or lifetime of the workforce as a component of pension expense. The net deferral of past asset gains or losses affects the calculated value of plan assets and, ultimately, future pension expense.

The discount rate reflects the current rate at which the pension liabilities could be effectively settled at the end of the year based on our most recent measurement date. At the December 31, 2017 measurement date, we changed the discount rate setting methodology from the single equivalent discount rate to the annual spot rate approach. Under the spot rate approach, individual spot rates from a full yield curve of published rates are used to discount each plan's cash flows to determine the plan's obligation. The spot rate approach produces a more precise measure of service and interest cost, and results in obligations that are equal at the measurement date under both methods. The weighted-average discount rate under the annual spot rate approach was 3.44% at the December 31, 2017 measurement date. The weighted-average discount rate under the single equivalent discount rate approach was 3.77% at the December 31, 2016 measurement date. The net effect of changes in the discount rate, as well as the net effect of other changes in actuarial assumptions and experience, have been deferred and amortized as a component of pension expense in accordance with FASB guidance.

In managing the plan assets, our objective is to be a responsible fiduciary while minimizing financial risk. Plan assets include a diversified mix of investment grade fixed maturity securities, equity securities and alternative investments across a range of sectors and levels of capitalization to maximize the long-term return for a prudent level of risk. In addition to producing a reasonable return, the investment strategy seeks to minimize the volatility in our expense and cash flow.

Other Postretirement Benefits

We provide most associates with certain medical, vision and dental benefits upon retirement. We use various actuarial assumptions, including a discount rate and the expected trend in healthcare costs, to estimate the costs and benefit obligations for our retiree benefits.

At our December 31, 2017 measurement date, the selected discount rate for all plans was 3.42% using the annual spot rate approach. At our December 31, 2016 measurement date, the selected discount rate for all plans was 3.82% using the single equivalent discount rate approach.

The assumed healthcare cost trend rates used to measure the expected cost of pre-Medicare (those who are not currently eligible for Medicare benefits) other benefits at our December 31, 2017 measurement date was 8.00% for 2018 with a gradual decline to 4.50% by the year 2028. The assumed healthcare cost trend rates used to measure the expected cost of post-Medicare (those who are currently eligible for Medicare benefits) other benefits at our December 31, 2017 measurement date was 6.00% for 2018 with a gradual decline to 4.50% by the year 2028. These estimated trend rates are subject to change in the future. The healthcare cost trend rate assumption affects the amounts reported. For example, an increase in the assumed healthcare cost trend rate of one percentage point would increase the postretirement benefit obligation as of December 31, 2017 by $35.0 and would increase service and interest costs by $1.6. Conversely, a decrease in the assumed healthcare cost trend rate of one percentage point would decrease the postretirement benefit obligation as of December 31, 2017 by $30.3 and would decrease service and interest costs by $1.4.

For additional information regarding our retirement benefits, see Note 10, "Retirement Benefits," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

New Accounting Pronouncements

For information regarding new accounting pronouncements that were issued or became effective during the year ended December 31, 2017 that had, or are expected to have, a material impact on our financial position, results of operations or financial statement disclosures, see the "*Recently Adopted Accounting Guidance*" and "*Recent Accounting Guidance Not Yet Adopted*" sections of Note 2, "Basis of Presentation and Significant Accounting Policies" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Liquidity and Capital Resources

Introduction

Our cash receipts result primarily from premiums, administrative fees, investment income, other revenue, proceeds from the sale or maturity of our investment securities, proceeds from borrowings, and proceeds from the issuance of common stock under our employee stock plans. Cash disbursements result mainly from claims payments, administrative expenses, taxes, purchases of investment securities, interest expense, payments on borrowings, acquisitions, capital expenditures, repurchases

of our debt securities and common stock and the payment of cash dividends. Cash outflows fluctuate with the amount and timing of settlement of these transactions. Any future decline in our profitability would likely have an unfavorable impact on our liquidity.

We manage our cash, investments and capital structure so we are able to meet the short and long-term obligations of our business while maintaining financial flexibility and liquidity. We forecast, analyze and monitor our cash flows to enable investment and financing within the overall constraints of our financial strategy.

A substantial portion of the assets held by our regulated subsidiaries are in the form of cash and cash equivalents and investments. After considering expected cash flows from operating activities, we generally invest cash that exceeds our near term obligations in longer term marketable fixed maturity securities to improve our overall investment income returns. Our investment strategy is to make investments consistent with insurance statutes and other regulatory requirements, while preserving our asset base. Our investments are generally available-for-sale to meet liquidity and other needs. Our subsidiaries pay out excess capital annually in the form of dividends to their respective parent companies for general corporate use, as permitted by applicable regulations.

The availability of financing in the form of debt or equity is influenced by many factors including our profitability, operating cash flows, debt levels, debt ratings, contractual restrictions, regulatory requirements and market conditions. The securities and credit markets have in the past experienced higher than normal volatility, although current market conditions are more stable. During recent years, the federal government and various governmental agencies have taken a number of steps to improve liquidity in the financial markets and strengthen the regulation of the financial services market. In addition, governments around the world have developed their own plans to provide liquidity and security in the credit markets and to ensure adequate capital in certain financial institutions.

We have a $2,500.0 commercial paper program. Should commercial paper issuance be unavailable, we have the ability to use a combination of cash on hand and/or our $3,500.0 senior revolving credit facility to redeem any outstanding commercial paper upon maturity. Additionally, we believe the lenders participating in our credit facility would be willing and able to provide financing in accordance with their legal obligations. In addition to the $3,500.0 senior revolving credit facility, we estimate that we will receive approximately $2,200.0 of dividends from our subsidiaries during 2018, which also provides further operating and financial flexibility.

The table below outlines the cash flows provided by or used in operating, investing and financing activities for the years ended December 31, 2017, 2016 and 2015:

	Years Ended December 31		
	2017	2016	2015
Cash flows provided by (used in):			
Operating activities	$ 4,184.8	$ 3,270.2	$ 4,211.9
Investing activities	(5,082.4)	(513.9)	(1,151.5)
Financing activities	426.9	(798.6)	(3,093.3)
Effect of foreign exchange rates on cash and cash equivalents	4.3	4.1	(5.3)
(Decrease) increase in cash and cash equivalents	$ (466.4)	$ 1,961.8	$ (38.2)

Liquidity—Year Ended December 31, 2017 Compared to Year Ended December 31, 2016

During the year ended December 31, 2017, net cash flow provided by operating activities was $4,184.8, compared to $3,270.2 for the year ended December 31, 2016, an increase of $914.6. The increase was primarily attributable to an increase in premium receipts as a result of both rate increases across our businesses designed to cover overall cost trends, and growth in membership. The increase in cash flow was partially offset by an increase in claims payments due to higher medical cost experience and growth in membership. The increase was further offset by an increase in spend to support our growth initiatives, the timing of provider capitation payments for pass-through funding under the California Medicaid contract and the timing of certain state Medicaid payments.

Net cash flow used in investing activities was $5,082.4 during the year ended December 31, 2017, compared to $513.9 for the year ended December 31, 2016. The increase in cash flow used in investing activities of $4,568.5 was primarily due to an increase in net purchases of investments, the acquisition of HealthSun and an increase in purchases of property and equipment. These increases were partially offset by a decrease in collateral held under our securities lending programs.

Net cash flow provided by financing activities was $426.9 during the year ended December 31, 2017, compared to net cash flow used in financing activities of $798.6 for the year ended December 31, 2016. The change in cash flow from financing activities of $1,225.5 primarily resulted from an increase in net proceeds from long-term, short-term and commercial paper borrowings, a decrease in payments on debt-related derivatives and an increase in proceeds from the issuance of common stock under our employee stock plans. These sources of cash were partially offset by cash used for the repurchase of common stock in 2017, an increase in repayments of collateral under our securities lending programs and a decrease in bank overdrafts.

Liquidity— Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

During the year ended December 31, 2016, net cash flow provided by operating activities was $3,270.2, compared to $4,211.9 for the year ended December 31, 2015, a decrease of $941.7. The decrease was primarily attributable to an increase in claims payments due to higher medical cost experience and growth in membership. The decrease was further due to the timing of claim reimbursements from our self-insured customers. These decreases were partially offset by an increase in premium receipts as a result of rate increases across our businesses designed to cover overall cost trends and growth in membership. The decrease was further offset by an increase in pharmacy rebates received.

Net cash flow used in investing activities was $513.9 during the year ended December 31, 2016, compared to $1,151.5 for the year ended December 31, 2015. The decrease in cash flow used in investing activities of $637.6 was primarily due to a decrease in cash used for the purchase of subsidiaries, as net cash used in investing activities during the year ended December 31, 2015 included the purchase of Simply Healthcare while there were no purchases of subsidiaries during the year ended December 31, 2016. This decrease was partially offset by an increase in net purchases of investments.

Net cash flow used in financing activities was $798.6 during the year ended December 31, 2016, compared to $3,093.3 for the year ended December 31, 2015. The decrease in cash flow used in financing activities of $2,294.7 primarily resulted from a decrease in common stock repurchases, as we did not repurchase any common stock during the year ended December 31, 2016. The decrease was further due to a reduction in net repayments of short- and long-term borrowings and changes in bank overdrafts. The decrease in cash flow used in financing activities was partially offset by changes in commercial paper borrowings, payments on debt-related derivatives in 2016, a decrease in proceeds from the issuance of common stock under our employee stock plans and a decrease in excess tax benefits from share-based compensation.

Financial Condition

We maintained a strong financial condition and liquidity position, with consolidated cash, cash equivalents and investments in fixed maturity and equity securities of $25,179.0 at December 31, 2017. Since December 31, 2016, total cash, cash equivalents and investments in fixed maturity and equity securities increased by $1,916.3 primarily due to cash generated from operations, net proceeds obtained from long- and short-term borrowings, proceeds from the issuance of common stock under our employee stock plans and net proceeds received from commercial paper borrowings. These increases were partially offset by cash used for the purchase of HealthSun, repurchases of common stock, cash dividends paid to shareholders, purchases of property and equipment and collateral payments and settlements of debt-related derivatives.

Many of our subsidiaries are subject to various government regulations that restrict the timing and amount of dividends and other distributions that may be paid to their respective parent companies. Certain accounting practices prescribed by insurance regulatory authorities, or statutory accounting practices, differ from GAAP. Changes that occur in statutory accounting practices, if any, could impact our subsidiaries' future dividend capacity. In addition, we have agreed to certain undertakings to regulatory authorities, including the requirement to maintain certain capital levels in certain of our subsidiaries.

At December 31, 2017, we held $2,759.8 of cash, cash equivalents and investments at the parent company, which are available for general corporate use, including investment in our businesses, acquisitions, potential future common stock repurchases and dividends to shareholders, repurchases of debt securities and debt and interest payments.

Debt

We generally issue senior unsecured notes, or Notes, for long-term borrowing purposes. Certain of these Notes may have a call feature that allows us to redeem the Notes at any time at our option and/or a put feature that allows a Note holder to redeem the Notes upon the occurrence of both a change in control event and a downgrade of the Notes below an investment grade rating.

On December 14, 2017, we redeemed the $255.2 remaining outstanding principal balance of our 7.000% Notes due 2019, plus applicable premium for early redemption and accrued and unpaid interest to the redemption date, for cash totaling $275.0. We recognized a loss on extinguishment of debt of $14.3 for the repurchase of these notes.

On November 21, 2017, we issued $900.0 aggregate principal amount of 2.500% Notes due 2020, $750.0 aggregate principal amount of 2.950% Notes due 2022, $850.0 aggregate principal amount of 3.350% Notes due 2024, $1,600.0 aggregate principal amount of 3.650% Notes due 2027 and $1,400.0 aggregate principal amount of 4.375% Notes due 2047 under our shelf registration statement. Interest on the 2020 Notes is payable semi-annually in arrears on May 21 and November 21 of each year, commencing on May 21, 2018. Interest on the 2022 Notes, the 2024 Notes, the 2027 Notes and the 2047 Notes is payable semi-annually in arrears on June 1 and December 1 of each year, commencing on June 1, 2018. The net proceeds were used to fund the acquisitions of HealthSun and America's 1st Choice; redemption of the 7.000% Notes due 2019, discussed above; and redemption of the Tender Notes, discussed below. We intend to use the remaining net proceeds for working capital and general corporate purposes.

On November 14, 2017, we initiated a cash tender offer to purchase any and all of our 7.000% Notes due 2019, or the Any and All Notes, and certain of our 5.950% Notes due 2034, 5.850% Notes due 2036, 6.375% Notes due 2037, 5.800% Notes due 2040 and 5.100% Notes due 2044, or the Maximum Tender Offer Notes, and collectively with the Any and All Notes, the Tender Notes. On November 21, 2017, we repurchased $185.1 aggregate principal amount of the Any and All Notes, plus applicable premium and accrued and unpaid interest, for cash totaling $199.4. On November 30, 2017, we repurchased $836.3 aggregate principal amount of the Maximum Tender Offer Notes, plus applicable premium and accrued and unpaid interest, for cash totaling $1,095.4. We recognized a loss on extinguishment of debt of $265.6 for the repurchase of the Tender Notes.

On June 15, 2017 and February 15, 2017, we repaid, upon maturity, the $528.8 outstanding balance of our 5.875% Notes and the $400.0 outstanding balance of our 2.375% Notes, respectively.

During the year ended December 31, 2017, $117.3 of the aggregate principal balance of our outstanding senior convertible debentures due 2042, or the Debentures, were surrendered for conversion by certain holders. We elected to settle the excess of the principal amount of the conversions with cash for total payments of $344.8. We recognized a loss on the extinguishment of debt related to the Debentures of $2.5, based on the fair values of the debt on the conversion settlement dates. During the year ended December 31, 2015, we repurchased $920.0 in aggregate principal amount of the Debentures. In addition, $66.6 aggregate principal amount was surrendered for conversion. We elected to settle the excess of the principal amount of the repurchases and conversions with cash for total payments of $2,055.7 and recognized a gain on the extinguishment of debt of $12.7. There were no repurchases or material conversions during the year ended December 31, 2016.

On September 10, 2015, we repaid, upon maturity, the $625.0 outstanding principal balance of our 1.25% senior unsecured notes due 2015. Additionally, during the year ended December 31, 2015, we repurchased $13.0 of outstanding principal balance of certain other senior unsecured notes, plus applicable premium, accrued and unpaid interest, for cash totaling $16.2. We recognized a loss on extinguishment of debt of $3.4 on the repurchase of these notes.

On May 12, 2015, we issued 25.0 Equity Units, pursuant to an underwriting agreement dated May 6, 2015, in an aggregate principal amount of $1,250.0. Each Equity Unit has a stated amount of $50 (whole dollars) and consists of a purchase contract obligating the holder to purchase a certain number of shares of our common stock on May 1, 2018, subject to earlier termination or settlement, for a price in cash of $50 (whole dollars); and a 5% undivided beneficial ownership interest in $1,000 (whole dollars) principal amount of our 1.900% remarketable subordinated notes, due 2028. We received $1,228.8 in cash proceeds from the issuance of the Equity Units, net of underwriting discounts and commissions and offering expenses payable by us, and recorded $1,250.0 in long-term debt.

For additional information related to our borrowing activities, see Note 12, "Debt" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

We calculate our consolidated debt-to-capital ratio, a non-GAAP measure, from the amounts presented on our audited consolidated balance sheets included in Part II, Item 8 of this Annual Report on Form 10-K. Our debt-to-capital ratio is calculated as the sum of short-term borrowings, plus current portion of long-term debt, plus long-term debt, less current portion, divided by the sum of short-term borrowings, plus current portion of long-term debt, plus long-term debt, less current portion, plus total shareholders' equity. We believe our debt-to-capital ratio assists investors and rating agencies in measuring our overall leverage and additional borrowing capacity. In addition, our bank covenants include a maximum debt-to-capital ratio that we cannot and did not exceed. Our debt-to-capital ratio may not be comparable to similarly titled measures reported by other companies. Our consolidated debt-to-capital ratio was 42.9% and 38.5% as of December 31, 2017 and 2016, respectively.

Our senior debt is rated "A" by S&P Global, "BBB" by Fitch Ratings, Inc., "Baa2" by Moody's Investor Service, Inc. and "bbb+" by AM Best Company, Inc. We intend to maintain our senior debt investment grade ratings. If our credit ratings are downgraded, our business, financial condition and results of operations could be adversely impacted by limitations on future borrowings and a potential increase in our borrowing costs.

Future Sources and Uses of Liquidity

We have a shelf registration statement on file with the Securities and Exchange Commission to register an unlimited amount of any combination of debt or equity securities in one or more offerings. Specific information regarding terms and securities being offered will be provided at the time of an offering. Proceeds from future offerings are expected to be used for general corporate purposes, including, but not limited to, the repayment of debt, investments in or extensions of credit to our subsidiaries and the financing of possible acquisitions or business expansion.

We have a senior revolving credit facility, or the Facility, with a group of lenders for general corporate purposes. The Facility provides credit up to $3,500.0 and matures on August 25, 2020. The interest rate on the Facility is based on either the LIBOR rate or a base rate plus a predetermined rate based on our public debt rating at the date of utilization. Our ability to borrow under the Facility is subject to compliance with certain covenants. There were no amounts outstanding under the Facility at December 31, 2017 or 2016.

In August 2017, we entered into two separate 364-day lines of credit with separate lenders for general corporate purposes. The facilities provide combined credit up to $450.0. The interest rate on each line of credit is based on the LIBOR rate plus a predetermined rate. Our ability to borrow under the lines of credit is subject to compliance with certain covenants. We had $450.0 outstanding under these lines of credit at December 31, 2017.

We have an authorized commercial paper program of up to $2,500.0, the proceeds of which may be used for general corporate purposes. At December 31, 2017 and 2016, we had $803.6 and $629.0, respectively, of borrowings outstanding under our commercial paper program. Commercial paper borrowings are classified as long-term debt as our general practice and intent is to replace short-term commercial paper outstanding at expiration with additional short-term commercial paper for an uninterrupted period extending for more than one year, and we have the ability to redeem our commercial paper with borrowings under the Facility described above.

We are a member, through certain subsidiaries, of the Federal Home Loan Bank of Indianapolis, the Federal Home Loan Bank of Cincinnati and the Federal Home Loan Bank of Atlanta, collectively, the FHLBs, and as a member we have the ability to obtain short-term cash advances subject to certain minimum collateral requirements. At December 31, 2017 and 2016, $825.0 and $440.0, respectively, were outstanding under our short-term FHLBs borrowings.

During the year ended December 31, 2015, we entered into a bridge facility commitment letter and a joinder agreement, and a term loan facility, to finance a portion of the consideration under the now terminated Cigna Merger Agreement. In January 2017, we reduced the size of the bridge facility from $22,500.0 to $19,500.0 and extended the termination date under the Cigna Merger Agreement, as well as the availability of commitments under the bridge facility and term loan facility, to April 30, 2017. We recorded $107.9, $104.0 and $36.8 of interest expense related to the amortization of the bridge loan facility and other related fees during the years ended December 31, 2017, 2016 and 2015, respectively. The commitment of the lenders to provide the bridge facility and term loan facility expired on April 30, 2017.

As discussed in "*Financial Condition*" above, many of our subsidiaries are subject to various government regulations that restrict the timing and amount of dividends and other distributions that may be paid. Based upon these requirements, we are currently estimating approximately $2,200.0 of dividends to be paid to the parent company during 2018. During 2017, we received $2,268.0 of dividends from our subsidiaries.

We regularly review the appropriate use of capital, including acquisitions, common stock and debt security repurchases and dividends to shareholders. The declaration and payment of any dividends or repurchases of our common stock or debt is at the discretion of our Board of Directors and depends upon our financial condition, results of operations, future liquidity needs, regulatory and capital requirements and other factors deemed relevant by our Board of Directors.

A summary of the cash dividend activity for the year ended December 31, 2017 is as follows:

Declaration Date	Record Date	Payment Date	Cash Dividend per Share	Total
February 22, 2017	March 10, 2017	March 24, 2017	$ 0.65	$ 172.2
April 27, 2017	June 9, 2017	June 23, 2017	0.65	171.8
July 25, 2017	September 8, 2017	September 25, 2017	0.70	181.4
October 24, 2017	December 5, 2017	December 21, 2017	0.70	179.5

On January 30, 2018, our Board of Directors declared a quarterly cash dividend to shareholders of $0.75 per share on the outstanding shares of our common stock. This quarterly dividend is payable on March 23, 2018 to the shareholders of record as of March 9, 2018.

Under our Board of Directors' authorization, we maintain a common stock repurchase program. On December 7, 2017, the Board of Directors authorized a $5,000.0 increase to the common stock repurchase program. Repurchases may be made from time to time at prevailing market prices, subject to certain restrictions on volume, pricing and timing. The repurchases are effected from time to time in the open market, through negotiated transactions, including accelerated share repurchase agreements, and through plans designed to comply with Rule 10b5-1 under the Securities Exchange Act of 1934, as amended. Our stock repurchase program is discretionary as we are under no obligation to repurchase shares. We repurchase shares under the program when we believe it is a prudent use of capital. The excess cost of the repurchased shares over par value is charged on a pro rata basis to additional paid-in capital and retained earnings.

A summary of common stock repurchases for the period January 1, 2018 through February 9, 2018 (subsequent to December 31, 2017) and for the year ended December 31, 2017 is as follows:

	January 1, 2018 through February 9, 2018	Year Ended December 31, 2017
Shares repurchased	0.7	10.5
Average price per share	$ 237.35	$ 189.93
Aggregate cost	$ 156.6	$ 1,997.7
Authorization remaining at the end of each period	$ 7,021.5	$ 7,178.1

There were no common stock repurchases in 2016.

We expect to utilize the remaining authorized amount over a multi-year period, subject to market and industry conditions.

Contractual Obligations and Commitments

Our estimated contractual obligations and commitments as of December 31, 2017 are as follows:

		Payments Due by Period			
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
On-Balance Sheet:					
Debt[1]	$ 29,967.1	$ 4,013.6	$ 3,685.7	$ 3,374.9	$ 18,892.9
Other long-term liabilities[2]	1,186.8	47.5	414.2	384.1	341.0
Off-Balance Sheet:					
Purchase obligations[3]	1,747.5	995.5	671.5	70.8	9.7
Operating lease commitments	898.5	154.5	269.4	188.6	286.0
Investment commitments[4]	823.8	255.2	360.6	168.4	39.6
Total contractual obligations and commitments	$ 34,623.7	$ 5,466.3	$ 5,401.4	$ 4,186.8	$ 19,569.2

1 Includes estimated interest expense.
2 Primarily consists of reserves for future policy benefits, projected other postretirement benefits, deferred compensation, supplemental executive retirement plan liabilities and certain other miscellaneous long-term obligations. Estimated future payments for funded pension benefits have been excluded from this table as we had no funding requirements under ERISA at December 31, 2017 as a result of the value of the assets in the plans.
3 Includes estimated payments for future services under contractual arrangements from third-party service contracts.
4 Includes unfunded capital commitments for alternative investments.

The above table does not contain $211.5 of gross liabilities for uncertain tax positions and interest for which we cannot reasonably estimate the timing of the resolutions with the respective taxing authorities. For further information, see Note 7, “Income Taxes,” to the audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

In addition to the contractual obligations and commitments discussed above, we have a variety of other contractual agreements related to acquiring materials and services used in our operations. However, we do not believe these other agreements contain material noncancelable commitments.

We believe that funds from future operating cash flows, cash and investments and funds available under our Facility and/or from public or private financing sources, will be sufficient for future operations and commitments, and for capital acquisitions and other strategic transactions.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet derivative instruments, guarantee transactions, agreements or other contractual arrangements or any indemnification agreements that will require funding in future periods. We have not transferred assets to an unconsolidated entity that serves as credit, liquidity or market risk support to such entity. We do not hold any variable interest in an unconsolidated entity where such entity provides us with financing, liquidity, market risk or credit risk support.

Risk-Based Capital

Our regulated subsidiaries’ states of domicile have statutory risk-based capital, or RBC, requirements for health and other insurance companies and health maintenance organizations largely based on the National Association of Insurance Commissioners, or NAIC, Risk-Based Capital (RBC) For Health Organizations Model Act, or RBC Model Act. These RBC requirements are intended to measure capital adequacy, taking into account the risk characteristics of an insurer’s investments and products. The NAIC sets forth the formula for calculating the RBC requirements, which are designed to take into account asset risks, insurance risks, interest rate risks and other relevant risks with respect to an individual insurance company’s business. In general, under the RBC Model Act, an insurance company must submit a report of its RBC level to the state insurance department or insurance commissioner, as appropriate, at the end of each calendar year. Our regulated subsidiaries'

respective RBC levels as of December 31, 2017, which was the most recent date for which reporting was required, were in excess of all mandatory RBC requirements. In addition to exceeding the RBC requirements, we are in compliance with the liquidity and capital requirements for a licensee of the BCBSA and with the tangible net worth requirements applicable to certain of our California subsidiaries.

For additional information, see Note 21, “Statutory Information," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

(In Millions, Except Per Share Data or As Otherwise Stated Herein)

As a result of our investing and borrowing activities, we are exposed to financial market risks, including those resulting from changes in interest rates and changes in market valuations. Potential impacts discussed below are based upon sensitivity analyses performed on our financial position as of December 31, 2017. Actual results could vary from these estimates. Our primary objectives with our investment portfolio are to provide safety and preservation of capital, sufficient liquidity to meet cash flow requirements, the integration of investment strategy with the business operations and an attainment of a competitive after-tax total return.

Investments

Our investment portfolio is exposed to three primary sources of risk: credit quality risk, interest rate risk and market valuation risk.

The primary risks associated with our fixed maturity securities are credit quality risk and interest rate risk. Credit quality risk is defined as the risk of a credit event, such as a ratings downgrade or default, to an individual fixed maturity security and the potential loss attributable to that event. Credit quality risk is managed through our investment policy, which establishes credit quality limitations on the overall portfolio as well as diversification and percentage limits on securities of individual issuers. The result is a well-diversified portfolio of fixed maturity securities, with an average credit rating of approximately “A.” Interest rate risk is defined as the potential for economic losses on fixed maturity securities due to a change in market interest rates. Our fixed maturity portfolio is invested primarily in U.S. government securities, corporate bonds, asset-backed bonds, mortgage-related securities and municipal bonds, all of which have exposure to changes in the level of market interest rates. Interest rate risk is managed by maintaining asset duration within a band based upon our liabilities, operating performance and liquidity needs. Additionally, we have the capability of holding any security to maturity, which would allow us to realize full par value.

Our available-for-sale investment portfolio includes corporate securities which account for 34.7% of the total portfolio at December 31, 2017 and are subject to credit/default risk. In a declining economic environment, corporate yields will usually increase prompted by concern over the ability of corporations to make interest payments, thus causing a decrease in the price

of corporate securities, and the decline in value of the corporate fixed maturity portfolio. We manage this risk through fundamental credit analysis, diversification of issuers and industries and an average credit rating of our corporate fixed maturity portfolio of approximately “BBB.”

Our equity portfolio is comprised of large capitalization and small capitalization domestic equities, foreign equities, exchange-traded funds and index mutual funds. Our equity portfolio is subject to the volatility inherent in the stock market, driven by concerns over economic conditions, earnings and sales growth, inflation, and consumer confidence. These systemic risks cannot be managed through diversification alone. However, more routine risks, such as stock/industry specific risks, are managed by investing in a diversified equity portfolio.

As of December 31, 2017, 83.2% of our available-for-sale investments were fixed maturity securities. Market risk is addressed by actively managing the duration, allocation and diversification of our investment portfolio. We have evaluated the impact on the fixed maturity portfolio’s fair value considering an immediate 100 basis point change in interest rates. A 100 basis point increase in interest rates would result in an approximate $829.9 decrease in fair value, whereas a 100 basis point decrease in interest rates would result in an approximate $844.5 increase in fair value. While we classify our fixed maturity securities as “available-for-sale” for accounting purposes, we believe our cash flows and the duration of our portfolio should allow us to hold securities to maturity, thereby avoiding the recognition of losses should interest rates rise significantly.

As of December 31, 2017, 16.8% of our available-for-sale investments were equity securities. An immediate 10% decrease in each equity investment’s value, arising from market movement, would result in a fair value decrease of $363.2. Alternatively, an immediate 10% increase in each equity investment’s value, attributable to the same factor, would result in a fair value increase of $363.2.

For additional information regarding our investments, see Part II, Item 8, Note 4, “Investments,” to our audited consolidated financial statements and “Critical Accounting Policies and Estimates - Investments” within Part II, Item 7 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in this Annual Report on Form 10-K.

Long-Term Debt

Our total long-term debt at December 31, 2017 consists of senior unsecured notes, remarketable subordinated notes, convertible debentures, commercial paper and subordinated surplus notes by one of our insurance subsidiaries. At December 31, 2017, the carrying value and estimated fair value of our long-term debt was $18,656.8 and $20,834.4, respectively. This debt is subject to interest rate risk as these instruments have fixed interest rates and the fair value is affected by changes in market interest rates. Should interest rates increase or decrease in the future, the estimated fair value of our fixed rate debt would decrease or increase accordingly.

For additional information regarding our long-term debt, see Note 6, "Fair Value" and Note 12, “Debt” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Derivatives

We have exposure to economic losses due to interest rate risk arising from changes in the level or volatility of interest rates. We attempt to mitigate our exposure to interest rate risk through the use of derivative financial instruments. These strategies include the use of interest rate swaps and forward contracts, which are used to lock-in interest rates or to hedge (on an economic basis) interest rate risks associated with variable rate debt. We have used these types of instruments as designated hedges against specific liabilities.

Changes in interest rates will affect the estimated fair value of these derivatives. As of December 31, 2017, we recorded a net liability of $12.2, the estimated fair value of the swaps at that date. We have evaluated the impact on the interest rate swaps' fair value considering an immediate 100 basis point change in interest rates. A 100 basis point increase in interest rates would result in an approximate $63.6 decrease in fair value, whereas a 100 basis point decrease in interest rates would result in an approximate $63.6 increase in fair value.

For additional information regarding our derivatives, see Note 5, “Derivative Financial Instruments” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

ANTHEM, INC.

CONSOLIDATED FINANCIAL STATEMENTS

Years ended December 31, 2017, 2016 and 2015

Contents

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Anthem, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Anthem, Inc. (the "Company") as of December 31, 2017 and 2016, and the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes and financial statement schedule listed in the Index at Item 15(c) (collectively referred to as the "financial statements"). In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company at December 31, 2017 and 2016, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 21, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ ERNST & YOUNG LLP

We have served as the Company's auditor since 1944.

Indianapolis, Indiana
February 21, 2018

Anthem, Inc.
Consolidated Balance Sheets

	December 31, 2017	December 31, 2016
(In millions, except share data)		
Assets		
Current assets:		
Cash and cash equivalents	$ 3,608.9	$ 4,075.3
Investments available-for-sale, at fair value:		
Fixed maturity securities (amortized cost of $17,054.5 and $16,991.8)	17,377.3	17,163.1
Equity securities (cost of $3,098.1 and $1,076.1)	3,599.2	1,468.5
Other invested assets, current	17.2	15.8
Accrued investment income	162.5	164.5
Premium and self-funded receivables	6,184.9	5,860.8
Other receivables	2,266.5	2,536.6
Income taxes receivable	341.9	168.7
Securities lending collateral	455.1	1,079.8
Other current assets	2,249.3	1,781.8
Total current assets	36,262.8	34,314.9
Long-term investments available-for-sale, at fair value:		
Fixed maturity securities (amortized cost of $556.0 and $524.6)	560.8	524.4
Equity securities (cost of $26.7 and $27.2)	32.8	31.4
Other invested assets, long-term	3,343.8	2,240.5
Property and equipment, net	2,174.9	1,977.9
Goodwill	19,231.2	17,561.2
Other intangible assets	8,368.4	7,964.9
Other noncurrent assets	565.3	467.9
Total assets	$ 70,540.0	$ 65,083.1
Liabilities and shareholders' equity		
Liabilities		
Current liabilities:		
Policy liabilities:		
Medical claims payable	$ 7,991.5	$ 7,892.6
Reserves for future policy benefits	69.9	71.8
Other policyholder liabilities	2,950.3	2,221.1
Total policy liabilities	11,011.7	10,185.5
Unearned income	860.3	971.9
Accounts payable and accrued expenses	5,024.4	4,014.9
Security trades pending payable	112.6	93.5
Securities lending payable	454.4	1,078.9
Short-term borrowings	1,275.0	440.0
Current portion of long-term debt	1,274.6	928.4
Other current liabilities	3,343.0	3,581.3
Total current liabilities	23,356.0	21,294.4
Long-term debt, less current portion	17,382.2	14,358.5
Reserves for future policy benefits, noncurrent	647.3	666.1
Deferred tax liabilities, net	1,726.5	2,779.9
Other noncurrent liabilities	925.1	883.8
Total liabilities	44,037.1	39,982.7
Commitments and contingencies—Note 13		
Shareholders' equity		
Preferred stock, without par value, shares authorized - 100,000,000; shares issued and outstanding - none	—	—
Common stock, par value $0.01, shares authorized - 900,000,000; shares issued and outstanding - 256,084,913 and 263,747,395	2.6	2.6
Additional paid-in capital	8,547.4	8,805.1
Retained earnings	18,054.4	16,560.6
Accumulated other comprehensive loss	(101.5)	(267.9)
Total shareholders' equity	26,502.9	25,100.4

Total liabilities and shareholders' equity	$ 70,540.0	$ 65,083.1

See accompanying notes.

Anthem, Inc.
Consolidated Statements of Income

	Years Ended December 31		
	2017	2016	2015
(In millions, except per share data)			
Revenues			
Premiums	$ 83,647.7	$ 78,860.1	$ 73,385.1
Administrative fees	5,380.4	5,298.8	4,976.6
Other revenue	33.1	35.1	43.1
Total operating revenue	89,061.2	84,194.0	78,404.8
Net investment income	866.5	779.5	677.6
Net realized gains on financial instruments	144.8	4.9	157.5
Other-than-temporary impairment losses on investments:			
Total other-than-temporary impairment losses on investments	(34.7)	(147.1)	(99.9)
Portion of other-than-temporary impairment losses recognized in other comprehensive income (loss)	1.6	31.7	16.5
Other-than-temporary impairment losses recognized in income	(33.1)	(115.4)	(83.4)
Total revenues	90,039.4	84,863.0	79,156.5
Expenses			
Benefit expense	72,236.2	66,834.4	61,116.9
Selling, general and administrative expense:			
Selling expense	1,395.5	1,391.5	1,441.1
General and administrative expense	11,254.1	11,166.4	11,093.7
Total selling, general and administrative expense	12,649.6	12,557.9	12,534.8
Interest expense	739.0	723.0	653.0
Amortization of other intangible assets	168.4	192.3	230.1
Loss (gain) on extinguishment of debt	282.4	—	(9.3)
Total expenses	86,075.6	80,307.6	74,525.5
Income before income tax expense	3,963.8	4,555.4	4,631.0
Income tax expense	121.0	2,085.6	2,071.0
Net income	$ 3,842.8	$ 2,469.8	$ 2,560.0
Net income per share			
Basic	$ 14.70	$ 9.39	$ 9.73
Diluted	$ 14.35	$ 9.21	$ 9.38
Dividends per share	$ 2.70	$ 2.60	$ 2.50

See accompanying notes.

Anthem, Inc.
Consolidated Statements of Comprehensive Income

	Years Ended December 31		
	2017	2016	2015
(In millions)			
Net income	$ 3,842.8	$ 2,469.8	$ 2,560.0
Other comprehensive income (loss), net of tax:			
Change in net unrealized gains/losses on investments	172.5	117.9	(384.3)
Change in non-credit component of other-than-temporary impairment losses on investments	4.4	5.4	(5.6)
Change in net unrealized gains/losses on cash flow hedges	(64.6)	(87.3)	(45.2)
Change in net periodic pension and postretirement costs	51.3	(13.4)	(26.0)
Foreign currency translation adjustments	2.8	2.1	(3.4)
Other comprehensive income (loss)	166.4	24.7	(464.5)
Total comprehensive income	$ 4,009.2	$ 2,494.5	$ 2,095.5

See accompanying notes.

Anthem, Inc.
Consolidated Statements of Cash Flows

	Years Ended December 31		
	2017	2016	2015
(In millions)			
Operating activities			
Net income	$ 3,842.8	$ 2,469.8	$ 2,560.0
Adjustments to reconcile net income to net cash provided by operating activities:			
Net realized gains on financial instruments	(144.8)	(4.9)	(157.5)
Other-than-temporary impairment losses recognized in income	33.1	115.4	83.4
Loss (gain) on extinguishment of debt	282.4	—	(9.3)
Loss on disposal of assets	13.0	4.5	16.0
Deferred income taxes	(1,272.1)	126.9	(65.9)
Amortization, net of accretion	779.7	807.8	802.1
Depreciation expense	110.7	104.0	105.8
Impairment of property and equipment	2.5	44.8	1.8
Share-based compensation	169.6	164.6	148.2
Excess tax benefits from share-based compensation	—	(53.5)	(95.8)
Changes in operating assets and liabilities:			
Receivables, net	(22.2)	(1,380.5)	(42.9)
Other invested assets	(35.5)	(19.4)	5.9
Other assets	(629.0)	(127.7)	33.8
Policy liabilities	731.6	321.7	193.0
Unearned income	(120.1)	(173.6)	33.9
Accounts payable and accrued expenses	921.8	182.3	(123.4)
Other liabilities	(120.2)	605.7	686.4
Income taxes	(193.9)	178.8	41.5
Other, net	(164.6)	(96.5)	(5.1)
Net cash provided by operating activities	4,184.8	3,270.2	4,211.9
Investing activities			
Purchases of fixed maturity securities	(9,794.6)	(10,157.7)	(9,792.0)
Proceeds from fixed maturity securities:			
Sales	7,931.7	8,636.0	8,909.2
Maturities, calls and redemptions	1,847.6	1,418.6	1,313.6
Purchases of equity securities	(5,416.3)	(1,476.3)	(1,561.4)
Proceeds from sales of equity securities	3,462.5	1,592.8	1,471.1
Purchases of other invested assets	(1,163.8)	(433.1)	(505.8)
Proceeds from sales of other invested assets	219.0	304.9	85.9
Changes in collateral and settlement of non-hedging derivatives	64.9	(34.5)	(36.5)
Changes in securities lending collateral	624.5	222.0	214.4
Purchases of subsidiaries, net of cash acquired	(2,079.6)	—	(638.9)
Purchases of property and equipment	(799.5)	(583.6)	(638.2)
Proceeds from sales of property and equipment	9.3	—	35.3
Other, net	11.9	(3.0)	(8.2)
Net cash used in investing activities	(5,082.4)	(513.9)	(1,151.5)
Financing activities			
Net proceeds from (repayments of) commercial paper borrowings	174.6	(53.2)	682.2
Proceeds from long-term borrowings	5,457.8	—	1,226.5
Repayments of long-term borrowings	(2,815.1)	—	(2,697.2)
Proceeds from short-term borrowings	5,835.0	2,400.0	2,760.0
Repayments of short-term borrowings	(5,000.0)	(2,500.0)	(2,620.0)
Changes in securities lending payable	(624.5)	(222.0)	(214.4)
Changes in bank overdrafts	71.0	513.8	(243.8)
Premiums paid on equity call options	—	—	(16.7)
Proceeds from sale of put options	0.9	—	16.6
Repurchase and retirement of common stock	(1,997.7)	—	(1,515.8)
Change in collateral and settlements of debt-related derivatives	(149.0)	(360.4)	—
Cash dividends	(704.9)	(684.0)	(656.6)

Proceeds from issuance of common stock under employee stock plans	225.3	119.4	186.0
Taxes paid through withholding of common stock under employee stock plans	(46.5)	(65.7)	(95.9)
Excess tax benefits from share-based compensation	—	53.5	95.8
Net cash provided by (used in) financing activities	426.9	(798.6)	(3,093.3)
Effect of foreign exchange rates on cash and cash equivalents	4.3	4.1	(5.3)
Change in cash and cash equivalents	(466.4)	1,961.8	(38.2)
Cash and cash equivalents at beginning of year	4,075.3	2,113.5	2,151.7
Cash and cash equivalents at end of year	$ 3,608.9	$ 4,075.3	$ 2,113.5

See accompanying notes.

Anthem, Inc.
Consolidated Statements of Shareholders' Equity

	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
	Number of Shares	Par Value				
(In millions)						
January 1, 2015	268.1	$ 2.7	$ 10,062.3	$ 14,014.4	$ 171.9	$ 24,251.3
Net income	—	—	—	2,560.0	—	2,560.0
Other comprehensive loss	—	—	—	—	(464.5)	(464.5)
Premiums for and settlement of equity options	—	—	(14.0)	—	—	(14.0)
Repurchase and retirement of common stock	(10.4)	(0.1)	(382.2)	(1,133.5)	—	(1,515.8)
Dividends and dividend equivalents	—	—	—	(662.4)	—	(662.4)
Issuance of common stock under employee stock plans, net of related tax benefits	3.5	—	308.2	—	—	308.2
Convertible debenture repurchases and conversions	—	—	(1,287.8)	—	—	(1,287.8)
Equity Units contract payments and issuance costs	—	—	(130.9)	—	—	(130.9)
December 31, 2015	261.2	2.6	8,555.6	14,778.5	(292.6)	23,044.1
Net income	—	—	—	2,469.8	—	2,469.8
Other comprehensive income	—	—	—	—	24.7	24.7
Dividends and dividend equivalents	—	—	—	(687.7)	—	(687.7)
Issuance of common stock under employee stock plans, net of related tax benefits	2.5	—	249.2	—	—	249.2
Equity Units issuance costs adjustment	—	—	0.3	—	—	0.3
December 31, 2016	263.7	2.6	8,805.1	16,560.6	(267.9)	25,100.4
Net income	—	—	—	3,842.8	—	3,842.8
Other comprehensive income	—	—	—	—	166.4	166.4
Premiums for and settlement of equity options	—	—	0.9	—	—	0.9
Repurchase and retirement of common stock	(10.5)	—	(356.1)	(1,641.6)	—	(1,997.7)
Dividends and dividend equivalents	—	—	—	(707.4)	—	(707.4)
Issuance of common stock under employee stock plans, net of related tax benefits	2.9	—	342.5	—	—	342.5
Convertible debenture conversions	—	—	(245.0)	—	—	(245.0)
December 31, 2017	256.1	$ 2.6	$ 8,547.4	$ 18,054.4	$ (101.5)	$ 26,502.9

See accompanying notes.

Anthem, Inc.

Notes to Consolidated Financial Statements

December 31, 2017

(In Millions, Except Per Share Data or As Otherwise Stated Herein)

1. Organization

References to the terms "we," "our," "us" or "Anthem" used throughout these Notes to Consolidated Financial Statements refer to Anthem, Inc., an Indiana corporation, and unless the context otherwise requires, its direct and indirect subsidiaries.

We are one of the largest health benefits companies in the United States in terms of medical membership, serving 40.2 medical members through our affiliated health plans as of December 31, 2017. We offer a broad spectrum of network-based managed care plans to Large Group, Small Group, Individual, Medicaid and Medicare markets. Our managed care plans include: Preferred Provider Organizations, or PPOs; Health Maintenance Organizations, or HMOs; Point-of-Service, or POS, plans; traditional indemnity plans and other hybrid plans, including Consumer-Driven Health Plans, or CDHPs; and hospital only and limited benefit products. In addition, we provide a broad array of managed care services to self-funded customers, including claims processing, underwriting, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services. We provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits, radiology benefit management and analytics-driven personal healthcare. We also provide services to the federal government in connection with the Federal Employee Program®, or FEP®.

We are an independent licensee of the Blue Cross and Blue Shield Association, or BCBSA, an association of independent health benefit plans. We serve our members as the Blue Cross licensee for California and as the Blue Cross and Blue Shield, or BCBS, licensee for Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri (excluding 30 counties in the Kansas City area), Nevada, New Hampshire, New York (in varying counties as BCBS, Blue Cross or Empire BlueCross BlueShield HealthPlus), Ohio, Virginia (excluding the Northern Virginia suburbs of Washington, D.C.) and Wisconsin. In a majority of these service areas we do business as Anthem Blue Cross, Anthem Blue Cross and Blue Shield, Blue Cross and Blue Shield of Georgia, and Empire Blue Cross Blue Shield or Empire Blue Cross (in our New York service areas). We also conduct business through arrangements with other BCBS licensees in Louisiana, South Carolina and western New York. Through our AMERIGROUP Corporation, or Amerigroup, subsidiary and other subsidiaries, we conduct business in Florida, Georgia, Iowa, Kansas, Maryland, Nevada, New Jersey, New Mexico, Tennessee, Texas, Washington and Washington, D.C. In addition, we conduct business through our Simply Healthcare Holdings, Inc., or Simply Healthcare, and HealthSun Health Plans, Inc., or HealthSun, subsidiaries in Florida. We also serve customers throughout the country as HealthLink, UniCare, and in certain Arizona, California, Connecticut, Iowa, Nevada, Tennessee and Virginia markets through our CareMore Health Group, Inc., or CareMore, subsidiary. We are licensed to conduct insurance operations in all 50 states and the District of Columbia through our subsidiaries.

2. Basis of Presentation and Significant Accounting Policies

Basis of Presentation: The accompanying consolidated financial statements include the accounts of Anthem and its subsidiaries and have been prepared in conformity with U.S. generally accepted accounting principles, or GAAP. All significant intercompany accounts and transactions have been eliminated in consolidation.

Certain of our subsidiaries operate outside of the United States and have functional currencies other than the U.S. dollar, or USD. We translate the assets and liabilities of those subsidiaries to USD using the exchange rate in effect at the end of the period. We translate the revenues and expenses of those subsidiaries to USD using the average exchange rates in effect during the period. The net effect of these translation adjustments is included in "Foreign currency translation adjustments" in our consolidated statements of comprehensive income.

Reclassifications: Certain prior year amounts have been reclassified to conform to the current year presentation.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Use of Estimates: The preparation of consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

Cash and Cash Equivalents: Cash and cash equivalents includes available cash and all highly liquid investments with maturities of three months or less when purchased. We control a number of bank accounts that are used exclusively to hold customer funds for the administration of customer benefits. At December 31, 2017 and 2016, we held $91.2 and $157.0, respectively, of customer funds with an offsetting liability in other current liabilities.

Investments: Certain Financial Accounting Standards Board, or FASB, other-than-temporary impairment, or OTTI, guidance applies to fixed maturity securities and provides guidance on the recognition, presentation of, and disclosures for OTTIs. If a fixed maturity security is in an unrealized loss position and we have the intent to sell the fixed maturity security, or it is more likely than not that we will have to sell the fixed maturity security before recovery of its amortized cost basis, the decline in value is deemed to be other-than-temporary and is presented within the other-than-temporary impairment losses recognized in income line item on our consolidated statements of income. For impaired fixed maturity securities that we do not intend to sell or it is more likely than not that we will not have to sell such securities, but we expect that we will not fully recover the amortized cost basis, the credit component of the OTTI is presented within the other-than-temporary impairment losses recognized in income line item on our consolidated statements of income and the non-credit component of the OTTI is recognized in other comprehensive income. Furthermore, unrealized losses entirely caused by non-credit related factors related to fixed maturity securities for which we expect to fully recover the amortized cost basis continue to be recognized in accumulated other comprehensive loss.

The credit component of an OTTI is determined primarily by comparing the net present value of projected future cash flows with the amortized cost basis of the fixed maturity security. The net present value is calculated by discounting our best estimate of projected future cash flows at the effective interest rate implicit in the fixed maturity security at the date of acquisition. For mortgage-backed and asset-backed securities, cash flow estimates are based on assumptions regarding the underlying collateral including prepayment speeds, vintage, type of underlying asset, geographic concentrations, default rates, recoveries and changes in value. For all other securities, cash flow estimates are driven by assumptions regarding probability of default, including changes in credit ratings, and estimates regarding timing and amount of recoveries associated with a default.

The unrealized gains or losses on our current and long-term equity securities classified as available-for-sale are included in accumulated other comprehensive loss as a separate component of shareholders' equity, unless the decline in value is deemed to be other-than-temporary and we do not have the intent and ability to hold such equity securities until their full cost can be recovered, in which case such equity securities are written down to fair value and the loss is charged to other-than-temporary impairment losses recognized in income.

We maintain various rabbi trusts to account for the assets and liabilities under certain deferred compensation plans. Under these plans, the participants can defer certain types of compensation and elect to receive a return on the deferred amounts based on the changes in fair value of various investment options, primarily a variety of mutual funds. We have corporate-owned life insurance policies on certain participants in the deferred compensation plans. The cash surrender value of the corporate-owned life insurance policies is reported in other invested assets, long-term, in the consolidated balance sheets. The remaining rabbi trust assets are generally invested according to the participant's investment election, and are classified as trading, which are reported in other invested assets, current, in the consolidated balance sheets.

We use the equity method of accounting for investments in companies in which our ownership interest enables us to influence the operating or financial decisions of the investee company. Our proportionate share of equity in net income of these unconsolidated affiliates is reported within net investment income.

For asset-backed securities included in fixed maturity securities, we recognize income using an effective yield based on anticipated prepayments and the estimated economic life of the securities. When estimates of prepayments change, the effective yield is recalculated to reflect actual payments to date and anticipated future payments. The net investment in the securities is adjusted to the amount that would have existed had the new effective yield been applied since the acquisition of the securities. Such adjustments are reported within net investment income.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Investment income is recorded when earned. All securities sold resulting in investment gains and losses are recorded on the trade date. Realized gains and losses are determined on the basis of the cost or amortized cost of the specific securities sold.

We participate in securities lending programs whereby marketable securities in our investment portfolio are transferred to independent brokers or dealers in exchange for cash and securities collateral. Under FASB guidance related to accounting for transfers and servicing of financial assets and extinguishments of liabilities, we recognize the collateral as an asset, which is reported as securities lending collateral on our consolidated balance sheets and we record a corresponding liability for the obligation to return the collateral to the borrower, which is reported as securities lending payable. The securities on loan are reported in the applicable investment category on our consolidated balance sheets. Unrealized gains or losses on securities lending collateral are included in accumulated other comprehensive loss as a separate component of shareholders' equity. The market value of loaned securities and that of the collateral pledged can fluctuate in non-synchronized fashions. To the extent the loaned securities' value appreciates faster or depreciates slower than the value of the collateral pledged, we are exposed to the risk of the shortfall. As a primary mitigating mechanism, the loaned securities and collateral pledged are marked to market on a daily basis and the shortfall, if any, is collected accordingly. Secondarily, the collateral level is set at 102% of the value of the loaned securities, which provides a cushion before any shortfall arises. The investment of the cash collateral is subject to market risk, which is managed by limiting the investments to higher quality and shorter duration instruments.

Premium and Self-Funded Receivables: Premium and self-funded receivables include the uncollected amounts from fully-insured and self-funded groups, individuals and government programs, and are reported net of an allowance for doubtful accounts of $455.3 and $333.5 at December 31, 2017 and 2016, respectively. The allowance for doubtful accounts is based on historical collection trends and our judgment regarding the ability to collect specific accounts.

Other Receivables: Other receivables include pharmacy rebates, provider advances, claims recoveries, reinsurance, proceeds due from brokers on investment trades, other government receivables and other miscellaneous amounts due to us. These receivables are reported net of an allowance for doubtful accounts of $305.6 and $197.6 at December 31, 2017 and 2016, respectively, which is based on historical collection trends and our judgment regarding the ability to collect specific accounts.

Income Taxes: We file a consolidated income tax return. Deferred income tax assets and liabilities are recognized for temporary differences between the financial statement and tax return basis of assets and liabilities based on enacted tax rates and laws. The deferred tax benefits of the deferred tax assets are recognized to the extent realization of such benefits is more likely than not. Deferred income tax expense or benefit generally represents the net change in deferred income tax assets and liabilities during the year, excluding the impact from amounts initially recorded for business combinations, if any, and amounts recorded to accumulated other comprehensive loss. Current income tax expense represents the tax consequences of revenues and expenses currently taxable or deductible on various income tax returns for the year reported.

We account for income tax contingencies in accordance with FASB guidance that contains a model to address uncertainty in tax positions and clarifies the accounting for income taxes by prescribing a minimum recognition threshold, which all income tax positions must achieve before being recognized in the financial statements.

Property and Equipment: Property and equipment is recorded at cost, net of accumulated depreciation. Depreciation is computed principally by the straight-line method over estimated useful lives ranging from fifteen to thirty-nine years for buildings and improvements, three to five years for computer equipment and software, and the lesser of the remaining life of the building lease, if any, or seven years for furniture and other equipment. Leasehold improvements are depreciated over the term of the related lease. Certain costs related to the development or purchase of internal-use software are capitalized and amortized over five years.

Goodwill and Other Intangible Assets: FASB guidance requires business combinations to be accounted for using the acquisition method of accounting and it also specifies the types of acquired intangible assets that are required to be recognized and reported separately from goodwill. Goodwill represents the excess of cost of acquisition over the fair value of net assets acquired. Other intangible assets represent the values assigned to customer relationships, provider and hospital networks, Blue Cross and Blue Shield and other trademarks, licenses, non-compete and other agreements. Goodwill and other intangible assets are allocated to reportable segments based on the relative fair value of the components of the businesses acquired.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Goodwill and other intangible assets with indefinite lives are not amortized but are tested for impairment at least annually. We complete our annual impairment tests of existing goodwill and other intangible assets with indefinite lives during the fourth quarter of each year. Certain interim impairment tests are also performed when potential impairment indicators exist or changes in our business or other triggering events occur. Goodwill and other intangible assets are allocated to reporting units for purposes of the annual goodwill impairment test. In addition, certain other intangible assets with indefinite lives, such as trademarks, are also tested separately.

FASB guidance allows for qualitative assessments of whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount for purposes of a goodwill impairment analysis and whether it is more likely than not that an indefinite-lived intangible asset is impaired for purposes of an indefinite-lived intangible asset impairment analysis. Quantitative analysis must be performed if qualitative analyses are not conclusive. Entities also have the option to bypass the assessment of qualitative factors and proceed directly to performing quantitative analyses. We begin our annual tests with quantitative analyses. Our impairment tests require us to make assumptions and judgments regarding the estimated fair value of our reporting units, including goodwill and other intangible assets with indefinite lives. Estimated fair values developed based on our assumptions and judgments might be significantly different if other reasonable assumptions and estimates were to be used.

Fair value for purposes of the goodwill impairment test is calculated using a blend of the projected income and market valuation approaches. The projected income approach is developed using assumptions about future revenue, expenses and net income derived from our internal planning process. Our assumed discount rate is based on our industry's weighted-average cost of capital and reflects volatility associated with the cost of equity capital. Market valuations include market comparisons to publicly traded companies in our industry and are based on observed multiples of certain measures including revenue; earnings before interest, taxes, depreciation and amortization, or EBITDA; and book value of invested capital. A goodwill impairment loss is recognized to the extent that the carrying amount exceeds the asset's fair value. This determination is made at the reporting unit level and consists of two steps. First, the fair value of a reporting unit is determined and compared to its carrying amount. Second, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recognized for any excess of the carrying amount of the reporting unit's goodwill over the implied fair value of that goodwill. The implied fair value of goodwill is determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation on a business acquisition, at the impairment test date.

The fair value of indefinite-lived intangible assets is estimated and compared to the carrying value. We estimate the fair value of indefinite-lived intangible assets using a projected income approach. We recognize an impairment loss when the estimated fair value of indefinite-lived intangible assets is less than the carrying value. If significant impairment indicators are noted relative to other intangible assets subject to amortization, we may be required to record impairment losses against future income.

Derivative Financial Instruments: We primarily invest in the following types of derivative financial instruments: interest rate swaps, futures, forward contracts, put and call options, swaptions, embedded derivatives and warrants. Derivatives embedded within non-derivative instruments, such as options embedded in convertible fixed maturity securities, are bifurcated from the host instrument when the embedded derivative is not clearly and closely related to the host instrument. Our use of derivatives is limited by statutes and regulations promulgated by the various regulatory bodies to which we are subject, and by our own derivative policy. Our derivative use is generally limited to hedging purposes, on an economic basis, and we generally do not use derivative instruments for speculative purposes.

We have exposure to economic losses due to interest rate risk arising from changes in the level or volatility of interest rates. We attempt to mitigate our exposure to interest rate risk through active portfolio management, including rebalancing our existing portfolios of assets and liabilities, as well as changing the characteristics of investments to be purchased or sold in the future. In addition, derivative financial instruments are used to modify the interest rate exposure of certain liabilities or forecasted transactions. These strategies include the use of interest rate swaps and forward contracts, which are used to lock-in interest rates or to hedge, on an economic basis, interest rate risks associated with variable rate debt. We have used these types of instruments as designated hedges against specific liabilities.

All investments in derivatives are recorded as assets or liabilities at fair value. If certain correlation, hedge effectiveness and risk reduction criteria are met, a derivative may be specifically designated as a hedge of exposure to changes in fair value or cash flow. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

the nature of any hedge designation thereon. Amounts excluded from the assessment of hedge effectiveness, if any, as well as the ineffective portion of the gain or loss, are reported in results of operations immediately. If the derivative is not designated as a hedge, the gain or loss resulting from the change in the fair value of the derivative is recognized in results of operations in the period of change. Cash flows associated with the settlement of non-designated derivatives are shown on a net basis in investing activity in our consolidated statements of cash flow.

From time to time, we may also purchase derivatives to hedge, on an economic basis, our exposure to foreign currency exchange fluctuations associated with the operations of certain of our subsidiaries. We generally use futures or forward contracts for these transactions. We generally do not designate these contracts as hedges and, accordingly, the changes in fair value of these derivatives are recognized in results of operations immediately.

Credit exposure associated with non-performance by the counterparties to derivative instruments is generally limited to the uncollateralized fair value of the asset related to instruments recognized in the consolidated balance sheets. We attempt to mitigate the risk of non-performance by selecting counterparties with high credit ratings and monitoring their creditworthiness and by diversifying derivatives among multiple counterparties. At December 31, 2017, we believe there were no material concentrations of credit risk with any individual counterparty.

We generally enter into master netting agreements, which reduce credit risk by permitting net settlement of transactions with the same counterparty. Certain of our derivative agreements also contain credit support provisions that require us or the counterparty to post collateral if there are declines in the derivative fair value or our credit rating. The derivative assets and derivative liabilities are reported at their fair values net of collateral and netting by the counterparty.

Retirement Benefits: We recognize the funded status of pension and other postretirement benefit plans on the consolidated balance sheets based on fiscal-year-end measurements of plan assets and benefit obligations. Prepaid pension benefits represent prepaid costs related to defined benefit pension plans and are reported with other noncurrent assets. Postretirement benefits represent outstanding obligations for retiree medical, life, vision and dental benefits. Liabilities for pension and other postretirement benefits are reported with current and noncurrent liabilities based on the amount by which the actuarial present value of benefits payable in the next twelve months included in the benefit obligation exceeds the fair value of plan assets.

We determine the expected return on plan assets using the calculated value of plan assets, which recognizes changes in the fair value of plan assets in a systematic manner over three years. We apply a corridor approach to amortize unrecognized actuarial gains or losses. Under this approach, only accumulated net actuarial gains or losses in excess of 10% of the greater of the projected benefit obligation or the fair value of plan assets are amortized over the average remaining service or lifetime of the workforce as a component of net periodic benefit cost.

The discount rate reflects the current rate at which the pension liabilities could be effectively settled at the end of the year based on our most recent measurement date. At the December 31, 2017 measurement date, we changed the discount rate setting methodology from the single equivalent discount rate to the annual spot rate approach. Under the spot rate approach, individual spot rates from a full yield curve of published rates are used to discount each plan's cash flows to determine the plan's obligations. The spot rate approach produces a more precise measure of service and interest cost, and results in obligations that are equal at the measurement date under both methods.

Medical Claims Payable: Liabilities for medical claims payable include estimated provisions for incurred but not paid claims on an undiscounted basis, as well as estimated provisions for expenses related to the processing of claims. Incurred but not paid claims include (1) an estimate for claims that are incurred but not reported, as well as claims reported to us but not yet processed through our systems; and (2) claims reported to us and processed through our systems but not yet paid.

Liabilities for both claims incurred but not reported and reported but not yet processed through our systems are determined in the aggregate, employing actuarial methods that are commonly used by health insurance actuaries and meet Actuarial Standards of Practice. Actuarial Standards of Practice require that the claim liabilities be appropriate under moderately adverse circumstances. We determine the amount of the liability for incurred but not paid claims by following a detailed actuarial process that uses both historical claim payment patterns as well as emerging medical cost trends to project our best estimate of claim liabilities. Under this process, historical paid claims data is formatted into “claim triangles,” which compare claim incurred dates to the dates of claim payments. This information is analyzed to create “completion factors” that represent the average percentage of total incurred claims that have been paid through a given date after being incurred.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Completion factors are applied to claims paid through the period-end date to estimate the ultimate claim expense incurred for the period. Actuarial estimates of incurred but not paid claim liabilities are then determined by subtracting the actual paid claims from the estimate of the ultimate incurred claims.

For the most recent incurred months (typically the most recent two months), the percentage of claims paid for claims incurred in those months is generally low. This makes the completion factor methodology less reliable for such months. Therefore, incurred claims for recent months are not projected from historical completion and payment patterns; rather, they are projected by estimating the claims expense for those months based on recent claims expense levels and healthcare trend levels, or "trend factors."

We regularly review and set assumptions regarding cost trends and utilization when initially establishing claim liabilities. We continually monitor and adjust the claims liability and benefit expense based on subsequent paid claims activity. If it is determined that our assumptions regarding cost trends and utilization are materially different than actual results, our income statement and financial position could be impacted in future periods.

Premium deficiencies are recognized when it is probable that expected claims and administrative expenses will exceed future premiums on existing medical insurance contracts without consideration of investment income. Determination of premium deficiencies for longer duration life and disability contracts includes consideration of investment income. For purposes of premium deficiencies, contracts are deemed to be either short or long duration and are grouped in a manner consistent with our method of acquiring, servicing and measuring the profitability of such contracts. Once established, premium deficiencies are released commensurate with actual claims experience over the remaining life of the contract. No premium deficiencies were established at December 31, 2017 or 2016.

Benefit expense includes incurred medical claims as well as quality improvement expenses for our fully-insured members. Quality improvement activities are those designed to improve member health outcomes, prevent hospital readmissions and improve patient safety. They also include expenses for wellness and health promotion provided to our members.

Reserves for Future Policy Benefits: Reserves for future policy benefits include liabilities for life and long-term disability insurance policy benefits based upon interest, mortality and morbidity assumptions from published actuarial tables, modified based upon our experience. Future policy benefits also include liabilities for insurance policies for which some of the premiums received in earlier years are intended to pay anticipated benefits to be incurred in future years. Future policy benefits are continually monitored and reviewed, and when reserves are adjusted, differences are reflected in benefit expense.

The current portion of reserves for future policy benefits relates to the portion of such reserves that we expect to pay within one year. We believe that our liabilities for future policy benefits, along with future premiums received are adequate to satisfy our ultimate benefit liability; however, these estimates are inherently subject to a number of variable circumstances. Consequently, the actual results could differ materially from the amounts recorded in our consolidated financial statements.

Other Policyholder Liabilities: Other policyholder liabilities include rate stabilization reserves associated with retrospectively rated insurance contracts and certain case-specific reserves. Other policyholder liabilities also includes liabilities for premium refunds based upon the minimum medical loss ratio, or MLR, the relative health risk of members, or other contractual or regulatory requirements. Rate stabilization reserves represent accumulated premiums that exceed what customers owe us based on actual claim experience. The timing of payment of these retrospectively rated refunds is based on the contractual terms with our customers and can vary from period to period based on the specific contractual requirements.

We are required to meet certain minimum MLR thresholds prescribed by the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, as amended, or collectively, the ACA. If we do not meet or exceed the minimum MLR thresholds specified by the ACA, we are required to pay rebates to certain customers. Minimum MLR rebates are calculated by applicable line of business (Large Group, Small Group, Individual and Medicare) and legal entity in accordance with regulations issued by the Department of Health and Human Services, or HHS. Such calculations are made using estimated calendar year medical loss expense and premiums, as defined by HHS.

We follow HHS guidelines for determining the types of expenses that may be included in our minimum MLR rebate calculations, which differ from benefit expense and premiums as reported in our consolidated financial statements prepared in conformity with GAAP. Certain amounts reported as expense in our GAAP basis consolidated financial statements may be

reported as a reduction of premiums in accordance with HHS regulations. In addition, profit amounts included in our payments to third party administrative service providers are recorded as benefit expense in our consolidated GAAP financial statements while HHS does not allow for the inclusion of these expenses within the medical loss expense for purposes of calculating minimum MLR.

Revenue Recognition: Premiums for fully-insured contracts are recognized as revenue over the period insurance coverage is provided, and, if applicable, net of amounts recognized for the ACA minimum MLR rebates, risk adjustment, reinsurance and risk corridor or contractual premium stabilization programs. Premium payments from contracted government agencies are based on eligibility lists produced by the government agencies. Premiums related to the unexpired contractual coverage periods are reflected in the accompanying consolidated balance sheets as unearned income. Premiums include revenue from retrospectively rated contracts where revenue is based on the estimated loss experience of the contract. Premium revenue includes an adjustment for retrospectively rated refunds based on an estimate of incurred claims. Premium rates for certain lines of business are subject to approval by the Department of Insurance of each respective state. Additionally, delays in annual premium rate changes from contracted government agencies require that we defer the recognition of any increases to the period in which the premium rates become final. The value of the impact can be significant in the period in which it is recognized depending on the magnitude of the premium rate increase, the membership to which it applies and the length of the delay between the effective date of the rate increase and the final contract date. Premium rate decreases are recognized in the period the change in premium rate becomes effective and the change in the rate is known, which may be prior to the period when the contract amendment affecting the rate is finalized.

Administrative fees include revenue from certain group contracts that provide for the group to be at risk for all, or with supplemental insurance arrangements, a portion of their claims experience. We charge these self-funded groups an administrative fee, which is based on the number of members in a group or the group's claim experience. In addition, administrative fees include amounts received for the administration of Medicare or certain other government programs. Under our self-funded arrangements, revenue is recognized as administrative services are performed. All benefit payments under these programs are excluded from benefit expense.

Share-Based Compensation: Our current compensation philosophy provides for share-based compensation, including stock options, restricted stock awards and an employee stock purchase plan. Stock options are granted for a fixed number of shares with an exercise price at least equal to the fair value of the shares at the date of the grant. Restricted stock awards are issued at the fair value of the stock on the grant date. The employee stock purchase plan allows for a purchase price per share which is 95% of the fair value of a share of common stock on the last trading day of the plan quarter. The employee stock purchase plan discount is not recognized as compensation expense based on GAAP guidance. All other share-based payments to employees are recognized as compensation expense in the income statement based on their fair values. Additionally, excess tax benefits, which result from actual tax benefits realized when awards vest or options are exercised exceeding deferred tax benefits previously recognized based on grant date fair value, are recognized as tax benefits in the income statement. Our share-based employee compensation plans and assumptions are described in Note 14, "Capital Stock." Also see "*Recently Adopted Accounting Guidance"* within this Note 2 for reference to accounting changes adopted related to share-based compensation.

***Advertising and Marketing Costs*:** We use print, broadcast and other advertising to promote our products and to develop our corporate image. We market our products through direct marketing activities and an extensive network of independent agents, brokers and retail partnerships for Individual and Medicare customers, and for certain Local Group customers with a smaller employee base. Products for National Accounts and Local Group customers with a larger employee base are generally sold through independent brokers or consultants retained by the customer and working with industry specialists from our in-house sales force. In the Individual and Small Group markets we offer products through state or federally facilitated marketplaces, or public exchanges, and off-exchange products. The cost of advertising and marketing for product promotion is expensed as incurred while advertising and marketing costs associated with our corporate image is expensed when first aired. Total advertising and marketing expense was $337.9, $246.2 and $313.5 for the years ended December 31, 2017, 2016 and 2015, respectively.

***Health Insurance Provider Fee*:** The ACA imposed an annual Health Insurance Provider Fee, or HIP Fee, on health insurers that write certain types of health insurance on U.S. risks. The annual HIP Fee is allocated to health insurers based on the ratio of the amount of an insurer's net premium revenues written during the preceding calendar year to an adjusted amount of health insurance for all U.S. health risk for those certain lines of business written during the preceding calendar year. We

record our estimated liability for the HIP Fee in full at the beginning of the year with a corresponding deferred asset that is amortized on a straight-line basis to general and administrative expense. The final calculation and payment of the annual HIP Fee occurs in the third quarter each year. The HIP Fee is non-deductible for federal income tax purposes. We price our affected products to cover the increased general and administrative and tax expenses associated with the HIP Fee. The total amount due from allocations to health insurers was $11,300.0 for each of 2015 and 2016, was suspended for 2017, has resumed and increased to $14,300.0 for 2018 and is suspended for 2019. For the years ended December 31, 2016 and 2015, we recognized $1,176.3 and $1,207.5, respectively, as general and administrative expense related to the HIP Fee. There was no corresponding expense for 2017 due to the suspension of the HIP Fee for 2017.

Earnings per Share: Earnings per share amounts, on a basic and diluted basis, have been calculated based upon the weighted-average common shares outstanding for the period.

Basic earnings per share excludes dilution and is computed by dividing income available to common shareholders by the weighted-average number of common shares outstanding for the period. Diluted earnings per share may include the dilutive effect of stock options, restricted stock, convertible debentures and Equity Units, using the treasury stock method. See Note 12, “Debt,” for a description of our Equity Units. The treasury stock method assumes exercise of stock options and vesting of restricted stock, with the assumed proceeds used to purchase common stock at the average market price for the period. The difference between the number of shares assumed issued and number of shares assumed purchased represents the dilutive shares.

Recently Adopted Accounting Guidance: In August 2017, the FASB issued Accounting Standards Update No. 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities*, or ASU 2017-12. This update amends the hedge accounting recognition and presentation requirements in Topic 815 with the objective of improving the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements. The update also makes certain targeted improvements to simplify the application of the hedge accounting guidance and provides several transition elections. We adopted ASU 2017-12 on October 1, 2017. The adoption of ASU 2017-12 did not have a material impact on our consolidated financial position, results of operations or cash flows.

In March 2016, the FASB issued Accounting Standards Update No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, or ASU 2016-09. The amendments in this update simplify several aspects of accounting for and reporting on share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. We adopted the amendments in ASU 2016-09 on January 1, 2017. We continue to estimate forfeitures expected to occur in determining stock compensation recognized in each period. We prospectively recognized tax benefits of $35.6, or $0.13 per diluted share, for the year ended December 31, 2017 in our consolidated statements of income, which previously would have been recorded to additional paid-in capital. In addition, we prospectively recognized excess tax benefits as an operating activity within our consolidated statement of cash flows for the year ended December 31, 2017. Finally, we retrospectively recognized taxes paid on our employees' behalf through the withholding of common stock as a financing activity within our consolidated statements of cash flows for the years ended December 31, 2017, 2016 and 2015.

In May 2015, the FASB issued Accounting Standards Update No. 2015-09, *Financial Services—Insurance (Topic 944): Disclosures about Short-Duration Contracts,* or ASU 2015-09. This update requires new and expanded disclosures in interim and annual reporting periods related to the liability for unpaid claims and claim adjustment expenses for short-duration insurance contracts. ASU 2015-09 became effective for our annual reporting period ended December 31, 2016, and interim reporting periods beginning January 1, 2017. The adoption of ASU 2015-09 did not have an impact on our consolidated financial position, results of operations or cash flows.

In April 2015, the FASB issued Accounting Standards Update No. 2015-05, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement*, or ASU 2015-05. This update provides guidance to help entities determine whether a cloud computing arrangement contains a software license that should be accounted for as internal-use software or as a service contract. ASU 2015-05 became effective January 1, 2016 and we elected to adopt the provisions of the new guidance prospectively to all arrangements entered into or materially modified on or after January 1, 2016. The adoption of ASU 2015-05 did not have an impact on our consolidated financial position, results of operations or cash flows.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

In February 2015, the FASB issued Accounting Standards Update No. 2015-02, *Consolidation (Topic 810): Amendments to the Consolidation Analysis*, or ASU 2015-02. This update amended the consolidation guidance by modifying the evaluation criteria for whether limited partnerships and similar legal entities are variable interest entities or voting interest entities, eliminating the presumption that a general partner should consolidate a limited partnership, and affecting the consolidation analysis of reporting entities that are involved with variable interest entities. We adopted the provisions of ASU 2015-02 effective January 1, 2016 and re-evaluated all legal entity investments under the revised consolidation model. The adoption of ASU 2015-02 did not have a material impact on our consolidated financial position, results of operations or cash flows.

Recent Accounting Guidance Not Yet Adopted: In February 2018, the FASB issued Accounting Standards Update No. 2018-02, *Income Statement—Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*, or ASU 2018-02. On December 22, 2017, the federal government enacted a tax bill, H.R.1, *An act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018*, or the Tax Cuts and Jobs Act. The Tax Cuts and Jobs Act contains significant changes to corporate taxation, including, but not limited to, reducing the U.S. federal corporate income tax rate from 35% to 21% and modifying or limiting many business deductions. Current FASB guidance requires adjustments of deferred taxes due to a change in the federal corporate income tax rate to be included in income from operations. As a result, the tax effects of items within accumulated other comprehensive loss do not reflect the appropriate tax rate. The amendments in ASU 2018-02 allow a reclassification from accumulated other comprehensive loss to retained earnings for stranded tax effects resulting from the change in the federal corporate income tax rate. The stranded tax effects in accumulated other comprehensive loss resulting from the remeasurement of our deferred tax balance was $20.8 at December 31, 2017. For additional information, see Note 7, "Income Taxes." ASU 2018-02 is effective for interim and annual reporting periods beginning after December 15, 2018, with early adoption permitted. The guidance is to be applied either in the period of adoption or retrospectively to each period in which the effect of the change in the corporate income tax rate in the Tax Cuts and Jobs Act is recognized. The adoption of ASU 2018-02 will not have a material impact on our consolidated financial position, results of operations or cash flows.

In May 2017, the FASB issued Accounting Standards Update No. 2017-09, *Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting*, or ASU 2017-09. This update provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. ASU 2017-09 is effective for interim and annual reporting periods beginning after December 15, 2017, with early adoption permitted. The guidance is to be applied prospectively to an award modified on or after the adoption date. The adoption of ASU 2017-09 is not expected to have a material impact on our consolidated financial position, results of operations or cash flows.

In March 2017, the FASB issued Accounting Standards Update No. 2017-08, *Receivables—Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities*, or ASU 2017-08. This update changes the amortization period for certain purchased callable debt securities held at a premium by shortening the amortization period for the premium to the earliest call date. Under current guidance, the premium is generally amortized over the contractual life of the instrument. ASU 2017-08 is effective for interim and annual reporting periods beginning after December 15, 2018, with early adoption permitted. Upon adoption, the amendments are to be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. The adoption of ASU 2017-08 is not expected to have a material impact on our consolidated financial position, results of operations or cash flows.

In March 2017, the FASB issued Accounting Standards Update No. 2017-07, *Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, or ASU 2017-07. This update requires entities to disaggregate the service cost component from the other components of the benefit cost and present the service cost component in the same income statement line item as other employee compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations. In addition, the amendment allows only the service cost component to be eligible for asset capitalization. Upon adoption, the guidance on the presentation of the components of net periodic benefit cost in the income statement is to be applied retrospectively and the guidance limiting the capitalization of net periodic benefit cost in assets to the service cost component is to be applied prospectively. ASU 2017-07 is effective for interim and annual reporting periods beginning after December 15, 2017, with early adoption permitted. The adoption of ASU 2017-07 is not expected to have a material impact on our consolidated financial position, results of operations or cash flows.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

In January 2017, the FASB issued Accounting Standards Update No. 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, or ASU 2017-04. This update removes Step 2 of the goodwill impairment test under current guidance, which requires a hypothetical purchase price allocation. The new guidance requires an impairment charge to be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value. Upon adoption, the guidance is to be applied prospectively. ASU 2017-04 is effective for us on January 1, 2020, with early adoption permitted. The adoption of ASU 2017-04 is not expected to have a material impact on our consolidated financial position, results of operations or cash flows.

In December 2016, the FASB issued Accounting Standards Update No. 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, or ASU 2016-20. In May 2016, the FASB issued Accounting Standards Update No. 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*, or ASU 2016-12. In April 2016, the FASB issued Accounting Standards Update No. 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing*, or ASU 2016-10. In March 2016, the FASB issued Accounting Standards Update No. 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross verses Net)*, or ASU 2016-08. These updates provide additional clarification and implementation guidance on the previously issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, or ASU 2014-09. The amendments in ASU 2016-20 provide technical corrections to various implementation examples and clarifying guidance on the treatment of capitalized advertising costs, impairment testing of capitalized contract costs, performance obligation disclosures and scope exceptions. The amendments in ASU 2016-12 provide clarifying guidance on assessing collectability; noncash consideration; presentation of sales taxes; and transition. The amendments in ASU 2016-10 provide clarifying guidance on the materiality and evaluation of performance obligations; treatment of shipping and handling costs; and determining whether an entity's promise to grant a license provides a customer with either a right to use or a right to access an entity's intellectual property. The amendments in ASU 2016-08 clarify how an entity should identify the specified good or service for the principal versus agent evaluation and how it should apply the control principle to certain types of arrangements. Collectively, these updates will require a company to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The adoption of ASU 2016-20, ASU 2016-12, ASU 2016-10 and ASU 2016-08 is to coincide with an entity's adoption of ASU 2014-09, which we will adopt for interim and annual reporting periods beginning after December 15, 2017. Upon the effective date, these updates will supersede almost all existing revenue recognition guidance under GAAP, with certain exceptions, including an exception for our premium revenues, recorded on the premiums line item on our consolidated statements of income, which will continue to be accounted for in accordance with the provisions of Accounting Standards Codification, or ASC, Topic 944, *Financial Services - Insurance*. Our administrative service and other contracts that will be subject to these Accounting Standards Updates are recorded in the administrative fees and other revenue line items on our consolidated statements of income and represent approximately 6.0% of our consolidated total operating revenue. The new guidance permits adoption through either a full retrospective approach or a modified retrospective approach with a cumulative effect adjustment to retained earnings. We will use the modified retrospective approach upon adoption. The adoption of these updates will not have a material impact on our consolidated financial position, results of operations, cash flows or related disclosures.

In November 2016, the FASB issued Accounting Standards Update No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash,* or ASU 2016-18. This update amends ASC Topic 230 to add and clarify guidance on the classification and presentation of restricted cash in the statement of cash flows. The guidance requires entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalents in the statement of cash flows. The guidance will be applied retrospectively and is effective for annual periods beginning after December 15, 2017, and interim periods within those years, with early adoption permitted. We are currently evaluating the effects the adoption of ASU 2016-18 will have on our consolidated statements of cash flows, if any. ASU 2016-18 will not impact our results of operations or consolidated financial position.

In August 2016, the FASB issued Accounting Standards Update No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments,* or ASU 2016-15. This update addresses the presentation and classification on the statement of cash flows for eight specific items, with the objective of reducing existing diversity in practice in how certain cash receipts and cash payments are presented and classified. ASU 2016-15 is effective for interim and annual reporting periods beginning after December 15, 2017, with early adoption permitted. We are currently evaluating

the effects the adoption of ASU 2016-15 will have on our consolidated statements of cash flows, if any. ASU 2016-15 will not impact our results of operations or consolidated financial position.

In June 2016, the FASB issued Accounting Standards Update No. 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments,* or ASU 2016-13. This update introduces a current expected credit loss model for measuring expected credit losses for certain types of financial instruments held at the reporting date based on historical experience, current conditions and reasonable supportable forecasts. ASU 2016-13 replaces the current incurred loss model for measuring expected credit losses, requires expected losses on available-for-sale debt securities to be recognized through an allowance for credit losses rather than as reductions in the amortized cost of the securities, and provides for additional disclosure requirements. ASU 2016-13 is effective for interim and annual reporting periods beginning after December 15, 2019, with early adoption permitted for interim and annual reporting periods beginning after December 15, 2018. We are currently evaluating the effects the adoption of ASU 2016-13 will have on our consolidated financial statements, results of operations and cash flows.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02, *Leases (Topic 842)*, or ASU 2016-02. Upon the effective date, ASU 2016-02 will supersede the current lease guidance in Topic 840, *Leases*. Under the new guidance, lessees will be required to recognize for all leases, with the exception of short-term leases, a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis. Concurrently, lessees will be required to recognize a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. ASU 2016-02 is effective for interim and annual reporting periods beginning after December 15, 2018, with early adoption permitted. The guidance is required to be applied using a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative periods presented in the financial statements. We are currently evaluating the effects the adoption of ASU 2016-02 will have on our consolidated financial statements, results of operations and cash flows.

In January 2016, the FASB issued Accounting Standards Update No. 2016-01, *Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*, or ASU 2016-01. The amendments in ASU 2016-01 change the accounting for non-consolidated equity investments that are not accounted for under the equity method of accounting by requiring changes in fair value to be recognized in income. Under current guidance, changes in fair value for investments of this nature are recognized in accumulated other comprehensive loss as a component of shareholders' equity. Additionally, ASU 2016-01 simplifies the impairment assessment of equity investments without readily determinable fair values; requires entities to use the exit price when estimating the fair value of financial instruments; and modifies various presentation disclosure requirements for financial instruments. ASU 2016-01 is effective for interim and annual reporting periods beginning after December 15, 2017. At December 31, 2017, we recognized $507.2 of unrealized gains on equity securities that will be reclassified from accumulated other comprehensive loss to retained earnings effective January 1, 2018. Beginning with the first quarter of 2018, results of operations will include any change in fair value in the period of change.

There were no other new accounting pronouncements that were issued or became effective during the year ended December 31, 2017 that had, or are expected to have, a material impact on our financial position, results of operations, cash flows or financial statement disclosures.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

3. Business Acquisitions

Acquisition of America's 1st Choice

On February 15, 2018, we completed our acquisition of Freedom Health, Inc., Optimum HealthCare, Inc., America's 1st Choice of South Carolina, Inc. and related entities, or collectively, America's 1st Choice, a Medicare Advantage organization that offers HMO products, including Chronic Special Needs Plans and Dual-Eligible Special Needs Plans under its Freedom Health and Optimum HealthCare brands in Florida and its America's 1st Choice of South Carolina brand in South Carolina. Through its Medicare Advantage Plans, America's 1st Choice currently serves approximately one hundred and thirty thousand members in twenty-five Florida and three South Carolina counties. The acquisition of America's 1st Choice aligns with our plans for continued growth in the Medicare Advantage and Special Needs populations. We are currently evaluating the fair value of the assets acquired and liabilities assumed. Any excess of the consideration transferred over the fair value of net assets acquired will be recognized as goodwill and allocated to our Government Business segment.

Acquisition of HealthSun

On December 21, 2017, we completed our acquisition of HealthSun, which serves approximately forty thousand members in the state of Florida through its Medicare Advantage Plans, which received a five-star rating from the Centers for Medicare & Medicaid Services. This acquisition aligns with our plans for continued growth in the Medicare Advantage and dual-eligible populations.

In accordance with FASB accounting guidance for business combinations, the consideration transferred was allocated to the preliminary fair value of HealthSun's assets acquired and liabilities assumed, including identifiable intangible assets. The excess of the consideration transferred over the preliminary fair value of net assets acquired resulted in preliminary goodwill of $1,643.4, at December 31, 2017, all of which was allocated to our Government Business segment. Preliminary goodwill recognized from the acquisition of HealthSun primarily relates to the future economic benefits arising from the assets acquired and is consistent with our stated intentions to strengthen our position and expand operations in the government sector to service Medicare Advantage and dual-eligible enrollees. Any subsequent adjustments made to the assets acquired or liabilities assumed during the measurement period will be recorded as an adjustment to goodwill.

The preliminary fair value of the net assets acquired from HealthSun includes $572.0 of other intangible assets at December 31, 2017, which primarily consist of finite-lived customer relationships with amortization periods ranging from 7 to 20 years. The results of operations of HealthSun are included in our consolidated financial statements within our Government Business segment for the period following December 21, 2017. The pro forma effects of this acquisition for prior periods were not material to our consolidated results of operations.

Acquisition of Simply Healthcare

On February 17, 2015, we completed our acquisition of Simply Healthcare, a leading managed care company for people enrolled in Medicaid and Medicare programs in Florida. This acquisition aligns with our strategy for continued growth in our Government Business segment. The results of operations of Simply Healthcare are included in our consolidated financial statements within our Government Business segment for the period following February 17, 2015. The pro forma effects of this acquisition for prior periods were not material to our consolidated results of operations.

Termination of Agreement and Plan of Merger with Cigna Corporation

On July 24, 2015, we and Cigna Corporation, or Cigna, announced that we entered into an Agreement and Plan of Merger, or Cigna Merger Agreement, dated as of July 23, 2015, to acquire all outstanding shares of Cigna. On May 12, 2017, we delivered to Cigna a notice terminating the Cigna Merger Agreement. For additional information, see Note 13, "Commitments and Contingencies - *Litigation*."

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

4. Investments

A summary of current and long-term investments, available-for-sale, at December 31, 2017 and 2016 is as follows:

	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses		Estimated Fair Value	Non-Credit Component of OTTIs Recognized in Accumulated Other Comprehensive Loss
			Less than 12 Months	12 Months or Greater		
December 31, 2017						
Fixed maturity securities:						
United States Government securities	$ 649.0	$ 2.2	$ (5.0)	$ (0.7)	$ 645.5	$ —
Government sponsored securities	90.3	0.3	(0.1)	(0.4)	90.1	—
States, municipalities and political subdivisions, tax-exempt	5,854.6	192.6	(5.0)	(7.3)	6,034.9	—
Corporate securities	7,362.8	165.8	(30.2)	(12.6)	7,485.8	(0.3)
Residential mortgage-backed securities	2,520.0	38.5	(8.0)	(11.6)	2,538.9	—
Commercial mortgage-backed securities	80.1	0.7	(0.1)	(2.0)	78.7	—
Other securities	1,053.7	14.4	(2.4)	(1.5)	1,064.2	—
Total fixed maturity securities	17,610.5	414.5	(50.8)	(36.1)	17,938.1	$ (0.3)
Equity securities	3,124.8	525.2	(18.0)	—	3,632.0	
Total investments, available-for-sale	$ 20,735.3	$ 939.7	$ (68.8)	$ (36.1)	$ 21,570.1	
December 31, 2016						
Fixed maturity securities:						
United States Government securities	$ 561.7	$ 2.5	$ (5.7)	$ —	$ 558.5	$ —
Government sponsored securities	40.1	0.3	(0.3)	(0.1)	40.0	—
States, municipalities and political subdivisions, tax-exempt	6,024.6	139.1	(55.2)	(3.2)	6,105.3	(3.8)
Corporate securities	8,011.7	159.5	(49.5)	(27.1)	8,094.6	(3.4)
Residential mortgage-backed securities	1,916.9	32.3	(15.3)	(4.6)	1,929.3	—
Commercial mortgage-backed securities	216.8	1.2	(0.3)	(3.4)	214.3	—
Other securities	744.6	6.4	(1.5)	(4.0)	745.5	—
Total fixed maturity securities	17,516.4	341.3	(127.8)	(42.4)	17,687.5	$ (7.2)
Equity securities	1,103.3	407.3	(10.7)	—	1,499.9	
Total investments, available-for-sale	$ 18,619.7	$ 748.6	$ (138.5)	$ (42.4)	$ 19,187.4	

Equity securities include exchange traded fund, or ETF, securities, with an estimated fair value of $1,300.3 and unrealized losses of $1.2, fixed maturity mutual funds with an estimated fair value of $790.6 and unrealized gains of $25.2, and common and private equity securities and equity mutual funds with an aggregate estimated fair value of $1,541.1 and unrealized gains of $483.2 at December 31, 2017. ETF securities are highly marketable, liquid and trade on exchanges similar to common stock and have underlying fixed maturity indices spanning various subdivisions of bond types, credit and duration. Fixed maturity mutual funds have underlying assets which primarily consist of emerging market and international fixed maturity securities. Common equity securities and equity mutual funds primarily consist of investments in highly liquid and marketable securities traded on equity exchanges. Private equity securities generally consist of private investments in less liquid and marketable securities.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

For available-for-sale securities in an unrealized loss position at December 31, 2017 and 2016, the following table summarizes the aggregate fair values and gross unrealized losses by length of time those securities have continuously been in an unrealized loss position.

	Less than 12 Months			12 Months or Greater		
	Number of Securities	Estimated Fair Value	Gross Unrealized Loss	Number of Securities	Estimated Fair Value	Gross Unrealized Loss
(Securities are whole amounts)						
December 31, 2017						
Fixed maturity securities:						
United States Government securities	36	$ 450.4	$ (5.0)	11	$ 56.1	$ (0.7)
Government sponsored securities	12	16.3	(0.1)	16	14.8	(0.4)
States, municipalities and political subdivisions, tax-exempt	414	641.4	(5.0)	189	355.5	(7.3)
Corporate securities	1,081	2,200.1	(30.2)	279	329.7	(12.6)
Residential mortgage-backed securities	445	1,050.3	(8.0)	287	478.0	(11.6)
Commercial mortgage-backed securities	7	13.7	(0.1)	12	27.2	(2.0)
Other securities	132	406.1	(2.4)	20	35.8	(1.5)
Total fixed maturity securities	2,127	4,778.3	(50.8)	814	1,297.1	(36.1)
Equity securities	386	1,070.5	(18.0)	—	—	—
Total fixed maturity and equity securities	2,513	$ 5,848.8	$ (68.8)	814	$ 1,297.1	$ (36.1)
December 31, 2016						
Fixed maturity securities:						
United States Government securities	51	$ 359.9	$ (5.7)	—	$ —	$ —
Government sponsored securities	18	26.4	(0.3)	1	1.0	(0.1)
States, municipalities and political subdivisions, tax-exempt	1,022	1,849.0	(55.2)	28	60.7	(3.2)
Corporate securities	1,272	2,640.6	(49.5)	203	422.8	(27.1)
Residential mortgage-backed securities	430	905.8	(15.3)	114	136.9	(4.6)
Commercial mortgage-backed securities	19	61.2	(0.3)	24	60.8	(3.4)
Other securities	66	144.3	(1.5)	55	133.8	(4.0)
Total fixed maturity securities	2,878	5,987.2	(127.8)	425	816.0	(42.4)
Equity securities	452	233.1	(10.7)	—	—	—
Total fixed maturity and equity securities	3,330	$ 6,220.3	$ (138.5)	425	$ 816.0	$ (42.4)

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The amortized cost and fair value of available-for-sale fixed maturity securities at December 31, 2017, by contractual maturity, are shown below. Expected maturities may differ from contractual maturities because the issuers of the securities may have the right to prepay obligations.

	Amortized Cost	Estimated Fair Value
Due in one year or less	$ 496.2	$ 496.5
Due after one year through five years	4,945.2	5,000.1
Due after five years through ten years	5,556.4	5,668.0
Due after ten years	4,012.6	4,155.9
Mortgage-backed securities	2,600.1	2,617.6
Total available-for-sale fixed maturity securities	$ 17,610.5	$ 17,938.1

The major categories of net investment income for the years ended December 31 are as follows:

	2017	2016	2015
Fixed maturity securities	$ 614.2	$ 673.1	$ 679.0
Equity securities	116.4	61.7	61.7
Cash equivalents	24.8	3.6	0.7
Other	152.2	84.9	(22.6)
Investment income	907.6	823.3	718.8
Investment expense	(41.1)	(43.8)	(41.2)
Net investment income	$ 866.5	$ 779.5	$ 677.6

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Net realized investment gains/losses and the net change in unrealized appreciation/depreciation on investments for the years ended December 31 are as follows:

	2017	2016	2015
Net realized gains (losses):			
Fixed maturity securities:			
Gross realized gains from sales	$ 136.6	$ 209.9	$ 135.9
Gross realized losses from sales	(54.9)	(152.1)	(182.1)
Net realized gains (losses) from sales of fixed maturity securities	81.7	57.8	(46.2)
Equity securities:			
Gross realized gains from sales	140.1	205.5	233.4
Gross realized losses from sales	(16.9)	(50.0)	(45.1)
Net realized gains from sales of equity securities	123.2	155.5	188.3
Other investments:			
Gross realized gains from sales	0.3	7.2	5.0
Gross realized losses from sales	(4.9)	(0.4)	—
Net realized (losses) gains from sales of other investments	(4.6)	6.8	5.0
Net realized gains	200.3	220.1	147.1
Other-than-temporary impairment losses recognized in income:			
Fixed maturity securities	(3.7)	(74.7)	(31.2)
Equity securities	(15.5)	(22.3)	(35.6)
Other investments	(13.9)	(18.4)	(16.6)
Other-than-temporary impairment losses recognized in income	(33.1)	(115.4)	(83.4)
Change in net unrealized gains (losses) on investments:			
Fixed maturity securities	156.5	193.3	(372.9)
Equity securities	110.6	6.9	(217.7)
Other investments	(9.8)	(2.5)	(4.1)
Total change in net unrealized gains (losses) on investments	257.3	197.7	(594.7)
Deferred income tax (expense) benefit	(84.8)	(79.8)	210.4
Net change in net unrealized gains (losses) on investments	172.5	117.9	(384.3)
Net realized gains on investments, other-than-temporary impairment losses recognized in income and net change in net unrealized gains (losses) on investments	$ 339.7	$ 222.6	$ (320.6)

A primary objective in the management of our fixed maturity and equity portfolios is to maximize total return relative to underlying liabilities and respective liquidity needs. In achieving this goal, assets may be sold to take advantage of market conditions or other investment opportunities as well as tax considerations. Sales will generally produce realized gains and losses. In the ordinary course of business, we may sell securities at a loss for a number of reasons, including, but not limited to: (i) changes in the investment environment; (ii) expectations that the fair value could deteriorate further; (iii) desire to reduce exposure to an issuer or an industry; (iv) changes in credit quality; or (v) changes in expected cash flow.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Proceeds from fixed maturity securities, equity securities and other invested assets and the related gross realized gains and gross realized losses for the years ended December 31 are as follows:

	2017	2016	2015
Proceeds	$ 13,460.8	$ 11,952.3	$ 11,779.8
Gross realized gains	277.0	422.6	374.3
Gross realized losses	(76.7)	(202.5)	(227.2)

A significant judgment in the valuation of investments is the determination of when an other-than-temporary decline in value has occurred. We follow a consistent and systematic process for recognizing impairments on securities that sustain other-than-temporary declines in value. We have established a committee responsible for the impairment review process. The decision to impair a security incorporates both quantitative criteria and qualitative information. The impairment review process considers a number of factors including, but not limited to: (i) the length of time and the extent to which the fair value has been less than book value, (ii) the financial condition and near term prospects of the issuer, (iii) our intent and ability to retain impaired investments for a period of time sufficient to allow for any anticipated recovery in fair value, (iv) our intent to sell or the likelihood that we will need to sell a fixed maturity security before recovery of its amortized cost basis, (v) whether the debtor is current on interest and principal payments, (vi) the reasons for the decline in value (i.e., credit event compared to liquidity, general credit spread widening, currency exchange rate or interest rate factors) and (vii) general market conditions and industry or sector specific factors. For securities that are deemed to be other-than-temporarily impaired, the security is adjusted to fair value and the resulting losses are recognized in the consolidated statements of income. The new cost basis of the impaired securities is not increased for future recoveries in fair value.

Other-than-temporary impairments recorded in 2017, 2016 and 2015 were primarily the result of the continued credit deterioration on specific issuers in the bond markets and the fair values of certain equity securities remaining below cost for an extended period of time. There were no individually significant OTTI losses on investments by issuer during 2017, 2016 or 2015.

Investment securities are exposed to various risks, such as interest rate, market and credit. Due to the level of risk associated with certain investment securities and the level of uncertainty related to changes in the value of investment securities, it is possible that changes in these risk factors in the near term could have an adverse material impact on our results of operations or shareholders' equity.

The changes in the amount of the credit component of OTTI losses on fixed maturity securities recognized in income, for which a portion of the OTTI losses was recognized in other comprehensive income, was not material for the years ended December 31, 2017, 2016 or 2015.

At December 31, 2017 and 2016, no investments exceeded 10% of shareholders' equity.

At December 31, 2017 and 2016, the carrying value of fixed maturity investments that did not produce income during the years then ended were $8.8 and $0.5, respectively.

As of December 31, 2017 and 2016, we had committed approximately $823.8 and $789.1, respectively, to future capital calls from various third-party investments in exchange for an ownership interest in the related entities.

At December 31, 2017 and 2016, securities with carrying values of approximately $560.8 and $524.4, respectively, were deposited by our insurance subsidiaries under requirements of regulatory authorities.

Securities Lending Programs

The fair value of the collateral received at the time of the securities lending transactions amounted to $454.4 and $1,078.9 at December 31, 2017 and 2016, respectively. The value of the collateral represented 104% and 103% of the market value of the securities on loan at December 31, 2017 and 2016, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The remaining contractual maturity of our securities lending agreements at December 31, 2017 is as follows:

	Overnight and Continuous	Less than 30 days	30-90 days	Greater Than 90 days	Total
Securities lending transactions					
United States Government securities	$ 16.3	$ —	$ 6.1	$ —	$ 22.4
Corporate securities	368.6	—	—	—	368.6
Equity securities	63.4	—	—	—	63.4
Total	$ 448.3	$ —	$ 6.1	$ —	$ 454.4

5. Derivative Financial Instruments

We primarily invest in the following types of derivative financial instruments: interest rate swaps, futures, forward contracts, put and call options, swaptions, embedded derivatives and warrants. We also enter into master netting agreements which reduce credit risk by permitting net settlement of transactions. At December 31, 2017, we had posted collateral of $11.5 related to our derivative financial instruments. At December 31, 2016, we had posted collateral of $92.4 and received collateral of $591.1 related to our derivative financial instruments.

In addition to collateral posted for derivative transactions, from time to time, we may have cash on deposit to meet certain regulatory requirements, which are included in Cash and cash equivalents on the balance sheets. At December 31, 2017 and 2016, we had cash on deposit of $51.0 and $405.3, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of the aggregate contractual or notional amounts and estimated fair values related to derivative financial instruments at December 31, 2017 and 2016 is as follows:

	Contractual/ Notional Amount	Balance Sheet Location	Estimated Fair Value	
			Asset	(Liability)
December 31, 2017				
Hedging instruments				
Interest rate swaps - fixed to floating	$ 1,235.0	Other assets/other liabilities	$ 2.0	$ (5.3)
Interest rate swaps - forward starting pay fixed	425.0	Other assets/other liabilities	—	(8.9)
Subtotal hedging	1,660.0	Subtotal hedging	2.0	(14.2)
Non-hedging instruments				
Interest rate swaps	171.3	Equity securities	1.0	(4.7)
Options	100.0	Other assets/other liabilities	—	(0.1)
Futures	116.8	Equity securities	0.1	(2.5)
Subtotal non-hedging	388.1	Subtotal non-hedging	1.1	(7.3)
Total derivatives	$ 2,048.1	Total derivatives	3.1	(21.5)
		Amounts netted	(1.6)	1.6
		Net derivatives	$ 1.5	$ (19.9)
December 31, 2016				
Hedging instruments				
Interest rate swaps - fixed to floating	$ 1,385.0	Other assets/other liabilities	$ 4.0	$ (0.7)
Interest rate swaps - forward starting pay fixed	4,775.0	Other assets/other liabilities	528.8	$ (6.0)
Subtotal hedging	6,160.0	Subtotal hedging	532.8	(6.7)
Non-hedging instruments				
Interest rate swaps	209.4	Equity securities	4.7	(0.2)
Options	10,280.2	Other assets/other liabilities	220.7	(233.9)
Futures	185.3	Equity securities	0.5	(1.1)
Subtotal non-hedging	10,674.9	Subtotal non-hedging	225.9	(235.2)
Total derivatives	$ 16,834.9	Total derivatives	758.7	(241.9)
		Amounts netted	(92.8)	92.8
		Net derivatives	$ 665.9	$ (149.1)

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Fair Value Hedges

We have entered into various interest rate swap contracts to convert a portion of our interest rate exposure on our long-term debt from fixed rates to floating rates. The floating rates payable on all of our fair value hedges are benchmarked to LIBOR. A summary of our outstanding fair value hedges at December 31, 2017 and 2016 is as follows:

Type of Fair Value Hedges	Year Entered Into	Outstanding Notional Amount		Interest Rate Received	Expiration Date
		2017	2016		
Interest rate swap	2017	$ 50.0	$ —	4.350 %	August 15, 2020
Interest rate swap	2015	200.0	200.0	4.350	August 15, 2020
Interest rate swap	2014	150.0	150.0	4.350	August 15, 2020
Interest rate swap	2013	10.0	10.0	4.350	August 15, 2020
Interest rate swap	2012	200.0	200.0	4.350	August 15, 2020
Interest rate swap	2012	625.0	625.0	1.875	January 15, 2018
Interest rate swap	2012	—	200.0	2.375	February 15, 2017
Total notional amount outstanding		$ 1,235.0	$ 1,385.0		

The following amounts were recorded on our consolidated balance sheets related to cumulative basis adjustments for fair value hedges at December 31, 2017 and 2016:

Balance Sheet Classification in Which Hedged Item is Included	Carrying Amount of Hedged Liability		Cumulative Amount of Fair Value Hedging Adjustment Included in the Carrying Amount of the Hedged Liability	
	2017	2016	2017	2016
Current portion of long term-debt	$ 1,274.6	$ 928.4	$ 2.0	$ 0.3
Long-term debt	17,382.2	14,358.5	(5.3)	3.0

Cash Flow Hedges

We have entered into a series of forward starting pay fixed interest rate swaps with the objective of eliminating the variability of cash flows in the interest payments on anticipated future financings. During 2017, swaps in the notional amount of $10,625.0 were terminated. We received an aggregate of $412.2 from the swap counter parties upon termination. As of December 31, 2017, we recognized a hedge loss of $8.9 on the outstanding swaps, which was recorded in accumulated other comprehensive loss. We had $425.0 and $4,775.0 in notional amount outstanding under these swaps at December 31, 2017 and 2016, respectively.

The unrecognized loss for all outstanding, expired and terminated cash flow hedges included in accumulated other comprehensive loss, net of tax, was $233.0 and $168.4 at December 31, 2017 and 2016, respectively. As of December 31, 2017, the total amount of amortization over the next twelve months for all cash flow hedges is estimated to increase interest expense by approximately $11.7. No amounts were excluded from effectiveness testing.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of the effect of cash flow hedges in accumulated other comprehensive loss for the year ended December 31, 2017 is as follows:

Type of Cash Flow Hedge	Hedge Loss Recognized in Other Comprehensive Income	Income Statement Location of Loss Reclassification from Accumulated Other Comprehensive Loss	Hedge Loss Reclassified from Accumulated Other Comprehensive Loss
Year ended December 31, 2017			
Forward starting pay fixed swaps	$ (112.0)	Interest expense	$ (6.6)
Forward starting pay fixed swaps		Net realized gains on financial instruments	$ (7.2)

A summary of the effect of cash flow hedges in accumulated other comprehensive loss for the years ended December 31, 2016 and 2015 is as follows:

	Effective Portion			Ineffective Portion	
Type of Cash Flow Hedge	Hedge Loss Recognized in Other Comprehensive Income (Loss)	Income Statement Location of Loss Reclassification from Accumulated Other Comprehensive Loss	Hedge Loss Reclassified from Accumulated Other Comprehensive Loss	Income Statement Location of Loss Recognized	Hedge Loss Recognized
Year ended December 31, 2016					
Forward starting pay fixed swaps	$ (140.1)	Interest expense	$ (5.8)	Net realized gains on financial instruments	$ (7.7)
Year ended December 31, 2015					
Forward starting pay fixed swaps	$ (75.2)	Interest expense	$ (5.5)	None	$ —

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Income Statement Relationship of Fair Value and Cash Flow Hedging

A summary of the relationship between the effects of fair value and cash flow hedges on the total amount of income and expense presented in our consolidated statements of income for the years ended December 31, 2017, 2016 and 2015 is as follows:

	Classification and Amount of Gain (Loss) Recognized in Income on Fair Value and Cash Flow Hedging Relationships				
	2017		2016		2015
	Net Realized Gains on Financial Instruments	Interest Expense	Net Realized Gains on Financial Instruments	Interest Expense	Interest Expense
Total amount of income or expense in the income statement in which the effects of fair value or cash flow hedges are recorded	$ 144.8	$ (739.0)	$ 4.9	$ (723.0)	$ (653.0)
Gain (loss) on fair value hedging relationships					
Interest rate swaps					
Hedged items	—	0.4	—	(8.1)	(12.1)
Derivatives designated as hedging instruments	—	(0.4)	—	8.1	12.1
Loss on cash flow hedging relationships					
Forward starting pay fixed swaps					
Amount of loss reclassified from accumulated other comprehensive loss into net income	—	(6.6)	—	(5.8)	(5.5)
Amount of loss reclassified from accumulated other comprehensive loss into net income due to ineffectiveness and missed forecasted transactions	(7.2)	—	(7.7)	—	—

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Non-Hedging Derivatives

A summary of the effect of non-hedging derivatives on our consolidated statements of income for the years ended December 31, 2017, 2016 and 2015 is as follows:

Type of Non-hedging Derivatives	Income Statement Location of (Loss) Gain Recognized	Derivative (Loss) Gain Recognized
Year ended December 31, 2017		
Interest rate swaps	Net realized gains on financial instruments	$ (9.2)
Options	Net realized gains on financial instruments	(35.6)
Futures	Net realized gains on financial instruments	(3.5)
Total		$ (48.3)
Year ended December 31, 2016		
Interest rate swaps	Net realized gains on financial instruments	$ 0.2
Options	Net realized gains on financial instruments	(209.1)
Futures	Net realized gains on financial instruments	1.4
Total		$ (207.5)
Year ended December 31, 2015		
Derivatives embedded in convertible fixed maturity securities	Net realized gains on financial instruments	$ (22.2)
Interest rate swaps	Net realized gains on financial instruments	(1.9)
Options	Net realized gains on financial instruments	34.6
Futures	Net realized gains on financial instruments	(0.1)
Total		$ 10.4

6. Fair Value

Assets and liabilities recorded at fair value in the consolidated balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Level inputs, as defined by FASB guidance for fair value measurements and disclosures, are as follows:

Level Input:	Input Definition:
Level I	Inputs are unadjusted, quoted prices for identical assets or liabilities in active markets at the measurement date.
Level II	Inputs other than quoted prices included in Level I that are observable for the asset or liability through corroboration with market data at the measurement date.
Level III	Unobservable inputs that reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date.

The following methods, assumptions and inputs were used to determine the fair value of each class of the following assets and liabilities recorded at fair value in the consolidated balance sheets:

Cash equivalents: Cash equivalents primarily consist of highly rated money market funds with maturities of three months or less, and are purchased daily at par value with specified yield rates. Due to the high ratings and short-term nature of the funds, we designate all cash equivalents as Level I.

Fixed maturity securities, available-for-sale: Fair values of available-for-sale fixed maturity securities are based on quoted market prices, where available. These fair values are obtained primarily from third party pricing services, which generally use Level I or Level II inputs for the determination of fair value to facilitate fair value measurements and disclosures. United States Government securities represent Level I or Level II securities, depending on whether the securities are actively traded. Level II securities primarily include corporate securities, securities from states, municipalities and

political subdivisions, mortgage-backed securities and certain other asset back securities. For securities not actively traded, the pricing services may use quoted market prices of comparable instruments or discounted cash flow analyses, incorporating inputs that are currently observable in the markets for similar securities. We have controls in place to review the pricing services' qualifications and procedures used to determine fair values. In addition, we periodically review the pricing services' pricing methodologies, data sources and pricing inputs to ensure the fair values obtained are reasonable. Inputs that are often used in the valuation methodologies include, but are not limited to, broker quotes, benchmark yields, credit spreads, default rates and prepayment speeds. We also have certain fixed maturity securities, primarily corporate debt securities, that are designated Level III securities. For these securities, the valuation methodologies may incorporate broker quotes or discounted cash flow analyses using assumptions for inputs such as expected cash flows, benchmark yields, credit spreads, default rates and prepayment speeds that are not observable in the markets.

Equity securities, available-for-sale: Fair values of equity securities are generally designated as Level I and are based on quoted market prices. For certain equity securities, quoted market prices for the identical security are not always available and the fair value is estimated by reference to similar securities for which quoted prices are available. These securities are designated Level II. We also have certain equity securities, including private equity securities, for which the fair value is estimated based on each security's current condition and future cash flow projections. Such securities are designated Level III. The fair values of these private equity securities are generally based on either broker quotes or discounted cash flow projections using assumptions for inputs such as the weighted-average cost of capital, long-term revenue growth rates and EBITDA, and/or revenue multiples that are not observable in the markets.

Other invested assets, current: Other invested assets, current include securities held in rabbi trusts that are classified as trading. These securities are designated Level I securities as fair values are based on quoted market prices.

Securities lending collateral: Fair values of securities lending collateral are based on quoted market prices, where available. These fair values are obtained primarily from third party pricing services, which generally use Level I or Level II inputs for the determination of fair value, to facilitate fair value measurements and disclosures.

Derivatives: Fair values are based on the quoted market prices by the financial institution that is the counterparty to the derivative transaction. We independently verify prices provided by the counterparties using valuation models that incorporate market observable inputs for similar derivative transactions. Derivatives are designated as Level II securities.

In addition, the following methods and assumptions were used to determine the fair value of each class of pension benefit plan assets and other benefit plan assets not defined above (see Note 10, "Retirement Benefits," for fair values of benefit plan assets):

Mutual funds: Fair values are based on quoted market prices, which represent the net asset value, or NAV, of the shares held.

Common and collective trusts: Fair values of common/collective trusts that replicate traded money market funds are based on cost, which approximates fair value. Fair values of common/collective trusts that invest in securities are valued at the NAV of the shares held, where the trust applies fair value measurements to the underlying investments to determine the NAV.

Partnership interests: Fair values are estimated based on the plan's proportionate share of the undistributed partners' capital as reported in audited financial statements of the partnership.

Contract with insurance company: Fair value of the contract in the insurance company general investment account is determined by the insurance company based on the fair value of the underlying investments of the account.

Investment in DOL 103-12 trust: Fair value is based on the plan's proportionate share of the fair value of investments held by the trust, qualified as a Department of Labor Regulation 2520.103-12 entity, or DOL 103-12 trust, as reported in the audited financial statements of the trust, where the trustee applies fair value measurements to the underlying investments of the trust.

Life insurance contracts: Fair value is based on the cash surrender value of the policies as reported by the insurer.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of fair value measurements by level for assets and liabilities measured at fair value on a recurring basis at December 31, 2017 and 2016 is as follows:

	Level I	Level II	Level III	Total
December 31, 2017				
Assets:				
Cash equivalents	$ 1,956.4	$ —	$ —	$ 1,956.4
Investments available-for-sale:				
Fixed maturity securities:				
United States Government securities	—	645.5	—	645.5
Government sponsored securities	—	90.1	—	90.1
States, municipalities and political subdivisions, tax-exempt	—	6,034.9	—	6,034.9
Corporate securities	24.8	7,231.8	229.2	7,485.8
Residential mortgage-backed securities	—	2,533.9	5.0	2,538.9
Commercial mortgage-backed securities	—	78.7	—	78.7
Other securities	75.2	973.1	15.9	1,064.2
Total fixed maturity securities	100.0	17,588.0	250.1	17,938.1
Equity securities	2,446.9	897.7	287.4	3,632.0
Other invested assets, current	17.2	—	—	17.2
Securities lending collateral	214.1	241.0	—	455.1
Derivatives	—	3.1	—	3.1
Total assets	$ 4,734.6	$ 18,729.8	$ 537.5	$ 24,001.9
Liabilities:				
Derivatives	$ —	$ (21.5)	$ —	$ (21.5)
Total liabilities	$ —	$ (21.5)	$ —	$ (21.5)
December 31, 2016				
Assets:				
Cash equivalents	$ 1,546.0	$ —	$ —	$ 1,546.0
Investments available-for-sale:				
Fixed maturity securities:				
United States Government securities	558.5	—	—	558.5
Government sponsored securities	—	40.0	—	40.0
States, municipalities and political subdivisions, tax-exempt	—	6,105.3	—	6,105.3
Corporate securities	79.9	7,775.9	238.8	8,094.6
Residential mortgage-backed securities	—	1,917.3	12.0	1,929.3
Commercial mortgage-backed securities	—	214.3	—	214.3
Other securities	53.4	649.3	42.8	745.5
Total fixed maturity securities	691.8	16,702.1	293.6	17,687.5
Equity securities	1,200.2	111.9	187.8	1,499.9
Other invested assets, current	15.8	—	—	15.8
Securities lending collateral	726.0	353.8	—	1,079.8
Derivatives	—	758.7	—	758.7
Total assets	$ 4,179.8	$ 17,926.5	$ 481.4	$ 22,587.7
Liabilities:				
Derivatives	$ —	$ (241.9)	$ —	$ (241.9)
Total liabilities	$ —	$ (241.9)	$ —	$ (241.9)

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A reconciliation of the beginning and ending balances of assets measured at fair value on a recurring basis using Level III inputs for the years ended December 31, 2017, 2016 and 2015 is as follows:

	Corporate Securities	Residential Mortgage-backed Securities	Commercial Mortgage-backed Securities	Other Securities	Equity Securities	Total
Year ended December 31, 2017						
Beginning balance at January 1, 2017	$ 238.8	$ 12.0	$ —	$ 42.8	$ 187.8	$ 481.4
Total (losses) gains:						
Recognized in net income	(0.7)	—	—	(0.1)	(0.2)	(1.0)
Recognized in accumulated other comprehensive loss	3.3	—	—	0.2	10.7	14.2
Purchases	88.3	3.6	—	35.6	89.6	217.1
Sales	(48.1)	(5.4)	—	(1.2)	(0.5)	(55.2)
Settlements	(64.1)	(2.3)	—	(6.7)	—	(73.1)
Transfers into Level III	14.2	3.2	—	15.3	—	32.7
Transfers out of Level III	(2.5)	(6.1)	—	(70.0)	—	(78.6)
Ending balance at December 31, 2017	$ 229.2	$ 5.0	$ —	$ 15.9	$ 287.4	$ 537.5
Change in unrealized losses included in net income related to assets still held for the year ended December 31, 2017	$ (3.3)	$ —	$ —	$ —	$ —	$ (3.3)
Year ended December 31, 2016						
Beginning balance at January 1, 2016	$ 186.2	$ —	$ 1.9	$ 25.6	$ 102.1	$ 315.8
Total (losses) gains:						
Recognized in net income	(2.9)	—	—	—	0.7	(2.2)
Recognized in accumulated other comprehensive loss	(2.0)	—	—	(0.5)	(0.5)	(3.0)
Purchases	170.2	4.3	—	—	222.6	397.1
Sales	(5.4)	—	—	—	(136.7)	(142.1)
Settlements	(56.8)	—	—	(0.9)	(0.4)	(58.1)
Transfers into Level III	6.6	9.3	—	28.8	—	44.7
Transfers out of Level III	(57.1)	(1.6)	(1.9)	(10.2)	—	(70.8)
Ending balance at December 31, 2016	$ 238.8	$ 12.0	$ —	$ 42.8	$ 187.8	$ 481.4
Change in unrealized losses included in net income related to assets still held for the year ended December 31, 2016	$ (2.0)	$ —	$ —	$ —	$ —	$ (2.0)
Year ended December 31, 2015						
Beginning balance at January 1, 2015	$ 144.6	$ —	$ 3.3	$ 6.6	$ 48.3	$ 202.8
Total gains (losses):						
Recognized in net income	1.4	—	—	0.2	(1.5)	0.1
Recognized in accumulated other comprehensive loss	0.7	—	—	(0.2)	3.9	4.4
Purchases	132.6	—	1.1	28.3	52.1	214.1
Sales	(11.7)	—	(1.1)	(0.9)	(13.8)	(27.5)
Settlements	(51.6)	—	(1.4)	(0.2)	—	(53.2)
Transfers into Level III	4.8	—	—	—	13.1	17.9
Transfers out of Level III	(34.6)	—	—	(8.2)	—	(42.8)
Ending balance at December 31, 2015	$ 186.2	$ —	$ 1.9	$ 25.6	$ 102.1	$ 315.8
Change in unrealized losses included in net income related to assets still held for the year ended December 31, 2015	$ (0.6)	$ —	$ —	$ —	$ (1.4)	$ (2.0)

Transfers between levels, if any, are recorded as of the beginning of the reporting period. During 2017, we transferred our United States Government securities from Level I to Level II based on the inputs used to measure fair value. There were no material transfers between levels during the years ended December 31, 2016 or 2015.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Certain assets and liabilities are measured at fair value on a nonrecurring basis; that is, the instruments are not measured at fair value on an ongoing basis but are subject to fair value adjustments only in certain circumstances. As disclosed in Note 3, "Business Acquisitions," we completed our acquisition of HealthSun on December 21, 2017. The preliminary values of net assets acquired in our acquisition of HealthSun and resulting goodwill and other intangible assets were recorded at fair value primarily using Level III inputs. The majority of HealthSun's assets acquired and liabilities assumed were recorded at their carrying values as of the respective date of acquisition, as their carrying values approximated their fair values due to their short-term nature. The preliminary fair values of goodwill and other intangible assets acquired in our acquisition of HealthSun were internally estimated based on the income approach. The income approach estimates fair value based on the present value of the cash flows that the assets could be expected to generate in the future. We developed internal estimates for the expected cash flows and discount rate in the present value calculation. Other than the assets acquired and liabilities assumed in our acquisition of HealthSun described above, there were no other material assets or liabilities measured at fair value on a nonrecurring basis during the years ended December 31, 2017 or 2016.

Our valuation policy is determined by members of our treasury and accounting departments. Whenever possible, our policy is to obtain quoted market prices in active markets to estimate fair values for recognition and disclosure purposes. Where quoted market prices in active markets are not available, fair values are estimated using discounted cash flow analyses, broker quotes or other valuation techniques. These techniques are significantly affected by our assumptions, including discount rates and estimates of future cash flows. Potential taxes and other transaction costs are not considered in estimating fair values. Our valuation policy is generally to obtain only one quoted price for each security from third party pricing services, which are derived through recently reported trades for identical or similar securities making adjustments through the reporting date based upon available market observable information. When broker quotes are used, we generally obtain only one broker quote per security. As we are responsible for the determination of fair value, we perform monthly analysis on the prices received from the pricing services to determine whether the prices are reasonable estimates of fair value. This analysis is performed by our internal treasury personnel who are familiar with our investment portfolios, the pricing services engaged and the valuation techniques and inputs used. Our analysis includes a review of month-to-month price fluctuations. If unusual fluctuations are noted in this review, we may obtain additional information from other pricing services to validate the quoted price. There were no adjustments to quoted market prices obtained from the pricing services during the years ended December 31, 2017, 2016 or 2015.

In addition to the preceding disclosures on assets recorded at fair value in the consolidated balance sheets, FASB guidance also requires the disclosure of fair values for certain other financial instruments for which it is practicable to estimate fair value, whether or not such values are recognized in the consolidated balance sheets.

Non-financial instruments such as real estate, property and equipment, other current assets, deferred income taxes, intangible assets and certain financial instruments, such as policy liabilities, are excluded from the fair value disclosures. Therefore, the fair value amounts cannot be aggregated to determine our underlying economic value.

The carrying amounts reported in the consolidated balance sheets for cash, accrued investment income, premium and self-funded receivables, other receivables, income taxes receivable/payable, unearned income, accounts payable and accrued expenses, security trades pending payable, securities lending payable and certain other current liabilities approximate fair value because of the short term nature of these items. These assets and liabilities are not listed in the table below.

The following methods and assumptions were used to estimate the fair value of each class of financial instrument that is recorded at its carrying value on the consolidated balance sheets:

Other invested assets, long-term: Other invested assets, long-term primarily include our investments in limited partnerships, joint ventures and other non-controlled corporations, as well as the cash surrender value of corporate-owned life insurance policies. Investments in limited partnerships, joint ventures and other non-controlled corporations are carried at our share in the entities' undistributed earnings, which approximates fair value. The carrying value of corporate-owned life insurance policies represents the cash surrender value as reported by the respective insurer, which approximates fair value.

Short-term borrowings: The fair value of our short-term borrowings is based on quoted market prices for the same or similar debt, or if no quoted market prices were available, on the current market interest rates estimated to be available to us for debt of similar terms and remaining maturities.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Long-term debt - commercial paper: The carrying amount for commercial paper approximates fair value as the underlying instruments have variable interest rates at market value.

Long-term debt - senior unsecured notes, remarketable subordinated notes and surplus notes: The fair values of our notes are based on quoted market prices in active markets for the same or similar debt, or, if no quoted market prices are available, on the current market observable rates estimated to be available to us for debt of similar terms and remaining maturities.

Long-term debt—convertible debentures: The fair value of our convertible debentures is based on the quoted market price in the active private market in which the convertible debentures trade.

A summary of the estimated fair values by level of each class of financial instrument that is recorded at its carrying value on our consolidated balance sheets at December 31, 2017 and 2016 are as follows:

	Carrying Value	Estimated Fair Value			
		Level I	Level II	Level III	Total
December 31, 2017					
Assets:					
Other invested assets, long-term	$ 3,343.8	$ —	$ —	$ 3,343.8	$ 3,343.8
Liabilities:					
Debt:					
Short-term borrowings	1,275.0	—	1,275.0	—	1,275.0
Commercial paper	803.6	—	803.6	—	803.6
Notes	17,592.7	—	18,815.1	—	18,815.1
Convertible debentures	260.5	—	1,215.7	—	1,215.7
December 31, 2016					
Assets:					
Other invested assets, long-term	$ 2,240.5	$ —	$ —	$ 2,240.5	$ 2,240.5
Liabilities:					
Debt:					
Short-term borrowings	440.0	—	440.0	—	440.0
Commercial paper	629.0	—	629.0	—	629.0
Notes	14,323.8	—	14,858.4	—	14,858.4
Convertible debentures	334.1	—	1,020.2	—	1,020.2

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

7. Income Taxes

The components of deferred income taxes at December 31, 2017 and 2016 are as follows:

	2017	2016
Deferred tax assets relating to:		
Retirement benefits	$ 210.7	$ 362.9
Accrued expenses	278.6	331.9
Insurance reserves	136.5	229.5
Net operating loss carryforwards	3.7	9.2
Bad debt reserves	128.4	119.6
State income tax	32.7	59.8
Deferred compensation	23.7	38.2
Investment basis difference	23.9	42.4
Other	81.5	110.5
Total deferred tax assets	919.7	1,304.0
Deferred tax liabilities relating to:		
Unrealized gains on securities	174.9	202.9
Intangible assets:		
Trademarks and state Medicaid licenses	1,528.5	2,547.6
Customer, provider and hospital relationships	186.0	194.1
Internally developed software and other amortization differences	324.1	450.5
Retirement benefits	170.2	267.3
Debt discount	27.6	60.8
State deferred tax	104.5	106.0
Depreciation and amortization	41.5	54.1
Other	88.9	200.6
Total deferred tax liabilities	2,646.2	4,083.9
Net deferred tax liability	$ (1,726.5)	$ (2,779.9)

Significant components of the provision for income taxes for the years ended December 31, 2017, 2016 and 2015 consist of the following:

	2017	2016	2015
Current tax expense:			
Federal	$ 1,355.9	$ 1,862.6	$ 1,996.6
State and local	39.5	93.9	133.0
Total current tax expense	1,395.4	1,956.5	2,129.6
Deferred tax (benefit) expense	(1,274.4)	129.1	(58.6)
Total income tax expense	$ 121.0	$ 2,085.6	$ 2,071.0

State and local current tax expense is reported gross of federal benefit, and includes amounts related to audit settlements, uncertain tax positions, state tax credits and true up of prior years' tax. Such items are included in multiple lines in the following rate reconciliation table on a net of federal tax basis.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A reconciliation of income tax expense recorded in the consolidated statements of income and amounts computed at the statutory federal income tax rate for the years ended December 31, 2017, 2016 and 2015 is as follows:

	2017		2016		2015	
	Amount	Percent	Amount	Percent	Amount	Percent
Amount at statutory rate	$ 1,387.3	35.0 %	$ 1,594.4	35.0 %	$ 1,620.9	35.0 %
State and local income taxes net of federal tax expense/benefit	(2.2)	(0.1)	61.5	1.4	75.3	1.6
Tax exempt interest and dividends received deduction	(57.9)	(1.4)	(61.7)	(1.4)	(63.2)	(1.3)
HIP Fee	—	—	411.7	9.0	422.6	9.1
Tax Cuts and Jobs Act	(1,108.3)	(27.9)	—	—	—	—
Other, net	(97.9)	(2.5)	79.7	1.8	15.4	0.3
Total income tax expense	$ 121.0	3.1 %	$ 2,085.6	45.8 %	$ 2,071.0	44.7 %

On December 22, 2017, the federal government enacted a tax bill, H.R.1, *An act to provide for reconciliation pursuant to titles II and V of the concurrent resolution on the budget for fiscal year 2018*, or the Tax Cuts and Jobs Act. The Tax Cuts and Jobs Act contains significant changes to corporate taxation, including, but not limited to, reducing the U.S. federal corporate income tax rate from 35% to 21% and modifying or limiting many business deductions. At December 31, 2017, we had not completed our accounting for the tax effects resulting from the enactment of the Tax Cuts and Jobs Act; however, we have made a reasonable estimate of the effects on our existing deferred tax balances. We remeasured deferred tax assets and liabilities based on the rates at which they are expected to be utilized in the future, which is generally 21%. However, we are still analyzing certain aspects of the Tax Cuts and Jobs Act and refining our calculations, which could potentially affect the measurement of those balances or give rise to new deferred tax amounts. The provisional amount recorded related to the remeasurement of our deferred tax balance was a benefit of $1,108.3, or $4.14 per diluted share, and is included as a component of income tax expense.

During the year ended December 31, 2016, we recognized income tax expense of $411.7, or $1.54 per diluted share, as a result of the non-tax deductibility of the HIP Fee payments.

During the year ended December 31, 2015, we recognized income tax expense of $422.6, or $1.55 per diluted share, as a result of the non-tax deductibility of the HIP Fee payments. We also recognized income tax expense of $42.3, or $0.16 per diluted share, as a result of an adverse California franchise tax ruling. This expense is allocated between the "state and local income taxes net of federal tax benefit" and the "other, net" line items in the table above.

The change in the carrying amount of gross unrecognized tax benefits from uncertain tax positions for the years ended December 31, 2017 and 2016 is as follows:

	2017	2016
Balance at January 1	$ 131.1	$ 212.0
Additions based on:		
Tax positions related to current year	2.6	—
Tax positions related to prior years	83.4	13.9
Reductions based on:		
Tax positions related to current year	—	(1.1)
Tax positions related to prior years	(18.5)	(88.4)
Settlements with taxing authorities	(9.0)	(5.3)
Balance at December 31	$ 189.6	$ 131.1

The table above excludes interest, net of related tax benefits, which is treated as income tax expense (benefit) under our accounting policy. The interest is included in the amounts described in the following paragraph.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

As of December 31, 2017, $174.8 of unrecognized tax benefits would impact our effective tax rate in future periods, if recognized. Also included in the table above is $2.4 that would be recognized as an adjustment to additional paid-in capital, which would not affect our effective tax rate. In addition to the contingent liabilities included in the table above, during 2017 we filed protective state income tax refund claims of approximately $309.5.

For the years ended December 31, 2017, 2016 and 2015, we recognized net interest expense (benefits) of $3.0, $6.6 and $(1.8), respectively. We had accrued approximately $21.9 and $18.9 for the payment of interest at December 31, 2017 and 2016, respectively.

As of December 31, 2017, as further described below, certain tax years remain open to examination by the Internal Revenue Service, or IRS, and various state and local authorities. In addition, we continue to discuss certain industry issues with the IRS. As a result of these examinations and discussions, we have recorded amounts for uncertain tax positions. It is anticipated that the amount of unrecognized tax benefits will change in the next twelve months due to possible settlements of audits and changes in temporary items. However, the ultimate resolution of these items is dependent on the completion of negotiations with various taxing authorities. While it is difficult to determine when other tax settlements will actually occur, it is reasonably possible that one could occur in the next twelve months and our unrecognized tax benefits could change within a range of approximately $(5.1) to $(117.4).

We are a member of the IRS Compliance Assurance Process, or CAP. The objective of CAP is to reduce taxpayer burden and uncertainty while assuring the IRS of the accuracy of tax returns prior to filing, thereby reducing or eliminating the need for post-filing examinations.

As of December 31, 2017, the IRS examination of our 2017 tax year continues to be in process. During 2017, the examination of our 2016 tax year was resolved with the IRS.

In certain states, we pay premium taxes in lieu of state income taxes. Premium taxes are reported with general and administrative expense.

At December 31, 2017, we had unused federal tax net operating loss carryforwards of approximately $10.6 to offset future taxable income. The loss carryforwards expire in the years 2018 through 2036. During 2017, 2016 and 2015, federal income taxes paid totaled $1,502.7, $1,665.2 and $1,952.1, respectively.

8. Property and Equipment

A summary of property and equipment at December 31, 2017 and 2016 is as follows:

	2017	2016
Land and improvements	$ 17.8	$ 21.2
Building and improvements	167.7	215.1
Computer equipment, furniture and other equipment	1,080.1	1,024.5
Computer software, purchased and internally developed	2,612.9	2,416.7
Leasehold improvements	494.0	462.4
Property and equipment, gross	4,372.5	4,139.9
Accumulated depreciation and amortization	(2,197.6)	(2,162.0)
Property and equipment, net	$ 2,174.9	$ 1,977.9

Depreciation expense for 2017, 2016 and 2015 was $110.7, $104.0 and $105.8, respectively. Amortization expense on computer software and leasehold improvements for 2017, 2016 and 2015 was $490.3, $472.0 and $409.8, respectively, which includes amortization expense on computer software, both purchased and internally developed, for 2017, 2016 and 2015 of $434.6, $411.8 and $366.7, respectively. Capitalized costs related to the internal development of software of $2,372.8 and $2,157.2 at December 31, 2017 and 2016, respectively, are reported with computer software.

During the years ended December 31, 2017, 2016 and 2015, we recognized $2.5, $25.3 and $1.8, respectively, of impairments related to computer software, primarily internally developed. We also recognized $19.5 of impairments related

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

to computer equipment in 2016. These impairments were due to project cancellation or asset replacement, some of which resulted from a change in strategic focus needed to effectively manage business operations in a post-ACA environment.

9. Goodwill and Other Intangible Assets

A summary of the change in the carrying amount of goodwill for our segments (see Note 19, "Segment Information") for 2017 and 2016 is as follows:

	Commercial and Specialty Business	Government Business	Other	Total
Balance as of January 1, 2016	$ 11,818.9	$ 5,743.3	$ —	$ 17,562.2
Other adjustments	(1.0)	—	—	(1.0)
Balance as of December 31, 2016	11,817.9	5,743.3	—	17,561.2
Acquisitions	—	1,658.5	11.5	1,670.0
Balance as of December 31, 2017	$ 11,817.9	$ 7,401.8	$ 11.5	$ 19,231.2
Accumulated impairment as of December 31, 2017	$ (41.0)	$ —	$ —	$ (41.0)

The increase in goodwill in 2017 was primarily due to the acquisition of HealthSun in December 2017. For additional information regarding this acquisition, see Note 3, "Business Acquisitions".

As required by FASB guidance, we completed annual impairment tests of existing goodwill and other intangible assets with indefinite lives during 2017, 2016 and 2015. We perform these annual impairment tests during the fourth quarter. FASB guidance also requires interim impairment testing to be performed when potential impairment indicators exist. These tests involve the use of estimates related to the fair value of goodwill and intangible assets with indefinite lives and require a significant degree of management judgment and the use of subjective assumptions. The fair values were estimated using the projected income and market valuation approaches, incorporating Level III internal estimates for inputs, including, but not limited to, revenue projections, income projections, cash flows and discount rates. We did not incur any impairment losses in 2017, 2016 or 2015, as the estimated fair values of our reporting units were substantially in excess of their carrying values.

The components of other intangible assets as of December 31, 2017 and 2016 are as follows:

	2017			2016		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intangible assets with finite lives:						
Customer relationships	$ 3,724.9	$ (2,877.8)	$ 847.1	$ 3,310.9	$ (2,759.7)	$ 551.2
Provider and hospital relationships	187.4	(73.2)	114.2	150.5	(65.9)	84.6
Other	184.0	(67.2)	116.8	89.4	(50.6)	38.8
Total	4,096.3	(3,018.2)	1,078.1	3,550.8	(2,876.2)	674.6
Intangible assets with indefinite lives:						
Blue Cross and Blue Shield and other trademarks	6,298.7	—	6,298.7	6,298.7	—	6,298.7
State Medicaid licenses	991.6	—	991.6	991.6	—	991.6
Total	7,290.3	—	7,290.3	7,290.3	—	7,290.3
Other intangible assets	$ 11,386.6	$ (3,018.2)	$ 8,368.4	$ 10,841.1	$ (2,876.2)	$ 7,964.9

As of December 31, 2017, the estimated amortization expense for each of the five succeeding years is as follows: 2018, $236.9; 2019, $197.3; 2020, $158.6; 2021, $126.9; and 2022, $100.6.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

10. Retirement Benefits

We sponsor various non-contributory employee defined benefit plans through certain subsidiaries.

The Anthem Cash Balance Plan A and the Anthem Cash Balance Plan B are cash balance pension plans covering certain eligible employees of the affiliated companies that participate in these plans. Effective January 1, 2006, benefits were curtailed, with the result that most participants stopped accruing benefits but continue to earn interest on benefits accrued prior to the curtailment. Certain participants subject to collective bargaining and certain other participants who met grandfathering rules continue to accrue benefits. Participants that do not receive credits and/or benefit accruals are included in the Anthem Cash Balance Plan A, while current employees who are still receiving credits and/or benefits participate in the Anthem Cash Balance Plan B. Several pension plans acquired through various corporate mergers and acquisitions have been merged into these plans in prior years.

The UGS Pension Plan is a defined benefit pension plan with a cash balance component. The UGS Pension Plan covers eligible employees of the affiliated companies that participate in the UGS Pension Plan. Effective January 1, 2004, benefits were curtailed, with the result that most participants stopped accruing benefits but continue to earn interest on benefits previously accrued. Certain employees subject to collective bargaining agreements and certain other employees who met grandfathering rules continue to accrue benefits. Effective December 31, 2017, the UGS Pension Plan was merged into the Anthem Cash Balance Plan B.

The Employees' Retirement Plan of Blue Cross of California, or the BCC Plan, is a defined benefit pension plan that covers eligible employees of Blue Cross of California who are covered by a collective bargaining agreement. Effective January 1, 2007, benefits were curtailed under the BCC Plan with the result that no Blue Cross of California employees hired or rehired after December 31, 2006 are eligible to participate in the BCC Plan.

All of the plans' assets consist primarily of common stocks, fixed maturity securities, investment funds and short-term investments. The funding policies for all plans are to contribute amounts at least sufficient to meet the minimum funding requirements set forth in the Employee Retirement Income Security Act of 1974, as amended, or ERISA, including amendment by the Pension Protection Act of 2006, and in accordance with income tax regulations, plus such additional amounts as are necessary to provide assets sufficient to meet the benefits to be paid to plan participants.

We use a December 31 measurement date for determining benefit obligations and fair value of plan assets.

The following tables disclose consolidated "pension benefits," which include the defined benefit pension plans described above, and consolidated "other benefits," which include postretirement health and welfare benefits including medical, vision and dental benefits offered to certain employees. Calculations were computed using assumptions at the December 31 measurement dates.

The reconciliation of the benefit obligation is as follows:

	Pension Benefits		Other Benefits	
	2017	2016	2017	2016
Benefit obligation at beginning of year	$ 1,824.9	$ 1,833.3	$ 565.2	$ 578.7
Service cost	10.1	11.6	1.4	1.6
Interest cost	66.3	68.5	20.8	22.4
Actuarial loss (gain)	103.7	32.2	(39.2)	(4.2)
Benefits paid	(132.6)	(120.7)	(24.0)	(33.3)
Benefit obligation at end of year	$ 1,872.4	$ 1,824.9	$ 524.2	$ 565.2

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The changes in the fair value of plan assets are as follows:

	Pension Benefits		Other Benefits	
	2017	2016	2017	2016
Fair value of plan assets at beginning of year	$ 1,887.8	$ 1,865.2	$ 331.8	$ 328.4
Actual return on plan assets	253.2	132.2	41.0	21.8
Employer contributions	3.9	11.1	7.5	14.9
Benefits paid	(132.6)	(120.7)	(24.0)	(33.3)
Fair value of plan assets at end of year	$ 2,012.3	$ 1,887.8	$ 356.3	$ 331.8

The net amount included in the consolidated balance sheets is as follows:

	Pension Benefits		Other Benefits	
	2017	2016	2017	2016
Noncurrent assets	$ 202.0	$ 126.7	$ —	$ —
Current liabilities	(5.4)	(3.7)	—	—
Noncurrent liabilities	(56.7)	(60.1)	(167.9)	(233.4)
Net amount at December 31	$ 139.9	$ 62.9	$ (167.9)	$ (233.4)

The net amounts included in accumulated other comprehensive loss that have not been recognized as components of net periodic benefit costs are as follows:

	Pension Benefits		Other Benefits	
	2017	2016	2017	2016
Net actuarial loss	$ 624.7	$ 655.8	$ 77.5	$ 146.6
Prior service cost (credit)	1.0	0.5	(46.1)	(59.7)
Net amount before tax at December 31	$ 625.7	$ 656.3	$ 31.4	$ 86.9

The estimated net actuarial loss and prior service cost for the defined benefit pension plans that will be reclassified from accumulated other comprehensive loss into net periodic benefit costs over the next year are $22.4 and $0.2, respectively. The estimated net actuarial loss and prior service credit for postretirement benefit plans that will be reclassified from accumulated other comprehensive loss into net periodic benefit costs over the next year are $3.5 and $12.4, respectively.

The accumulated benefit obligation for the defined benefit pension plans was $1,868.9 and $1,821.1 at December 31, 2017 and 2016, respectively.

As of December 31, 2017, certain pension plans had accumulated benefit obligations in excess of plan assets. For those same plans, the projected benefit obligation was also in excess of plan assets. Such plans had a combined projected benefit obligation, accumulated benefit obligation and fair value of plan assets of $101.9, $100.4 and $39.8, respectively.

The weighted-average assumptions used in calculating the benefit obligations for all plans are as follows:

	Pension Benefits		Other Benefits	
	2017	2016	2017	2016
Discount rate	3.44%	3.77%	3.42%	3.82%
Rate of compensation increase	3.00%	3.00%	3.00%	3.00%
Expected rate of return on plan assets	7.83%	7.95%	7.00%	7.00%

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The components of net periodic (benefit credit) benefit cost included in the consolidated statements of income are as follows:

	2017	2016	2015
Pension Benefits			
Service cost	$ 10.1	$ 11.6	$ 13.1
Interest cost	66.3	68.5	68.2
Expected return on assets	(147.6)	(147.1)	(143.2)
Recognized actuarial loss	21.8	19.0	25.7
Amortization of prior service credit	(0.4)	(0.6)	(0.6)
Settlement loss	7.4	7.3	6.5
Net periodic benefit credit	$ (42.4)	$ (41.3)	$ (30.3)
Other Benefits			
Service cost	$ 1.4	$ 1.6	$ 2.1
Interest cost	20.8	22.4	23.4
Expected return on assets	(22.6)	(22.4)	(23.7)
Recognized actuarial loss	11.4	12.4	15.3
Amortization of prior service credit	(13.6)	(13.8)	(14.4)
Net periodic (benefit credit) benefit cost	$ (2.6)	$ 0.2	$ 2.7

During the years ended December 31, 2017, 2016 and 2015 we incurred total settlement losses of $7.4, $7.3 and $6.5, respectively, as lump-sum payments exceeded the service cost and interest cost components of net periodic benefit cost for certain of our plans.

The weighted-average assumptions used in calculating the net periodic benefit cost for all plans are as follows:

	2017	2016	2015
Pension Benefits			
Discount rate	3.77%	3.92%	3.66%
Rate of compensation increase	3.00%	3.00%	3.00%
Expected rate of return on plan assets	7.95%	7.84%	7.62%
Other Benefits			
Discount rate	3.82%	4.01%	3.74%
Rate of compensation increase	3.00%	3.00%	3.00%
Expected rate of return on plan assets	7.00%	7.00%	7.00%

The assumed healthcare cost trend rates used to measure the expected cost of pre-Medicare (those who are not currently eligible for Medicare benefits) other benefits at our December 31, 2017 measurement date was 8.00% for 2018 with a gradual decline to 4.50% by the year 2028. The assumed healthcare cost trend rates used to measure the expected cost of post-Medicare (those who are currently eligible for Medicare benefits) other benefits at our December 31, 2017 measurement date was 6.00% for 2018 with a gradual decline to 4.50% by the year 2028. These estimated trend rates are subject to change in the future. The healthcare cost trend rate assumption affects the amounts reported. For example, an increase in the assumed healthcare cost trend rate of one percentage point would increase the postretirement benefit obligation as of December 31, 2017 by $35.0 and would increase service and interest costs by $1.6. Conversely, a decrease in the assumed healthcare cost trend rate of one percentage point would decrease the postretirement benefit obligation as of December 31, 2017 by $30.3 and would decrease service and interest costs by $1.4.

Plan assets include a diversified mix of investment grade fixed maturity securities, equity securities and alternative investments across a range of sectors and levels of capitalization to maximize the long-term return for a prudent level of risk. The weighted-average target allocation for pension benefit plan assets is 45% equity securities, 46% fixed maturity securities, and 9% to all other types of investments. Equity securities primarily include a mix of domestic securities, foreign securities and mutual funds invested in equities. Fixed maturity securities primarily include treasury securities, corporate bonds and asset-backed investments issued by corporations and the U.S. government. Other types of investments primarily include partnership interests, collective trusts that replicate money market funds and insurance contracts designed specifically for employee benefit plans. As of December 31, 2017, there were no significant concentrations of investments in the pension benefit assets or other benefit assets. No plan assets were invested in Anthem common stock.

Pension benefit assets and other benefit assets recorded at fair value are categorized based upon the level of judgment associated with the inputs used to measure their fair value.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The fair values of our pension benefit assets and other benefit assets by asset category and level inputs at December 31, 2017, excluding cash, investment income receivable and amounts due to/from brokers, resulting in a net asset of $15.1, are as follows (see Note 6, "Fair Value," for additional information regarding the definition of level inputs):

	Level I	Level II	Level III	Total
December 31, 2017				
Pension Benefit Assets:				
Equity securities:				
U.S. securities	$ 584.4	$ 4.8	$ —	$ 589.2
Foreign securities	178.7	—	—	178.7
Mutual funds	39.4	—	—	39.4
Fixed maturity securities:				
Government securities	226.9	—	—	226.9
Corporate securities	—	376.5	—	376.5
Asset-backed securities	—	139.9	—	139.9
Other types of investments:				
Common and collective trusts	—	53.9	—	53.9
Partnership interests	—	—	220.8	220.8
Insurance company contracts	—	—	173.4	173.4
Total pension benefit assets	$ 1,029.4	$ 575.1	$ 394.2	$ 1,998.7
Other Benefit Assets:				
Equity securities:				
U.S. securities	$ 10.3	$ 0.2	$ —	$ 10.5
Foreign securities	3.3	—	—	3.3
Mutual funds	47.8	—	—	47.8
Fixed maturity securities:				
Government securities	2.5	—	—	2.5
Corporate securities	—	5.2	—	5.2
Asset-backed securities	—	4.7	—	4.7
Other types of investments:				
Common and collective trusts	—	0.5	—	0.5
Partnership interests	—	—	0.4	0.4
Life insurance contracts	—	—	268.5	268.5
Investment in DOL 103-12 trust	—	11.4	—	11.4
Total other benefit assets	$ 63.9	$ 22.0	$ 268.9	$ 354.8

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The fair values of our pension benefit assets and other benefit assets by asset category and level inputs at December 31, 2016, excluding cash, investment income receivable and amounts due to/from brokers, resulting in a net asset of $2.8, are as follows:

	Level I	Level II	Level III	Total
December 31, 2016				
Pension Benefit Assets:				
Equity securities:				
U.S. securities	$ 561.4	$ 4.4	$ —	$ 565.8
Foreign securities	264.5	—	—	264.5
Mutual funds	36.6	—	—	36.6
Fixed maturity securities:				
Government securities	183.9	—	—	183.9
Corporate securities	—	385.9	—	385.9
Asset-backed securities	—	134.7	—	134.7
Other types of investments:				
Common and collective trusts	—	27.5	—	27.5
Partnership interests	—	—	112.5	112.5
Insurance company contracts	—	—	173.3	173.3
Treasury futures contracts	0.3	—	—	0.3
Total pension benefit assets	$ 1,046.7	$ 552.5	$ 285.8	$ 1,885.0
Other Benefit Assets:				
Equity securities:				
U.S. securities	$ 13.0	$ 0.2	$ —	$ 13.2
Foreign securities	5.4	—	—	5.4
Mutual funds	47.1	—	—	47.1
Fixed maturity securities:				
Government securities	2.7	—	—	2.7
Corporate securities	—	7.9	—	7.9
Asset-backed securities	—	5.8	—	5.8
Other types of investments:				
Common and collective trusts	—	1.0	—	1.0
Partnership interests	—	—	1.2	1.2
Life insurance contracts	—	—	237.7	237.7
Investment in DOL 103-12 trust	—	9.8	—	9.8
Total other benefit assets	$ 68.2	$ 24.7	$ 238.9	$ 331.8

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A reconciliation of the beginning and ending balances of plan assets measured at fair value using Level III inputs for the years ended December 31, 2017, 2016 and 2015 is as follows:

	Partnership Interests	Insurance Company Contracts	Life Insurance Contracts	Total
Year ended December 31, 2017				
Beginning balance at January 1, 2017	$ 113.7	$ 173.3	$ 237.7	$ 524.7
Actual return on plan assets relating to assets still held at the reporting date	20.4	(0.5)	30.8	50.7
Purchases	126.1	9.7	—	135.8
Sales	(39.0)	(9.1)	—	(48.1)
Ending balance at December 31, 2017	$ 221.2	$ 173.4	$ 268.5	$ 663.1
Year ended December 31, 2016				
Beginning balance at January 1, 2016	$ 118.6	$ 174.2	$ 229.9	$ 522.7
Actual return on plan assets relating to assets still held at the reporting date	(3.5)	(3.1)	10.8	4.2
Purchases	17.8	8.9	—	26.7
Sales	(19.2)	(6.7)	(3.0)	(28.9)
Ending balance at December 31, 2016	$ 113.7	$ 173.3	$ 237.7	$ 524.7
Year ended December 31, 2015				
Beginning balance at January 1, 2015	$ 122.2	$ 187.7	$ 238.4	$ 548.3
Actual return on plan assets relating to assets still held at the reporting date	(5.9)	(5.7)	(6.8)	(18.4)
Purchases	10.9	7.0	—	17.9
Sales	(8.6)	(14.8)	(1.7)	(25.1)
Ending balance at December 31, 2015	$ 118.6	$ 174.2	$ 229.9	$ 522.7

There were no transfers between Levels I, II and III during the years ended December 31, 2017, 2016 and 2015.

Our current funding strategy is to fund an amount at least equal to the minimum required funding as determined under ERISA with consideration of maximum tax deductible amounts. We may elect to make discretionary contributions up to the maximum amount deductible for income tax purposes. For the years ended December 31, 2017, 2016 and 2015, no material contributions were necessary to meet ERISA required funding levels. However, during the years ended December 31, 2017, 2016 and 2015, we made tax deductible discretionary contributions to the pension benefit plans of $3.9, $11.1 and $3.7, respectively. Employer contributions to other benefit plans represent discretionary contributions and do not include payments to retirees for current benefits.

Our estimated future payments for pension benefits and postretirement benefits, which reflect expected future service, as appropriate, are as follows:

	Pension Benefits	Other Benefits
2018	$ 156.4	$ 39.6
2019	152.3	40.0
2020	149.6	39.9
2021	145.8	39.6
2022	144.5	39.3
2023 - 2027	636.9	179.4

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

In addition to the defined benefit plans, we maintain the Anthem 401(k) Plan which is a qualified defined contribution plan covering substantially all employees. Voluntary employee contributions are matched by us subject to certain limitations. Contributions made by us totaled $141.9, $131.5 and $125.4 during 2017, 2016 and 2015, respectively.

11. Medical Claims Payable

A reconciliation of the beginning and ending balances for medical claims payable, by segment (see Note 19, "Segment Information"), for the year ended December 31, 2017 is as follows:

	Commercial & Specialty Business	Government Business	Total
Gross medical claims payable, beginning of year	$ 3,267.0	$ 4,625.6	$ 7,892.6
Ceded medical claims payable, beginning of year	(521.3)	(17.8)	(539.1)
Net medical claims payable, beginning of year	2,745.7	4,607.8	7,353.5
Business combinations and purchase adjustments	—	75.8	75.8
Net incurred medical claims:			
Current year	29,722.1	42,150.2	71,872.3
Prior years redundancies	(462.7)	(701.9)	(1,164.6)
Total net incurred medical claims	29,259.4	41,448.3	70,707.7
Net payments attributable to:			
Current year medical claims	26,481.8	37,767.9	64,249.7
Prior years medical claims	2,194.7	3,806.0	6,000.7
Total net payments	28,676.5	41,573.9	70,250.4
Net medical claims payable, end of year	3,328.6	4,558.0	7,886.6
Ceded medical claims payable, end of year	78.0	26.9	104.9
Gross medical claims payable, end of year	$ 3,406.6	$ 4,584.9	$ 7,991.5

A reconciliation of the beginning and ending balances for medical claims payable, by segment, for the year ended December 31, 2016 is as follows:

	Commercial & Specialty Business	Government Business	Total
Gross medical claims payable, beginning of year	$ 3,396.1	$ 4,173.7	$ 7,569.8
Ceded medical claims payable, beginning of year	(635.7)	(9.9)	(645.6)
Net medical claims payable, beginning of year	2,760.4	4,163.8	6,924.2
Net incurred medical claims:			
Current year	27,797.3	38,574.1	66,371.4
Prior years redundancies	(466.5)	(383.9)	(850.4)
Total net incurred medical claims	27,330.8	38,190.2	65,521.0
Net payments attributable to:			
Current year medical claims	25,119.3	34,037.3	59,156.6
Prior years medical claims	2,226.2	3,708.9	5,935.1
Total net payments	27,345.5	37,746.2	65,091.7
Net medical claims payable, end of year	2,745.7	4,607.8	7,353.5
Ceded medical claims payable, end of year	521.3	17.8	539.1
Gross medical claims payable, end of year	$ 3,267.0	$ 4,625.6	$ 7,892.6

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A reconciliation of the beginning and ending balances for medical claims payable, by segment, for the year ended December 31, 2015 is as follows:

	Commercial & Specialty Business	Government Business	Total
Gross medical claims payable, beginning of year	$ 3,541.4	$ 3,319.8	$ 6,861.2
Ceded medical claims payable, beginning of year	(762.5)	(4.9)	(767.4)
Net medical claims payable, beginning of year	2,778.9	3,314.9	6,093.8
Business combinations and purchase adjustments	—	121.8	121.8
Net incurred medical claims:			
Current year	26,798.5	33,909.9	60,708.4
Prior years redundancies	(480.3)	(319.9)	(800.2)
Total net incurred medical claims	26,318.2	33,590.0	59,908.2
Net payments attributable to:			
Current year medical claims	24,145.7	29,922.0	54,067.7
Prior years medical claims	2,191.0	2,940.9	5,131.9
Total net payments	26,336.7	32,862.9	59,199.6
Net medical claims payable, end of year	2,760.4	4,163.8	6,924.2
Ceded medical claims payable, end of year	635.7	9.9	645.6
Gross medical claims payable, end of year	$ 3,396.1	$ 4,173.7	$ 7,569.8

Amounts incurred related to prior years vary from previously estimated liabilities as the claims are ultimately settled. Liabilities at any period-end are continually reviewed and re-estimated as information regarding actual claims payments, or runout, becomes known. This information is compared to the originally established year end liability. Negative amounts reported for incurred medical claims related to prior years result from claims being settled for amounts less than originally estimated. The prior year redundancy of $1,164.6 shown above for the year ended December 31, 2017 represents an estimate based on paid claim activity from January 1, 2017 to December 31, 2017. Medical claim liabilities are usually described as having a "short tail," which means that they are generally paid within twelve months of the member receiving service from the provider. Accordingly, the majority of the $1,164.6 redundancy relates to claims incurred in calendar year 2016.

The following table provides a summary of the two key assumptions having the most significant impact on our incurred but not paid liability estimates for the years ended December 31, 2017, 2016 and 2015, which are the completion and trend factors. These two key assumptions can be influenced by utilization levels, unit costs, mix of business, benefit plan designs, provider reimbursement levels, processing system conversions and changes, claim inventory levels, claim processing patterns, claim submission patterns and operational changes resulting from business combinations.

	Favorable Developments by Changes in Key Assumptions		
	2017	2016	2015
Assumed trend factors	$ (651.3)	$ (591.3)	$ (467.9)
Assumed completion factors	(513.3)	(259.1)	(332.3)
Total	$ (1,164.6)	$ (850.4)	$ (800.2)

The favorable development recognized in 2017 resulted from trend and completion factors developing more favorably than originally expected. The favorable development recognized in 2016 and 2015 resulted primarily from trend factors in late 2015 and late 2014, respectively, developing more favorably than originally expected as well as a smaller but significant contribution from completion factor development.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The reconciliation of net incurred medical claims to benefit expense included in the consolidated statements of income is as follows:

	Years Ended December 31		
	2017	2016	2015
Net incurred medical claims:			
Commercial & Specialty Business	$ 29,259.4	$ 27,330.8	$ 26,318.2
Government Business	41,448.3	38,190.2	33,590.0
Total net incurred medical claims	70,707.7	65,521.0	59,908.2
Quality improvement and other claims expense	1,528.5	1,313.4	1,208.7
Benefit expense	$ 72,236.2	$ 66,834.4	$ 61,116.9

Incurred claims development, net of reinsurance, for the Commercial & Specialty Business for the years ended December 31, 2017, 2016 and 2015 is as follows:

Commercial & Specialty Business	Cumulative Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance		
Claim Year	**2015**	**2016**	**2017**
2015 & Prior	$ 29,097.0	$ 28,630.5	$ 28,581.0
2016		27,797.3	27,384.1
2017			29,722.1
Total			$ 85,687.2

Paid claims development, net of reinsurance, for the Commercial & Specialty Business for the years ended December 31, 2017, 2016 and 2015 is as follows:

Commercial & Specialty Business	Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance		
Claim Year	**2015**	**2016**	**2017**
2015 & Prior	$ 26,336.7	$ 28,562.8	$ 28,546.9
2016		25,119.3	27,329.9
2017			26,481.8
Total			$ 82,358.6

At December 31, 2017, the total of incurred but not reported liabilities plus expected development on reported claims for the Commercial & Specialty Business was $34.1, $54.2 and $3,240.3 for the claim years 2015 and prior, 2016 and 2017, respectively.

At December 31, 2017, the cumulative number of reported claims for the Commercial & Specialty Business was 124.5, 115.5 and 113.1 for the claims years 2015 and prior, 2016 and 2017, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Incurred claims development, net of reinsurance, for the Government Business as of and for the years ended December 31, 2017, 2016 and 2015 is as follows:

Government Business	Cumulative Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance		
Claim Year	2015	2016	2017
2015 & Prior	$ 37,026.7	$ 36,642.9	$ 36,594.3
2016		38,574.1	37,920.8
2017			42,226.0
Total			$ 116,741.1

Paid claims development, net of reinsurance, for the Government Business as of and for the years ended December 31, 2017, 2016 and 2015 is as follows:

Government Business	Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance		
Claim Year	2015	2016	2017
2015 & Prior	$ 32,862.9	$ 36,572.0	$ 36,572.0
2016		34,037.3	37,843.2
2017			37,767.9
Total			$ 112,183.1

At December 31, 2017, the total of incurred but not reported liabilities plus expected development on reported claims for the Government Business was $22.3, $77.6 and $4,458.1 for the claim years 2015 and prior, 2016 and 2017, respectively.

At December 31, 2017, the cumulative number of reported claims for the Government Business was 198.9, 204.0 and 202.8 for the claims years 2015 and prior, 2016 and 2017, respectively.

The information about incurred and paid claims development for the years ended December 31, 2015 and 2016, for both the Commercial & Specialty Business and Government Business, is presented as supplementary information.

The cumulative number of reported claims for each claim year for both the Commercial & Specialty Business and Government Business have been developed using historical data captured by our claim payment systems. The provided claim amounts are not a precise tool for understanding utilization of medical services. They could be impacted by a variety of factors including changes in provider billing practices, provider reimbursement arrangements, mix of services, benefit design or processing systems. The cumulative number of reported claims has been provided to comply with FASB accounting standards and is not used by management in its claims analysis. Our cumulative number of reported claims may not be comparable to similar measures reported by other health benefits companies.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The reconciliation of the Commercial & Specialty Business and Government Business incurred and paid claims development information for the three years ended December 31, 2017, reflected in the tables above, to the consolidated ending balance for medical claims payable, as of December 31, 2017, is as follows:

	Commercial & Specialty Business	Government Business	Total
Cumulative incurred claims and allocated claim adjustment expenses, net of reinsurance	$ 85,687.2	$ 116,741.1	$ 202,428.3
Less: cumulative paid claims and allocated claim adjustment expenses, net of reinsurance	82,358.6	112,183.1	194,541.7
Net medical claims payable, end of year	3,328.6	4,558.0	7,886.6
Ceded medical claims payable, end of year	78.0	26.9	104.9
Gross medical claims payable, end of year	$ 3,406.6	$ 4,584.9	$ 7,991.5

12. Debt

Short-term Borrowings

We are a member, through certain subsidiaries, of the Federal Home Loan Bank of Indianapolis, the Federal Home Loan Bank of Cincinnati and the Federal Home Loan Bank of Atlanta, or collectively, the FHLBs. As a member we have the ability to obtain short-term cash advances, subject to certain minimum collateral requirements. At December 31, 2017 and 2016, $825.0 and $440.0, respectively, were outstanding under our short-term FHLB borrowings. These outstanding short-term FHLB borrowings at December 31, 2017 and 2016 had fixed interest rates of 1.386% and 0.643%, respectively.

In August 2017, we entered into two separate 364-day lines of credit with separate lenders for general corporate purposes. The facilities provide combined credit up to $450.0. The interest rate on each line of credit is based on the LIBOR rate plus a predetermined rate. Our ability to borrow under the lines of credit is subject to compliance with certain covenants. We had $450.0 outstanding under these lines of credit at December 31, 2017.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Long-term Debt

The carrying value of long-term debt at December 31, 2017 and 2016 consists of the following:

	2017	2016
Senior unsecured notes:		
2.375%, due 2017	$ —	$ 400.1
5.875%, due 2017	—	528.3
1.875%, due 2018	625.5	624.3
2.300%, due 2018	649.1	647.5
2.250%, due 2019	847.2	845.6
7.000%, due 2019	—	439.4
2.500%, due 2020	894.9	—
4.350%, due 2020	692.9	700.0
3.700%, due 2021	697.6	696.9
2.950%, due 2022	745.9	—
3.125%, due 2022	844.9	843.8
3.300%, due 2023	994.4	993.3
3.350%, due 2024	845.0	—
3.500%, due 2024	792.9	791.9
3.650%, due 2027	1,589.2	—
5.950%, due 2034	334.0	444.7
5.850%, due 2036	395.6	768.3
6.375%, due 2037	366.3	639.9
5.800%, due 2040	123.5	193.9
4.625%, due 2042	886.7	886.3
4.650%, due 2043	986.3	985.9
4.650%, due 2044	791.1	790.8
5.100%, due 2044	593.8	593.6
4.375%, due 2047	1,385.5	—
4.850%, due 2054	246.8	246.8
Remarketable subordinated notes:		
1.900%, due 2028	1,238.7	1,237.6
Surplus note:		
9.000%, due 2027	24.9	24.9
Senior convertible debentures:		
2.750%, due 2042	260.5	334.1
Variable rate debt:		
Commercial paper program	803.6	629.0
Total long-term debt	18,656.8	15,286.9
Current portion of long-term debt	(1,274.6)	(928.4)
Long-term debt, less current portion	$ 17,382.2	$ 14,358.5

All debt is a direct obligation of Anthem, Inc., except for the surplus note, the FHLB borrowings and the lines of credit.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

We generally issue senior unsecured notes, or Notes, for long-term borrowing purposes. Certain of these Notes may have a call feature that allows us to redeem the Notes at any time at our option and/or a put feature that allows a Note holder to redeem the Notes upon the occurrence of both a change in control event and a downgrade of the Notes below an investment grade rating.

On December 14, 2017, we redeemed the $255.2 remaining outstanding principal balance of our 7.000% Notes due 2019, plus applicable premium for early redemption and accrued and unpaid interest to the redemption date, for cash totaling $275.0. We recognized a loss on extinguishment of debt of $14.3 for the repurchase of these Notes.

On November 21, 2017, we issued $900.0 aggregate principal amount of 2.500% Notes due 2020, $750.0 aggregate principal amount of 2.950% Notes due 2022, $850.0 aggregate principal amount of 3.350% Notes due 2024, $1,600.0 aggregate principal amount of 3.650% Notes due 2027 and $1,400.0 aggregate principal amount of 4.375% Notes due 2047 under our shelf registration statement. Interest on the 2020 Notes is payable semi-annually in arrears on May 21 and November 21 of each year, commencing on May 21, 2018. Interest on the 2022 Notes, the 2024 Notes, the 2027 Notes and the 2047 Notes is payable semi-annually in arrears on June 1 and December 1 of each year, commencing on June 1, 2018. The net proceeds were used to fund the acquisitions of HealthSun and America's 1st Choice; redemption of the 7.000% Notes due 2019, discussed above; and redemption of the Tender Notes, discussed below. We intend to use the remaining net proceeds for working capital and general corporate purposes.

On November 14, 2017, we initiated a cash tender offer to purchase any and all of our 7.000% Notes due 2019, or the Any and All Notes, and certain of our 5.950% Notes due 2034, 5.850% Notes due 2036, 6.375% Notes due 2037, 5.800% Notes due 2040 and 5.100% Notes due 2044, or the Maximum Tender Offer Notes, and collectively with the Any and All Notes, the Tender Notes. On November 21, 2017, we repurchased $185.1 aggregate principal amount of the Any and All Notes, plus applicable premium and accrued and unpaid interest, for cash totaling $199.4. On November 30, 2017, we repurchased $836.3 aggregate principal amount of the Maximum Tender Offer Notes, plus applicable premium and accrued and unpaid interest, for cash totaling $1,095.4. We recognized a loss on extinguishment of debt of $265.6 for the repurchase of the Tender Notes.

On June 15, 2017 and February 15, 2017, we repaid, upon maturity, the $528.8 outstanding balance of our 5.875% Notes and the $400.0 outstanding balance of our 2.375% Notes, respectively.

On September 10, 2015, we repaid, upon maturity, the $625.0 outstanding principal balance of our 1.250% Notes due 2015. Additionally, during the year ended December 31, 2015, we repurchased $13.0 of outstanding principal balance of certain Notes, plus applicable premium and accrued and unpaid interest, for cash totaling $16.2. We recognized a loss on extinguishment of debt of $3.4 on the repurchase of these Notes.

On May 12, 2015, we issued 25.0 Equity Units, pursuant to an underwriting agreement dated May 6, 2015, in an aggregate principal amount of $1,250.0. Each Equity Unit has a stated amount of $50 (whole dollars) and consists of a purchase contract obligating the holder to purchase a certain number of shares of our common stock on May 1, 2018, subject to earlier termination or settlement, for a price in cash of $50 (whole dollars); and a 5% undivided beneficial ownership interest in $1,000 (whole dollars) principal amount of our 1.900% remarketable subordinated notes, or RSNs, due 2028. We received $1,228.8 in cash proceeds from the issuance of the Equity Units, net of underwriting discounts, commissions and offering expenses payable by us, and recorded $1,250.0 in long-term debt. On May 1, 2018, if the applicable market value of our common stock is equal to or greater than $207.5898 per share, the settlement rate will be 0.2406 shares of our common stock. If the applicable market value of our common stock is less than $207.5898 per share but greater than $143.7160 per share, the settlement rate will be a number of shares of our common stock equal to $50 (whole dollars) divided by the applicable market value of our common stock. If the applicable market value of common stock is less than or equal to $143.7160 per share, the settlement rate will be 0.3480 shares of our common stock. Holders of the Equity Units may elect early settlement at a minimum settlement rate of 0.2406 shares of our common stock for each purchase contract being settled. The RSNs are pledged as collateral to secure the purchase of common stock under the related stock purchase contracts. Quarterly interest payments on the RSNs commenced on August 1, 2015. The RSNs are scheduled to be remarketed during the five business day period ending on April 26, 2018 and may be remarketed earlier, at our election, during the period from January 30, 2018 through April 12, 2018. Following the remarketing, the interest rate on the RSNs will be set to current market rates and interest will be payable semi-annually. At December 31, 2017 and 2016, the stock purchase contract liability was $20.9 and $62.0, respectively, and is included in other current liabilities and other noncurrent liabilities with a

corresponding offset to additional paid-in capital in our consolidated balance sheets. Contract adjustment payments commenced on August 1, 2015 at a rate of 3.350% per annum on the stated amount per Equity Unit. Subject to certain specified terms and conditions, we have the right to defer payments on all or part of the contract adjustment payments but not beyond the contract settlement date, and we have the right to defer payment of interest on the RSNs but not beyond the purchase contract settlement date or maturity date.

The surplus note is an unsecured obligation of Anthem Insurance Companies, Inc., or Anthem Insurance, a wholly owned subsidiary, and is subordinate in right of payment to all of Anthem Insurance's existing and future indebtedness. Any payment of interest or principal on the surplus note may be made only with the prior approval of the Indiana Department of Insurance, or IDOI, and only out of capital and surplus funds of Anthem Insurance that the IDOI determines to be available for the payment under Indiana insurance laws.

We have a senior revolving credit facility, or the Facility, with a group of lenders for general corporate purposes. The Facility provides credit up to $3,500.0 and matures on August 25, 2020. The interest rate on the Facility is based on either the LIBOR rate or a base rate plus a predetermined rate based on our public debt rating at the date of utilization. Our ability to borrow under the Facility is subject to compliance with certain covenants. There were no amounts outstanding under the Facility at December 31, 2017 or 2016.

We have an authorized commercial paper program of up to $2,500.0, the proceeds of which may be used for general corporate purposes. At December 31, 2017, we had $803.6 outstanding under our commercial paper program with a weighted-average interest rate of 1.8247%. At December 31, 2016, we had $629.0 outstanding under our commercial paper program with a weighted-average interest rate of 0.9715%. Commercial paper borrowings have been classified as long-term debt at December 31, 2017 and 2016, as our general practice and intent is to replace short-term commercial paper outstanding at expiration with additional short-term commercial paper for an uninterrupted period extending for more than one year, and we have the ability to redeem our commercial paper with borrowings under the Facility described above.

During the year ended December 31, 2015, we entered into a bridge facility commitment letter and a joinder agreement, and a term loan facility, to finance a portion of the consideration under the now terminated Cigna Merger Agreement. In January 2017, we reduced the size of the bridge facility from $22,500.0 to $19,500.0 and extended the termination date under the Cigna Merger Agreement, as well as the availability of commitments under the bridge facility and term loan facility, to April 30, 2017. We recorded $107.9, $104.0 and $36.8 of interest expense related to the amortization of the bridge loan facility and other related fees during the years ended December 31, 2017, 2016 and 2015, respectively. The commitment of the lenders to provide the bridge facility and term loan facility expired on April 30, 2017.

Convertible Debentures

On October 9, 2012, we issued $1,500.0 of senior convertible debentures, or the Debentures, in a private offering to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended, or the Securities Act. The Debentures are governed by an indenture dated as of October 9, 2012 between us and The Bank of New York Mellon Trust Company, N.A., as trustee, or the Indenture. The Debentures bear interest at a rate of 2.750% per year, payable semi-annually in arrears in cash on April 15 and October 15 of each year, and mature on October 15, 2042, unless earlier redeemed, repurchased or converted into shares of common stock at the applicable conversion rate. The Debentures also have a contingent interest feature that will require us to pay additional interest based on certain thresholds and for certain events, as defined in the Indenture, beginning on October 15, 2022.

Holders may convert their Debentures at their option prior to the close of business on the business day immediately preceding April 15, 2042, only under the following circumstances: (1) during any fiscal quarter if the last reported sale price of our common stock for at least 20 trading days during a period of 30 consecutive trading days ending on the last trading day of the preceding fiscal quarter is greater than or equal to 130% of the applicable conversion price on each applicable trading day; (2) during the five business day period after any 10 consecutive trading day period, or the measurement period, in which the trading price per $1,000 (whole dollars) principal amount of Debentures for each trading day of that measurement period was less than 98% of the product of the last reported sale price of our common stock and the applicable conversion rate on each such day; (3) if we call any or all of the Debentures for redemption, at any time prior to the close of business on the third scheduled trading day prior to the redemption date; or (4) upon the occurrence of specified corporate events, as defined in the Indenture. On and after April 15, 2042 and until the close of business on the third scheduled trading day immediately

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

preceding the Debentures' maturity date of October 15, 2042, holders may convert their Debentures into common stock at any time irrespective of the preceding circumstances. The Debentures are redeemable at our option at any time on or after October 20, 2022, upon the occurrence of certain events, as defined in the Indenture.

Upon conversion of the Debentures, we will deliver cash up to the aggregate principal amount of the Debentures converted. With respect to any conversion obligation in excess of the aggregate principal amount of the Debentures converted, we have the option to settle the excess with cash, shares of our common stock or a combination thereof based on a daily conversion value, determined in accordance with the Indenture. The initial conversion rate for the Debentures was 13.2319 shares of our common stock per Debenture, which represented a 25% conversion premium based on the closing price of $60.46 per share of our common stock on October 2, 2012 (the date the Debentures' terms were finalized) and is equivalent to an initial conversion price of $75.575 per share of our common stock.

During the year ended December 31, 2017, $117.3 aggregate principal amount of the Debentures were surrendered for conversion by certain holders in accordance with the terms and provisions of the Indenture. We elected to settle the excess of the principal amount of the conversions with cash for total payments of $344.8. We recognized a loss on the extinguishment of debt related to the Debentures of $2.5, based on the fair values of the debt on the conversion settlement dates. During the year ended December 31, 2015, we repurchased $920.0 in aggregate principal amount of the Debentures. In addition, $66.6 aggregate principal amount was surrendered for conversion. We elected to settle the excess of the principal amount of the repurchases and conversions with cash for total payments of $2,055.7 and recognized a gain on the extinguishment of debt of $12.7. There were no repurchases or material conversions during the year ended December 31, 2016.

As of December 31, 2017, our common stock was last traded at a price of $225.01 per share. If the remaining Debentures had been converted or matured at December 31, 2017, we would have been obligated to pay the principal of the Debentures plus an amount in cash or shares equal to $829.1. The Debentures and underlying shares of our common stock have not been and will not be registered under the Securities Act, or any state securities laws, and may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements.

We have accounted for the Debentures in accordance with the cash conversion guidance in FASB guidance for debt with conversion and other options. As a result, the value of the embedded conversion option, net of deferred taxes and equity issuance costs, has been bifurcated from its debt host and recorded as a component of additional paid-in capital in our consolidated balance sheets.

The following table summarizes, at December 31, 2017, the related balances, conversion rate and conversion price of the Debentures:

Outstanding principal amount	$	396.1
Unamortized debt discount	$	131.4
Net debt carrying amount	$	260.5
Equity component carrying amount	$	143.6
Conversion rate (shares of common stock per $1,000 of principal amount)		13.7467
Effective conversion price (per $1,000 of principal amount)	$	72.7441

The remaining amortization period of the unamortized debt discount as of December 31, 2017 is approximately 25 years. The unamortized discount will be amortized into interest expense using the effective interest method based on an effective interest rate of 5.130%, which represents the market interest rate for a comparable debt instrument that does not have a conversion feature. During the years ended December 31, 2017, 2016 and 2015, we recognized $16.7, $17.3 and $32.5, respectively, of interest expense related to the Debentures, of which $13.4, $14.1 and $26.6, respectively, represented interest expense recognized at the stated interest rate of 2.750% and $3.3, $3.2 and $5.9, respectively, represented interest expense resulting from amortization of the debt discount.

Total interest paid during 2017, 2016 and 2015 was $777.6, $594.9, and $604.0, respectively.

We were in compliance with all applicable covenants under all of our outstanding debt agreements at December 31, 2017 and 2016.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Future maturities of all long-term debt outstanding at December 31, 2017 are as follows: 2018, $2,078.2; 2019, $847.2; 2020, $1,587.8; 2021, $697.6; 2022, $1,590.8 and thereafter, $11,855.2.

13. Commitments and Contingencies

Litigation

In the ordinary course of business, we are defendants in, or parties to, a number of pending or threatened legal actions or proceedings. To the extent a plaintiff or plaintiffs in the following cases have specified in their complaint or in other court filings the amount of damages being sought, we have noted those alleged damages in the descriptions below. With respect to the cases described below, we contest liability and/or the amount of damages in each matter and believe we have meritorious defenses.

We are a defendant in multiple lawsuits that were initially filed in 2012 against the BCBSA as well as Blue Cross and/or Blue Shield licensees across the country. The cases were consolidated into a single multi-district lawsuit called *In re Blue Cross Blue Shield Antitrust Litigation* that is pending in the United States District Court for the Northern District of Alabama, or the Court. Generally, the suits allege that the BCBSA and the Blue plans have engaged in a conspiracy to horizontally allocate geographic markets through license agreements, best efforts rules (which limit the percentage of non-Blue revenue of each plan), restrictions on acquisitions, rules governing the BlueCard and National Accounts programs and other arrangements in violation of the Sherman Antitrust Act and related state laws. The cases were brought by two putative nationwide classes of plaintiffs, health plan subscribers and providers. Subscriber and provider plaintiffs each filed consolidated amended complaints in July 2013. The consolidated amended subscriber complaint was also brought on behalf of putative state classes of health plan subscribers in Alabama, Arkansas, California, Florida, Hawaii, Illinois, Louisiana, Michigan, Mississippi, Missouri, New Hampshire, North Carolina, Pennsylvania, Rhode Island, South Carolina, Tennessee, and Texas. Defendants filed motions to dismiss in September 2013. In June 2014, the Court denied the majority of the motions, ruling that plaintiffs had alleged sufficient facts at that stage of the litigation to avoid dismissal of their claims. Following the subsequent filing of amended complaints by each of the subscriber and provider plaintiffs, we filed our answer and asserted our affirmative defenses in December 2014. Since January 2016, subscribers have filed additional actions asserting damage claims in Indiana, Kansas, Kansas City, Minnesota, Montana, Nebraska, North Dakota, Oklahoma, South Dakota, Vermont, and Virginia, all of which have been consolidated into the multi-district lawsuit. In November 2016 and April 2017, subscriber plaintiffs and provider plaintiffs filed new consolidated amended complaints adding new named plaintiffs and new factual allegations. We filed answers to the amended complaints in May 2017. In February 2017, the Court granted in part defendants' motion for summary judgment based on the filed rate doctrine finding that the damages claims of certain named Alabama subscribers are barred under federal law. Subscribers filed a motion to reconsider the Court's order, which was denied without prejudice to plaintiffs' right to raise the issue at a later date. In April 2017, the Court of Appeals for the Eleventh Circuit affirmed a lower court ruling in a related declaratory judgment action, *Musselman v. Blue Cross and Blue Shield of Alabama, et al*., that the antitrust conspiracy claims being asserted by a subset of putative provider class members were released a decade ago by class action settlements in the *In re Managed Care Litigation*. In June 2017, the Court denied defendants' motion to dismiss certain of the claims in provider plaintiffs' latest consolidated complaint. Briefing on the relevant standard of review for the claims asserted under the Sherman Antitrust Act commenced in July 2017. Cross motions for partial summary judgment on the relevant standard of review were heard by the Court in October 2017, and they remain pending. In August 2017, provider plaintiffs moved for partial summary judgment against Anthem on the basis of collateral estoppel on several issues discussed in *United States v. Anthem, Inc*., 236 F. Supp. 3d 171 (D.D.C. 2017). That motion was heard in October 2017, and is pending. In January 2018, the Court issued an order suspending certain deadlines from the Court's third amended scheduling order. No dates have been set for either the pretrial conference or trials in these actions. We intend to vigorously defend these suits; however, their ultimate outcome cannot be presently determined.

In July 2013, our California affiliate Blue Cross of California doing business as Anthem Blue Cross, or BCC, was named as a defendant, along with an unaffiliated entity, in a California taxpayer action filed in Los Angeles County Superior Court, captioned as *Michael D. Myers v. State Board of Equalization, et al.* This action was brought under a California statute that permits an individual taxpayer to sue a governmental agency when the taxpayer believes the agency has failed to enforce governing law. Plaintiff contends that BCC, a licensed Health Care Service Plan, or HCSP, is an "insurer" for purposes of taxation despite acknowledging it is not an "insurer" under regulatory law. At the time, under California law, "insurers" were required to pay a gross premiums tax, or GPT, calculated as 2.35% on gross premiums. As a licensed HCSP, BCC has paid the California Corporate Franchise Tax, or CFT, the tax paid by California businesses generally. Plaintiff contends that BCC

must pay the GPT rather than the CFT. Plaintiff seeks a writ of mandate directing the taxing agencies to collect the GPT, and seeks an order requiring BCC to pay GPT back taxes, interest, and penalties, for a period dating to eight years prior to the July 2013 filing of the complaint. In February 2014, the Superior Court sustained BCC's demurrer to the complaint, without leave to amend, ruling that BCC is not an "insurer" for purposes of taxation. Plaintiff appealed. In September 2015, the Court of Appeal reversed the Superior Court's ruling, and remanded. The Court of Appeal held that HCSP could be an insurer for purposes of taxation if it wrote predominantly "indemnity" products. In October 2015, BCC filed a petition for rehearing in the Court of Appeal, which was denied. In November 2015, BCC filed a petition for review with the California Supreme Court, which was denied in December 2015. This lawsuit is being coordinated with similar lawsuits filed against other entities. BCC has filed and served a motion for judgment on the pleadings based upon the 2016 Managed Care Organization tax bill, which became effective in 2016 and demonstrates the Legislature's clear intent that HCSPs such as BCC are not subject to the gross premium tax. BCC's motion was heard in January 2018 and taken under advisement. Because GPT is constitutionally imposed in lieu of certain other taxes, BCC has filed protective tax refund claims with the city of Los Angeles, the California Department of Health Care Services and the Franchise Tax Board to protect its rights to recover certain taxes previously paid, should BCC eventually be determined to be subject to GPT for the same tax periods. BCC intends to vigorously defend this suit; however, its ultimate outcome cannot be presently determined.

In March 2016, we filed a lawsuit against Express Scripts, Inc., or Express Scripts, our vendor for pharmacy benefit management, or PBM, services, captioned *Anthem, Inc. v. Express Scripts, Inc.*, in the U.S. District Court for the Southern District of New York. The lawsuit seeks to recover damages for pharmacy pricing that is higher than competitive benchmark pricing, damages related to operational breaches, as well as various declarations under the pharmacy benefit management agreement, or PBM Agreement, between the parties. Our suit asserts that Express Scripts' pricing exceeds the competitive benchmark pricing required by the PBM Agreement by approximately $13,000.0 over the remaining term of the PBM Agreement, and by approximately $1,800.0 through the post-termination transition period. Further, we assert that Express Scripts' excessive pricing has caused us to lose existing customers and prevented us from gaining new business. In addition to the amounts associated with competitive benchmark pricing, we are seeking over $158.0 in damages associated with operational breaches incurred, together with a declaratory judgment that Express Scripts: (i) breached its obligation to negotiate in good faith and to agree in writing to new pricing terms; (ii) is required to provide competitive benchmark pricing to us through the term of the PBM Agreement; (iii) has breached the PBM Agreement, and that we can terminate the PBM Agreement either due to Express Scripts' breaches or because we have determined that Express Scripts' performance with respect to the delegated Medicare Part D prescription drug plans, or Medicare Part D, functions has been unsatisfactory; and (iv) is required under the PBM Agreement to provide post-termination services, at competitive benchmark pricing, for one year following any termination. In April 2016, Express Scripts filed an answer to the lawsuit disputing our contractual claims and alleging various defenses and counterclaims. Express Scripts contends that we breached the PBM Agreement by failing to negotiate proposed new pricing terms in good faith and that we breached the implied covenant of good faith and fair dealing by disregarding the terms of the transaction. In addition, Express Scripts is seeking declaratory judgments: (i) regarding the timing of the periodic pricing review under the PBM Agreement; (ii) that it has no obligation to ensure that we receive any specific level of pricing, that we have no contractual right to any change in pricing under the PBM Agreement and that its sole obligation is to negotiate proposed pricing terms in good faith; and (iii) that we do not have the right to terminate the PBM Agreement. In the alternative, Express Scripts claims that we have been unjustly enriched by its payment of $4,675.0 at the time of the PBM Agreement. We believe that Express Scripts' defenses and counterclaims are without merit. We filed a motion to dismiss Express Scripts' counterclaims. In March 2017, the court granted our motion to dismiss Express Scripts' counterclaims for (i) breach of the implied covenant of good faith and fair dealing, and (ii) unjust enrichment with prejudice. We intend to vigorously pursue our claims and defend against any counterclaims; however, the ultimate outcome cannot be presently determined.

Anthem, Inc. and Express Scripts were named as defendants in a purported class action lawsuit filed in June 2016 in the Southern District of New York by three members of ERISA plans alleging ERISA violations captioned *Karen Burnett, Brendan Farrell, and Robert Shullich, individually and on behalf of all others similarly situated v. Express Scripts, Inc. and Anthem, Inc.* The lawsuit was then consolidated with a similar lawsuit that was previously filed against Express Scripts. A first amended consolidated complaint was filed in the consolidated lawsuit, which is captioned *In Re Express Scripts/Anthem ERISA Litigation*. The first amended consolidated complaint was filed by six individual plaintiffs against Anthem and Express Scripts on behalf of all persons who are participants in or beneficiaries of any ERISA or non-ERISA healthcare plan from December 1, 2009 to the present in which Anthem provided prescription drug benefits through a PBM Agreement with Express Scripts and who paid a percentage based co-insurance payment in the course of using that prescription drug benefit.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

As to the ERISA members, the plaintiffs allege that Anthem breached its duties under ERISA (i) by failing to adequately monitor Express Scripts' pricing under the PBM Agreement and (ii) by placing its own pecuniary interest above the best interests of Anthem insureds by allegedly agreeing to higher pricing in the PBM Agreement in exchange for the $4,675.0 purchase price for our NextRx PBM business. As to the non-ERISA members, the plaintiffs assert that Anthem breached the implied covenant of good faith and fair dealing implied in the health plans under which the non-ERISA members are covered by (i) negotiating and entering into the PBM Agreement with Express Scripts that was detrimental to the interests of such non-ERISA members, (ii) failing to adequately monitor the activities of Express Scripts, including failing to timely monitor and correct the prices charged by Express Scripts for prescription medications, and (iii) acting in Anthem's self-interests instead of the interests of the non-ERISA members when it accepted the $4,675.0 purchase price for NextRx. Plaintiffs seek to hold Anthem and Express Scripts jointly and severally liable and to recover all losses suffered by the proposed class, equitable relief, disgorgement of alleged ill-gotten gains, injunctive relief, attorney's fees and costs and interest. In November 2016, we filed a motion to dismiss all of the claims brought against Anthem. In response, in March 2017, the plaintiffs filed a second amended consolidated complaint adding two self-insured accounts as plaintiffs and asserting an additional purported class of self-insured accounts. In April 2017, we filed a motion to dismiss the claims brought against Anthem. Our motion was granted without prejudice in January 2018. Plaintiffs have filed a notice of appeal. We intend to vigorously defend this suit; however, its ultimate outcome cannot be presently determined.

In July 2015, we and Cigna announced that we entered into the Cigna Merger Agreement, pursuant to which we would acquire all outstanding shares of Cigna. In July 2016, the U.S. Department of Justice, or DOJ, along with certain state attorneys general, filed a civil antitrust lawsuit in the U.S. District Court for the District of Columbia, or District Court, seeking to block the merger. In February 2017, Cigna purported to terminate the Cigna Merger Agreement and commenced litigation against us in the Delaware Court of Chancery, or Delaware Court, seeking damages, including the $1,850.0 termination fee pursuant to the terms of the Cigna Merger Agreement, and a declaratory judgment that its purported termination of the Cigna Merger Agreement was lawful, among other claims, which is captioned *Cigna Corp. v. Anthem Inc.* Also in February 2017, we initiated our own litigation against Cigna in the Delaware Court seeking a temporary restraining order to enjoin Cigna from terminating the Cigna Merger Agreement, specific performance compelling Cigna to comply with the Cigna Merger Agreement and damages, which is captioned *Anthem Inc. v. Cigna Corp*. In April 2017, the U.S. Circuit Court of Appeals for the District of Columbia affirmed the ruling of the District Court, which blocked the merger. In May 2017, after the Delaware Court denied our motion to enjoin Cigna from terminating the Cigna Merger Agreement, we delivered to Cigna a notice terminating the Cigna Merger Agreement. The litigation in Delaware is ongoing with trial scheduled to commence in February 2019. We believe Cigna's allegations are without merit and we intend to vigorously pursue our claims and defend against Cigna's allegations; however, the ultimate outcome of our litigation with Cigna cannot be presently determined.

In December 2016, the DOJ issued a civil investigative demand to Anthem, Inc. to discover information about our chart review and risk adjustment programs under Parts C and D of the Medicare Program. We understand the DOJ is investigating the programs of other Medicare Advantage health plans, along with providers and vendors. We continue to cooperate with the DOJ's investigation.

Where available information indicates that it is probable that a loss has been incurred as of the date of the consolidated financial statements and we can reasonably estimate the amount of that loss, we accrue the estimated loss by a charge to income. In many proceedings, however, it is difficult to determine whether any loss is probable or reasonably possible. In addition, even where loss is possible or an exposure to loss exists in excess of the liability already accrued with respect to a previously identified loss contingency, it is not always possible to reasonably estimate the amount of the possible loss or range of loss.

With respect to many of the proceedings to which we are a party, we cannot provide an estimate of the possible losses, or the range of possible losses in excess of the amount, if any, accrued, for various reasons, including but not limited to some or all of the following: (i) there are novel or unsettled legal issues presented, (ii) the proceedings are in early stages, (iii) there is uncertainty as to the likelihood of a class being certified or decertified or the ultimate size and scope of the class, (iv) there is uncertainty as to the outcome of pending appeals or motions, (v) there are significant factual issues to be resolved, and/or (vi) in many cases, the plaintiffs have not specified damages in their complaint or in court filings. For those legal proceedings where a loss is probable, or reasonably possible, and for which it is possible to reasonably estimate the amount of the possible loss or range of losses, we currently believe that the range of possible losses, in excess of established reserves, for all of those proceedings is from $0.0 to approximately $250.0 at December 31, 2017. This estimated aggregate range of reasonably

possible losses is based upon currently available information taking into account our best estimate of such losses for which such an estimate can be made.

Cyber Attack Incident

In February 2015, we reported that we were the target of a sophisticated external cyber attack. The attackers gained unauthorized access to certain of our information technology systems and obtained personal information related to many individuals and employees, such as names, birth dates, healthcare identification/social security numbers, street addresses, email addresses, phone numbers and employment information, including income data. To date, there is no evidence that credit card or medical information, such as claims, test results or diagnostic codes, were targeted, accessed or obtained, although no assurance can be given that we will not identify additional information that was accessed or obtained.

Upon discovery of the cyber attack, we took immediate action to remediate the security vulnerability and retained a cybersecurity firm to evaluate our systems and identify solutions based on the evolving landscape. We have provided credit monitoring and identity protection services to those who have been affected by this cyber attack. We have continued to implement security enhancements since this incident. We have incurred expenses subsequent to the cyber attack to investigate and remediate this matter and expect to continue to incur expenses of this nature in the foreseeable future. We recognize these expenses in the periods in which they are incurred.

Actions have been filed in various federal and state courts and other claims have been or may be asserted against us on behalf of current or former members, current or former employees, other individuals, shareholders or others seeking damages or other related relief, allegedly arising out of the cyber attack. Federal and state agencies, including state insurance regulators, state attorneys general, the Health and Human Services Office of Civil Rights and the Federal Bureau of Investigation, are investigating events related to the cyber attack, including how it occurred, its consequences and our responses. In December 2016, the National Association of Insurance Commissioners, or NAIC, concluded its multistate targeted market conduct and financial exam. In connection with the resolution of the matter, the NAIC requested we provide, and we agreed to provide, a customized credit protection program, equivalent to a credit freeze, for our members who were under the age of eighteen on January 27, 2015. No fines or penalties were imposed on us. Although we are cooperating in these investigations, we may be subject to fines or other obligations, which may have an adverse effect on how we operate our business and an adverse effect on our results of operations and financial condition. With respect to the civil actions, a motion to transfer was filed with the Judicial Panel on Multidistrict Litigation, or the Panel, in February 2015 and was subsequently heard by the Panel in May 2015. In June 2015, the Panel entered its order transferring the consolidated matter to the U.S. District Court for the Northern District of California, or the U.S. District Court. The U.S. District Court entered its case management order in September 2015. We filed a motion to dismiss ten of the counts that were before the U.S. District Court. In February 2016, the U.S. District Court issued an order granting in part and denying in part our motion, dismissing three counts with prejudice, four counts without prejudice and allowing three counts to proceed. Plaintiffs filed a second amended complaint in March 2016, and we subsequently filed a second motion to dismiss. In May 2016, the U.S. District Court issued an order granting in part and denying in part our motion, dismissing one count with prejudice, dismissing certain counts asserted by specific named plaintiffs with or without prejudice depending on their individualized facts, and allowing the remaining counts to proceed. In July 2016, plaintiffs filed a third amended complaint, which we answered in August 2016. Fact discovery was completed in December 2016. Plaintiffs filed their motion for class certification and trial plan in March 2017. We filed our opposition to class certification, motions to strike the testimony of three of the plaintiffs' experts and trial plan in April 2017. Prior to those motions being heard, the parties agreed to settle plaintiffs' claims on a class-wide basis for a total settlement payment of $115.0 and certain non-monetary relief. In June 2017, plaintiffs filed a motion for preliminary approval of the settlement and a motion to continue all case deadlines. In July 2017, the U.S. District Court granted the motion to continue all case deadlines. The U.S. District Court issued an order of preliminary approval in August 2017. The U.S. District Court held a hearing on plaintiffs' motion for final approval and class counsel's fee petition in February 2018. The U.S. District Court has appointed a special master to review class counsel's fee petition and has rescheduled the final fairness hearing for April 2018. Three state court cases related to the cyber attack are presently proceeding outside of this multidistrict litigation. Two of those cases have been stayed and a dispositive motion is pending with respect to the third. There remain open regulatory investigations into the incident that are not directly impacted by the multidistrict litigation settlement.

We have contingency plans and insurance coverage for certain expenses and potential liabilities of this nature and will pursue coverage for all applicable losses; however, the ultimate outcome of our pursuit of insurance coverage cannot be

presently determined. We intend to vigorously defend the remaining state court cases and regulatory actions related to the cyber attack; however, their ultimate outcome cannot be presently determined.

Other Contingencies

From time to time, we and certain of our subsidiaries are parties to various legal proceedings, many of which involve claims for coverage encountered in the ordinary course of business. We, like HMOs and health insurers generally, exclude certain healthcare and other services from coverage under our HMO, PPO and other plans. We are, in the ordinary course of business, subject to the claims of our enrollees arising out of decisions to restrict or deny reimbursement for uncovered services. The loss of even one such claim, if it results in a significant punitive damage award, could have a material adverse effect on us. In addition, the risk of potential liability under punitive damage theories may increase significantly the difficulty of obtaining reasonable settlements of coverage claims.

In addition to the lawsuits described above, we are also involved in other pending and threatened litigation of the character incidental to our business, and are from time to time involved as a party in various governmental investigations, audits, reviews and administrative proceedings. These investigations, audits, reviews and administrative proceedings include routine and special inquiries by state insurance departments, state attorneys general, the U.S. Attorney General and subcommittees of the U.S. Congress. Such investigations, audits, reviews and administrative proceedings could result in the imposition of civil or criminal fines, penalties, other sanctions and additional rules, regulations or other restrictions on our business operations. Any liability that may result from any one of these actions, or in the aggregate, could have a material adverse effect on our consolidated financial position or results of operations.

The National Organization of Life & Health Insurance Guaranty Associations, or NOLHGA, is a voluntary organization consisting of the state life and health insurance guaranty associations located throughout the U.S. Such associations, working together with NOLHGA, provide a safety net for their state's policyholders, ensuring that they continue to receive coverage, subject to state maximum limits, even if their insurer is declared insolvent. In March 2017, long term care insurance writers Penn Treaty Network America Insurance Company and its subsidiary, American Network Insurance Company (collectively, Penn Treaty), were ordered to be liquidated by the Pennsylvania state court, which had jurisdiction over the Penn Treaty rehabilitation proceeding. We and other insurers will be obligated to pay a portion of their policyholder claims through state guaranty association assessments in future periods. We estimated our portion of these net assessments for the insolvency of Penn Treaty to be approximately $253.8 and recorded the estimate as a general and administrative expense. Payment of the assessments will be largely recovered through premium billing surcharges and premium tax credits over future years.

Contractual Obligations and Commitments

Express Scripts, through our PBM Agreement, is the exclusive provider of certain PBM services to our plans, excluding our HealthSun and America's 1st Choice subsidiaries, our CareMore operations in the state of Arizona and certain self-insured members, who have exclusive agreements with different PBM service providers. The initial term of this PBM Agreement expires on December 31, 2019. Under the PBM Agreement, the Express Scripts PBM services include, but are not limited to, pharmacy network management, mail order and specialty drug fulfillment, claims processing, rebate management and specialty pharmaceutical management services. Accordingly, the PBM Agreement contains certain financial and operational requirements obligating both Express Scripts and us. Express Scripts' primary obligations relate to the performance of such services in a compliant manner and meeting certain pricing guarantees and performance standards. Our primary responsibilities relate to formulary management, product and benefit design, provision of data, payment for services, certain minimum volume requirements and oversight. The failure by either party to meet the respective requirements could potentially serve as a basis for financial penalties or early termination of the PBM Agreement. In March 2016, we filed a lawsuit against Express Scripts seeking to recover damages for pharmacy pricing that is higher than competitive benchmark pricing, damages related to operational breaches, as well as various declarations under the PBM Agreement between the parties. For additional information regarding this lawsuit, refer to the *Litigation* section above. We believe we have appropriately recognized all rights and obligations under this PBM Agreement at December 31, 2017.

Vulnerability from Concentrations

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash equivalents, investment securities, premium receivables and instruments held through hedging activities. All investment securities are

managed by professional investment managers within policies authorized by our Board of Directors. Such policies limit the amounts that may be invested in any one issuer and prescribe certain investee company criteria. Concentrations of credit risk with respect to premium receivables are limited due to the large number of employer groups that constitute our customer base in the states in which we conduct business. As of December 31, 2017, there were no significant concentrations of financial instruments in a single investee, industry or geographic location.

14. Capital Stock

Stock Incentive Plans

Our Board of Directors has adopted the 2017 Anthem Incentive Compensation Plan, or 2017 Incentive Plan, which has been approved by our shareholders. The term of the 2017 Incentive Plan is such that no awards may be granted on or after May 18, 2027. The 2017 Incentive Plan gives authority to the Compensation Committee of the Board of Directors to make incentive awards to our non-employee directors, employees and consultants, consisting of stock options, stock, restricted stock, restricted stock units, cash-based awards, stock appreciation rights, performance shares and performance units. The 2017 Incentive Plan limits the number of available shares for issuance to 37.5 shares, subject to adjustment as set forth in the 2017 Incentive Plan.

Stock options are granted for a fixed number of shares with an exercise price at least equal to the fair value of the shares at the grant date. Stock options vest over three years in equal semi-annual installments and generally have a term of ten years from the grant date.

Certain option grants contain provisions whereby the employee continues to vest in the award subsequent to termination due to retirement. Our attribution method for newly granted awards considers all vesting and other provisions, including retirement eligibility, in determining the requisite service period over which the fair value of the awards will be recognized.

Awards of restricted stock or restricted stock units are issued at the fair value of the stock on the grant date and may also include one or more performance measures that must be met for the award to vest. The restrictions lapse in three equal annual installments. Performance units issued in 2017 will vest in 2020, based on earnings targets over the three year period of 2017 to 2019. Performance units issued in 2016 will vest in 2019, based on earnings targets over the three year period of 2016 to 2018. Performance units issued in 2015 will vest in 2018, based on earnings targets over the three year period of 2015 to 2017.

For the years ended December 31, 2017, 2016 and 2015, we recognized share-based compensation expense of $169.6, $164.6 and $148.2, respectively, as well as related tax benefits of $67.8, $60.5 and $53.7, respectively.

A summary of stock option activity for the year ended December 31, 2017 is as follows:

	Number of Shares	Weighted-Average Option Price per Share	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2017	5.6	$ 102.80		
Granted	1.1	167.57		
Exercised	(2.2)	89.88		
Forfeited or expired	(0.2)	142.51		
Outstanding at December 31, 2017	4.3	124.31	6.15	$ 433.0
Exercisable at December 31, 2017	2.6	107.07	4.72	$ 312.3

The intrinsic value of options exercised during the years ended December 31, 2017, 2016 and 2015 amounted to $192.3, $103.0 and $188.1, respectively. We recognized tax benefits of $75.9, $37.9 and $68.0 in 2017, 2016 and 2015, respectively, from option exercises and disqualifying dispositions. During the years ended December 31, 2017, 2016 and 2015, we received cash of $200.0, $95.4 and $162.2, respectively, from exercises of stock options.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The total fair value of restricted stock awards that vested during the years ended December 31, 2017, 2016 and 2015 was $127.2, $184.9 and $257.2, respectively.

A summary of the status of nonvested restricted stock activity, including restricted stock units, for the year ended December 31, 2017 is as follows:

	Restricted Stock Shares and Units	Weighted-Average Grant Date Fair Value per Share
Nonvested at January 1, 2017	2.1	$ 127.68
Granted	0.8	174.44
Vested	(0.8)	110.39
Forfeited	(0.1)	148.77
Nonvested at December 31, 2017	2.0	152.20

During the year ended December 31, 2017, we granted approximately 0.4 restricted stock units that are contingent upon us achieving earning targets over the three year period of 2017 to 2019. These grants have been included in the activity shown above, but will be subject to adjustment at the end of 2019, based on results in the three year period.

As of December 31, 2017, the total remaining unrecognized compensation expense related to nonvested stock options and restricted stock, including restricted stock units, amounted to $17.6 and $127.2, respectively, which will be amortized over the weighted-average remaining requisite service periods of 10 months and 14 months, respectively.

As of December 31, 2017, there were approximately 29.3 shares of common stock available for future grants under the 2017 Incentive Plan.

Fair Value

We use a binomial lattice valuation model to estimate the fair value of all stock options granted. Expected volatility assumptions used in the binomial lattice model are based on an analysis of implied volatilities of publicly traded options on our stock and historical volatility of our stock price. The risk-free interest rate is derived from the U.S. Treasury strip rates at the time of the grant. The expected term of the options was derived from the outputs of the binomial lattice model, which incorporates post-vesting forfeiture assumptions based on an analysis of historical data. The dividend yield was based on our estimate of future dividend yields. Similar groups of employees that have dissimilar exercise behavior are considered separately for valuation purposes. We utilize the multiple-grant approach for recognizing compensation expense associated with each separately vesting portion of the share-based award.

The following weighted-average assumptions were used to estimate the fair values of options granted during the years ended December 31, 2017, 2016 and 2015:

	2017	2016	2015
Risk-free interest rate	2.31%	1.76%	1.96%
Volatility factor	32.00%	32.00%	31.00%
Dividend yield (annual)	1.60%	2.00%	1.70%
Weighted-average expected life (years)	4.00	4.10	4.00

The following weighted-average fair values were determined for the years ending December 31, 2017, 2016 and 2015:

	2017	2016	2015
Options granted during the year	$ 40.88	$ 30.56	$ 33.97
Restricted stock awards granted during the year	174.44	131.81	147.00

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The binomial lattice option-pricing model requires the input of highly subjective assumptions including the expected stock price volatility. Because our stock option grants have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, in our opinion, existing models do not necessarily provide a reliable single measure of the fair value of our stock option grants.

Employee Stock Purchase Plan

We have registered 14.0 shares of common stock for the Employee Stock Purchase Plan, or the Stock Purchase Plan, which is intended to provide a means to encourage and assist employees in acquiring a stock ownership interest in Anthem. Pursuant to the terms of the Stock Purchase Plan, an employee is permitted to purchase no more than $25,000 (actual dollars) worth of stock in any calendar year, based on the fair value of the stock at the end of each plan quarter. Employees become participants by electing payroll deductions from 1% to 15% of gross compensation. Once purchased, the stock is accumulated in the employee's investment account. The Stock Purchase Plan allows participants to purchase shares of our common stock at a price per share of 95% of the fair value of a share of common stock on the last trading day of the plan quarter. The employee stock purchase plan discount is not recognized as compensation expense based on GAAP guidance. There were 0.2 shares issued during the year ended December 31, 2017. As of December 31, 2017, 5.2 shares were available for issuance under the Stock Purchase Plan.

Use of Capital and Stock Repurchase Program

We regularly review the appropriate use of capital, including acquisitions, common stock and debt security repurchases and dividends to shareholders. The declaration and payment of any dividends or repurchases of our common stock or debt is at the discretion of our Board of Directors and depends upon our financial condition, results of operations, future liquidity needs, regulatory and capital requirements and other factors deemed relevant by our Board of Directors.

A summary of the cash dividend activity for the years ended December 31, 2017 and 2016 is as follows:

Declaration Date	Record Date	Payment Date	Cash Dividend per Share	Total
Year ended December 31, 2017				
February 22, 2017	March 10, 2017	March 24, 2017	$ 0.65	$ 172.2
April 27, 2017	June 9, 2017	June 23, 2017	0.65	171.8
July 25, 2017	September 8, 2017	September 25, 2017	0.70	181.4
October 24, 2017	December 5, 2017	December 21, 2017	0.70	179.5
Year ended December 31, 2016				
February 18, 2016	March 10, 2016	March 25, 2016	$ 0.65	$ 170.7
April 26, 2016	June 10, 2016	June 24, 2016	0.65	170.9
July 26, 2016	September 9, 2016	September 26, 2016	0.65	171.1
November 1, 2016	December 5, 2016	December 21, 2016	0.65	171.3

On January 30, 2018, our Board of Directors declared a quarterly cash dividend to shareholders of $0.75 per share on the outstanding shares of our common stock. This quarterly dividend is payable on March 23, 2018 to the shareholders of record as of March 9, 2018.

Under our Board of Directors' authorization, we maintain a common stock repurchase program. On December 7, 2017, the Board of Directors authorized a $5,000.0 increase to the common stock repurchase program. Repurchases may be made from time to time at prevailing market prices, subject to certain restrictions on volume, pricing and timing. The repurchases are effected from time to time in the open market, through negotiated transactions, including accelerated share repurchase agreements, and through plans designed to comply with Rule 10b5-1 under the Securities Exchange Act of 1934, as amended. Our stock repurchase program is discretionary as we are under no obligation to repurchase shares. We repurchase shares under the program when we believe it is a prudent use of capital. The excess cost of the repurchased shares over par value is charged on a pro rata basis to additional paid-in capital and retained earnings.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of common stock repurchases for the period January 1, 2018 through February 9, 2018 (subsequent to December 31, 2017) and for the year ended December 31, 2017 is as follows:

	January 1, 2018 through February 9, 2018	Year Ended December 31, 2017
Shares repurchased	0.7	10.5
Average price per share	$ 237.35	$ 189.93
Aggregate cost	$ 156.6	$ 1,997.7
Authorization remaining at end of year	$ 7,021.5	$ 7,178.1

There were no common stock repurchases in 2016.

We expect to utilize the remaining authorized amount over a multi-year period, subject to market and industry conditions.

For additional information regarding the use of capital for debt security repurchases, see Note 12, "Debt."

Equity Units

On May 12, 2015, we issued 25.0 Equity Units, pursuant to an underwriting agreement dated May 6, 2015, in an aggregate principal amount of $1,250.0. For additional information relating to the Equity Units, see Note 12, “Debt.”

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

15. Accumulated Other Comprehensive Loss

A reconciliation of the components of accumulated other comprehensive loss at December 31, 2017 and 2016 is as follows:

	2017	2016
Investments:		
Gross unrealized gains	$ 939.7	$ 748.6
Gross unrealized losses	(104.9)	(180.9)
Net pretax unrealized gains	834.8	567.7
Deferred tax liability	(301.1)	(206.5)
Net unrealized gains on investments	533.7	361.2
Non-credit components of OTTI on investments:		
Gross unrealized losses	(0.3)	(7.2)
Deferred tax asset	0.1	2.6
Net unrealized non-credit component of OTTI on investments	(0.2)	(4.6)
Cash flow hedges:		
Gross unrealized losses	(358.6)	(259.1)
Deferred tax asset	125.6	90.7
Net unrealized losses on cash flow hedges	(233.0)	(168.4)
Defined benefit pension plans:		
Deferred net actuarial loss	(624.7)	(655.8)
Deferred prior service cost	(1.0)	(0.5)
Deferred tax asset	244.1	257.2
Net unrecognized periodic benefit costs for defined benefit pension plans	(381.6)	(399.1)
Postretirement benefit plans:		
Deferred net actuarial loss	(77.5)	(146.6)
Deferred prior service credits	46.1	59.7
Deferred tax asset	12.3	34.0
Net unrecognized periodic benefit costs for postretirement benefit plans	(19.1)	(52.9)
Foreign currency translation adjustments:		
Gross unrealized losses	(2.1)	(6.3)
Deferred tax asset	0.8	2.2
Net unrealized losses on foreign currency translation adjustments	(1.3)	(4.1)
Accumulated other comprehensive loss	$ (101.5)	$ (267.9)

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Other comprehensive income (loss) reclassification adjustments for the years ended December 31, 2017, 2016 and 2015 are as follows:

	2017	2016	2015
Investments:			
Net holding gain (loss) on investment securities arising during the period, net of tax (expense) benefit of ($152.6), ($118.9), and $180.4, respectively	$ 280.1	$ 186.0	$ (336.1)
Reclassification adjustment for net realized gain on investment securities, net of tax expense of $58.0, $36.6, and $25.9, respectively	(107.6)	(68.1)	(48.2)
Total reclassification adjustment on investments	172.5	117.9	(384.3)
Non-credit component of OTTI on investments:			
Non-credit component of OTTI on investments, net of tax (expense) benefit of ($2.8), ($2.8), and $3.0, respectively	4.4	5.4	(5.6)
Cash flow hedges:			
Holding loss, net of tax benefit of $34.9, $47.0, and $24.4, respectively	(64.6)	(87.3)	(45.2)
Other:			
Net change in unrecognized periodic benefit costs for defined benefit pension and postretirement benefit plans, net of tax (expense) benefit of ($34.8), $5.7, and $13.4, respectively	51.3	(13.4)	(26.0)
Foreign currency translation adjustment, net of tax (expense) benefit of ($1.4), ($1.1), and $1.8, respectively	2.8	2.1	(3.4)
Net gain (loss) recognized in other comprehensive loss, net of tax (expense) benefit of ($98.7), ($33.5), and $248.9, respectively	$ 166.4	$ 24.7	$ (464.5)

16. Reinsurance

We reinsure certain risks with other companies and assume risk from other companies. We remain primarily liable to policyholders under ceded insurance contracts and are contingently liable for amounts recoverable from reinsurers in the event that such reinsurers do not meet their contractual obligations. We evaluate the financial condition of our reinsurers and monitor concentrations of credit risk arising from similar geographic regions, activities, or economic characteristics of the reinsurers to minimize our exposure to significant losses from reinsurer insolvencies. In conjunction with the ACA temporary reinsurance premium stabilization program that was effective for 2014 through 2016, we recognized assessments upon our fully-insured non-grandfathered individual market plans that were eligible for reinsurance recoveries as ceded premiums and estimated reinsurance recoveries as a reduction to benefit expense. Assessments upon all other lines of business that were not eligible for reinsurance recoveries were recognized in general and administrative expense.

A summary of direct, assumed and ceded premiums written and earned for the years ended December 31, 2017, 2016 and 2015 is as follows:

	2017		2016		2015	
	Written	Earned	Written	Earned	Written	Earned
Direct	$ 83,974.3	$ 83,417.8	$ 78,200.4	$ 78,726.2	$ 72,925.5	$ 73,259.2
Assumed	274.6	274.6	217.4	217.3	221.8	221.9
Ceded	(43.7)	(44.7)	(79.8)	(83.4)	(95.8)	(96.0)
Net premiums	$ 84,205.2	$ 83,647.7	$ 78,338.0	$ 78,860.1	$ 73,051.5	$ 73,385.1
Percentage—assumed to net premiums	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of net premiums written and earned by segment (see Note 19, "Segment Information") for the years ended December 31, 2017, 2016 and 2015 is as follows:

	2017		2016		2015	
	Written	Earned	Written	Earned	Written	Earned
Reportable segments:						
Commercial & Specialty Business	$ 35,683.1	$ 35,804.3	$ 33,355.6	$ 33,831.5	$ 33,016.9	$ 33,078.0
Government Business	48,522.1	47,843.4	44,982.4	45,028.6	40,034.6	40,307.1
Net premiums	$ 84,205.2	$ 83,647.7	$ 78,338.0	$ 78,860.1	$ 73,051.5	$ 73,385.1

The effect of reinsurance on benefit expense for the years ended December 31, 2017, 2016 and 2015 is as follows:

	2017	2016	2015
Direct	$ 72,135.0	$ 67,221.7	$ 61,674.0
Assumed	216.7	184.9	192.2
Ceded	(115.5)	(572.2)	(749.3)
Net benefit expense	$ 72,236.2	$ 66,834.4	$ 61,116.9

The effect of reinsurance on certain assets and liabilities at December 31, 2017 and 2016 is as follows:

	2017	2016
Policy liabilities, assumed	$ 54.3	$ 47.2
Unearned income, assumed	0.6	0.6
Premiums payable, ceded	9.3	5.2
Premiums receivable, assumed	32.9	25.9

17. Leases

We lease office space and certain computer and related equipment using noncancelable operating leases. At December 31, 2017, future lease payments for operating leases with initial or remaining noncancelable terms of one year or more consisted of the following:

2018	$ 154.5
2019	145.5
2020	123.9
2021	100.4
2022	88.2
Thereafter	286.0
Total minimum payments required	$ 898.5

We have certain lease agreements that contain contingent payment provisions. Under these provisions, we pay contingent amounts in addition to base rent, primarily based upon annual changes in the consumer price index. The schedule above contains estimated amounts for potential future increases in lease payments based on the contingent payment provisions.

Lease expense for 2017, 2016 and 2015 was $204.6, $207.5 and $212.9, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

18. Earnings per Share

The denominator for basic and diluted earnings per share at December 31, 2017, 2016 and 2015 is as follows:

	2017	2016	2015
Denominator for basic earnings per share—weighted-average shares	261.5	262.9	263.0
Effect of dilutive securities—employee stock options, non-vested restricted stock awards and convertible debentures	6.3	5.2	9.9
Denominator for diluted earnings per share	267.8	268.1	272.9

During the years ended December 31, 2017, 2016 and 2015, weighted-average shares related to certain stock options of 0.4, 2.2 and 1.0, respectively, were excluded from the denominator for diluted earnings per share because the stock options were anti-dilutive.

During the years ended December 31, 2017, 2016 and 2015, we issued approximately 0.4, 0.5 and 0.4 restricted stock units, respectively, of which vesting was contingent upon us meeting certain earnings targets. Contingent restricted stock units are excluded from the denominator for diluted earnings per share and are included only if and when the contingency is met. The 2017 contingent restricted stock units are being measured over the three year period of 2017 through 2019, the 2016 contingent restricted stock units are being measured over the three year period of 2016 through 2018 and the 2015 contingent restricted stock units are being measured over the three year period of 2015 through 2017. Contingent restricted stock units vest in March of the year following each measurement period.

The Equity Units are dilutive securities when the market value of our common stock exceeds a certain threshold price. The Equity Units were excluded from the denominator for diluted earnings per share for each of the years presented as the dilutive stock price threshold was not met until December 2017 and the dilution impact was not material. For additional information relating to the Equity Units, see Note 12, “Debt.”

19. Segment Information

Our organizational structure is comprised of three reportable segments: Commercial & Specialty Business; Government Business; and Other.

Our Commercial & Specialty Business segment includes our Local Group, National Accounts, Individual and Specialty businesses. Business units in the Commercial & Specialty Business segment offer fully-insured health products; provide a broad array of managed care services to self-funded customers including claims processing, underwriting, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services; and provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits, radiology benefit management and analytics-driven personal healthcare guidance.

Our Government Business segment includes our Medicare and Medicaid businesses, National Government Services, or NGS, and services provided to the federal government in connection with FEP®. Medicare business includes services such as Medicare Supplement plans; Medicare Advantage, including Special Needs Plans; Medicare Part D; and dual-eligible programs through Medicare-Medicaid Plans. Medicaid business includes our managed care alternatives through publicly funded healthcare programs, including Medicaid, ACA-related Medicaid expansion programs, Temporary Assistance for Needy Families programs, programs for seniors and people with disabilities, Children’s Health Insurance Programs, and specialty programs such as those focused on long-term services and support, HIV/AIDS, foster care, behavioral health and/or substance abuse disorders, and intellectual disabilities or developmental disabilities. NGS acts as a Medicare contractor for the federal government in several regions across the nation.

Our Other segment includes other businesses that do not individually meet the quantitative thresholds for an operating segment as defined by FASB guidance, as well as corporate expenses not allocated to either of our other reportable segments.

We define operating revenues to include premium income, administrative fees and other revenues. Operating revenues are derived from premiums and fees received, primarily from the sale and administration of health benefit products.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Operating gain, a non-GAAP measure, is calculated as total operating revenue less benefit expense and selling, general and administrative expense.

Through our participation in various federal government programs, we generated approximately 17.8%, 18.2% and 18.8% of our total consolidated revenues from agencies of the U.S. government for the years ended December 31, 2017, 2016, and 2015, respectively. These revenues are contained in the Government Business segment.

The accounting policies of the segments are consistent with those described in the summary of significant accounting policies in Note 2, "Basis of Presentation and Significant Accounting Policies," except that certain shared administrative expenses for each segment are recognized on a pro rata allocated basis, which in the aggregate approximates the consolidated expense. Any difference between the allocated expenses and actual consolidated expense is included in other expenses not allocated to reportable segments. Intersegment sales and expenses are recorded at cost and eliminated in the consolidated financial statements. We evaluate performance of the reportable segments based on operating gain or loss as defined above. We evaluate net investment income, net realized gains on financial instruments, OTTI losses recognized in income, interest expense, amortization expense, gain or loss on extinguishment of debt, income taxes, assets and liabilities on a consolidated basis as these items are managed in a corporate shared service environment and are not the responsibility of segment operating management.

Financial data by reportable segment for the years ended December 31, 2017, 2016 and 2015 is as follows:

	Commercial & Specialty Business	Government Business	Other	Total
Year ended December 31, 2017				
Operating revenue	$ 40,754.1	$ 48,276.2	$ 30.9	$ 89,061.2
Operating gain (loss)	2,876.1	1,430.2	(130.9)	4,175.4
Depreciation and amortization of property and equipment	—	—	601.0	601.0
Year ended December 31, 2016				
Operating revenue	$ 38,692.1	$ 45,477.7	$ 24.2	$ 84,194.0
Operating gain (loss)	3,195.2	1,784.3	(177.8)	4,801.7
Depreciation and amortization of property and equipment	—	—	576.0	576.0
Year ended December 31, 2015				
Operating revenue	$ 37,570.8	$ 40,813.0	$ 21.0	$ 78,404.8
Operating gain (loss)	2,854.0	1,978.5	(79.4)	4,753.1
Depreciation and amortization of property and equipment	—	—	515.6	515.6

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The major product revenues for each of the reportable segments for the years ended December 31, 2017, 2016 and 2015 are as follows:

	2017	2016	2015
Commercial & Specialty Business			
Managed care products	$ 34,272.1	$ 32,369.8	$ 31,676.9
Managed care services	4,821.0	4,710.1	4,344.8
Dental/Vision products and services	1,218.1	1,182.3	1,111.7
Other	442.9	429.9	437.4
Total Commercial & Specialty Business	40,754.1	38,692.1	37,570.8
Government Business			
Managed care products	47,843.4	45,028.5	40,307.0
Managed care services	432.8	449.2	506.0
Total Government Business	48,276.2	45,477.7	40,813.0
Other			
Other	30.9	24.2	21.0
Total product revenues	$ 89,061.2	$ 84,194.0	$ 78,404.8

The classification between managed care products and managed care services in the above table primarily distinguishes between the levels of risk assumed. Managed care products represent insurance products where we bear the insurance risk, whereas managed care services represent product offerings where we provide claims adjudication and other administrative services to the customer, but the customer principally bears the insurance risk.

Asset, liability and equity details by reportable segment have not been disclosed, as we do not internally report such information.

A reconciliation of reportable segment operating revenues to the amounts of total revenues included in the consolidated statements of income for the years ended December 31, 2017, 2016 and 2015 is as follows:

	2017	2016	2015
Reportable segments operating revenues	$ 89,061.2	$ 84,194.0	$ 78,404.8
Net investment income	866.5	779.5	677.6
Net realized gains on financial instruments	144.8	4.9	157.5
Other-than-temporary impairment losses recognized in income	(33.1)	(115.4)	(83.4)
Total revenues	$ 90,039.4	$ 84,863.0	$ 79,156.5

A reconciliation of reportable segment operating gain to income before income tax expense included in the consolidated statements of income for the years ended December 31, 2017, 2016 and 2015 is as follows:

	2017	2016	2015
Reportable segments operating gain	$ 4,175.4	$ 4,801.7	$ 4,753.1
Net investment income	866.5	779.5	677.6
Net realized gains on financial instruments	144.8	4.9	157.5
Other-than-temporary impairment losses recognized in income	(33.1)	(115.4)	(83.4)
Interest expense	(739.0)	(723.0)	(653.0)
Amortization of other intangible assets	(168.4)	(192.3)	(230.1)
(Loss) gain on extinguishment of debt	(282.4)	—	9.3
Income before income tax expense	$ 3,963.8	$ 4,555.4	$ 4,631.0

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

20. Related Party Transactions

We have a 19.50% equity investment in National Accounts Service Company, LLC, or NASCO, which processes National Accounts claims and provides other administrative services for us and certain other Blue Cross Blue Shield plans. Administrative expenses incurred related to NASCO services totaled $73.0, $79.7 and $83.6, for the years ended December 31, 2017, 2016 and 2015, respectively. Amounts due to NASCO were $5.7 and $6.2 at December 31, 2017 and 2016, respectively.

21. Statutory Information

The majority of our insurance and HMO subsidiaries report their accounts in conformity with accounting practices prescribed or permitted by state insurance regulatory authorities, commonly referred to as statutory accounting, which vary in certain respects from GAAP. However, certain of our insurance and HMO subsidiaries, including BCC, Blue Cross of California Partnership Plan, Inc., Golden West Health Plan, Inc. and CareMore Health Plan are regulated by the California Department of Managed Health Care, or DMHC, and report their accounts in conformity with GAAP (these entities are collectively referred to as the "DMHC regulated entities"). Typical differences of GAAP reporting as compared to statutory reporting are the inclusion of unrealized gains or losses relating to fixed maturity securities in shareholders' equity, recognition of all assets including those that are non-admitted for statutory purposes and recognition of all deferred tax assets without regard to statutory limits. The National Association of Insurance Commissioners, or NAIC, developed a codified version of the statutory accounting principles, designed to foster more consistency among the states for accounting guidelines and reporting. Prescribed statutory accounting practices are set forth in a variety of publications of the NAIC as well as state laws, regulations and general administrative rules.

Our ability to pay dividends and credit obligations is significantly dependent on receipt of dividends from our subsidiaries. The payment of dividends to us by our insurance and HMO subsidiaries without prior approval of the insurance departments of each subsidiary's domiciliary jurisdiction is limited by formula. Dividends in excess of these amounts are subject to prior approval by the respective state insurance departments or the DMHC.

Our statutory basis insurance and HMO subsidiaries are subject to risk-based capital, or RBC, requirements. RBC is a method developed by the NAIC to determine the minimum amount of statutory capital appropriate for an insurance company or HMO to support its overall business operations in consideration of its size and risk profile. The formula for determining the amount of RBC specifies various factors, weighted based on the perceived degree of risk, which are applied to certain financial balances and financial activity. Below minimum RBC requirements are classified within certain levels, each of which requires specified corrective action. Additionally, the DMHC regulated entities are subject to capital and solvency requirements as prescribed by the DMHC. As of December 31, 2017 and 2016, all of our regulated subsidiaries exceeded the minimum RBC requirements and/or capital and solvency requirements of their applicable governmental regulator. The statutory RBC necessary to satisfy regulatory requirements of our statutory basis insurance and HMO subsidiaries was approximately $4,700.0 and $4,300.0 as of December 31, 2017 and 2016, respectively. The tangible net equity required for the DMHC regulated entities was approximately $670.0 and $650.0 as of December 31, 2017 and 2016, respectively.

Statutory-basis capital and surplus of our insurance and HMO subsidiaries and capital and surplus of our other regulated subsidiaries, excluding the DMHC regulated entities, was $11,665.9 and $10,580.2 at December 31, 2017 and 2016, respectively. Statutory-basis net income of our insurance and HMO subsidiaries and net income of our other regulated subsidiaries, excluding the DMHC regulated entities, was $2,673.6, $2,613.2 and $2,359.9 for 2017, 2016 and 2015, respectively. GAAP equity of the DMHC regulated entities was $2,917.3 and $2,225.7 at December 31, 2017 and 2016, respectively. GAAP net income of the DMHC regulated entities was $1,046.6, $774.5 and $477.5 for the years ended December 31, 2017, 2016 and 2015, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

22. Selected Quarterly Financial Data (Unaudited)

Selected quarterly financial data is as follows:

	For the Quarter Ended			
	March 31	June 30	September 30	December 31
2017				
Total revenues	$ 22,525.9	$ 22,407.2	$ 22,426.0	$ 22,680.3
Income before income tax expense	1,515.0	1,205.7	1,118.9	124.2
Net income	1,009.9	855.3	746.9	1,230.7
Basic net income per share	$ 3.82	$ 3.23	$ 2.87	$ 4.80
Diluted net income per share	3.73	3.16	2.80	4.67
2016				
Total revenues	$ 20,288.5	$ 21,456.2	$ 21,403.9	$ 21,714.4
Income before income tax expense	1,312.0	1,448.3	1,136.5	658.6
Net income	703.0	780.6	617.8	368.4
Basic net income per share	$ 2.69	$ 2.97	$ 2.35	$ 1.40
Diluted net income per share	2.63	2.91	2.30	1.37

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

There have been no changes in or disagreements with our independent registered public accounting firm on accounting or financial disclosures.

ITEM 9A. CONTROLS AND PROCEDURES.

Evaluation of Disclosure Controls and Procedures

We carried out an evaluation as of December 31, 2017, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rule 13a-15(e) of the Exchange Act. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective in timely alerting them to material information relating to us (including our consolidated subsidiaries) required to be disclosed in our reports under the Exchange Act. In addition, based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective in ensuring that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosures.

Management's Report on Internal Control Over Financial Reporting

Management, under the supervision and with the participation of the principal executive officer and principal financial officer, of Anthem, Inc., or the Company, is responsible for establishing and maintaining effective internal control over financial reporting, or Internal Control, as such term is defined in the Exchange Act. The Company's Internal Control is designed to provide reasonable assurance regarding the reliability of the Company's financial reporting and the preparation of financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles, or GAAP. The Company's Internal Control includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in

accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of inherent limitations in any Internal Control, no matter how well designed, misstatements due to error or fraud may occur and not be detected. Accordingly, even effective Internal Control can provide only reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

Management, under the supervision and with the participation of the principal executive officer and principal financial officer, assessed the effectiveness of the Company's Internal Control as of December 31, 2017. Management's assessment was based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on management's assessment, management has concluded that the Company's Internal Control was effective as of December 31, 2017 to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with GAAP.

Ernst & Young LLP, the Company's independent registered public accounting firm, has audited the consolidated financial statements of the Company for the year ended December 31, 2017, and has also issued an audit report dated February 21, 2018, on the effectiveness of the Company's internal control over financial reporting as of December 31, 2017, which is included in this Annual Report on Form 10-K.

/S/ GAIL K. BOUDREAUX	/S/ JOHN E. GALLINA
President and Chief Executive Officer	Executive Vice President and Chief Financial Officer

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting that occurred during the three months ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Anthem, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Anthem, Inc.'s internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control–Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the "COSO criteria"). In our opinion, Anthem, Inc. (the "Company") maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of Anthem, Inc. as of December 31, 2017 and 2016, and the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2017, and the related notes and schedule and our report dated February 21, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ ERNST & YOUNG LLP

Indianapolis, Indiana
February 21, 2018

ITEM 9B. OTHER INFORMATION.

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The information required by this Item concerning our Executive Officers, Directors and nominees for Director, Audit Committee members and financial expert(s) and concerning disclosure of delinquent filers under Section 16(a) of the Exchange Act and our Standards of Ethical Business Conduct is incorporated herein by reference from our definitive Proxy Statement for our 2018 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this Item concerning remuneration of our Executive Officers and Directors, material transactions involving such Executive Officers and Directors and Compensation Committee interlocks, as well as the Compensation Committee Report, are incorporated herein by reference from our definitive Proxy Statement for our 2018 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information required by this Item concerning the stock ownership of management and five percent beneficial owners and securities authorized for issuance under equity compensation plans is incorporated herein by reference from our definitive Proxy Statement for our 2018 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information required by this Item concerning certain relationships and related person transactions and director independence is incorporated herein by reference from our definitive Proxy Statement for our 2018 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information required by this Item concerning principal accounting fees and services is incorporated herein by reference from our definitive Proxy Statement for our 2018 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) 1. Financial Statements:

The following consolidated financial statements of the Company are set forth in Part II, Item 8:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2017 and 2016

Consolidated Statements of Income for the years ended December 31, 2017, 2016, and 2015

Consolidated Statements of Comprehensive Income for the years ended December 31, 2017, 2016, and 2015

Consolidated Statements of Shareholders' Equity for the years ended December 31, 2017, 2016 and 2015

Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2016 and 2015

Notes to Consolidated Financial Statements

2. Financial Statement Schedule:

The following financial statement schedule of the Company is included in Item 15(c):

Schedule II—Condensed Financial Information of Registrant (Parent Company Only).

All other schedules for which provision is made in the applicable accounting regulations of the SEC are not required under the related instructions, are inapplicable, or the required information is included in the consolidated financial statements, and therefore, have been omitted.

3. Exhibits required to be filed as part of this report:

Exhibit Number	Exhibit
2.1	Agreement and Plan of Merger, dated as of July 23, 2015 among Anthem, Inc., Anthem Merger Sub. Corp. and Cigna Corporation, incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on July 27, 2015.
3.1	Amended and Restated Articles of Incorporation of the Company, as amended and restated effective May 18, 2017, incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on May 18, 2017.
3.2	Bylaws of the Company, as amended and restated effective May 18, 2017, incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed on May 18, 2017.
4.1	Form of Specimen Certificate of the Company's common stock, $0.01 par value per share, incorporated by reference to Exhibit 4.3 to the Company's Post-Effective Amendment No.1 to Form S-8 Registration Statement filed on May 23, 2017.
4.2	Indenture, dated as of December 9, 2004, between the Company and The Bank of New York Trust Company, N.A., as trustee, including the Form of the Company's 5.950% Notes due 2034, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on December 15, 2004, SEC File No. 001-16751.
4.3	Indenture, dated as of January 10, 2006, between the Company and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A.), as trustee, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on January 11, 2006, SEC File No. 001-16751.
(a)	Form of 5.85% Notes due 2036, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on January 11, 2006, SEC File No. 001-16751.

Exhibit Number	Exhibit
	(b) Form of 6.375% Notes due 2037, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on June 8, 2007, SEC File No. 001-16751.
	(c) Form of 4.350% Notes due 2020, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on August 12, 2010, SEC File No. 001-16751.
	(d) Form of 5.800% Notes due 2040, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on August 12, 2010, SEC File No. 001-16751.
	(e) Form of 3.700% Notes due 2021, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on August 15, 2011, SEC File No. 001-16751.
	(f) Form of 3.125% Notes due 2022, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on May 7, 2012, SEC File No. 001-16751.
	(g) Form of 4.625% Notes due 2042, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on May 7, 2012, SEC File No. 001-16751.
	(h) Form of 1.875% Notes due 2018, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on September 10, 2012, SEC File No. 001-16751.
	(i) Form of 3.300% Notes due 2023, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on September 10, 2012, SEC File No. 001-16751.
	(j) Form of 4.650% Notes due 2043, incorporated by reference to Exhibit 4.5 to the Company's Current Report on Form 8-K filed on September 10, 2012, SEC File No. 001-16751.
	(k) Form of 2.300% Notes due 2018, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on July 31, 2013.
	(l) Form of 5.100% Notes due 2044, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on July 31, 2013.
	(m) Form of 2.250% Notes due 2019, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on August 12, 2014.
	(n) Form of 3.500% Notes due 2024, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on August 12, 2014.
	(o) Form of 4.650% Notes due 2044, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on August 12, 2014.
	(p) Form of 4.850% Notes due 2054, incorporated by reference to Exhibit 4.5 to the Company's Current Report on Form 8-K filed on August 12, 2014.
4.4	Indenture dated as of October 9, 2012 between the Company and The Bank of New York Mellon Trust Company, N.A. as trustee, including the Form of the 2.750% Senior Convertible Debentures due 2042, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on October 9, 2012, SEC File No. 001-16751.
4.5	Subordinated Indenture, dated as of May 12, 2015, between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on May 12, 2015.
	(a) First Supplemental Indenture to the Subordinated Indenture, dated as of May 12, 2015, between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee, including the Form of 1.90% Remarketable Subordinated Notes due 2028, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on May 12, 2015.
4.6	Indenture dated as of November 21, 2017 between the Company and The Bank of New York Mellon Trust Company, N.A. as trustee, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on November 21, 2017.
	(a) Form of 2.500% Notes due 2020, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on November 21, 2017.
	(b) Form of 2.950% Notes due 2022, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on November 21, 2017.

Exhibit Number		Exhibit
	(c)	Form of 3.350% Notes due 2024, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on November 21, 2017.
	(d)	Form of 3.650% Notes due 2027, incorporated by reference to Exhibit 4.5 to the Company's Current Report on Form 8-K filed on November 21, 2017.
	(e)	Form of 4.375% Notes due 2047, incorporated by reference to Exhibit 4.6 to the Company's Current Report on Form 8-K filed on November 21, 2017.
4.7		Purchase Contract and Pledge Agreement, dated as of May 12, 2015, between the Company and The Bank of New York Mellon Trust Company, N.A., as Purchase Contract Agent, Collateral Agent, Custodial Agent and Securities Intermediary, including the Form of Remarketing Agreement, Form of Corporate Units Certificate and Form of Treasury Units Certificate, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on May 12, 2015.
4.8		Upon the request of the Securities and Exchange Commission, the Company will furnish copies of any other instruments defining the rights of holders of long-term debt of the Company or its subsidiaries.
10.1	*	Anthem Incentive Compensation Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on December 2, 2014.
	(a)	Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement, incorporated by reference to Exhibit 10.2(o) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, SEC File No. 001-16751.
	(b)	Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2013, incorporated by reference to Exhibit 10.2(s) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013.
	(c)	Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2014, incorporated by reference to Exhibit 10.2(p) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014.
	(d)	Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2015, incorporated by reference to Exhibit 10.2(n) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015.
	(e)	Form of Incentive Compensation Plan Restricted Stock Unit Award Agreement for 2015, incorporated by reference to Exhibit 10.2(o) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015.
	(f)	Form of Incentive Compensation Plan Performance Stock Unit Award Agreement for 2015, incorporated by reference to Exhibit 10.2(p) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015.
	(g)	Form of Amendment, dated March 9, 2016, to Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2014, incorporated by reference to Exhibit 10.2(m) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
	(h)	Form of Amendment, dated March 9, 2016, to Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2015, incorporated by reference to Exhibit 10.2(p) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
	(i)	Form of Amendment, dated March 9, 2016, to Incentive Compensation Plan Restricted Stock Unit Award Agreement for 2015, incorporated by reference to Exhibit 10.2(q) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
	(j)	Form of Amendment, dated March 9, 2016, to Incentive Compensation Plan Performance Stock Unit Award Agreement for 2015, incorporated by reference to Exhibit 10.2(r) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
	(k)	Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2016 and 2017, incorporated by reference to Exhibit 10.2(s) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
	(l)	Form of Incentive Compensation Plan Restricted Stock Unit Award Agreement for 2016 and 2017, incorporated by reference to Exhibit 10.2(t) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.

Exhibit Number		Exhibit
		(m) Form of Incentive Compensation Plan Performance Stock Unit Award Agreement for 2016, incorporated by reference to Exhibit 10.2(u) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
10.2	*	2017 Anthem Incentive Compensation Plan, effective May 18, 2017, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on May 18, 2017.
		(a) Form of Incentive Compensation Plan Performance Stock Unit Award Agreement for 2017, incorporated by reference to Exhibit 10.1(r) to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017.
		(b) Form of Incentive Compensation Plan Performance Stock Unit Award Agreement for the Chief Executive Officer for 2017.
		(c) First Amendment, effective January 1, 2018, to 2017 Anthem Incentive Compensation Plan.
10.3	*	Anthem, Inc. Comprehensive Nonqualified Deferred Compensation Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.3 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.
10.4	*	Anthem, Inc. Executive Agreement Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.4 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.
		(a) First Amendment, dated March 9, 2016, to Executive Agreement Plan, incorporated by reference to Exhibit 10.4(a) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2016.
		(b) Second Amendment, dated January 6, 2017, to Executive Agreement Plan, incorporated by reference to Exhibit 10.3(b) to the Company's Annual Report on Form 10-K for the year ended December 31, 2016.
10.5	*	Anthem, Inc. Executive Salary Continuation Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.5 to the Company's Annual Report on Form 10-K for the year ended December 31, 2015. .
10.6	*	Anthem, Inc. Directed Executive Compensation Plan amended effective January 1, 2014, incorporated by reference to Exhibit 10.6 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2013.
10.7	*	Anthem, Inc. Board of Directors Compensation Program, as amended effective May 18, 2017, incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2017.
10.8	*	Anthem Board of Directors' Deferred Compensation Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.8 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.
10.9	*	(a) Form of Employment Agreement between the Company and each of the following: John E. Gallina, Brian T. Griffin, Peter D. Haytaian, Gloria McCarthy and Thomas C. Zielinski, incorporated by reference to Exhibit A to Exhibit 10.41 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2007, SEC File No. 001-16751.
		(b) Form of Employment Agreement between the Company and each of the following: Craig E. Samitt and Jacquelyn H. Wolf, incorporated by reference to Exhibit A to Exhibit 10.4 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.
		(c) Form of Employment Agreement between the Company and Gail Boudreaux, incorporated by reference to Exhibit A to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 6, 2017.
10.10	*	Offer Letter, by and between the Company and Gail Boudreaux, dated as of November 5, 2017, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on November 6, 2017.
10.11	*	Transition Letter Agreement between the Company and Joseph R. Swedish, dated as of November 5, 2017, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on November 6, 2017.
10.12		Blue Cross License Agreement by and between Blue Cross Blue Shield Association and the Company, including revisions, if any, adopted by the Member Plans through November 18, 2016, incorporated by reference to Exhibit 10.10 to the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

Exhibit Number	Exhibit
10.13	Blue Shield License Agreement by and between Blue Cross Blue Shield Association and the Company, including revisions, if any, adopted by the Member Plans through November 18, 2016, incorporated by reference to Exhibit 10.11 to the Company's Annual Report on Form 10-K for the year ended December 31, 2016.
10.14	Undertakings to California Department of Managed Health Care, dated October 15, 2012, delivered by Blue Cross of California, incorporated by reference to Exhibit 10.19 to the Company's Annual Report on Form 10-K for the year ended December 31, 2012, SEC File No. 001-16751.
12.1	Computation of Ratio of Earnings to Fixed Charges.
21	Subsidiaries of the Company.
23	Consent of Independent Registered Public Accounting Firm.
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Exchange Act Rules, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Exchange Act Rules, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following materials from Anthem, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2017, formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets; (ii) the Consolidated Statements of Income; (iii) the Consolidated Statements of Comprehensive Income; (iv) the Consolidated Statements of Cash Flows; (v) the Consolidated Statements of Shareholders' Equity; (vi) the Notes to Consolidated Financial Statements and (vii) Financial Statement Schedule II.

* Indicates management contracts or compensatory plans or arrangements.

(b) Exhibits

The response to this portion of Item 15 is set forth in paragraph (a) 3 above.

(c) Financial Statement Schedule

Schedule II—Condensed Financial Information of Registrant (Parent Company Only).

ITEM 16. FORM 10-K SUMMARY.

None.

Schedule II—Condensed Financial Information of Registrant

Anthem, Inc. (Parent Company Only)
Balance Sheets

(In millions, except share data)	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 956.0	$ 882.7
Investments available-for-sale, at fair value:		
Fixed maturity securities (amortized cost of $341.7 and $463.4)	345.5	477.6
Equity securities (cost of $1,400.9 and $35.7)	1,458.3	85.5
Other invested assets, current	5.5	4.6
Other receivables	60.6	47.8
Income taxes receivable	75.4	69.0
Net due from subsidiaries	2,428.5	1,394.6
Securities lending collateral	14.5	39.7
Other current assets	227.8	277.0
Total current assets	5,572.1	3,278.5
Long-term investments available-for-sale, at fair value:		
Fixed maturity securities (amortized cost of $0.4 and $0.0)	0.4	—
Equity securities (cost of $6.3 and $6.4)	6.3	6.4
Other invested assets, long-term	644.2	632.4
Property and equipment, net	117.6	142.8
Deferred tax assets, net	161.8	107.5
Investments in subsidiaries	40,211.2	37,378.8
Other noncurrent assets	88.5	87.6
Total assets	$ 46,802.1	$ 41,634.0
Liabilities and shareholders' equity		
Liabilities		
Current liabilities:		
Accounts payable and accrued expenses	$ 1,232.5	$ 690.2
Security trades pending payable	11.1	18.2
Securities lending payable	14.5	39.7
Current portion of long-term debt	1,274.6	928.4
Other current liabilities	219.0	301.4
Total current liabilities	2,751.7	1,977.9
Long-term debt, less current portion	17,356.7	14,333.6
Other noncurrent liabilities	190.8	222.1
Total liabilities	20,299.2	16,533.6
Commitments and contingencies—Note 5		
Shareholders' equity		
Preferred stock, without par value, shares authorized - 100,000,000; shares issued and outstanding - none	—	—
Common stock, par value $0.01, shares authorized - 900,000,000; shares issued and outstanding - 256,084,913 and 263,747,395	2.6	2.6
Additional paid-in capital	8,547.4	8,805.1
Retained earnings	18,054.4	16,560.6
Accumulated other comprehensive loss	(101.5)	(267.9)
Total shareholders' equity	26,502.9	25,100.4
Total liabilities and shareholders' equity	$ 46,802.1	$ 41,634.0

See accompanying notes.

Anthem, Inc. (Parent Company Only)
Statements of Income

(In millions)	Years ended December 31 2017	2016	2015
Revenues			
Net investment income	$ 64.3	$ 74.7	$ 99.7
Net realized losses on financial instruments	(18.2)	(195.0)	(3.8)
Other-than-temporary impairment losses on investments:			
Total other-than-temporary impairment losses on investments	(7.6)	(65.0)	(49.2)
Portion of other-than-temporary impairment losses recognized in other comprehensive income	0.1	17.2	10.0
Other-than-temporary impairment losses recognized in income	(7.5)	(47.8)	(39.2)
Other revenue	—	—	3.5
Total revenues (losses)	38.6	(168.1)	60.2
Expenses			
General and administrative expense	437.2	270.0	77.9
Interest expense	726.5	719.3	649.7
Loss (gain) on extinguishment of debt	282.4	—	(9.3)
Total expenses	1,446.1	989.3	718.3
Loss before income tax credits and equity in net income of subsidiaries	(1,407.5)	(1,157.4)	(658.1)
Income tax credits	(215.5)	(438.5)	(270.1)
Equity in net income of subsidiaries	5,034.8	3,188.7	2,948.0
Net income	$ 3,842.8	$ 2,469.8	$ 2,560.0

See accompanying notes.

Anthem, Inc. (Parent Company Only)
Statements of Comprehensive Income

(in millions)	Years ended December 31 2017	2016	2015
Net income	$ 3,842.8	$ 2,469.8	$ 2,560.0
Other comprehensive income (loss), net of tax:			
Change in net unrealized gains/losses on investments	172.5	117.9	(384.3)
Change in non-credit component of other-than-temporary impairment losses on investments	4.4	5.4	(5.6)
Change in net unrealized gains/losses on cash flow hedges	(64.6)	(87.3)	(45.2)
Change in net periodic pension and postretirement costs	51.3	(13.4)	(26.0)
Foreign currency translation adjustments	2.8	2.1	(3.4)
Other comprehensive income (loss)	166.4	24.7	(464.5)
Total comprehensive income	$ 4,009.2	$ 2,494.5	$ 2,095.5

See accompanying notes.

Anthem, Inc. (Parent Company Only)
Statements of Cash Flows

(In millions)	Years ended December 31 2017	2016	2015
Operating activities			
Net income	$ 3,842.8	$ 2,469.8	$ 2,560.0
Adjustments to reconcile net income to net cash provided by operating activities:			
Undistributed earnings of subsidiaries	(2,436.7)	(502.4)	(287.8)
Net realized losses on financial instruments	18.2	195.0	3.8
Other-than-temporary impairment losses recognized in income	7.5	47.8	39.2
Loss (gain) on extinguishment of debt	282.4	—	(9.3)
Loss on disposal of assets	—	2.3	0.2
Deferred income taxes	(32.5)	(7.0)	55.0
Amortization, net of accretion	25.4	33.5	40.8
Depreciation expense	69.2	70.4	68.1
Share-based compensation	169.6	164.6	148.2
Excess tax benefits from share-based compensation	—	(53.5)	(95.8)
Changes in operating assets and liabilities:			
Receivables, net	(17.1)	17.5	(17.9)
Other invested assets, current	(0.9)	1.3	(0.2)
Other assets	(102.0)	213.2	(106.9)
Amounts due from/to subsidiaries	(1,033.9)	(1,487.8)	420.5
Accounts payable and accrued expenses	490.5	43.9	103.4
Other liabilities	(61.0)	(30.7)	(231.4)
Income taxes	(6.4)	198.4	47.2
Other, net	(2.3)	5.1	(10.2)
Net cash provided by operating activities	1,212.8	1,381.4	2,726.9
Investing activities			
Purchases of investments	(3,814.3)	(2,874.9)	(2,130.7)
Proceeds from sales, maturities, calls and redemptions of investments	2,594.7	3,309.8	3,076.6
Changes in collateral and settlement of non-hedging derivatives	64.9	(34.5)	(36.5)
Capitalization of subsidiaries	(124.2)	(295.0)	(939.7)
Changes in securities lending collateral	25.0	91.8	94.0
Purchases of property and equipment, net of sales	(44.0)	(98.7)	(51.1)
Other, net	18.7	(7.9)	1.5
Net cash (used in) provided by investing activities	(1,279.2)	90.6	14.1
Financing activities			
Net proceeds from (repayments of) commercial paper borrowings	174.6	(53.2)	682.2
Proceeds from long-term borrowings	5,457.8	—	1,226.5
Repayments of long-term borrowings	(2,815.1)	—	(2,697.2)
Changes in securities lending payable	(25.2)	(90.9)	(94.2)
Changes in bank overdrafts	51.8	30.8	(89.3)
Premiums paid on equity call options	—	—	(16.7)
Proceeds from sale of put options	0.9	—	16.6
Repurchase and retirement of common stock	(1,997.7)	—	(1,515.8)
Change in collateral and settlements of debt-related derivatives	(149.0)	(360.4)	—
Cash dividends	(737.2)	(715.1)	(686.5)
Proceeds from issuance of common stock under employee stock plans	225.3	119.4	186.0
Taxes paid through withholding of common stock under employee stock plans	(46.5)	(65.7)	(95.9)
Excess tax benefits from share-based compensation	—	53.5	95.8
Net cash provided by (used in) financing activities	139.7	(1,081.6)	(2,988.5)
Change in cash and cash equivalents	73.3	390.4	(247.5)
Cash and cash equivalents at beginning of year	882.7	492.3	739.8
Cash and cash equivalents at end of year	$ 956.0	$ 882.7	$ 492.3

See accompanying notes.

Anthem, Inc.
(Parent Company Only)
Notes to Condensed Financial Statements

December 31, 2017
(In Millions, Except Per Share Data)

1. Basis of Presentation and Significant Accounting Policies

In the parent company only financial statements of Anthem, Inc., or Anthem, Anthem's investment in subsidiaries is stated at cost plus equity in undistributed earnings of the subsidiaries. Anthem's share of net income of its unconsolidated subsidiaries is included in income using the equity method of accounting.

Certain amounts presented in the parent company only financial statements are eliminated in the consolidated financial statements of Anthem.

Certain prior year amounts have been reclassified to conform to the current year presentation.

Anthem's parent company only financial statements should be read in conjunction with Anthem's audited consolidated financial statements and the accompanying notes included in Part II, Item 8 of this Annual Report on Form 10-K.

2. Subsidiary Transactions

Dividends from Subsidiaries

Anthem received cash dividends from subsidiaries of $2,268.0, $2,688.8 and $2,672.3 during 2017, 2016 and 2015, respectively.

Dividends to Subsidiaries

Certain subsidiaries of Anthem own shares of Anthem common stock. Anthem paid cash dividends to subsidiaries related to these shares of common stock in the amount of $32.3, $31.1 and $29.9 during 2017, 2016 and 2015, respectively.

Investments in Subsidiaries

Capital contributions to subsidiaries were $124.2, $295.0 and $939.7 during 2017, 2016 and 2015, respectively.

Amounts Due to and From Subsidiaries

At December 31, 2017 and 2016, Anthem reported amounts due from subsidiaries of $2,428.5 and $1,394.6, respectively. The amounts due from subsidiaries primarily include amounts for allocated administrative expenses or cash held overnight at the parent level resulting from daily cash management activities. These items are routinely settled, and as such, are classified as current assets or liabilities.

3. Derivative Financial Instruments

The information regarding derivative financial instruments contained in Note 5, "Derivative Financial Instruments," of the Notes to Consolidated Financial Statements of Anthem and its subsidiaries, included in Part II, Item 8 of this Annual Report on Form 10-K, is incorporated herein by reference.

4. Long-Term Debt

The information regarding long-term debt contained in Note 12, "Debt," of the Notes to Consolidated Financial Statements of Anthem and its subsidiaries, included in Part II, Item 8 of this Annual Report on Form 10-K, is incorporated herein by reference.

5. Commitments and Contingencies

The information regarding commitments and contingencies contained in Note 13, "Commitments and Contingencies," of the Notes to Consolidated Financial Statements of Anthem and its subsidiaries, included in Part II, Item 8 of this Annual Report on Form 10-K, is incorporated herein by reference.

6. Capital Stock

The information regarding capital stock contained in Note 14, "Capital Stock," of the Notes to Consolidated Financial Statements of Anthem and its subsidiaries, included in Part II, Item 8 of this Annual Report on Form 10-K, is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ANTHEM, INC.

By: /s/ GAIL K. BOUDREAUX
Gail K. Boudreaux
President and Chief Executive Officer

Dated: February 21, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ GAIL K. BOUDREAUX **Gail K. Boudreaux**	President and Chief Executive Officer, Director (Principal Executive Officer)	February 21, 2018
/s/ JOHN E. GALLINA **John E. Gallina**	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 21, 2018
/s/ RONALD W. PENCZEK **Ronald W. Penczek**	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 21, 2018
/s/ JOSEPH R. SWEDISH **Joseph R. Swedish**	Executive Chairman of the Board	February 21, 2018
/s/ R. KERRY CLARK **R. Kerry Clark**	Director	February 21, 2018
/s/ ROBERT L. DIXON, JR. **Robert L. Dixon, Jr.**	Director	February 21, 2018
/s/ LEWIS HAY III **Lewis Hay III**	Director	February 21, 2018
/s/ JULIE A. HILL **Julie A. Hill**	Director	February 21, 2018
/s/ BAHIJA JALLAL **Bahija Jallal**	Director	February 21, 2018
/s/ ANTONIO F. NERI **Antonio F. Neri**	Director	February 21, 2018
/s/ RAMIRO G. PERU **Ramiro G. Peru**	Director	February 21, 2018
/s/ GEORGE A. SCHAEFER, JR. **George A. Schaefer, Jr.**	Director	February 21, 2018
/s/ ELIZABETH E. TALLETT **Elizabeth E. Tallett**	Director	February 21, 2018

Exhibit 10.2(b)

Schedule A

Notice of Performance Stock Unit Grant

Participant: [●]

Company: Anthem, Inc.

Notice: You have been granted the following award of performance stock units of common stock of the Company in accordance with the terms of the Plan and the attached Performance Stock Unit Agreement.

Plan: 2017 Anthem Incentive Compensation Plan

Grant: Grant Date: [●]
Number of Performance Stock Units: [●]

Performance Period: The period beginning on the Grant Date and ending on the Vesting Date is the Performance Period. Subject to achievement of the performance measures described below, the number of your Performance Stock Units listed in the "Shares" column, and any related Dividend Equivalents shall vest on the date listed in the "Vesting Date" column. Achievement of the performance measures described below may increase or decrease the total number of Performance Stock Units covered by the Grant and any related Dividend Equivalents that vest on the Vesting Date.

Shares	Vesting Date

Achievement of the following performance measures must be approved by the Compensation Committee of the Board of Directors of Anthem, Inc. There are two performance scales, which together provide you an opportunity to earn up to 400% of the number of Performance Stock Units originally covered by the Grant. The first performance scale is the "Operating Revenue Scale" and the second performance scale is the "Adjusted Net Income Scale."

Operating Revenue Scale For the Cumulative Operating Revenue performance measure, you will earn between 0% and [•]% (share amounts will be interpolated) of one-fourth of the number of Performance Stock Units originally covered by the Grant. The total number of Performance Stock Units, as adjusted for achievement of the Operating Revenue performance measure, will vest on the date listed in the Vesting Date column above. If achievement of any performance measure results in a number of shares awarded that is more or less than 25%, then the number of Dividend Equivalents payable upon the Vesting Date shall be adjusted accordingly.

	Threshold	Target	Maximum
Cumulative Operating Revenue (2017-2019)			
Percent of Shares Vesting			

Adjusted Net Income Scale

For the Cumulative Net Income performance measure, you will earn between 0% and [•]% (share amounts will be interpolated) of three-fourths of the number of Performance Stock Units originally covered by the Grant. The total number of Performance Stock Units, as adjusted for achievement of the Adjusted Net Income performance measure, will vest on the date listed in the Vesting Date column above. If achievement of any performance measure results in a number of shares awarded that is more or less than 75%, then the number of Dividend Equivalents payable upon the Vesting Date shall be adjusted accordingly.

	Threshold	Target	Maximum
Cumulative Operating Revenue (2017-2019)			
Percent of Shares Vesting			

In the event that a Change of Control (as defined in the Plan) occurs before the end of the Performance Period, the Compensation Committee of the Board of Directors of Anthem, Inc. will determine the extent to which the performance measures described above have been achieved as of the date of the Change of Control, and the number of Performance Stock Units earned will be based on such level of achievement. If the successor company does not assume the Performance Stock Unit Grant, the number of earned Performance Stock Units as so determined shall immediately vest upon the Change of Control and the Shares covered by the award shall be immediately delivered upon the Change of Control, provided that in the event that the Performance Stock Units are deferred compensation within the meaning of Code Section 409A, such Stock Units shall only be delivered upon the Change of Control if such Change of Control is a "change in control event" within the meaning of Code Section 409A and the delivery is made in accordance with Treasury Regulation 1.409A-3(j)(ix).

If the successor does assume the Performance Stock Unit Grant and your employment continues with the successor, the number of earned Performance Stock Units as so determined will be paid on the Vesting Date, provided that you continue to be employed through the Vesting Date (subject to earlier payment on a termination without Cause, Good Reason (or due to Retirement), or by reason of death or Disability as provided in the Award Agreement).

Acceptance:

In order to accept your Performance Stock Units, you must electronically accept this Agreement through the Company's broker at any time within ninety (90) days after the Grant Date. To effect your acceptance, please follow the instructions included with your grant materials. Acceptance of the Agreement includes acceptance of the terms and conditions of the Plan. If you do not timely and electronically accept this Agreement, this Agreement will be null and void as of the 90th day after the Grant Date and you will have no right or claim to the Performance Stock Units described above.

Performance Stock Unit Award Agreement

This Performance Stock Unit Award Agreement (this "Agreement") dated as of the Grant Date (the "Grant Date") set forth in the Notice of Performance Stock Unit Grant attached as Schedule A hereto (the "Grant Notice") is made between Anthem, Inc. (the "Company") and the Participant set forth in the Grant Notice. The Grant Notice is included in and made part of this Agreement.

1. Performance Period. The Performance Period with respect to the Performance Stock Units shall be as set forth in the Grant Notice (the "Performance Period"). The Participant acknowledges that the Performance Stock Units may not be sold, transferred, pledged, assigned, encumbered, alienated, hypothecated or otherwise disposed of (whether voluntary or involuntary or by operation of law by judgment, levy, attachment, garnishment or any other legal or equitable proceedings (including bankruptcy)). Upon the completion of the applicable portion of the Performance Period and subject to the performance measure described in the attached Grant Notice, the restrictions set forth in this Agreement with respect to the Performance Stock Units theretofore subject to such completed Performance Period shall lapse and the Shares covered by the related portion of the award shall be immediately delivered, except as may be provided in accordance with Section 10 hereof.

2. Ownership. Upon expiration of the applicable portion of the Performance Period and subject to the performance measure described in the attached Grant Notice, the Company shall transfer the Shares covered by the related portion of the award to the Participant's account with the Company's captive broker.

3. Termination.

(a) *Retirement.* If the Participant's Termination is due to Retirement (for purposes of this Agreement, defined as the Participant's Termination after attaining age fifty-five (55) with at least ten (10) completed years of service) or after attaining age sixty-five (65), the restrictions upon the Performance Stock Units shall continue to lapse throughout the Performance Period and the shares covered by the related portion of the award shall continue to be delivered upon the applicable Vesting Date, subject to achievement of the performance measures described in the attached Grant Notice; *provided, however,* that the maximum number of Performance Stock Units that may be earned shall be capped based on the date of Retirement as provided in the following table:

Date of Retirement	Maximum Percentage of Performance Stock Units (% multiplied by the number of Performance Stock Units originally covered by the Grant)
Prior to July 1, 2018	
July 1, 2018 through December 31, 2018	
January 1, 2019 through June 30, 2019	
July 1, 2019 through December 31, 2019	
January 1, 2020 through March 1, 2020	

Notwithstanding the foregoing, if the Participant's Termination due to Retirement is during the calendar year of the Grant Date, the Performance Stock Units that would otherwise be earned (taking into account the limit set forth above) shall be forfeited on a pro-rata basis, measured by the number of completed full months in that calendar year during which the Participant was employed by the Company or an Affiliate (*e.g.*, if the Participant's Retirement occurs in September, 33.3% (or 4/12) of the Performance Stock Units will be forfeited), and the Performance Period on the non-forfeited portion of the Performance Stock Units shall continue to lapse throughout the Performance Period, subject to achievement of the performance measures described in the attached Grant Notice and the maximum cap described in the above table.

(b) *Death and Disability*. If the Participant's Termination is due to death or Disability (for purposes of this Agreement, as defined in the applicable Anthem Long-Term Disability Plan), then the Performance Period shall immediately lapse, causing any restrictions which would otherwise remain on the Performance Stock Units to immediately lapse, and 100% of the Shares covered by the award shall be immediately delivered.

(c) *Termination Without Cause or for Good Reason* . Unless Section 3(e) is applicable, and notwithstanding any other provisions of this Agreement to the contrary, if the Participant's Termination is either (A) by the Company or an Affiliate without Cause (as defined in the Anthem, Inc. Executive Agreement Plan (the "Agreement Plan")) or (B) by the Participant for Good Reason (as defined in the Participant's Employment Agreement dated as of November 5, 2017 and effective as of November 13, 2017, as may be amended), the restrictions upon the Performance Stock Units shall continue to lapse throughout the Performance Period and the shares covered by the related portion of the award shall continue to be delivered upon the applicable Vesting Date, subject to achievement of the performance measures described in the attached Grant Notice.

(d) *Other Terminations*. Unless Section 3(e) is applicable, if the Participant's Termination is by the Company or an Affiliate or by the Participant for any reason other than death, Disability, Retirement or without Cause more than two years prior to the Vesting Date, then all Performance Stock Units for which the Performance Period had not lapsed prior to the date of such Termination shall be immediately forfeited.

(e) *Termination after Change of Control.* If after a Change of Control the Participant's Termination is (i) by the Company or an Affiliate without Cause or (ii) by the Participant for Good Reason, then there shall be paid out in cash to the Participant within 30 days following termination of employment the value of the Performance Stock Units earned based on the extent to which the performance measures were achieved as of the Change of Control as described in the attached Grant Notice. Notwithstanding any provision of this Agreement to the contrary, in the event that the Participant becomes entitled to vest in Performance Stock Units under any provision of this Section 3 by reason of any Termination and such Termination occurs within the two year period following a Change in Control that is a "change in control event" within the meaning of Code Section 409A, the Participant's Performance Stock Units shall be paid to the Participant immediately upon such Termination.

(f) *Clawback Provision*. Notwithstanding any other provisions of this Agreement to the contrary, in the event that the Participant is a non-executive participant in the Agreement Plan, is an Executive (as defined by the Company) at the time of the Participant's Termination, regardless of whether the Executive is then a participant in such Agreement Plan, the Performance Stock Units shall be forfeited if the Participant breaches any provision of Section 3.6 or 3.10 of the Agreement Plan, in which case the Participant shall be subject to the "Return of Consideration" provision contained in Section 3.7 of the Agreement Plan. For purposes of this Agreement and application of the "Return of Consideration" provision, the "Restriction Period" shall be the greater of the "Restriction Period" as defined in the Agreement Plan or the period following the Participant's Termination through the Vesting Date.

4. Transferability of the Performance Stock Units. The Participant shall have the right to appoint any individual or legal entity in writing, on a Designation of Beneficiary form, as his/her beneficiary to receive any Shares (to the extent not previously terminated or forfeited) under this Agreement upon the Participant's death. Such designation under this Agreement may be revoked by the Participant at any time and a new beneficiary may be appointed by the Participant by execution and submission to the Company, or its designee, of a revised Designation of Beneficiary form to this Agreement. In order to be effective, a designation of beneficiary must be completed by the Participant on the Designation of Beneficiary form and received by the Company, or its designee, prior to the date of the Participant's death. If the Participant dies without such designation, the Performance Stock Units will become part of the Participant's estate.

5. Dividend Equivalents. In the event the Company declares a dividend on Shares (as defined in the Plan), for each unvested Performance Stock Unit on the dividend payment date, the Participant shall be credited with a Dividend Equivalent, payable in cash, with a value equal to the value of the declared dividend. The Dividend Equivalents shall be subject to the same restrictions as the unvested Performance Stock Units to which they relate. No interest or other earnings shall be credited on the Dividend Equivalents, provided that additional Dividend Equivalents may be awarded or forfeited in the same proportion as the number of Performance Stock Units determined to be awarded

or forfeited based on the achievement of the performance measures. Subject to continued employment with the Company and Affiliates and, as applicable, achievement of performance measures, the restrictions with respect to the Dividend Equivalents shall lapse at the same time and in the same proportion as the initial award of Performance Stock Units. No additional Dividend Equivalents shall be accrued for the benefit of the Participant with respect to record dates occurring prior to, or with respect to record dates occurring on or after the date, if any, on which the Participant has forfeited the Performance Stock Units or any Performance Stock Units have been settled. For any specified employee, any Dividend Equivalents subject to Code Section 409A and payable upon a termination of employment shall be subject to a six month delay. The Dividend Equivalents shall be subject to all such other provisions set forth herein, and may be used to satisfy any or all obligations for the payment of any tax attributable to the Dividend Equivalents and/or Performance Stock Units.

6 . Taxes and Withholdings . Upon the expiration of the applicable portion of the Performance Period (and delivery of the underlying Shares), or as of which the value of any Performance Stock Units first becomes includible in the Participant's gross income for income tax purposes, the Participant shall satisfy all obligations for the payment of any tax attributable to the Performance Stock Units. The Participant shall notify the Company if the Participant wishes to pay the Company in cash, check or with shares of Anthem common stock already owned for the satisfaction of any taxes of any kind required by law to be withheld with respect to such Performance Stock Units. Any such election made by the Participant must be irrevocable, made in writing, signed by the Participant, and shall be subject to any restrictions or limitations that the Compensation Committee of the Board of Directors of the Company ("Committee"), in its sole discretion deems appropriate. If the Participant does not notify the Company in writing at least 14 days prior to the applicable lapse of the Performance Period, the Committee is authorized to take any such other action as may be necessary or appropriate, as determined by the Committee, to satisfy all obligations for the payment of such taxes. Such other actions may include withholding the required amounts from other compensation payable to the Participant, a sell-to-cover transaction or such other method determined by the Committee, in its discretion.

7 . No Rights as a Shareholder. The Participant shall have no rights of a shareholder (including, without limitation, dividend and voting rights) with respect to the Performance Stock Units, for record dates occurring on or after the Grant Date and prior to the date any such Performance Stock Units vest in accordance with this Agreement.

8. No Right to Continued Employment. Neither the Performance Stock Units nor any terms contained in this Agreement shall confer upon the Participant any express or implied right to be retained in the employment or service of the Company or any Affiliate for any period, nor restrict in any way the right of the Company, which right is hereby expressly reserved, to terminate the Participant's employment or service at any time for any reason. The Participant acknowledges and agrees that any right to have restrictions on the Performance Stock Units lapse is earned only by continuing as an employee of the Company or an Affiliate at the will of the Company or such Affiliate, or satisfaction of any other applicable terms and conditions contained in the Plan and this Agreement, and not through the act of being hired, being granted the Performance Stock Units or acquiring Shares hereunder.

9 . The Plan. This Agreement is subject to all the terms, provisions and conditions of the Plan, which are incorporated herein by reference, and to such regulations as may from time to time be adopted by the Committee. Unless defined herein, capitalized terms are as defined in the Plan. In the event of any conflict between the provisions of the Plan and this Agreement, the provisions of the Plan shall control, and this Agreement shall be deemed to be modified accordingly. The Plan and the prospectus describing the Plan can be found on the Company's HR intranet. A paper copy of the Plan and the prospectus shall be provided to the Participant upon the Participant's written request to the Company at Anthem, Inc., 120 Monument Circle, Indianapolis, Indiana 46204, Attention: Corporate Secretary, Shareholder Services Department.

10. Compliance with Laws and Regulations.

(a) The Performance Stock Units and the obligation of the Company to deliver Shares hereunder shall be subject in all respects to (i) all applicable Federal and state laws, rules and regulations and (ii) any registration, qualification, approvals or other requirements imposed by any government or regulatory agency or body which the Committee shall, in its discretion, determine to be necessary or applicable. Moreover, the Company shall not deliver any certificates for Shares to the Participant or any other person pursuant to this Agreement if doing so would be contrary to applicable law. If at any time the Company determines, in its discretion, that the listing, registration or qualification of Shares upon any national securities exchange or under any state or Federal law, or the consent or approval of any governmental regulatory body, is necessary or desirable, the Company shall not be required to deliver

any certificates for Shares to the Participant or any other person pursuant to this Agreement unless and until such listing, registration, qualification, consent or approval has been effected or obtained, or otherwise provided for, free of any conditions not acceptable to the Company.

(b) The Shares received upon the expiration of the applicable portion of the Performance Period shall have been registered under the Securities Act of 1933 ("Securities Act"). If the Participant is an "affiliate" of the Company, as that term is defined in Rule 144 under the Securities Act ("Rule 144"), the Participant may not sell the Shares received except in compliance with Rule 144. Certificates representing Shares issued to an "affiliate" of the Company may bear a legend setting forth such restrictions on the disposition or transfer of the Shares as the Company deems appropriate to comply with Federal and state securities laws.

(c) If, at any time, the Shares are not registered under the Securities Act, and/or there is no current prospectus in effect under the Securities Act with respect to the Shares, the Participant shall execute, prior to the delivery of any Shares to the Participant by the Company pursuant to this Agreement, an agreement (in such form as the Company may specify) in which the Participant represents and warrants that the Participant is purchasing or acquiring the shares acquired under this Agreement for the Participant's own account, for investment only and not with a view to the resale or distribution thereof, and represents and agrees that any subsequent offer for sale or distribution of any kind of such Shares shall be made only pursuant to either (i) a registration statement on an appropriate form under the Securities Act, which registration statement has become effective and is current with regard to the Shares being offered or sold, or (ii) a specific exemption from the registration requirements of the Securities Act, but in claiming such exemption the Participant shall, prior to any offer for sale of such Shares, obtain a prior favorable written opinion, in form and substance satisfactory to the Company, from counsel for or approved by the Company, as to the applicability of such exemption thereto.

11. Code Section 409A Compliance. Except with respect to Participants who are Retirement eligible or become Retirement eligible before the calendar year containing the Vesting Date as shown on the Grant Notice, it is intended that this Agreement meet the short-term deferral exception from Code Section 409A. This Agreement and the Plan shall be administered in a manner consistent with this intent and any provision that would cause the Agreement or Plan to fail to satisfy this exception shall have no force and effect. Notwithstanding anything contained herein to the contrary, Shares in respect of any Performance Stock Units that (a) constitute "nonqualified deferred compensation" as defined in Code Section 409A and (b) vest as a consequence of the Participant's Termination shall not be delivered until the date that the Participant incurs a "separation from service" within the meaning of Code Section 409A (or, if the Participant is a "specified employee" within the meaning of Code Section 409A and the regulations promulgated thereunder, the date that is six months following the date of such "separation from service" (or death, if earlier). In addition, each amount to be paid or benefit to be provided to the Participant pursuant to this Agreement that constitutes deferred compensation subject to Code Section 409A, shall be construed as a separate identified payment for purposes of Code Section 409A.

12. Notices. All notices by the Participant or the Participant's assignees shall be addressed to Anthem, Inc., 120 Monument Circle, Indianapolis, Indiana 46204, Attention: Stock Administration, or such other address as the Company may from time to time specify. All notices to the Participant shall be addressed to the Participant at the Participant's address in the Company's records.

13. Other Plans. The Participant acknowledges that any income derived from the Performance Stock Units shall not affect the Participant's participation in, or benefits under, any other benefit plan or other contract or arrangement maintained by the Company or any Affiliate.

14. Recoupment Policy for Incentive Compensation. The Company's Recoupment Policy for Incentive Compensation, as may be amended from time to time, shall apply to the Performance Stock Units, any Shares delivered hereunder and any profits realized on the sale of such Shares to the extent that the Participant is covered by such policy. If the Participant is covered by such policy, the policy may apply to recoup Performance Stock Units awarded, any Shares delivered hereunder or profits realized on the sale of such Shares either before, on or after the date on which the Participant becomes subject to such policy.

ANTHEM, INC.

By: /s/ LEWIS HAY III
Printed: Lewis Hay III
Its: Chair, Compensation Committee
of the Board of Directors

Exhibit 10.2(c)

FIRST AMENDMENT TO THE

2017 ANTHEM INCENTIVE COMPENSATION PLAN

Pursuant to rights reserved under Section 17.1 of the 2017 Anthem Incentive Compensation Plan (the "Plan"), Anthem, Inc. amends the Plan, effective for grants awarded on and after January 1, 2018, to provide as follows:

1. Section 3.3(d) is amended in its entirety to read as follows:

(d) determine the terms and conditions of Awards, including the Option Prices of Options and the Grant Prices of SARs, provided that, no Option shall be exercisable within six (6) months following the grant date of an Option and any Award (other than a Cash-Based Award and Options) granted under the Plan shall have a minimum vesting period and/or a minimum Period of Restriction of one (1) year following the grant date of any such Award; provided further that, the foregoing limitations shall apply to 95% of all such Awards granted under the Plan.

* * *

IN WITNESS WHEREOF, the following authorized officer has executed this First Amendment to evidence its adoption by Anthem, Inc. this 30th day of January, 2018.

ANTHEM, INC.

By: /s/ GAIL K. BOUDREAUX
Gail K. Boudreaux
President & CEO

Exhibit 12.1

COMPUTATION OF RATIO OF EARNINGS TO FIXED CHARGES

(Dollars in millions)	Year Ended December 31, 2017	2016	2015	2014 [1]	2013 [1]
Earnings:					
Income from continuing operations before income tax expense	$ 3,963.8	$ 4,555.4	$ 4,631.0	$ 4,368.1	$ 3,840.2
Fixed charges	807.2	792.2	724.0	664.9	664.7
Total earnings available for fixed charges	$ 4,771.0	$ 5,347.6	$ 5,355.0	$ 5,033.0	$ 4,504.9
Fixed charges:					
Interest expense	$ 739.0	$ 723.0	$ 653.0	$ 600.7	$ 602.7
Estimated interest portion of of rental expense	68.2	69.2	71.0	64.2	62.0
Total fixed charges	$ 807.2	$ 792.2	$ 724.0	$ 664.9	$ 664.7
Ratio of earnings to fixed charges	5.91x	6.75x	7.40x	7.57x	6.78x

1. The operating results of 1-800 CONTACTS, Inc. are reported as discontinued operations at December 31, 2014 and 2013 as a result of the divestiture completed on January 31, 2014.

Exhibit 21

Legal Name	*State or Country*
American Imaging Management, Inc. (d/b/a AIM Specialty Health)	Illinois
America's 1st Choice of South Carolina, Inc.	South Carolina
America's Health Management Services, Inc.	South Carolina
AMERIGROUP Community Care of New Mexico, Inc.	New Mexico
AMERIGROUP Corporation (d/b/a AMERIGROUP CORPORATION; AGP Corporation; AMGP; AMGP Corporation; AMGP Missouri; Amerigroup)	Delaware
America Delaware, Inc.	Delaware
AMERIGROUP District of Columbia, Inc.	District of Columbia
AMERIGROUP Health Plan of Louisiana, Inc.	Louisiana
AMERIGROUP Health Plan of Oregon, Inc.	Oregon
Amerigroup Insurance Company	Texas
Amerigroup Iowa, Inc.	Iowa
Amerigroup IPA of New York, LLC	New York
Amerigroup Kansas, Inc.	Kansas
AMERIGROUP Maryland, Inc. (d/b/a AMERIGROUP Community Care)	Maryland
AMERIGROUP Michigan, Inc.	Michigan
AMERIGROUP Mississippi, Inc.	Mississippi
AMERIGROUP New Jersey, Inc. (d/b/a AMERIGROUP Community Care)	New Jersey
AMERIGROUP Ohio, Inc. (d/b/a AMERIGROUP Community Care)	Ohio
AMERIGROUP Oklahoma, Inc.	Oklahoma
Amerigroup Partnership Plan, LLC	Illinois
AMERIGROUP Pennsylvania, Inc.	Pennsylvania
AMERIGROUP Tennessee, Inc. (d/b/a AMERIGROUP Community Care)	Tennessee
AMERIGROUP Texas, Inc. (d/b/a AMERIGROUP Community Care)	Texas
AMERIGROUP Washington, Inc.	Washington
AMGP Georgia Managed Care Company, Inc. (d/b/a AMERIGROUP; AMERIGROUP Community Care; AMERIGROUP Georgia; AMGP Georgia)	Georgia
Anthem Blue Cross Life and Health Insurance Company	California
Anthem Financial, Inc.	Delaware
Anthem Health Insurance Company of Nevada	Nevada
Anthem Health Plans of Kentucky, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	Kentucky
Anthem Health Plans of Maine, Inc. (d/b/a Anthem Blue Cross and Blue Shield and Associated Hospital Service)	Maine
Anthem Health Plans of New Hampshire, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	New Hampshire
Anthem Health Plans of Virginia, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	Virginia
Anthem Health Plans, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	Connecticut
Anthem Holding Corp. (d/b/a Anthem Properties, Inc.)	Indiana
Anthem Insurance Companies, Inc. (d/b/a Anthem Blue Cross and Blue Shield; Anthem Blue Cross Blue Shield)	Indiana
Anthem Kentucky Managed Care Plan, Inc. (d/b/a Anthem Blue Cross and Blue Shield Medicaid)	Kentucky
Anthem Life & Disability Insurance Company	New York
Anthem Life Insurance Company	Indiana
Anthem Partnership Holding Company, LLC	Indiana
Anthem Southeast, Inc.	Indiana

Legal Name	*State or Country*
Anthem UM Services, Inc.	Indiana
Anthem Workers' Compensation, LLC	Indiana
Anthem, Inc.	Indiana
APPLIED PATHWAYS LLC	Illinois
Arcus Enterprises, Inc.	Delaware
Associated Group, Inc.	Indiana
ATH Holding Company, LLC	Indiana
Blue Cross and Blue Shield of Georgia, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	Georgia
Blue Cross Blue Shield Healthcare Plan of Georgia, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	Georgia
Blue Cross Blue Shield of Wisconsin (d/b/a Anthem Blue Cross and Blue Shield)	Wisconsin
Blue Cross of California (d/b/a Anthem Blue Cross)	California
Blue Cross of California Partnership Plan, Inc.(d/b/a Anthem Blue Cross Partnership Plan)	California
CareMore Health Plan	California
CareMore Health Plan of Arizona, Inc.	Arizona
CareMore Health Plan of Nevada	Nevada
CareMore Health Plan of Texas, Inc.	Texas
CareMore Health System	California
CareMore Services Company, LLC	Indiana
CareMore, LLC	Indiana
Cerulean Companies, Inc.	Georgia
Claim Management Services, Inc.(d/b/a Anthem Blue Cross and Blue Shield)	Wisconsin
Community Care Health Plan of Louisiana, Inc.	Louisiana
Community Care Health Plan of Nevada, Inc. (d/b/a Anthem Blue Cross and Blue Shield Healthcare Solutions; AMERIGROUP Community Care)	Nevada
Community Insurance Company (d/b/a Anthem Blue Cross and Blue Shield)	Ohio
Compcare Health Services Insurance Corporation (d/b/a Anthem Blue Cross and Blue Shield)	Wisconsin
Crossroads Acquisition Corp.	Delaware
DeCare Analytics, LLC	Minnesota
DeCare Dental Health International, LLC	Minnesota
DeCare Dental Insurance Ireland, Ltd.	Ireland
DeCare Dental Networks, LLC	Minnesota
DeCare Dental, LLC	Minnesota
DeCare Operations Ireland, Limited	Ireland
Delivery Network, LLC	Florida
Designated Agent Company, Inc.	Kentucky
EasyScripts, LLC	Florida
EasyScripts Hialeah LLC	Florida
EHC Benefits Agency, Inc.	New York
Empire HealthChoice Assurance, Inc. (d/b/a Empire Blue Cross; Empire Blue Cross Blue Shield HMO)	New York
Empire HealthChoice HMO, Inc. (d/b/a Empire Blue Cross HMO; Empire Blue Cross Blue Shield HMO)	New York
Federal Government Solutions, LLC	Wisconsin
Freedom Health, Inc.	Florida
Global TPA, LLC	Florida
Golden West Health Plan, Inc.	California

Legal Name	*State or Country*
Greater Georgia Life Insurance Company (d/b/a Anthem Life)	Georgia
Health Core, Inc.	Delaware
Health Management Corporation (d/b/a LiveHealth Online; HMC of Virginia; Health Management of Virginia)	Virginia
Health Ventures Partner, L.L.C.	Illinois
HealthKeepers, Inc.	Virginia
HealthLink HMO, Inc. (d/b/a HealthLink HMO)	Missouri
HealthLink, Inc.	Illinois
HealthPlus HP, LLC (d/b/a Empire BlueCross BlueShield HealthPlus)	New York
Healthy Alliance Life Insurance Company (d/b/a Anthem Blue Cross and Blue Shield)	Missouri
HealthSun Blocker Corp. I	Delaware
HealthSun Blocker Corp. II	Delaware
HealthSun Health Plans, Inc.	Florida
HealthSun Holdings, LLC	Florida
HealthSun Management, LLC	Florida
HealthSun Physicians Network I, LLC	Florida
HealthSun Physicians Network, LLC	Florida
Healthware Solutions, LLC	Florida
Healthy Alliance Life Insurance Company (d/b/a Anthem Blue Cross and Blue Shield)	Missouri
HEP AP Holdings, Inc.	Delaware
Highland Acquisition Holdings, LLC	Delaware
Highland Holdco, Inc.	Delaware
Highland Investor Holdings, LLC	Delaware
HMO Colorado, Inc. (d/b/a HMO Colorado; HMO Nevada)	Colorado
HMO Missouri, Inc. (d/b/a Amerigroup Missouri; Anthem Blue Cross and Blue Shield)	Missouri
Human Resource Associates, LLC	Florida
Imaging Management Holdings, LLC	Delaware
IngenioRx, Inc.	Indiana
Legato Health Technologies, LLP	India
Legato Holdings I, Inc.	Indiana
Legato Holdings II, LLC	Indiana
Living Complete Technologies, Inc.	Maryland
Marketing in Motion Group, LLC	Florida
Matthew Thornton Health Plan, Inc.	New Hampshire
Meridian Resource Company, LLC	Wisconsin
National Government Services, Inc. (d/b/a NGS of Indiana)	Indiana
National Telehealth Network, LLC	Delaware
New England Research Institutes, Inc. (d/b/a Summit Community Care)	Massachusetts
Newco Holdings, Inc.	Indiana
NGS Federal, LLC	Indiana
OPTIMUM HEALTHCARE, INC.	Florida
Park Square Holdings, Inc.	California
Park Square I, Inc.	California
Park Square II, Inc.	California
Pasteur Medical Bird Road, LLC	Florida
Pasteur Medical Center, LLC	Delaware

Legal Name	*State or Country*
Pasteur Medical Cutler Bay, LLC	Florida
Pasteur Medical Group, LLC	Florida
Pasteur Medical Hialeah Gardens, LLC	Florida
Pasteur Medical Holdings, LLC	Florida
Pasteur Medical Kendall, LLC	Florida
Pasteur Medical Management, LLC	Florida
Pasteur Medical Miami Gardens, LLC	Florida
Pasteur Medical North Miami Beach, LLC	Florida
Pasteur Medical Partners, LLC	Florida
Pasteur Pharmacy II, LLC	Florida
Pasteur Pharmacy III, LLC	Florida
Pasteur Pharmacy IV, LLC	Florida
Pasteur Pharmacy V, LLC	Florida
Resolution Health, Inc.	Delaware
RightCHOICE Managed Care, Inc. (d/b/a RightCHOICE Benefit Administrators; Anthem Blue Cross and Blue Shield)	Delaware
Rocky Mountain Hospital and Medical Service, Inc.(d/b/a Anthem Blue Cross and Blue Shield)	Colorado
SellCore, Inc. (d/b/a SellCore Insurance Services, Inc.)	Delaware
Simply Healthcare Plans, Inc. (d/b/a Clear Health Alliance; Bettter Health and Amerigroup Florida)	Florida
Southeast Services, Inc.	Virginia
State Sponsored DM Services, Inc.	Indiana
The Anthem Companies of California, Inc.	California
The Anthem Companies, Inc.	Indiana
TPX, LLC	Florida
TrustSolutions, LLC	Wisconsin
UNICARE Health Plan of West Virginia, Inc.	West Virginia
UNICARE Illinois Services, Inc.	Illinois
UniCare Life & Health Insurance Company	Indiana
UNICARE National Services, Inc.	Delaware
UniCare Specialty Services, Inc.	Delaware
Valus, Inc.	Indiana
Wellmax Health Medical Centers, LLC	Florida
Wellmax Health Physicians Network, LLC	Florida
WellPoint Acquisition, LLC	Indiana
WellPoint Behavioral Health, Inc.	Delaware
WellPoint California Services, Inc.	Delaware
WellPoint Dental Services, Inc.	Delaware
WellPoint Health Solutions, Inc.	Indiana
WellPoint Holding Corp.	Delaware
WellPoint Information Technology Services, Inc.	California
WellPoint Insurance Services, Inc.	Hawaii
WellPoint Military Care Corporation	Indiana
WPMI (Shanghai) Enterprise Service Co., Ltd.	China
WPMI, LLC	Delaware

Exhibit 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

- Form S-8 No. 333-84906 and Form S-8 No. 333-129334 pertaining to the Anthem 401(k) Plan;
- Form S-8 No. 333-156099 pertaining to the Anthem, Inc. Employee Stock Purchase Plan;
- Form S-8 No. 333-159830 pertaining to the Anthem Incentive Compensation Plan;
- Form S-8 No. 333-218190 pertaining to the Anthem 2017 Incentive Compensation Plan; and
- Form S-3 No. 333-221824 pertaining to the Anthem, Inc. registration of senior debt securities, subordinated debt securities, preferred stock, common stock, depositary shares, warrants, rights, stock purchase contracts and stock purchase units

of our report dated February 21, 2018, with respect to the consolidated financial statements and schedule of Anthem, Inc., and the effectiveness of internal control over financial reporting of Anthem, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2017.

/S/ ERNST & YOUNG LLP
Indianapolis, Indiana
February 21, 2018

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULE 13a-14(a) AND RULE 15d-14(a) OF THE EXCHANGE ACT RULES,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Gail K. Boudreaux, certify that:

1. I have reviewed this report on Form 10-K of Anthem, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 21, 2018

/s/ GAIL K. BOUDREAUX
President and Chief Executive Officer

Exhibit 31.C

RETI FAHROI FNP USTLSOPI I N
TSa E 13-4l( )-DOP5 TSa E 1dH4l( )-DNA I XE EGRXOP, E ORI TSa EL0
OLO5NUI E5 USTLSOPI I N
LERI FNP 32CNA I XE LOTBOPELANGa EY ORI NAC22C

I, John E. Gallina, certify that:

1. I have reviewed this report on Form 10-K of Anthem, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 21, 2018

/s/ JOHN E. GALLINA

Executive Vice President and
Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Anthem, Inc. (the "Company") on Form 10-K for the period ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Gail K. Boudreaux, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ GAIL K. BOUDREAUX

Gail K. Boudreaux
President and Chief Executive Officer
February 21, 2018

Exhibit 32.2

1 ECRTI TI FRTAO NPCUP FOR RA
S8 P.U1 . UE1 RTAO S350,
FUFDANRED NPCUP FOR RA
UE1 RTAO 906 AI RHE UFCBFOEU-AXLEY F1 R AI 2002

In connection with the Annual Report of Anthem, Inc. (the "Company") on Form 10-K for the period ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John E. Gallina, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ JOHN E. GALLINA

John E. Gallina
Executive Vice President and Chief Financial Officer
February 21, 2018

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2016
OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to
Commission file number: 001-16751

ANTHEM, INC.
(Exact name of registrant as specified in its charter)

INDIANA	**35-2145715**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification Number)**
120 MONUMENT CIRCLE INDIANAPOLIS, INDIANA	**46204**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: **(317) 488-6000**
Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Name of each exchange on which registered**
Common Stock, Par Value $0.01	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act: NONE

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer", and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☒ Accelerated filer ☐

Non-accelerated filer ☐ (Do not check if a smaller reporting company Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant (assuming solely for the purposes of this calculation that all Directors and executive officers of the registrant are "affiliates") as of June 30, 2016 was approximately $34,510,272,302.

As of February 10, 2017, 264,378,577 shares of the Registrant's Common Stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Part III of this Annual Report on Form 10-K incorporates by reference information from the registrant's Definitive Proxy Statement for the Annual Meeting of Shareholders to be held May 18, 2017.

Anthem, Inc.

Annual Report on Form 10-K
For the Year Ended December 31, 2016

Table of Contents

This Annual Report on Form 10-K, including Management's Discussion and Analysis of Financial Condition and Results of Operations, contains forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, that reflect our views about future events and financial performance. When used in this report, the words *"expect," "feel," "believe," "will," "may," "should," "anticipate," "intend," "estimate," "project," "forecast," "plan,"* and similar expressions are intended to identify forward-looking statements, which are generally not historical in nature. Forward-looking statements include, but are not limited to, financial projections and estimates and their underlying assumptions; statements regarding plans, objectives and expectations with respect to future operations, products and services; and statements regarding future performance. Forward-looking statements are subject to known and unknown risks and uncertainties, many of which are difficult to predict and generally beyond our control, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. You are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof. You are also urged to carefully review and consider the various disclosures made by us, which attempt to advise interested parties of the factors that affect our business, including "Risk Factors" set forth in Part I, Item 1A hereof and our reports filed with the U.S. Securities and Exchange Commission, or SEC, from time to time. Except to the extent otherwise required by federal securities laws, we do not undertake any obligation to republish revised forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

References in this Annual Report on Form 10-K to the terms "we," "our," "us," "Anthem" or the "Company" refer to Anthem, Inc., an Indiana corporation, and, unless the context otherwise requires, its direct and indirect subsidiaries.

PART I

ITEM 1. BUSINESS.

General

We are one of the largest health benefits companies in the United States in terms of medical membership, serving 39.9 million medical members through our affiliated health plans as of December 31, 2017. We are an independent licensee of the Blue Cross and Blue Shield Association, or BCBSA, an association of independent health benefit plans. We serve our members as the Blue Cross licensee for California and as the Blue Cross and Blue Shield, or BCBS, licensee for Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri (excluding 30 counties in the Kansas City area), Nevada, New Hampshire, New York (as BCBS in 10 New York City metropolitan and surrounding counties, and as Blue Cross or BCBS in selected upstate counties), Ohio, Virginia (excluding the Northern Virginia suburbs of Washington, D.C.) and Wisconsin. In a majority of these service areas we do business as Anthem Blue Cross, Anthem Blue Cross and Blue Shield, Blue Cross and Blue Shield of Georgia, and Empire Blue Cross Blue Shield or Empire Blue Cross (in our New York service areas). We also conduct business through arrangements with other BCBS licensees in South Carolina and Western New York. Through our AMERIGROUP Corporation, or Amerigroup, subsidiary, we conduct business in Florida, Georgia, Iowa, Kansas, Louisiana, Maryland, Nevada, New Jersey, New Mexico, New York, Tennessee, Texas, and Washington. In addition, we conduct business through our Simply Healthcare Holdings, Inc., or Simply Healthcare, subsidiary in Florida. We also serve customers throughout the country as HealthLink, UniCare (including a non-risk arrangement with Massachusetts), and in certain Arizona, California, Nevada and Virginia markets through our CareMore Health Group, Inc., or CareMore, subsidiary. We are licensed to conduct insurance operations in all 50 states through our subsidiaries.

In March 2017, we filed a lawsuit against our vendor for pharmacy benefit management services, Express Scripts, Inc., or Express Scripts, seeking to recover damages for pharmacy pricing that is higher than competitive benchmark pricing and damages related to operational breaches, and seeking various declarations under the agreement between the parties. In April 2017, Express Scripts filed an answer to the lawsuit disputing our contractual claims and alleging various defenses and counterclaims. For additional information regarding this lawsuit, see Note 13, “Commitments and Contingencies - *Litigation,*” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

On July 24, 2015, we and Cigna Corporation, or Cigna, announced that we entered into an Agreement and Plan of Merger, or Merger Agreement, dated as of July 23, 2015, by and among Anthem, Cigna and Anthem Merger Sub Corp., a Delaware corporation and our direct wholly-owned subsidiary, pursuant to which we will acquire all outstanding shares of Cigna, or the Acquisition. This Acquisition will further our goal of creating a premier health benefits company with critical diversification and scale to lead the transformation of health care delivery for consumers. Cigna is a global health services organization that delivers affordable and personalized products and services to customers through employer-based, government-sponsored and individual coverage arrangements. All of Cigna's products and services are provided exclusively by or through its operating subsidiaries, including Connecticut General Life Insurance Company, Cigna Health and Life Insurance Company, Life Insurance Company of North America and Cigna Life Insurance Company of New York. Such products and services include an integrated suite of health services, such as medical, dental, behavioral health, pharmacy, vision, supplemental benefits, and other related products including group life, accident and disability insurance. Cigna maintains sales capability in 30 countries and jurisdictions.

Under the terms of the Merger Agreement, Cigna’s shareholders will receive $103.40 in cash and 0.5152 shares of our common stock for each Cigna common share outstanding. The value of the transaction is estimated to be approximately $53.0 billion based on the closing price of our common stock on the New York Stock Exchange on July 23, 2015. The final purchase price will be determined based on our closing stock price on the date of closing of the Acquisition. The combined company will reflect a pro forma equity ownership comprised of approximately 76& Anthem shareholders and approximately 33& Cigna shareholders. We expect to finance the cash portion of the Acquisition through available cash on hand and the issuance of new debt. The Acquisition is subject to certain state regulatory approvals, other standard closing conditions and customary approvals required under the Hart-Scott-Rodino Antitrust Improvements Act. For additional information, see •Risk Factors• included in Part I, Item 1A; •Management's Discussion and Analysis of Financial Condition and Results of Operations - Overview• included in Part II, Item 6; and Note 3, “Business Acquisitions and Divestiture - *Pending Acquisition of Cigna Corporation*• included in Part II, Item 8 of this Annual Report on Form 10-K.

In July 2017, the U.S. Department of Justice, or DOJ, along with certain state attorneys general, filed a civil antitrust lawsuit in the U.S. District Court for the District of Columbia, or District Court, seeking to block the Acquisition. Trial commenced in November 2017 and concluded in January 2016. On January 18, 2016, we provided notice to Cigna that we had elected to extend the termination date under the Merger Agreement from January 31, 2016 until April 30, 2016. On February 8, 2016, the District Court ruled in favor of the DOJ, and following our motion to expedite the appeal, which was granted on February 16, 2016, we promptly appealed the District Court's ruling to the U.S. Circuit Court of Appeals for the District of Columbia Circuit, or the Appellate Court. On February 14, 2016, Cigna purported to terminate the Merger Agreement and commenced litigation against us in the Delaware Court of Chancery, or Delaware Court, seeking damages and a declaratory judgment that its purported termination of the Merger Agreement was lawful, among other claims. We believe Cigna's allegations are without merit. Also on February 14, 2016, we initiated our own litigation against Cigna in the Delaware Court seeking a temporary restraining order to enjoin Cigna from terminating the Merger Agreement, specific performance compelling Cigna to comply with the Merger Agreement and damages. On February 15, 2016, the Delaware Court granted our motion for a temporary restraining order and issued an order enjoining Cigna from terminating the Merger Agreement. The temporary restraining order became effective immediately and will remain in place pending any further order from the Delaware Court. A hearing will be scheduled the week of April 10, 2016. We intend to vigorously defend the Acquisition in both the Circuit Court and the Delaware Court and remain committed to completing the Acquisition as soon as practicable. If the Merger Agreement is terminated because the required regulatory approvals cannot be obtained, under certain conditions, we could be obligated to pay a $1.85 billion termination fee to Cigna.

Our vision is to become America's valued health partner. Together we are transforming health care with trusted and caring solutions and as a result, we focus on delivering quality products and services that give members access to the care they need. With an unyielding commitment to meeting the needs of our diverse customers, we are guided by the following values:

- ® Accountable
- ® Caring
- ® Easy to do business with
- ® Innovative
- ® Trustworthy

We offer a broad spectrum of network-based managed care plans to large and small employer, individual, Medicaid and Medicare markets. Our managed care plans include: preferred provider organizations, or PPOs; health maintenance organizations, or HMOs; point-of-service, or POS, plans; traditional indemnity plans and other hybrid plans, including consumer-driven health plans, or CDHPs; and hospital only and limited benefit products. In addition, we provide a broad array of managed care services to self-funded customers, including claims processing, underwriting, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services. We provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits, radiology benefit management and analytics-driven personal health care. We also provide services to the federal government in connection with the Federal Employee Program, or FEP.

The increased focus on health care costs by employers, the government and consumers has continued to drive the growth of alternatives to traditional indemnity health insurance. HMO, PPO and hybrid plans, such as POS plans and CDHPs, are among the various forms of managed care products that have been developed. Through these types of products, insurers attempt to contain the cost of health care by negotiating contracts with hospitals, physicians and other providers to deliver high quality health care to members at favorable rates. These products usually feature medical management and other quality and cost optimization measures such as pre-admission review and approval for certain non-emergency services, pre-authorization of outpatient surgical procedures, network credentialing to determine that network doctors and hospitals have the required certifications and expertise, and various levels of care management programs to help members better understand and navigate the health care system. In addition, providers may have incentives to achieve certain quality measures, may share medical cost risk or may have other incentives to deliver quality medical services in a cost-effective manner. Also, certain plans offer members incentives for healthy behaviors, such as smoking cessation and weight management. Members are charged periodic, prepaid premiums and generally pay co-payments, coinsurance and/or deductibles when they receive services. While the distinctions between the various types of plans have lessened over recent years, PPO, POS and CDHP

products generally provide reduced benefits for out-of-network services, while traditional HMO products generally provide little to no reimbursement for non-emergency out-of-network utilization, but often offer more generous benefit coverage. An HMO plan may also require members to select one of the network primary care physicians, or PCPs, to coordinate their care and approve any specialist or other services.

Economic factors, greater consumer and employer sophistication and accountability have resulted in an increased demand for choice in both product/benefit designs and provider network configurations. As a result we continue to offer our broad access PPO networks with multiple benefit designs, but are also focused on leveraging our provider collaboration initiatives with our Accountable Care Organization, or ACO, partnerships to develop both narrow and tiered network offerings. This array of network and product configurations allows both the employer and the employee to design and select the combination of benefit designs (e.g., traditional PPOs, high deductibles, HRAs, HSAs, PCP based products, tiered copays) and networks (e.g., broad, narrow, tiered, closed or exclusive provider, and open) that optimize choice, quality and price at the consumer, employer and market level. We believe we are well-positioned in each of our states to respond to these market preferences.

For our fully-insured products, we charge a premium and assume all of the health care risk. Under self-funded products, we charge a fee for services and the employer or plan sponsor reimburses us for the health care costs. In addition, we charge a premium to underwrite stop loss insurance for Large Group and National Account employers that maintain self-funded health plans.

Our medical membership includes seven different customer types: Local Group, Individual, National Accounts, BlueCard—, Medicare, Medicaid and FEP.

BCBS-branded business generally refers to members in our service areas licensed by the BCBSA. Non-BCBS-branded business refers to members in our non-BCBS-branded Amerigroup, CareMore and Simply Healthcare plans, as well as HealthLink and UniCare members. In addition to the above medical membership, we also serve customers who purchase one or more of our other products or services that are often ancillary to our health business.

Our products are generally developed and marketed with an emphasis on the differing needs of our customers. In particular, our product development and marketing efforts take into account the differing characteristics between the various customers served by us, as well as the unique needs of educational and public entities, labor groups, federal employee health and benefit programs, national employers and state-run programs servicing low-income, high-risk and under-served markets. Overall, we seek to establish pricing and product designs to provide value for our customers while achieving an appropriate level of profitability for each of our customer categories balanced with the competitive objective to grow market share. We believe that one of the keys to our success has been our focus on these distinct customer types, which better enables us to develop benefit plans and services that meet our customers' unique needs.

We market our products through direct marketing activities and an extensive network of independent agents, brokers and retail partnerships for Individual and Medicare customers, and for certain Local Group customers with a smaller employee base. Products for National Accounts and Local Group customers with a larger employee base are generally sold through independent brokers or consultants retained by the customer and working with industry specialists from our in-house sales force. In the Individual and Small Group markets, we offer on-exchange products through state or federally facilitated marketplaces, referred to as public exchanges, and off-exchange products. Federal premium subsidies are available for certain members, subject to income and family size, who purchase public exchange products.

Being a licensee of the BCBS association of companies, of which there were 37 independent primary licensees as of December 31, 2017, provides significant market value, especially when competing for very large multi-state employer groups. For example, each BCBS member company is able to utilize other BCBS licensees' substantial provider networks and discounts when any BCBS member works or travels outside of the state in which their policy is written. This program is referred to as BlueCard—and is a source of revenue when we provide member services in the states where we are the BCBS licensee to individuals who are customers of BCBS plans not affiliated with us. This program also provides a national provider network for our members when they travel to other states.

For additional information describing each of our customer types, detailed marketing efforts and changes in medical membership over the last three years, see "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Part II, Item 6 of this Annual Report on Form 10-K.

Our results of operations depend in large part on accurately predicting health care costs and our ability to manage future health care costs through adequate product pricing, medical management, product design and negotiation of favorable provider contracts.

Advances in medical technology, increases in specialty drug costs, increases in hospital expenditures and other provider costs, the aging of the population and other demographic characteristics continue to contribute to rising health care costs. Our managed care plans and products are designed to encourage providers and members to participate in quality, cost-effective health benefit programs by using the full range of our innovative medical management services, quality initiatives and financial incentives. Our significant market share and high business retention rates enable us to realize the long-term benefits of investing in preventive and early detection programs. Our ability to provide cost-effective health benefits products and services is enhanced through a disciplined approach to internal cost containment, prudent management of our risk exposure and successful integration of acquired businesses. In addition, our ability to manage selling, general and administrative costs continues to be a driver of our overall profitability.

The future results of our operations will also be impacted by certain external forces and resulting changes in our business model and strategy. In 2010, the Patient Protection and Affordable Care Act, or ACA, as well as the Health Care and Education Reconciliation Act of 2010, or collectively, Health Care Reform, became law, causing significant changes to the U.S. health care system. Since then, significant regulations have been enacted by the U.S. Department of Health and Human Services, or HHS, the Department of Labor and the Department of the Treasury. The legislation and regulations are far-reaching and are intended to expand access to health insurance coverage over time by mandating that most individuals obtain health insurance coverage, increasing the eligibility thresholds for most state Medicaid programs and providing certain individuals and small businesses with tax credits to subsidize a portion of the cost of health insurance coverage. As a result of the complexity of the law, its impact on health care in the United States, the continuing modification and interpretation of Health Care Reform rules and the potential for significant future changes to the law, we continue to analyze and refine our estimates of the ultimate impact of Health Care Reform on our business, cash flows, financial condition and results of operations. Health Care Reform presented us with new growth opportunities, but also introduced new risks, regulatory challenges and uncertainties, and required changes in the way products are designed, underwritten, priced, distributed and administered. Changes to our business are likely to continue for the next several years as elected officials at the national and state level have proposed significant modification to existing laws and regulations, including the potential repeal or replacement of Health Care Reform. For additional discussion, see “Regulation,” herein and Part I, Item 1A “Risk Factors” in this Annual Report on Form 10-K.

In addition to the external forces discussed in the preceding paragraph, our results of operations are impacted by levels and mix of membership. In recent years, we have experienced membership growth due to the quality and pricing of our health benefits products and services, improved economic conditions, decreases in unemployment, acquisitions, entry into new markets and expansions in existing markets. In addition, we believe the self-insured portion of our group membership base will continue to increase as a percentage of total group membership. However, these membership trends could be negatively impacted by various factors that could have a material adverse effect on our future results of operations such as general economic downturns that result in business failures, failure to obtain new customers or retain existing customers, premium increases, benefit changes or our exit from a specific market. See Part I, Item 1A “Risk Factors” and Part II, Item 6 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in this Annual Report on Form 10-K.

Private exchanges have gained visibility in the marketplace based on the promise of helping employers reduce costs, increase consumer engagement and manage the complexities created by the ACA and other market forces. While private exchanges have been a distribution channel in the Medicare and Individual markets for some time, in more recent years the Commercial market has received an increased level of attention from the consulting and broker communities as well as health insurance carriers. In response, we have continued our broad-based strategy of offering Anthem Health Marketplace's consumer experience platform to groups, while also participating in four large national consultant-led exchanges, several regional broker-led exchanges and various Individual, Commercial and Medicare exchanges. To date, adoption levels in the Commercial market overall have been lower than analyst predictions. While the ultimate volume, pace of growth and winning business models remain highly uncertain in this space, we continue to believe we are well positioned to adapt with the market as it evolves.

We believe health care is local and that we have the strong local presence required to understand and meet local customer needs. Further, we believe we are well-positioned to deliver what customers want: innovative, choice-based and affordable products; distinctive service; simplified transactions; and better access to information for quality care. Our local presence, combined with our national expertise, has created opportunities for collaborative programs that reward physicians and hospitals for clinical quality and excellence. We feel that our commitment to health improvement and care management provides added value to customers and health care professionals. Ultimately, we believe that practical and sustainable improvements in health care must focus on improving health care quality while managing costs for total affordability. We have implemented initiatives driving payment innovation and partnering with providers to compel improved cost, quality and health, and we continue to develop new and innovative ways to effectively manage risk and engage our members. In addition, we are focused on achieving efficiencies from our national scale while optimizing service performance for our customers. Finally, we expect to continue to rationalize our portfolio of businesses and products and align our investments to capitalize on new opportunities to drive growth in our existing markets and expand into new markets in the future.

We continue to enhance interactions with customers, providers, brokers, agents, employees and other stakeholders through web-enabled technology and improving internal operations. Our approach includes not only sales and distribution of health benefits products on the Internet, but also implementing advanced capabilities that improve services benefiting customers, agents, brokers, and providers while optimizing administrative costs. These enhancements can also help improve the quality, coordination and safety of health care through increased communications between patients and their physicians.

In pursuing our vision of becoming America's valued health partner, we intend to transform health care by providing trusted and caring solutions and delivering quality products and services that give customers access to the care they need. At the same time, we will focus on earnings per share, or EPS, growth through organic membership growth, improvements in our operating cost structure, strategic acquisitions and the efficient use of capital.

Significant Transactions

While Health Care Reform has caused significant changes to the U.S. health care system in recent years, the significant transactions that have occurred over the last five years that have impacted or will impact our capital structure or that have or will influence how we conduct our business operations include:

- ® Pending acquisition of Cigna;
- ® Acquisition of Simply Healthcare (2015);
- ® Use of Capital% Board of Directors declaration of dividends on common stock (2012 through February 2016); authorization for repurchases of our common stock (2016 and prior); and debt repurchases and new debt issuance (2015 and prior);
- ® Acquisition of Amerigroup and the related debt issuance (2012); and
- ® Acquisition of 1-800 CONTACTS (2012) and subsequent divestiture (2014).

For additional information regarding certain of these transactions, see Note 3, “Business Acquisitions and Divestiture,” Note 12, “Debt,” and Note 14, “Capital Stock,” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Competition

The managed care industry is highly competitive, both nationally and in our local markets. Competition continues to be intense due to aggressive marketing and pricing, business consolidations, new competitors in the market, a proliferation of new products, the impact of Health Care Reform, and increased quality awareness and price sensitivity among customers.

We believe that participants in the managed care industry compete for customers based on quality of service, price, access to provider networks, access to care management and wellness programs (including health information), innovation, breadth and flexibility of products and benefits, reputation (including National Committee on Quality Assurance, or NCQA, accreditation status), brand recognition and financial stability. Our ability to attract and retain customers is substantially tied to our ability to distinguish ourselves from our competitors in these areas.

Also, a health plan's ability to interact with employers, customers and other third parties (including health care professionals) via the Internet has become a more important competitive factor, and we have made significant investments in technology to enhance our electronic interaction with providers, employers, customers and third parties.

We believe our exclusive right to market products under the most recognized brand in the industry, BCBS, in our most significant markets provides us with greater brand recognition over competitive product offerings. Our provider networks in our markets enable us to achieve efficiencies and distinctive service levels enabling us to offer a broad range of health benefits to our customers on a more cost-effective basis than many of our competitors. We strive to distinguish our products through provider access, service, care management, product value and brand recognition.

Pricing in our Commercial and Specialty Business segment (defined below), including our Individual and Small Group lines of business, remains competitive and we strive to price our health care benefit products consistent with anticipated underlying medical trends. We believe our pricing strategy, based on predictive modeling, proprietary research and data-driven processes have positioned us to benefit from the potential growth opportunities available in fully-insured commercial products as a result of Health Care Reform and any subsequent changes to the current regulatory scheme. We believe that our pricing strategy, brand name and network quality will provide a strong foundation for commercial risk membership growth opportunities in the future.

To build our provider networks, we compete with other health benefits plans for the best contracts with hospitals, physicians and other providers. We believe that physicians and other providers primarily consider customer volume, reimbursement rates, timeliness of reimbursement and administrative service capabilities along with the reduction of non-value added administrative tasks when deciding whether to contract with a health benefits plan.

At the sales and distribution level, we compete for qualified agents and brokers to recommend and distribute our products. Strong competition exists among insurance companies and health benefits plans for agents and brokers with demonstrated ability to secure new business and maintain existing accounts. We believe that the quality and price of our products, support services, reputation and prior relationships, along with a reasonable commission structure are the factors agents and brokers consider in choosing whether to market our products. We believe that we have good relationships with our agents and brokers, and that our products, support services and commission structure compare favorably to those of our competitors in all of our markets. Typically, we are the largest competitor in each of our Blue-branded markets and, thus, are a closely watched target by other insurance competitors.

Reportable Segments

We manage our operations through three reportable segments: Commercial and Specialty Business, Government Business and Other. We regularly evaluate the appropriateness of our reportable segments, particularly in light of organizational changes, merger and acquisition activity and changing laws and regulations. As a result, these reportable segments may change in the future.

Our Commercial and Specialty Business and Government Business segments both offer a diversified mix of managed care products, including PPOs, HMOs, traditional indemnity benefits and POS plans, as well as a variety of hybrid benefit plans including CDHPs, hospital only and limited benefit products.

Our Commercial and Specialty Business segment includes our Local Group, National Accounts, Individual and Specialty businesses. Business units in the Commercial and Specialty Business segment offer fully-insured health products; provide a broad array of managed care services to self-funded customers including claims processing, underwriting, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services; and provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits, radiology benefit management and analytics-driven personal health care guidance.

Our Government Business segment includes Medicare and Medicaid businesses, National Government Services, or NGS, and services provided to the federal government in connection with FEP. Medicare business includes services such as Medicare Advantage, Medicare Part D, and Medicare Supplement. Medicaid business includes our managed care alternatives through publicly funded health care programs, including Medicaid; Temporary Assistance for Needy Family programs, or TANF; programs for seniors and people with disabilities, or SPD; programs for long-term services and support, or LTSS;

Children's Health Insurance Programs, or CHIP; and ACA-related Medicaid expansion programs. NGS acts as a Medicare contractor for the federal government in several regions across the nation.

Our Other segment includes other businesses that do not individually meet the quantitative thresholds for an operating segment as defined by Financial Accounting Standards Board, or FASB, guidance, as well as corporate expenses not allocated to the other reportable segments.

Through our participation in various federal government programs, we generated approximately 18.2&, 18.8& and 21.0& of our total consolidated revenues from agencies of the U.S. government for the years ended December 31, 2017, 2015 and 2014, respectively. These revenues are contained in the Government Business segment. An immaterial amount of our total consolidated revenues is derived from activities outside of the U.S.

For additional information regarding the operating results of our segments, see Part II, Item 6 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Note 19, "Segment Information," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Products and Services

A general description of our products and services is provided below:

Preferred Provider Organization: PPO products offer the member an option to select any health care provider, with benefits reimbursed by us at a higher level when care is received from a participating network provider. Increasingly, customers are choosing our PPO products offered with an exclusive provider organization which eliminates coverage out of network. Coverage is subject to co-payments or deductibles and coinsurance, with member cost sharing usually limited by out-of-pocket maximums.

Consumer-Driven Health Plans: CDHPs provide consumers with increased financial responsibility, choice and control regarding how their health care dollars are spent. Generally, CDHPs combine a high-deductible PPO plan with an employer-funded and/or employee-funded personal care account, which may result in tax benefits to the employee. Some or all of the dollars remaining in the personal care account at year-end can be rolled over to the next year for future health care needs.

Traditional Indemnity: Indemnity products offer the member an option to select any health care provider for covered services. Coverage is subject to deductibles and coinsurance, with member cost sharing usually limited by out-of-pocket maximums.

Health Maintenance Organization: HMO products include comprehensive managed care benefits, generally through a participating network of physicians, hospitals and other providers. A member in one of our HMOs must typically select a PCP from our network. PCPs generally are family practitioners, internists or pediatricians who provide necessary preventive and primary medical care, and are generally responsible for coordinating other necessary health care services. We offer HMO plans with varying levels of co-payments, which result in different levels of premium rates.

Point-of-Service: POS products blend the characteristics of HMO, PPO and indemnity plans. Members can have comprehensive HMO-style benefits through participating network providers with minimum out-of-pocket expenses (co-payments) and also can go directly, without a referral, to any provider they choose, subject to, among other things, certain deductibles and coinsurance. Member cost sharing is limited by out-of-pocket maximums.

ACA Public Exchange and Off-Exchange Products: The ACA required the modification of existing products and development of new products to meet the requirements of the legislation, subject to certain transitional relief. Individual and Small Group products cover essential health benefits as defined in the ACA along with many other requirements and cost sharing features. Individual and Small Group products offered on and off the public exchanges meet the definition of the "metal" product requirements (bronze, silver, gold and platinum) and each metal product must satisfy a specific actuarial value. Health insurers participating on the public exchanges must offer at least one silver and one gold product.

In our Individual markets we offer bronze, silver and gold products, both on and off the public exchanges, in California, Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri, Nevada, New Hampshire, New York, Ohio, Virginia and Wisconsin. Additionally, we offer platinum products, both on and off the public exchanges, in California and New York.

In our Small Group markets, we offer bronze, silver and gold products, off the public exchanges, in California, Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri, Nevada, New Hampshire, New York, Ohio, Virginia and Wisconsin. We offer platinum products, off the public exchanges, in California, Colorado, Connecticut, Georgia, Indiana, Kentucky, New York, Virginia and Wisconsin. We offer bronze, silver and gold products, on the public exchanges, in Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri, Nevada, New Hampshire, Ohio and Virginia. Additionally, we offer platinum products on the public exchange in Connecticut.

Administrative Services: In addition to fully-insured products, we provide administrative services to Large Group employers that maintain self-funded health plans. These administrative services include underwriting, actuarial services, medical cost management, disease management, wellness programs, claims processing and other administrative services for self-funded employers. Self-funded health plans are also able to use our provider networks and to realize savings through our negotiated provider arrangements, while allowing employers the ability to design certain health benefit plans in accordance with their own requirements and objectives. We also underwrite stop loss insurance for self-funded plans.

BlueCard®: BlueCard—is a national program that links participating health care providers and independent BCBS plans. BlueCard—host members are generally members who reside in or travel to a state in which an Anthem subsidiary is the Blue Cross and/or Blue Shield licensee and who are covered under an employer sponsored health plan serviced by a non-Anthem controlled BCBS licensee, which is the "home" plan. We perform certain administrative functions for BlueCard—host members, for which we receive administrative fees from the BlueCard—members' home plans. Other administrative functions, including maintenance of enrollment information and customer service, are performed by the home plan.

Medicare Plans: We offer a wide variety of plans, products and options to individuals age 75 and older such as Medicare supplement plans; Medicare Advantage, including special needs plans; Medicare Part D Prescription Drug Plans, or Medicare Part D; and Medicare-Medicaid Plans, or MMPs. Medicare supplement plans typically pay the difference between health care costs incurred by a beneficiary and amounts paid by Medicare. Medicare Advantage plans provide Medicare beneficiaries with a managed care alternative to traditional Medicare and often include a Medicare Part D benefit. In addition, our Medicare Advantage special needs plans provide tailored benefits to Medicare beneficiaries who have chronic diseases and also cover certain dual eligible customers, who are low-income seniors and persons under age 75 with disabilities. Medicare Part D offers a prescription drug plan to Medicare and MMP beneficiaries. MMP is a demonstration program focused on serving members who are dually eligible for Medicaid and Medicare, which was established as a result of the passage of the ACA. We offer these plans to customers through our health benefit subsidiaries throughout the country, including Amerigroup, CareMore and Simply Healthcare.

Individual Plans: We offer a full range of health insurance plans with a variety of options and deductibles for individuals who are not covered by employer-sponsored coverage and are not eligible for government sponsored plans, such as Medicare and/or Medicaid. Individual policies are generally sold through independent agents and brokers, retail partnerships, our in-house sales force or via the Internet. Individual business is sold on a fully-insured basis. We offer on-exchange products through public exchanges and off-exchange products. Federal premium subsidies are available only for certain public exchange Individual products. Individual customers are generally more sensitive to product pricing and, to a lesser extent, the configuration of the network, and the efficiency of administration. Some of our products target certain demographic populations such as uninsured younger individuals between the ages of 19 and 29, families, those transitioning between jobs or early retirees.

Medicaid Plans and Other State-Sponsored Programs: We have contracts to serve members enrolled in publicly funded health care programs, including Medicaid, TANF, SPD, LTSS, CHIP, and ACA-related Medicaid expansion programs. The Medicaid program makes federal matching funds available to all states for the delivery of health care benefits for low income and/or high medical risk individuals. These programs are managed by the individual states based on broad federal guidelines. TANF is a state and federally funded program designed for the population consisting primarily of low-income children and their guardians. SPD is a federal income supplement program designed for Supplemental Security Income recipients; however, states can broaden eligibility criteria. This population consists of low-income seniors and people with disabilities. LTSS is a state and federally funded program that offers states a broad and flexible set of program design options and refers to the delivery of long-term services and support for our members who receive home and community- or institution-based services for long-term care. CHIP is a state and federally funded program that provides health care coverage to children not otherwise covered by Medicaid or other insurance programs. Our Medicaid plans also cover certain dual eligible customers, as previously described above, who also receive Medicare benefits. We provide Medicaid and other State-

Sponsored services in California, Florida, Georgia, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Nevada, New Jersey, New York, South Carolina, Tennessee, Texas, Virginia, Washington, West Virginia and Wisconsin.

Pharmacy Products: We market and sell an integrated prescription drug product to both fully-insured and self-funded customers through our health benefit subsidiaries throughout the country. This comprehensive product includes features such as drug formularies, a pharmacy network and maintenance of a prescription drug database and mail order capabilities. Since December 1, 2009, we have delegated certain functions and administrative services related to our integrated prescription drug products to Express Scripts under a ten year contract, excluding our CareMore subsidiary and certain self-insured members who have exclusive agreements with different pharmacy benefit management, or PBM, service providers. Express Scripts manages the network of pharmacy providers, operates mail order pharmacies and processes prescription drug claims on our behalf, while we sell and support the product for clients, make formulary decisions and set drug benefit design strategy and provide front line member support. In March 2017, we filed a lawsuit against Express Scripts seeking to recover damages for pharmacy pricing that is higher than competitive benchmark pricing. For additional information, see Note 13, "Commitments and Contingencies - *Litigation*," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Life Insurance: We offer an array of competitive individual and group life insurance benefit products to both Large Group and Small Group customers in conjunction with our health plans. The life products include term life and accidental death and dismemberment.

Disability: We offer short-term and long-term disability products, usually in conjunction with our health plans.

Radiology Benefit Management: We offer outpatient diagnostic imaging management services to health plans. These services include utilization management for advanced diagnostic imaging procedures, network development and optimization, patient safety, claims adjudication and provider payment.

Personal Health Care Guidance: We offer evidence-based and analytics-driven personal health care guidance. These services help improve the quality, coordination and safety of health care, enhance communications between patients and their physicians, and reduce medical costs.

Dental: Our dental plans include networks in certain states in which we operate. Many of the dental benefits are provided to customers enrolled in our health plans and are offered on both a fully-insured and self-funded basis. Our members also have access to additional dental providers through our participation in the National Dental GRID, a national dental network developed by and for BCBS plans. The National Dental GRID includes dentists in all 50 states and provides multi-state customers with a national solution providing in-network discounts across the country. Additionally, we offer managed dental services to other health care plans to assist those plans in providing dental benefits to their customers.

Vision Services and Products: Our vision plans include networks within the states in which we operate. Many of the vision benefits are provided to customers enrolled in our health plans and are offered on both a fully-insured and self-funded basis.

Medicare Administrative Operations: Through our subsidiary, NGS, we serve as a fiscal intermediary, carrier and Medicare administrative contractor for the federal government providing administrative services for the Medicare program, which generally provides coverage for persons who are 75 or older and for persons who are disabled or with end-stage renal disease. Part A of the Medicare program provides coverage for services provided by hospitals, skilled nursing facilities and other health care facilities. Part B of the Medicare program provides coverage for services provided by physicians, physical and occupational therapists and other professional providers, as well as certain durable medical equipment and medical supplies.

Networks and Provider Relations

Our relationships with physicians, hospitals and professionals that render health care services to our members are guided by local, regional and national standards for network development, reimbursement and contract methodologies. While following industry standards, we are simultaneously seeking to lead transformation efforts within our health care system, moving from our current fragmented model premised on episodic intervention to one based on proactive, coordinated care built around the needs of the patient. A key element of this transformation involves a transition from traditional fee-for-

service payment models to models where providers are paid based on the value, both in quality and affordability, of the care they deliver.

We establish “market-based” hospital reimbursement payments that we believe are fair, but aggressive, and among the most competitive in the market. We also seek to ensure that physicians in our network are paid in a timely manner at appropriate rates. In many instances, we deploy multi-year contracting strategies, including case rates or fixed rates, to limit our exposure to medical cost inflation and to increase cost predictability. We maintain both broad and narrow provider networks to ensure member choice, based on both price and access needs, while implementing programs designed to improve the quality of care our members receive. Increasingly, we are supplementing our broad-based networks with smaller or more cost-effective networks that are designed to be attractive to a more price-sensitive customer segment, such as public exchange customers.

Our reimbursement strategies vary across markets and depend on the degree of consolidation and integration of physician groups and hospitals. Fee-for-service is currently our predominant reimbursement methodology for physicians, but as noted above, we are transitioning providers to value-based payment contracts. More traditional physician fee schedules are developed at the state level based on an assessment of several factors and conditions, including the Centers for Medicare @Medicaid Services, or CMS, resource-based relative value system, or RBRVS, medical practice cost inflation and physician supply. We utilize CMS RBRVS fee schedules as a reference point for fee schedule development and analysis. The RBRVS structure was developed, maintained, and updated by CMS and is used by the Medicare program and other major payers. In addition, we have implemented and continue to expand physician incentive contracting, or “pay for performance,” which ties physician payment levels to performance on clinical measures.

While we generally do not delegate full financial responsibility to our physician providers in the form of capitation-based reimbursement, we maintain capitation-based arrangements in certain markets where we determine that market dynamics result in it being a useful method to lower costs and reduce underwriting risk.

Our hospital contracts provide for a variety of reimbursement arrangements depending on local market dynamics and current hospital utilization efficiency. Most hospitals are reimbursed a fixed amount per day or reimbursed a per-case amount, per admission, for inpatient covered services. A small percentage of hospitals, primarily rural, sole community hospitals, are reimbursed on a discount from approved charge basis for covered services. Our “per-case” reimbursement methods utilize many of the same attributes contained in Medicare’s Diagnosis Related Groups, or DRG, methodology. Hospital outpatient services are reimbursed by fixed case rates, fee schedules or percent of approved charges. Our hospital contracts recognize unique hospital attributes, such as academic medical centers or community hospitals, and the volume of care performed for our members. To improve predictability of expected costs, we frequently use a multi-year contracting approach with providers. In addition, the majority of our hospital contracts include a “pay for performance” component where reimbursement levels are linked to improved clinical performance, patient safety and medical error reduction.

Although fee-for-service combined with pay for performance remains our predominant payment model today, our provider engagement and contracting strategies are moving away from “unit price” or volume-based payment models to payment models that align compensation with the value delivered as measured by health care, quality and cost. We launched the most significant of these efforts, our Enhanced Personal Health Care program, in the fourth quarter of 2012. This program augments traditional fee-for-service with shared savings opportunities for providers when actual health care costs are below projected costs, and providers meet specific quality measures. The quality measures are based on nationally accepted, credible standards (e.g. NCQA, the American Diabetes Association and the American Academy of Pediatrics) and span preventive, acute and chronic care. We understand, however, that payment incentives alone are insufficient to create the large-scale, system-wide transformation required to achieve meaningful impacts on cost, quality and member experience. Accordingly, we invested in care delivery transformation and population health management support structures to help providers succeed under value-based payment models. This support includes our web-based population health management technology and teams of dedicated expert consultants who work alongside providers, sharing best practices, and helping them leverage our data to the benefit of their patients. In some of these arrangements, participating physician practices receive a per-member, per-month clinical coordination fee to compensate them for important care management activities that occur outside of the patient visit (e.g. purchasing an electronic health record or hiring care management nurses), all of which have been shown to reduce healthcare costs and improve care outcomes. Since the launch of Enhanced Personal Health Care, we now have arrangements with provider organizations covering 51& of our PCPs and have rolled this program out in each of the fourteen states where we operate as a licensee of the BCBSA.

Medical Management Programs

Our medical management programs include a broad array of activities that facilitate improvements in the quality of care provided to our members and promote cost-effective medical care. These medical management activities and programs are administered and directed by physicians and nurses. The goals of our medical management strategies are to ensure that the care delivered to our members is supported by appropriate medical and scientific evidence, is received on a timely basis and occurs in the most appropriate location. The following is a general description of our medical management programs, which are available to our members depending on the particular plan or product in which they participate:

Precertification: A traditional medical management program involves assessment of the appropriateness of certain hospitalizations and other medical services prior to the services being rendered. For example, precertification is used to determine whether a set of hospital and medical services is being appropriately applied to the member's clinical condition, in accordance with criteria for medical necessity as that term is defined in the member's benefits contract. All of our health plans have implemented precertification programs for common high-tech radiology studies, including cardiac diagnostic testing, addressing an area of historically significant cost trends. Through our AIM Specialty Health, or AIM, subsidiary we promote appropriate, safe and affordable member care in imaging as well as oncology, sleep management and specialty pharmacy benefits. These expanded specialty benefit management solutions leverage clinical expertise and technology to engage our provider communities and members in more effective and efficient use of outpatient services.

Care Coordination: Another traditional medical management strategy we use is care coordination, which is based on nationally recognized criteria developed by third-party medical specialists. With inpatient care coordination, the requirements and intensity of services during a patient's hospital stay are reviewed, at times by an onsite skilled nurse professional in collaboration with the hospital's medical and nursing staff, in order to coordinate care and determine the most effective transition of care from the hospital setting. In addition, guidance for many continued stay cases is reviewed with physician medical directors to ensure appropriate utilization of medical services. We also coordinate care for outpatient services to help ensure that patients with chronic conditions who receive care from multiple physicians are able to manage the exchange of information between physicians and coordinate office visits to their physicians.

Case Management: We have implemented a medical management strategy focused on identifying the small percentage of the membership that will require a high level of intervention to manage their health care needs. The registered nurses and medical directors focus on members likely to be readmitted to the hospital and help them coordinate their care through pharmacy compliance, post-hospital care, follow-up visits to see their physician and support in their home. We are also working to move increasing aspects of this work to the providers we work with via our provider collaboration programs such as Togetherworks, a set of capabilities, offerings, programs and products that help us partner with providers to leverage data, insights and technology to deliver the right care, at the right time, in the right place.

Formulary management: We have developed formularies, which are selections of drugs based on clinical quality and effectiveness. A pharmacy and therapeutics committee of physicians uses scientific and clinical evidence to ensure that our members have access to the appropriate drug therapies.

Medical policy: A medical policy group, comprised of physician leaders from various areas of the country, working in cooperation with academic medical centers, practicing community physicians and medical specialty organizations such as the American College of Radiology and national organizations such as the Centers for Disease Control and Prevention and the American Cancer Society, determines our national policy for the application of new medical technologies and treatments.

Quality programs: We are actively engaged with our hospital and physician networks to enable them to improve medical and surgical care and achieve better outcomes for our members. We endorse, encourage and incentivize hospitals and physicians to support national initiatives to improve the quality of clinical care and patient outcomes and to reduce medication errors and hospital infections.

External review procedures: We work with outside experts through a process of external review to provide our members scientifically and clinically, evidence-based medical care. When we receive member concerns, we have formal appeals procedures that ultimately allow coverage disputes related to medical necessity decisions under the benefits contract to be settled by independent expert physicians.

Service management: In HMO and POS networks, PCPs serve as the overall coordinators of members' health care needs by providing an array of preventive health services and overseeing referrals to specialists for appropriate medical care. In PPO networks, patients have access to network physicians without a PCP serving as the coordinator of care.

Provider Cost Comparison Tools: Through Estimate Your Cost, Anthem Care Comparison and other tools, our members can compare cost estimates and quality data for common services at contracted providers, with cost estimates accounting for facility, professional and ancillary services. These cost estimates bundle related services typically performed at the time of the procedure, not just for the procedure itself. Users can review cost data for over 400 procedures in 49 states. Members can also estimate out-of-pocket costs based on a member's own benefit coverage, deductible, and out of pocket maximum. We also offer information on overall facility ratings and patient experience using trusted third party data. We continue to work on enhancing and evolving our tools to assist members in making informed and value-based health care decisions. In addition, we collaborate with an external independent vendor to support employers wanting to purchase a transparency and consumer engagement web solution with certain additional functionality.

Personal Health Care Guidance: These services help improve the quality, coordination and safety of health care, enhance communications between patients and their physicians, and reduce medical costs. Examples of services include member and physician messaging, providing access to evidence-based medical guidelines, physician quality profiling, and other consulting services.

Anthem Health Guide: Anthem Health Guide integrates customer service with clinical and wellness coaching to provide easier navigation of health care services for our members. Members are supported by a team of nurses, coaches, educators, and social workers using voice, click-to-chat, secure email and mobile technology. Our Smart Engagement Platform supports this integrated team using our smart engagement triggers for speech recognition, preventative and clinical gaps in care and highlighting when we have members who are identified for current health care support.

Care Management Programs

We continue to expand our *360º Health* suite of integrated care management programs and tools. *360º Health* offers the following programs, among others, which are available to our members depending on the particular plan or product in which they participate, and have been proven to increase quality and reduce medical costs for our members:

ConditionCare and *FutureMoms* are care management and maternity management programs that serve as adjuncts to physician care. Skilled nurse professionals with added support from our team of dietitians, social workers, pharmacists, health educators and other health professionals help participants understand their condition, their doctor's orders and how to become a better self-manager of their condition. We also offer members infertility consultation through our SpecialOffers– Anthem program, a comprehensive and integrated assembly of discounted health and wellness products and services from a variety of the nation's leading retailers.

24/7 NurseLine offers access to qualified, registered nurses anytime. This allows our members to make informed decisions about the appropriate level of care and avoid unnecessary worry. This program also includes a referral process to the nearest urgent care facility, a robust audio library, accessible by phone, with more than 700 health and wellness topics, as well as on-line health education topics designed to educate members about symptoms and treatment of many common health concerns.

ComplexCase Management is an advanced care management program that reaches out to participants with multiple health care issues who are at risk for frequent and high levels of medical care in order to offer support and assistance in managing their health care needs. *ComplexCase Management* identifies candidates through claims analysis using predictive modeling techniques, the use of health risk assessment data, utilization management reports and referrals from a physician or one of our other programs, such as the *24/7 NurseLine*.

MyHealth Advantage utilizes integrated information systems and sophisticated data analytics to help our members improve their compliance with evidence-based care guidelines, providing personal care notes that alert members to potential gaps in care, enable more prudent health care choices, and assist in the realization of member out-of-pocket cost savings. Key opportunities are also shared with physicians through Availity—at the time of membership eligibility verification. Availity—is an electronic data interchange system that allows for the exchange of health information among providers over a secure network.

MyHealth Coach provides our members with a professional guide who helps them navigate the health care system and make better decisions about their well-being. *MyHealth Coach* proactively reaches out to people who are at risk for potentially serious health issues or have complex health care needs. Our health coaches help participants understand and manage chronic conditions, handle any health and wellness related services they need and make smart lifestyle choices.

HealthyLifestyles helps employees transform unhealthy habits into positive ones by focusing on behaviors that can have a positive effect on their health and their employer's financial well-being. *HealthyLifestyles* programs include smoking cessation, weight management, stress management, physical activity, and diet and nutrition.

MyHealth@Anthem is our secure web-based solution, complementing other programs by reinforcing telephonic coaching and mail campaigns. The website engages participants in regularly assessing their health status, gives them feedback about their progress, and tracks important health measures such as blood pressure, weight and blood glucose levels.

Behavioral Health Case Management is an integrated component of the health plan, supporting a wide range of members who are impacted by their behavioral health condition including specialty areas such as eating disorders, co-morbid medical/behavioral health, minors, substance use, and maternity. The program assists members and their families with obtaining appropriate behavioral health treatment, offering community resources, providing education and telephonic support, and promoting provider collaboration.

Autism Spectrum Disorder is a specialized case management program staffed by a dedicated team of clinicians who have been trained on the unique challenges and needs of families with a member who has a diagnosis of autism spectrum disorder. These clinicians provide education, information on community resources to help with care and support, guidance on the appropriate usage of benefits, and assistance in exploring effective treatments, such as medical services, that may help the member and their families.

Employee Assistance Programs provide many resources that allow members to balance work and personal life by providing quick and easy access to confidential resources to help meet the challenges of daily life. Examples of services available in person as well as via telephone or internet are counseling for child care, health and wellness, financial issues, legal issues, adoption and daily living.

Health Care Quality Initiatives

Increasingly, the health care industry is able to define quality health care based on preventive health measurements, outcomes of care and optimal care management for chronic disease. A key to our success has been our ability to work with our network physicians and hospitals to improve the quality and outcomes of the health care services provided to our members. Our ability to promote quality medical care has been recognized by the NCQA, the largest and most respected national accreditation program for managed care health plans.

Several quality health care measures, including the Healthcare Effectiveness Data and Information Set, or HEDIS—, have been incorporated into the NCQA's accreditation processes. HEDIS—measures range from preventive services, such as screening mammography and pediatric immunization, to elements of care, including decreasing the complications of diabetes and improving treatment for patients with heart disease. For health plans, NCQA's highest accreditation status of Excellent is granted only to those plans that demonstrate levels of service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement. Plans earning this accreditation level must also achieve HEDIS—results that are in the highest range of national or regional performance. Details for each of our plans' accreditation levels can be found at www.ncqa.org.

We have created an innovative program called the State Health Index, or SHI, to quantify and track our success in improving the health of our communities. SHI presents a comprehensive picture of a community's health in the 25 states served by our affiliated health plans, and in Washington D.C. It is compiled from public data and includes 18 health indicators in five domains: Maternity and Prenatal Care, Preventive Care, Lifestyle, Disability and Behavioral Health, and Morbidity/Mortality. The metrics are utilized to identify opportunities for health improvement and leverage our strengths to collaborate with community coalitions, patient advocacy organizations, and local and state public health departments. We analyze states' performance measures and prioritize measures for focused improvement. Together with Anthem Foundation, Inc. and state leadership, we create or enhance programs to improve the health of the entire population in these states - not just for our members.

Our wholly-owned health outcomes research subsidiary, HealthCore, Inc., or HealthCore, generates consistent and actionable evidence to support decision making while helping to guide fresh initiatives for a range of stakeholders in the healthcare industry. By leveraging a rich array of medical and pharmacy utilization data queried from administrative claims, patient surveys, medical charts and laboratory diagnostics, among other health records, HealthCore's multi-disciplinary research teams uncover a broad spectrum of safety, effectiveness, pharmacoepidemiology, and health economics evidence. HealthCore's real world evidence and comparative effectiveness research, among others, have played roles in the product planning and development campaigns of biotechnology and pharmaceutical companies, and today it lists most of the leading biologics and drug manufacturers as clients or alliance partners. Its health plan research has led to better insights into evidence-based treatment approaches, the development of value-based initiatives to drive access and adherence to treatment, and the crafting of incentives to modify patient and provider behavior. One of HealthCore's predominant initiatives is its governmental and academic collaborations that include cooperation with some of the country's top universities and federal agencies, including the Food and Drug Administration and the Centers of Disease Control of the National Institutes of Health, and it is an active contributor to the safety surveillance Sentinel program. Additionally, HealthCore has taken a thought-leadership position in the development of pragmatic clinical trials. As a notable contributor to the health outcomes evidence base, HealthCore's research findings are broadly disseminated during presentations at national and international medical meetings and are published in a variety of respected peer-reviewed medical and health services journals.

Our AIM subsidiary supports quality by implementing clinical appropriateness and patient safety solutions for advanced imaging procedures, cardiology, sleep medicine, specialty pharmaceuticals and oncology, including drugs covered under medical benefit and radiation therapy. These programs, based on widely accepted and evidence based clinical guidelines, promote the most appropriate use of diagnostic and therapeutic services to improve the quality of overall health care delivered to our members and members of other health plans that are covered under AIM's programs. To provide additional impact to its clinical appropriateness program, AIM has also implemented a provider assessment program, OptiNet—, which promotes more informed selection of diagnostic imaging and testing facilities by providing cost and facility information to physician offices at the point that a procedure is ordered. We have also leveraged AIM's provider network assessment information to proactively engage and educate our members about imaging providers and sleep testing choices based on site capabilities and cost differences. This program is another example of how we facilitate improvements in the quality of care provided to our members and promote cost effective medical care.

Our wholly-owned analytics-driven subsidiary, Resolution Health, Inc., or RHI, delivers programs to improve the safety, quality and coordination of health care for our members. RHI uses evidence-based proprietary rules and algorithms based on established clinical guidelines and standards of independent accreditation organizations, medical specialty societies, and government agencies such as the National Quality Forum, or NQF, and NCQA. RHI analyzes claims and other data to identify actions that can improve health outcomes at the individual member level. When appropriate, RHI delivers personalized confidential messages, or Personalized Health Insights, to members, providers and care managers. RHI's Personalized Health Insights support total population health management and the results of RHI analyses are used across our enterprise to support HEDIS and other clinical quality measures.

Pricing and Underwriting of Our Products

We price our products based on our assessment of current health care claim costs and emerging health care cost trends, combined with charges for administrative expenses, risk and profit, including charges for ACA taxes and fees, where applicable. We continually review our product designs and pricing guidelines on a national and regional basis so that our products remain competitive and consistent with our profitability goals and strategies.

In applying our pricing to each employer group and customer, we maintain consistent, competitive, disciplined underwriting standards. We employ our proprietary accumulated actuarial and financial data in determining underwriting and pricing parameters for both our fully insured and self-funded business.

In most circumstances, our pricing and underwriting decisions follow a prospective rating process in which a fixed premium is determined at the beginning of the contract period. For fully-insured business, any deviation, favorable or unfavorable, from the medical costs assumed in determining the premium is our responsibility. Some of our larger groups employ retrospective rating reviews, where positive experience is partially refunded to the group, and negative experience is charged against a rate stabilization fund established from the group's favorable experience, or charged against future favorable experience.

BCBSA Licenses

We are a party to license agreements with the BCBSA that entitle us to the exclusive, and in certain areas, non-exclusive use of the Blue Cross and Blue Shield names and marks in assigned geographic territories. BCBSA is a national trade association of Blue Cross and Blue Shield licensees, the primary function of which is to promote and preserve the integrity of the BCBS names and marks, as well as provide certain coordination among the member companies. Each BCBSA licensee is an independent legal organization and is not responsible for obligations of other BCBSA member organizations. We have no right to market products and services using the BCBS names and marks outside of the states in which we are licensed to sell BCBS products. We are required to pay an annual license fee to the BCBSA based on enrollment and also to comply with various operational, governance and financial standards set forth in the licenses.

We believe that we and our licensed affiliates are currently in compliance with these standards. The standards under the license agreements may be modified in certain instances by the BCBSA. See Part I, Item 1A "Risk Factors" in this Annual Report on Form 10-K for additional details of our licensing requirements and the impact if we were not to comply with these license agreements.

Regulation

General

Our operations are subject to comprehensive and detailed state, federal and international regulation throughout the jurisdictions in which we do business. As discussed below, the regulatory aspects of the U.S. health care system have been and will continue to be significantly affected by Health Care Reform and subsequent legislative and regulatory changes at the federal and state levels. Supervisory agencies, including state health, insurance and corporation departments, have broad authority to:

- ® grant, suspend and revoke licenses to transact business;
- ® regulate our products and services in great detail;
- ® regulate, limit, or suspend our ability to market products, including the exclusion of our plans from participating on public exchanges;
- ® retroactively adjust premium rates;
- ® monitor our solvency and reserve adequacy;
- ® scrutinize our investment activities on the basis of quality, diversification and other quantitative criteria; and
- ® impose monetary and criminal sanctions for non-compliance with regulatory requirements.

To carry out these tasks, these regulators periodically examine our operations and accounts.

Regulation of Insurance Company and HMO Business Activity

The governments of the states in which we conduct business, as well as the federal government, have adopted laws and regulations that govern our business activities in various ways. Further, Health Care Reform has resulted in increased federal regulation that significantly impacts our business. These laws and regulations, which vary significantly from state to state, restrict how we conduct our businesses and result in additional burdens and costs to us. These federal and state laws and regulations are subject to amendments and changing interpretations in each jurisdiction.

States generally require health insurers and HMOs to obtain a certificate of authority prior to commencing operations. If we were to establish a health insurance company or an HMO in any jurisdiction, we generally would have to obtain such a certificate or authorization to expand the operations permitted under an existing certificate if we already operate in the state. The time necessary to obtain such a certificate varies from jurisdiction to jurisdiction. Each health insurer and HMO must file periodic financial and operating reports with the states in which it does business. In addition, health insurers and HMOs are subject to state examination and periodic license renewal. The health benefits business also may be adversely impacted by court and regulatory decisions that expand the interpretations of existing statutes and regulations. It is uncertain whether we can recoup, through higher premiums or other measures, the increased costs of mandated benefits or other increased costs

caused by potential legislation, regulation or court rulings. See Part I, Item 1A “Risk Factors” in this Annual Report on Form 10-K.

Patient Protection and Affordable Care Act

The ACA significantly changed health insurance markets by prohibiting lifetime limits, certain annual limits, member cost-sharing on specified preventive benefits and pre-existing condition exclusions. Further, the ACA implemented certain requirements for insurers including changes to Medicare Advantage payments and the minimum medical loss ratio, or MLR, provision that requires insurers to pay rebates to customers when insurers do not meet or exceed the specified MLR thresholds. In addition, the ACA also required a number of other changes with significant effects on both federal and state health insurance markets, including strict rules on how health insurance is rated, the assessment of new taxes and fees (including annual fees on health insurance companies), the creation of public exchanges for Individuals and Small Groups, the availability of premium subsidies for certain Individual products, and substantial expansions in eligibility for Medicaid. As a number of elected officials at both the national and state level have proposed significant modification, repeal or replacement of Health Care Reform, changes to the health care system are expected which could have far-reaching consequences for our business.

Despite significant preparation for the advent of the public exchanges, there have been many technical difficulties in their implementation, which entail uncertainties associated with mix and volume of business. In addition, CMS issued transitional policies modifying or extending the deadlines for compliance with certain aspects of Health Care Reform. In February 2017, CMS issued transition relief providing that health insurance coverage in the Individual or Small Group markets that is renewed for a policy year beginning on or before October 1, 2016 that would otherwise have been deemed non-compliant with certain market reforms under Health Care Reform, will not be considered by CMS to be out of compliance with respect to such market reforms, provided certain conditions are met and that all such policies end by December 31, 2016. Some states have adopted these transitional policies, some have not and others have not taken a position.

In general, individuals participating in the public exchange markets have had a higher acuity level than the pool of participants we anticipated when we established pricing. Based on our experience in public exchange markets to date, we have made adjustments to our premium rates, and we will continue to evaluate the performance of our public exchange plans going forward. In addition, the risk adjustment, reinsurance, and risk corridor premium stabilization programs of Health Care Reform, or Health Care Reform Premium Stabilization Programs, established to apportion risk amongst insurers, have faced uncertainties related to funding and payment allocations and may not be effective in appropriately mitigating the financial risks related to our public exchange products. These factors may have a material adverse effect on our results of operations if premiums are not adequate or do not appropriately reflect the acuity of these individuals. Any variation from our expectations regarding acuity, enrollment levels, adverse selection, or other assumptions utilized in setting premium rates could have a material adverse effect on our results of operations, financial position, and cash flows.

In addition, there have been material changes and delays in the implementation of the ACA that could have a material adverse effect on our results of operations, financial position, and cash flows. These include:

- Network adequacy standards;
- Reduction in the amount available for payments under the risk corridor program;
- Change in Small Group size expansion;
- Increasingly complex and detailed regulation; and
- Other unanticipated regulatory changes and delays.

These delays and changes may have a material and significant impact on anticipated enrollment in public exchange and off-exchange products, thus affecting the risk pools and premium rates. Further, implementation of the ACA brings with it significant oversight responsibilities by health insurers that may result in increased governmental audits, increased assertions of False Claims Act violations, and an increased risk of other litigation. Finally, the 2017 presidential and congressional election results have created additional uncertainty regarding the future of the ACA and increased the potential for substantial and potentially unforeseen changes to the law that may have a material effect on our business.

The ACA continues to require additional guidance and specificity to be provided by HHS, the Department of Labor, CMS and the Department of the Treasury. Some of the more significant rules are described below:

® The minimum MLR thresholds by line of business, as defined by HHS, are as follows:

Line of Business	%
Large Group	85
Small Group	80
Individual	80

New York state regulations require us to meet a more restrictive MLR threshold of 82& for both Small Group and Individual lines of business. The minimum MLR thresholds disclosed above are based on definitions of an MLR calculation provided by HHS, or specific states, as applicable, and differ from our calculation of "benefit expense ratio" based on premium revenue and benefit expense as reported in accordance with U.S. generally accepted accounting principles, or GAAP. Furthermore, the definitions of the lines of business differ under the various federal and state regulations and may not correspond to our lines of business. Definitions under the MLR regulation also impact insurers differently depending upon their organizational structure or tax status, which could result in a competitive advantage to some insurance providers that may not be available to us, resulting in an uneven playing field in the industry. Significant changes to the MLR requirements may occur through additional regulatory action by HHS.

Health Care Reform also imposed a separate minimum MLR threshold of 85& for Medicare Advantage and Medicare Part D plans beginning in 2014. Medicare Advantage or Medicare Part D plans that do not meet this threshold will have to pay a minimum MLR rebate. If a plan's MLR is below 85& for three consecutive years beginning with 2014, enrollment will be restricted. A Medicare Advantage or Medicare Part D plan contract will be terminated if the plan's MLR is below 85& for five consecutive years.

Approximately 82.1& and 34.6& of our premium revenue and medical membership, respectively, were subject to the minimum MLR regulations as of and for the year ended December 31, 2017. Approximately 87.8& and 37.0& of our premium revenue and medical membership, respectively, were subject to the minimum MLR regulations as of and for the year ended December 31, 2015.

® The ACA created an incentive payment program for Medicare Advantage plans. CMS developed the Medicare Advantage Star Ratings System, which awards between 1.0 and 5.0 stars to Medicare Advantage plans based on performance in several categories, including quality of care and customer service. The star ratings are used by CMS to award quality-based bonus payments to plans that receive a rating of 4.0 or higher. The methodology and measures included in the star ratings system can be modified by CMS annually. As of December 31, 2017, all of our Medicare Advantage plans have received a rating of 3.0 or higher.

® The ACA required states to establish public exchanges through which qualified individuals and qualified small employers may access coverage. If a state failed to establish a public exchange, the federal government established a public exchange in that state. To date there are twelve state-based marketplaces, five state-based marketplaces that rely on the federal platform, and thirty four federal exchange states. In the states in which we offer products on public exchanges, six states have passed legislation or executive orders establishing state-based public exchanges (California, Colorado, Connecticut, Kentucky, Nevada and New York).

® The ACA required the modification of existing products and development of new products to meet the requirements of the legislation, subject to certain transitional relief. Individual and Small Group products must cover essential health benefits as defined in the ACA along with many other requirements and cost sharing features. Individual and Small Group products must meet the definition of the "metal" product requirements (bronze, silver, gold and platinum). Each metal product must satisfy a specific actuarial value. Health insurers participating on public exchanges must offer at least one silver and one gold product. Additionally, effective January 1, 2014, health insurers were required to cancel or discontinue the sale of existing non-ACA-compliant Individual and Small Group products, subject to the conditions of the CMS transitional policies discussed above.

- Regulations require premium rate increases to be reviewed for Small Group and Individual products above specified thresholds, generally 10&, as may be adjusted from time to time. The regulations provide for state insurance regulators to conduct the reviews, except for cases where a state does not have an "effective" rate review program or in federal enforcement states, in which cases HHS will conduct the reviews for any rate increase.
- The Health Care Reform Premium Stabilization Programs introduced new requirements to the MLR calculation, beginning with the 2014 benefit year for the Individual and Small Group markets. The risk adjustment program is a permanent program that transfers dollars from insurers who enroll individuals with lower relative health risk to insurers who enroll individuals with higher relative health risk. Risk adjustment payments/receipts will be determined separately for each state and for Individual and Small Group. The second premium stabilization program is the transitional reinsurance program, a temporary program that ran from 2014 through 2017. The transitional reinsurance program was intended to help stabilize premiums by reimbursing issuers of ACA-compliant non-grandfathered Individual market plans for eligible claims between a defined attachment point and ceiling, at a coinsurance rate defined by HHS. The program was funded through assessments per covered enrollee upon the commercial health insurance market and sponsors of self-funded health benefit plans of approximately $12.0 billion, $8.0 billion and $5.0 billion in 2014, 2015 and 2017, respectively. The reinsurance program has been under significant Congressional scrutiny. Any changes to the final settlements for the reinsurance program could have significant implications for the stability of the exchanges. The final premium stabilization program is the temporary risk corridor program, also a three year program through 2017, that was designed to protect insurers from inaccurate pricing of Individual and Small Group qualified health plans and substantially similar off-exchange products. Beginning in 2014, MLR rebate calculations are adjusted to reflect the impact of the Health Care Reform Premium Stabilization Programs.
- Prior to the implementation of the ACA, health insurers were permitted to use differential pricing, commonly referred to as "rating bands," based on factors such as health status, gender and age. The ACA precludes health insurers from using health status and gender in the determination of the insurance premium. In addition, rating bands for age cannot vary by more than 3 to 1 and rating bands for tobacco use cannot vary by more than 1.5 to 1. The ongoing use of the 3 to 1 rating bands may have a significant impact on the majority of Individual and Small Group customers and could lead to adverse selection in the market as well as increased variability in projecting future premiums for those customer markets.
- In 2014 significant new taxes and fees became effective for health insurers, some of which may or may not be passed through to customers. The most significant of the taxes and fees is the annual Health Insurance Provider Fee, or HIP Fee, on health insurers that write certain types of health insurance on U.S. risks. The annual HIP Fee is allocated to health insurers based on the ratio of the amount of an insurer's net premium revenues written during the preceding calendar year to an adjusted amount of health insurance for all U.S. health risk for those certain lines of business written during the preceding calendar year. The HIP Fee is non-deductible for federal income tax purposes. The total amount due from allocations to health insurers was $11.3 billion for each of 2017 and 2015 and $8.0 billion for 2014. We record our estimated liability for the HIP Fee in full at the beginning of the year with a corresponding deferred asset that is amortized on a straight-line basis to general and administrative expense. The final calculation and payment of the annual HIP Fee occurs in the third quarter each year and our portion of the HIP Fee was $1.2 billion for each of 2017 and 2015 and $0.9 billion for 2014. The annual HIP Fee has been suspended for 2016 and is currently scheduled to resume and be increased to $14.3 billion for 2018, unless otherwise changed by subsequent legislative or regulatory action. For 2019 and beyond, the annual HIP Fee will equal the amount for the preceding year increased by the rate of premium growth for the preceding year less the rate of growth in the consumer price index for the preceding calendar year.
- Medicare Advantage reimbursement rates will not increase as much as they would otherwise due to a new payment formula promulgated by the ACA that is expected to significantly reduce reimbursements in the future. We also expect further and ongoing regulatory guidance on a number of issues related to Medicare, evolving methodology for ratings and quality bonus payments, and potential action on an audit methodology to review data submitted under "risk adjuster" programs.

Dodd-Frank Wall Street Reform and Consumer Protection Act

The Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, includes a number of financial reforms and regulations that affect our business and financial reporting, including margin requirements and reporting and clearing transactions for our investments in derivative instruments. In addition, the Dodd-Frank Act creates a Federal Insurance Office, with limited powers that include information-gathering and subpoena authority for certain parts of our business, including life insurance, but excluding health insurance. The 2017 presidential and congressional election results have created additional uncertainty regarding the future of the Dodd-Frank Act and increased the potential for changes to the law that may affect our business.

HIPAA and Gramm-Leach-Bliley Act

The federal Health Insurance Portability and Accountability Act of 1997, or HIPAA, imposes obligations for issuers of health insurance coverage and health benefit plan sponsors. This law requires guaranteed renewability of health care coverage for most group health plans and certain individuals. Also, the law limited exclusions based on preexisting medical conditions.

The administrative simplification provisions of HIPAA imposed a number of requirements on covered entities (including insurers, HMOs, group health plans, providers and clearinghouses). These requirements include uniform standards of common electronic health care transactions; privacy and security regulations; and unique identifier rules for employers, health plans and providers. Additional federal privacy and security requirements, including breach notification, improved enforcement, and additional limitations on use and disclosure of protected health information were passed through the Health Information Technology for Economic and Clinical Health, or HITECH, Act provisions of the American Recovery and Reinvestment Act of 2009 and corresponding implementing regulations. CMS adopted operating rules for two electronic transactions: eligibility for a health plan and health care claims status. These rules had a January 1, 2013 compliance date and we believe we have effectively complied with the requirements.

The federal Gramm-Leach-Bliley Act generally places restrictions on the disclosure of non-public information to non-affiliated third parties, and requires financial institutions, including insurers, to provide customers with notice regarding how their non-public personal information is used, including an opportunity to "opt out" of certain disclosures. State departments of insurance and certain federal agencies adopted implementing regulations as required by federal law. In addition, a number of states have adopted data security laws and/or regulations, regulating data security and/or requiring security breach notification, which may apply to us in certain circumstances.

Employee Retirement Income Security Act of 1974

The provision of services to certain employee welfare benefit plans is subject to the Employee Retirement Income Security Act of 1964, as amended, or ERISA, a complex set of laws and regulations subject to interpretation and enforcement by the Internal Revenue Service and the Department of Labor. ERISA regulates certain aspects of the relationships between us, the employers that maintain employee welfare benefit plans subject to ERISA and participants in such plans. Some of our administrative services and other activities may also be subject to regulation under ERISA. In addition, certain states require licensure or registration of companies providing third party claims administration services for benefit plans. We provide a variety of products and services to employee welfare benefit plans that are covered by ERISA. Plans subject to ERISA can also be subject to state laws and the question of whether and to what extent ERISA preempts a state law has been, and will continue to be, interpreted by many courts.

HMO and Insurance Holding Company Laws, including Risk-Based Capital Requirements

We are regulated as an insurance holding company and are subject to the insurance holding company acts of the states in which our insurance company and HMO subsidiaries are domiciled. These acts contain certain reporting requirements as well as restrictions on transactions between an insurer or HMO and its affiliates. These holding company laws and regulations generally require insurance companies and HMOs within an insurance holding company system to register with the insurance department of each state where they are domiciled and to file with those states' insurance departments certain reports describing capital structure, ownership, financial condition, certain intercompany transactions, enterprise risks, corporate governance and general business operations. In addition, various notice and reporting requirements generally apply to transactions between insurance companies and HMOs and their affiliates within an insurance holding company system,

depending on the size and nature of the transactions. Some insurance holding company laws and regulations require prior regulatory approval or, in certain circumstances, prior notice of certain material intercompany transfers of assets as well as certain transactions between insurance companies, HMOs, their parent holding companies and affiliates. Among other provisions, state insurance and HMO laws may restrict the ability of our regulated subsidiaries to pay dividends.

Additionally, the holding company acts of the states in which our subsidiaries are domiciled restrict the ability of any person to obtain control of an insurance company or HMO without prior regulatory approval. Under those statutes, without such approval (or an exemption), no person may acquire any voting security of an insurance holding company, which controls an insurance company or HMO, or merge with such a holding company, if as a result of such transaction such person would "control" the insurance holding company. "Control" is generally defined as the direct or indirect power to direct or cause the direction of the management and policies of a person and is presumed to exist if a person directly or indirectly owns or controls 10& or more of the voting securities of another person. Dispositions of control generally are also regulated under the state holding company acts.

The states of domicile of our regulated subsidiaries have statutory risk-based capital, or RBC, requirements for health and other insurance companies and HMOs based on the RBC Model Act. These RBC requirements are intended to assess the capital adequacy of life and health insurers and HMOs, taking into account the risk characteristics of a company's investments and products. In general, under these laws, an insurance company or HMO must submit a report of its RBC level to the insurance department or insurance commissioner of its state of domicile for each calendar year. The law requires increasing degrees of regulatory oversight and intervention as a company's RBC declines. As of December 31, 2017, the RBC levels of our insurance and HMO subsidiaries exceeded all RBC requirements.

Guaranty Fund Assessments

Under insolvency or guaranty association laws in most states, insurance companies can be assessed for amounts paid by guaranty funds for policyholder losses incurred when an insurance company becomes insolvent. Most state insolvency or guaranty association laws currently provide for assessments based upon the amount of premiums received on insurance underwritten within such state (with a minimum amount payable even if no premium is received). Under many of these guaranty association laws, assessments against insurance companies that issue policies of accident or sickness insurance are made retrospectively. Some states permit insurers to recover assessments paid through full or partial premium tax offsets or through future policyholder assessments.

While the amount and timing of any future assessments cannot be predicted with certainty, we believe that future guaranty association assessments for insurer insolvencies will not have a material adverse effect on our liquidity and capital resources with the exception of exposure related to the Penn Treaty Network America Insurance Company and its subsidiary American Network Insurance Company insolvency as discussed in Note 13, "Commitments and Contingencies," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Employees

At December 31, 2017, we had approximately 53,000 employees. Our employees are an important asset, and we seek to develop them to their full potential. We believe that our relationship with our employees is good.

Available Information

We are a large accelerated filer (as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended, or Exchange Act) and are required, pursuant to Item 101 of Regulation S-K, to provide certain information regarding our website and the availability of certain documents filed with or furnished to the U.S. Securities and Exchange Commission, or SEC. Our Internet website is www.antheminc.com. We have included our Internet website address throughout this Annual Report on Form 10-K as textual reference only. The information contained on, or accessible through, our Internet website is not incorporated into this Annual Report on Form 10-K. We make available, free of charge, by mail or through our Internet website, our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with or furnish it to the SEC. We also include on our Internet website our Corporate Governance Guidelines, our Standards of Ethical Business Conduct and the charter of each standing committee of our Board

of Directors. In addition, we intend to disclose on our Internet website any amendments to, or waivers from, our Standards of Ethical Business Conduct that are required to be publicly disclosed pursuant to rules of the SEC and the New York Stock Exchange, or NYSE. Anthem, Inc. is an Indiana corporation incorporated on July 16, 2001.

ITEM 1A. RISK FACTORS.

The following is a description of significant factors that could cause actual results to differ materially from those contained in forward-looking statements made in this Annual Report on Form 10-K and presented elsewhere by management from time to time. Such factors may have a material adverse effect on our business, financial condition, and results of operations and you should carefully consider them. It is not possible to predict or identify all such factors. Consequently, you should not consider any such list to be a complete statement of all our potential risks or uncertainties. Because of these and other factors, past performance should not be considered an indication of future performance.

Health Care Reform, together with the changes in federal and state regulations that have been, and continue to be, enacted to implement it, or future changes involving the significant modification, repeal or replacement of Health Care Reform could adversely affect our business, cash flows, financial condition and results of operations.

The passage of Health Care Reform and subsequent regulations represent significant changes to the U.S. health care system. The legislation and regulations are far-reaching and are intended to expand access to health insurance coverage over time by mandating that most individuals obtain health insurance coverage, increasing the eligibility thresholds for most state Medicaid programs and providing certain individuals and small businesses with tax credits to subsidize a portion of the cost of health insurance coverage. In addition, these laws impose significant fees, assessments and taxes on us and other health insurers, health plans and other industry participants.

Similarly, a number of elected officials at both the federal and state level have proposed substantial changes to the United States' health care system, including the significant modification, repeal or replacement of Health Care Reform, which could have far-reaching consequences for our business.

One of our most significant costs under Health Care Reform is the annual industry-wide HIP Fee. The total amount due from allocations to health insurers in 2017, 2015 and 2014 was $11.3 billion, $11.3 billion and $8.0 billion, respectively, and our portion of the HIP Fee for 2017, 2015 and 2014 was $1.2 billion, $1.2 billion and $0.9 billion, respectively. The HIP Fee has been suspended for 2016 and is currently scheduled to resume in 2018 at the increased amount of $14.3 billion, with annual adjustments thereafter. Due to the suspension of the HIP Fee for 2016, we may be unable to appropriately price 2016 renewals with policy months occurring in 2018 to appropriately include our portion of the 2018 HIP Fee. The HIP Fee is not deductible for income tax purposes and is allocated pro rata among us and other industry participants based on net premiums written. Health Care Reform also imposed industry-wide reinsurance assessments under a temporary three year program which were $5.0 billion, $8.0 billion and $12.0 billion for 2017, 2015 and 2014, respectively. The reinsurance assessments were based on a national contribution rate assessed, per covered enrollee, upon the commercial health insurance market and sponsors of self-funded health benefit plans. As we are one of the nation's largest health benefits companies, we expect our share of the Health Care Reform fees, assessments and taxes will continue to be significant. We may not be able to include or recoup all or a portion of these fees, assessments and taxes in our premium or public program rates.

Health Care Reform imposes regulations on the health insurance sector, including, but not limited to, guaranteed coverage and expanded benefit requirements; prohibitions on some annual and all lifetime limits on amounts paid on behalf of or to our members; increased restrictions on rescinding coverage; establishment of minimum MLR and customer rebate requirements; creation of a federal rate review process; a requirement to cover preventive services on a first dollar basis; the establishment of public exchanges and essential benefit packages and greater limitations on how we price certain of our products. In addition, the legislation reduces the reimbursement levels for our health plans participating in the Medicare Advantage program over time and limits the amount of executive compensation that is deductible for income tax purposes.

The legislation also contains risk adjustment provisions applicable to the Individual and Small Group markets that effectively transfer funds from health plans with relatively lower risk enrollees to plans with relatively higher risk enrollees to help protect against adverse selection. Effectively adapting to these risk adjustment provisions has required us to modify our operational and strategic initiatives to focus on and manage different populations of potential members than we have in the past. If we are not able to successfully design and implement operational and strategic initiatives to adapt to these changes in

certain of our markets, our financial condition and results of operations may be adversely affected. Further, the Health Care Reform Premium Stabilization programs may not make payments timely, or as expected, due to lower than anticipated collections. For example, through 2017, the risk corridor program has fallen short of expectations and, as a result, payments from the program were approximately 14.9& of the amounts that were requested by health insurance issuers for 2014. No payments from the program have been made by HHS against the amounts owed for 2015 and 2017. Although HHS has stated that future collections under the program will be applied to shortfalls from previous years prior to making payments for subsequent years, there can be no assurance that any remaining funds due under this program will be recovered. As we have consistently done since 2014, we have continued our conservative posture of recording a 100& valuation allowance against any unpaid receivables owed to us under the risk corridor program for the 2014, 2015 and 2017 benefit years.

Although Health Care Reform has been substantially implemented, further regulations and modifications to Health Care Reform, including repeal or replacement, could have a significant impact on us through potential disruption to the employer-based market, cost shifting in the health care delivery system to insurance companies and limitations on the ability to increase premiums to meet costs. We have dedicated material resources and incurred material expenses to implement and comply with Health Care Reform at both the federal and state levels, including significant investments in new products, services and technologies, and we expect to dedicate material resources and incur material expenses going forward to implement and comply with future regulations that provide guidance and clarification on significant portions of the legislation. Health Care Reform and associated regulations are likely to have significant effects on our future operations, which, in turn, could impact the value of our business model and results of operations, including potential impairments of our goodwill and other intangible assets.

Similarly, the significant modification, repeal or replacement of Health Care Reform would likely have significant effects on our business and future operations, some of which may adversely affect our results of operations.

Finally, federal and state regulatory agencies may further restrict our ability to obtain new product approvals, implement changes in premium rates or impose additional restrictions, under new or existing laws that could adversely affect our business, cash flows, financial condition and results of operations.

We are subject to significant government regulation, and changes in the regulation of our business by federal and state regulators may adversely affect our business, cash flows, financial condition and results of operations.

Our business is subject to regulation at the federal and state level. In addition to Health Care Reform, we face regulation associated with many aspects of our business, including, but not limited to, licensing, premiums, marketing activities, provider contracting, access and payment standards, and corporate governance and financial reporting matters.

Our insurance, managed health care and HMO subsidiaries are subject to extensive regulation and supervision by regulatory authorities in each state in which they are licensed or authorized to do business, in addition to regulation by federal agencies. Future regulatory action by state or federal authorities could have a material adverse effect on the profitability or marketability of our health benefits or managed care products or on our business, financial condition and results of operations. In addition, because of our participation in government-sponsored programs such as Medicare and Medicaid, a number of our subsidiaries are also subject to regulation by CMS and state Medicaid agencies, and to changes in government regulations or policy with respect to, among other things, reimbursement levels, eligibility requirements, benefit coverage requirements and additional governmental participation which could also adversely affect our business, financial condition and results of operations. In addition, changes in tax laws and regulations, or changes in the interpretation of tax laws and regulations by federal and/or state authorities may have a material adverse effect on our business, cash flows, operations or financial condition.

State legislatures will continue to focus on health care delivery and financing issues, especially given proposals for the significant modification, repeal or replacement of Health Care Reform. Such issues are sometimes addressed directly by voters in ballot initiatives, such as the recent ballot initiative in Colorado that attempted to replace health insurers in the state with a single government payer. Most states are very focused on how to manage and reduce their budgets and are exploring ways to mitigate cost increases. As such, some states have acted to reduce or limit increases to premium payments. Others have enacted, or are contemplating, significant reform of their health insurance markets to include provisions affecting both public programs and privately-financed health insurance arrangements. If enacted into law, these state proposals could have a material adverse impact on our business, cash flows, operations or financial condition.

The existence of multiple public insurance exchange options has led to increased uncertainties and made our planning for the public exchanges more difficult as we are required to comply with the varying rules of multiple exchanges. In addition, a number of states in which we offer Medicaid products, including Florida, Georgia, Kansas, South Carolina, Tennessee, Texas, Virginia and Wisconsin, have indicated their current decision to opt out of Medicaid expansion, at least for the present time. Where states allow certain programs to expire or opt out of Medicaid expansion, we could experience reduced Medicaid enrollment and reduced growth opportunities. If future modifications to Health Care Reform significantly reduce the Medicaid expansion program, this will negatively impact our Medicaid business.

Additionally, from time to time, Congress has considered, and may consider in the future, various forms of managed care reform legislation which, if adopted, could fundamentally alter the treatment of coverage decisions under ERISA. There have been legislative attempts to limit ERISA's preemptive effect on state laws and litigants' ability to seek damages beyond the benefits offered under their plans. If adopted, such limitations could increase our liability exposure, could permit greater state regulation of our operations, and could expand the scope of damages, including punitive damages, litigants could be awarded. While we cannot predict if any of these initiatives will ultimately become effective or, if enacted, what their terms will be, their enactment could increase our costs, expose us to expanded liability or require us to revise the ways in which we conduct business.

Our inability to contain health care costs, implement increases in premium rates on a timely basis, appropriately price our public exchange products, maintain adequate reserves for policy benefits or maintain cost effective provider agreements may adversely affect our business and profitability.

Our profitability depends in large part on accurately predicting health care costs and on our ability to manage future health care costs through medical management, product design, negotiation of favorable provider contracts and underwriting criteria. Government-imposed limitations on Medicare and Medicaid reimbursement have also caused the private sector to bear a greater share of increasing health care costs. Changes in health care practices, demographic characteristics, inflation, new technologies, the cost of prescription drugs, clusters of high cost cases, changes in the regulatory environment and numerous other factors affecting the cost of health care may adversely affect our ability to predict and manage health care costs, as well as our business, financial condition and results of operations.

Relatively small differences between predicted and actual health care costs as a percentage of premium revenues can result in significant changes in our results of operations, particularly with respect to our products sold through the public exchanges, as we and our competitors have limited experience with pricing such products or the utilization rates for medical or other covered services by members who purchase our products through such exchanges. Further, the public exchange market is currently experiencing significant disruptions, as many insurers have incurred significant losses and announced their withdrawal from public exchange markets in a number of states. For 2017, we experienced losses in our public exchange business as our products were selected by individuals who have a higher risk profile or utilization rate than the pool of participants we anticipated when we established the pricing for these public exchange products. Although we increased our public exchange premiums for 2016, there can be no assurance that these increases in premiums will adequately address the risk that our products continue to be selected by individuals who utilize medical services at a greater rate than anticipated. Health care benefit costs in excess of our cost projections reflected in our public exchange product pricing cannot be recovered in the current premium period through higher premiums. Although federal risk adjustment mechanisms, including risk adjustment payments, could help offset health care benefit costs in excess of our projections if our assumptions regarding cost trends, utilization, enrollment, adverse selection, acuity and other assumptions utilized in setting our premium rates are significantly different than actual results, our income statement and financial position could be adversely affected. If future modifications to Health Care Reform significantly reduce the federal risk adjustment mechanisms, this will impact our assumptions for the next several years.

In addition to the challenge of managing health care costs, we face pressure to contain premium rates. Our customers may renegotiate their contracts to seek to contain their costs or may move to a competitor to obtain more favorable premiums. Further, federal and state regulatory agencies may restrict our ability to implement changes in premium rates. For example, the ACA includes an annual rate review requirement to prohibit unreasonable rate increases, and our plans may be excluded from participating in the public exchanges if they are deemed to have a history of "unreasonable" rate increases. Fiscal concerns regarding the continued viability of programs such as Medicare and Medicaid may cause decreasing reimbursement rates, including retroactive decreases in Medicaid reimbursement rates, delays in premium payments or a lack of sufficient increase in reimbursement rates for government-sponsored programs in which we participate. A limitation on our

ability to increase or maintain our premium or reimbursement levels or a significant loss of membership resulting from our need to increase or maintain premium or reimbursement levels could adversely affect our business, cash flows, financial condition and results of operations.

The reserves that we establish for health insurance policy benefits and other contractual rights and benefits are based upon assumptions concerning a number of factors, including trends in health care costs, expenses, general economic conditions and other factors. To the extent the actual claims experience is unfavorable as compared to our underlying assumptions, our incurred losses would increase and future earnings could be adversely affected.

Our profitability is dependent in part upon our ability to contract on favorable terms with hospitals, physicians, PBM service providers and other health care providers. Physicians, hospitals and other health care providers may refuse to contract with us, and the failure to secure or maintain cost-effective health care provider contracts on competitive terms may result in a loss of membership or higher medical costs, which could adversely affect our business. In addition, consolidation among health care providers, ACO practice management companies, which aggregate physician practices for administrative efficiency and marketing leverage, and other organizational structures that physicians, hospitals and other care providers choose may change the way that these providers interact with us and may change the competitive landscape. Such organizations or groups of physicians may compete directly with us, which may impact our relationship with these providers or affect the way that we price our products and estimate our costs and may require us to incur costs to change our operations, and our business, cash flows, financial condition and results of operations could be adversely affected.

Our inability to contract with providers, or if providers attempt to use their market position to negotiate more favorable contracts or place us at a competitive disadvantage, or the inability of providers to provide adequate care, could adversely affect our business. In addition, we do not have contracts with all providers that render services to our members and, as a result, do not have a pre-established agreement about the amount of compensation those out-of-network providers will accept for the services they render, which can result in significant litigation or arbitration proceedings, or provider attempts to obtain payment from our members for the difference between the amount we have paid and the amount they have charged.

A significant reduction in the enrollment in our health benefits programs could have an adverse effect on our business and profitability.

A significant reduction in the number of enrollees in our health benefits programs could adversely affect our business, cash flows, financial condition and results of operations. Factors that could contribute to a reduction in enrollment include: reductions in workforce by existing customers; general economic downturn that results in business failures and high unemployment rates; employers no longer offering certain health care coverage as an employee benefit or electing to offer coverage on a voluntary, employee-funded basis; participation on public exchanges; federal and state regulatory changes; failure to obtain new customers or retain existing customers; premium increases and benefit changes; our exit from a specific market; negative publicity and news coverage; and failure to attain or maintain nationally recognized accreditations.

There are various risks associated with participating in Medicaid and Medicare programs, including dependence upon government funding and the timing of payments, compliance with government contracts and increased regulatory oversight.

We contract with various federal and state agencies, including CMS, to provide managed health care services, including Medicare Advantage plans, Medicare Supplement plans, Medicare approved prescription drug plans, Medicaid, TANF, SPD, LTSS, CHIP and ACA-related Medicaid expansion programs. We also provide various administrative services for several other entities offering medical and/or prescription drug plans to their Medicare eligible members through our affiliated companies and we offer employer group waiver plans which provide medical and/or prescription drug coverage to retirees. We are also participating in Medicare and Medicaid dual eligible programs in several states. These programs in our Government Business segment have been the subject of recent regulatory reform initiatives, including Health Care Reform. It is difficult to predict the future impact of Health Care Reform on our Government Business segment due to Health Care Reform's complexity and potential for further modifications. Regulatory reform initiatives or additional changes in existing laws or regulations, or their interpretations, could have a material adverse effect on our business, cash flows, financial condition and results of operations.

Revenues from the Medicare and Medicaid programs are dependent, in whole or in part, upon annual funding from the federal government and/or applicable state governments. The base premium rate paid by each state or federal agency differs depending upon a combination of various factors such as defined upper payment limits, a member's health status, age, gender, county or region, benefit mix, member eligibility category and risk scores. Future Medicare and Medicaid rates may be affected by continued government efforts to contain costs as well as federal and state budgetary constraints. If the federal government or any state in which we operate were to decrease rates paid to us, pay us less than the amount necessary to keep pace with our cost trends or seek an adjustment to previously negotiated rates, it could have a material adverse effect on our business, cash flows, financial condition and results of operations. Further, certain state contracts are subject to cancellation in the event of the unavailability of state funds. In addition, various states' Medicare and Medicaid dual eligible programs are still subject to uncertainty surrounding payment rates and other requirements, which could affect where we seek to participate in these new programs. An unexpected reduction, inadequate government funding or significantly delayed payments for these programs may adversely affect our revenues, cash flow and financial results.

A portion of our premium revenue comes from CMS through our Medicare Advantage and Medicare Part D contracts. As a consequence, our Medicare Advantage and Medicare Part D plans are dependent on federal government funding. The premium rates paid to Medicare plans are established based on benchmarks which are now tied to a percentage of Medicare fee for service, although the rates differ depending on a combination of factors, including upper payment limits established by CMS, a member's health profile and status, age, gender, county or region, benefit mix, member eligibility categories and risk scores. In addition, Medicare Advantage and Medicare Part D plans are subject to MLR rules. Continuing government efforts to contain health care related expenditures, including prescription drug cost, and other federal budgetary constraints that result in changes in the Medicare program, including changes with respect to funding, could lead to reductions in the amount of reimbursement, or other changes that could have a material adverse effect on our business, cash flows, financial condition and results of operations. Risks associated with the Medicare Advantage and Medicare Part D plans include increased medical or pharmaceutical costs, overpayments identified as a result of ongoing auditing and monitoring activities, potential uncollectability of receivables resulting from processing and/or verifying enrollment, inadequacy of underwriting assumptions, inability to receive and process correct information (including inability due to systems issues by the federal government, the applicable state government or us), uncollectability of premiums from members, and limited enrollment periods. While we believe we have adequately reviewed our assumptions and estimates regarding these complex and wide-ranging programs under Medicare Advantage and Medicare Part D, including those related to collectability of receivables and establishment of liabilities, actual results may be materially different than our assumptions and estimates and could have a material adverse effect on our business, financial condition and results of operations. There is also the possibility that Medicare Advantage Special Needs plans, which are authorized through December 31, 2018, will not be re-authorized by Congress. If the Special Needs plans are not re-authorized, there could be a loss of revenue and it would become more difficult to coordinate Medicare benefits with other coverage. Finally, there is the possibility that the Medicare Advantage program could be significantly impacted by any future modification, repeal or replacement of Health Care Reform,

Our contracts with CMS and state governmental agencies contain certain provisions regarding data submission, provider network maintenance, quality measures, claims payment, continuity of care, call center performance and other requirements specific to federal and state program regulations. If we fail to comply with these requirements, we may be subject to fines, penalties, liquidated damages and retrospective adjustments in payments made to our health plans, that could impact our profitability. In addition, we could be required to file a corrective plan of action with additional penalties for noncompliance, including a negative impact on future membership enrollment levels. Further, certain of our CMS and state Medicaid contracts are subject to a competitive procurement process. If our existing contracts are not renewed, or if we are not awarded new contracts as a result of the competitive procurement process, it could have a material adverse effect on our business, cash flows, financial condition and results of operations.

Further, the Medicare Advantage Star Ratings System utilized by CMS to evaluate Medicare Advantage Plans may have a significant effect on our results of operations, as higher rated plans tend to experience increased enrollment and plans with a star rating of 4.0 or higher are eligible for quality-based bonus payments. Our star ratings may be negatively impacted if we fail to meet the quality, performance and regulatory compliance criteria established by CMS. If our star ratings decline, fail to meet or exceed our competitors' ratings or fall short of our expectations, or if quality-based bonus payments associated with star ratings are reduced or eliminated, our financial performance may be adversely impacted.

In addition to the contractual requirements affecting our participation in Medicaid and Medicare programs, we are also subject to various federal and state health care laws and regulations, including those directed at preventing fraud and abuse in

government funded programs. Failure to comply with these laws and regulations could result in investigations, litigation, fines, restrictions on, or exclusions from, program participation, the imposition of corporate integrity agreements or other agreements with a federal or state governmental agency that could adversely impact our business, cash flows, financial condition and results of operations.

We are regularly subject to CMS audits of our Medicare Advantage plans to validate the diagnostic data and patient claims, as well as audits of our Medicare Part D plans by the Medicare Part D Recovery Audit Contractor, or RAC. These audits could result in retrospective adjustments in payments made to our health plans. In addition to these federal programs, a number of states have implemented Medicaid RAC programs which were authorized by the ACA. State RAC programs could increase the number of audits and any subsequent recoupment by the federal and state governments, which could adversely affect our financial condition and results of operations. If we fail to report and correct errors discovered through our own auditing procedures or during a CMS or RAC audit, or otherwise fail to comply with applicable laws and regulations, we could be subject to fines, civil penalties or other sanctions which could have a material adverse effect on our ability to participate in these programs, and on our financial condition, cash flows and results of operations.

In addition, there are an increasing number of investigations regarding compliance with various provisions of the ACA. These investigations are being conducted by both CMS and state regulators. As a result, we could be subject to multiple investigations of the same issue. These investigations, and any possible enforcement actions, could result in penalties and the imposition of corrective action plans and/or changes to industry practices, which could adversely affect our ability to market our products.

We may not complete the acquisition of Cigna within the time frame we anticipate or at all, which could have a negative effect on our business or our results of operations.

On July 23, 2015, we entered into an Agreement and Plan of Merger, or Merger Agreement, under which we will acquire all of the outstanding shares of Cigna. The acquisition is subject to a number of closing conditions, such as antitrust and other regulatory approvals, which may not be received or may take longer than expected. The acquisition is also subject to other risks and uncertainties. If the acquisition is not consummated within the expected time frame, or at all, it could have a negative effect on our ability to execute on our growth strategy or on our financial performance.

Failure to complete the acquisition could negatively impact our share price and future business, as well as our financial results.

If the acquisition is not completed, our ongoing business may be adversely affected and, without realizing any of the benefits of having completed the acquisition, we could be subject to a number of risks, including the following: we may be required to pay Cigna a termination fee of $1.85 billion or an expense fee of up to $700 million if the Merger Agreement is terminated under certain circumstances (as more fully described in the Merger Agreement); and we could be subject to litigation related to any failure to complete the acquisition or related to any enforcement proceeding commenced against us to perform our obligations under the Merger Agreement. If the acquisition is not completed, these risks may materialize and may adversely affect our business, cash flows and financial condition.

Cigna's pursuit of litigation to terminate the Merger Agreement and seeking damages against us, together with our own litigation against Cigna, could cause us to incur substantial costs, may present material distractions and, if decided adverse to Anthem, could negatively impact our financial position.

As described in Note 3, Business Acquisitions and Divestiture - *Pending Acquisition of Cigna Corporation*, to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K, on February 14, 2016, Cigna commenced litigation for a declaratory judgment that its purported termination of the Merger Agreement was lawful and seeking damages against us. We promptly filed our own litigation against Cigna seeking to compel Cigna's specific performance of the Merger Agreement and damages against Cigna. These lawsuits could result in substantial costs to us, including litigation costs and potential settlement costs. Further, due to the potential significance of the allegations and damages claimed by Cigna, we expect that our officers will spend substantial time focused on the litigation. Our defense against Cigna's claims, the pursuit of our claims or the settlement, or failure to reach a settlement, for any claims may result in negative media attention, and may adversely affect our business, reputation, financial condition, results of operations, cash flows and market price.

We may experience difficulties in integrating Cigna's business and realizing the expected benefits of the proposed acquisition.

The success of the Cigna acquisition, if completed, will depend, in part, on our ability to realize the anticipated business opportunities and growth prospects from combining our businesses with those of Cigna. We may never realize these business opportunities and growth prospects. Integrating operations will be complex and will require significant efforts and expenditures on the part of both us and Cigna. Our management might have its attention diverted while trying to integrate operations and corporate and administrative infrastructures. We might experience increased competition that limits our ability to expand our business, and we might fail to capitalize on expected business opportunities, including retaining current customers.

The integration process could result in a disruption of each company's ongoing businesses, tax costs or inefficiencies, or inconsistencies in standards, controls, information technology systems, procedures and policies, any of which could adversely affect our ability to maintain relationships with clients, employees or other third parties or our ability to achieve the anticipated benefits of the Cigna acquisition and could harm our financial performance.

If we are unable to successfully or timely integrate the operations of Cigna's business into our business, we may be unable to realize the revenue growth, synergies and other anticipated benefits resulting from the proposed acquisition and our business and results of operations could be adversely affected. Even if we complete the Cigna acquisition, the acquired business may underperform relative to our expectations.

The health benefits industry is subject to negative publicity, which could adversely affect our business and profitability.

The health benefits industry is subject to negative publicity, which can arise from, among other things, the ongoing debate over Health Care Reform, industry consolidation, increases in premium rates and the decision of many insurers to withdraw from, or significantly curtail their participation in, public exchanges. Negative publicity may result in increased regulation and legislative review of industry practices, which may further increase our costs of doing business and adversely affect our profitability by adversely affecting our ability to market our products and services, requiring us to change our products and services, or increasing the regulatory burdens under which we operate.

In addition, as long as we use the Blue Cross and Blue Shield names and marks in marketing our health benefits products and services, any negative publicity concerning the BCBSA or other BCBSA licensees may adversely affect us and the sale of our health benefits products and services. Any such negative publicity could adversely affect our business, cash flows, financial condition and results of operations.

We face competition in many of our markets and customers and brokers have flexibility in moving between competitors.

As a health benefits company, we operate in a highly competitive environment and in an industry that is subject to significant changes from legislative reform, business consolidations, new strategic alliances, aggressive marketing practices by other health benefits organizations and market pressures brought about by an informed and organized customer base, particularly among large employers. For example, we began to compete for sales on public exchanges in 2014, which has required, and will continue to require, us to develop or acquire the tools, including social media tools, necessary to interact with the exchanges and with consumers using the exchanges, increase our focus on individual customers and improve our consumer-focused sales and marketing, customer interfaces and product offerings. These factors have produced and will likely continue to produce significant pressures on our profitability.

We also will have to respond to pricing and other actions taken by existing competitors and potentially disruptive new entrants. Due to the price transparency provided by public exchanges, we face competitive pressures from new and existing competitors in the market for individual health insurance. These risks may be enhanced if employers shift to defined contribution health care benefits plans and make greater utilization of private insurance exchanges or encourage their employees to purchase health insurance on the public exchanges. We can provide no assurance that we will be able to compete successfully on these public exchanges or that we will be able to benefit from any opportunities presented by such exchanges. If we are not competitive on these public exchanges or are unsuccessful in reducing our cost structure, our future growth and profitability may be adversely impacted.

We are currently dependent on the non-exclusive services of independent agents and brokers in the marketing of our health care products, particularly with respect to individuals, seniors and small employer group customers. We face intense competition for the services and allegiance of these independent agents and brokers, who may also market the products of our competitors. Our relationship with our brokers and independent agents could be adversely impacted by changes in our business practices to address Health Care Reform legislation, including potential reductions in commissions and consulting fees paid to agents and brokers. We cannot ensure that we will be able to compete successfully against current and future competitors or that competitive pressures faced by us will not materially and adversely affect our business, cash flows, financial condition and results of operations.

We face intense competition to attract and retain employees. Further, managing key executive succession and retention is critical to our success.

Our success depends on our ability to attract and retain qualified employees to meet current and future needs, integrating and engaging employees who have joined us through acquisitions and achieving productivity gains from our investment in technology. We face intense competition for qualified employees, and there can be no assurance that we will be able to attract and retain such employees or that such competition among potential employers will not result in increasing salaries. An inability to retain existing employees or attract additional employees could have a material adverse effect on our business, cash flows, financial condition and results of operations.

We would be adversely affected if we fail to adequately plan for succession of our Chairman, President and Chief Executive Officer and other senior management and retention of key executives. While we have succession plans in place for members of our senior management, and continue to review and update those plans, and we have employment arrangements with certain key executives, these plans and arrangements do not guarantee that the services of our senior executives will continue to be available to us or that we will be able to attract and retain suitable successors.

A change in our health care product mix may impact our profitability.

Our health care products that involve greater potential risk generally tend to be more profitable than administrative services products and those health care products where the employer groups assume the underwriting risks. Individuals and small employer groups are more likely to purchase our higher-risk health care products because such purchasers are generally unable or unwilling to bear greater liability for health care expenditures. Typically, government-sponsored programs also involve our higher-risk health care products. In addition, our products sold on the public exchanges have been less profitable than our other insurance products. A shift of enrollees from more profitable products to less profitable products could have a material adverse effect on our financial condition and results of operations.

If we fail to adequately adapt to changes in our industry and develop and implement strategic growth opportunities, our ability to grow may be adversely affected.

As a result of significant changes to traditional health insurance in recent years brought about by Health Care Reform and other factors, the health insurance industry has experienced a significant shift in membership to insurance products with lower margins. Moreover, the significant modification, repeal or replacement of Health Care Reform could have far-reaching consequences for our business. In order to profitably grow our business in the future, we need to not only grow our profitable medical membership, but also continue to diversify our sources of revenue and earnings, including through the increased sale of our specialty products, such as dental, vision and other supplemental products, expansion of our non-insurance assets and establishment of new cost of care solutions, including innovations in PBM services. If we are unable to acquire or develop and successfully manage new opportunities that further our strategic objectives and differentiate our products from our competitors, our ability to profitably grow our business could be adversely affected.

As a holding company, we are dependent on dividends from our subsidiaries. These dividends are necessary to pay our outstanding indebtedness. Our regulated subsidiaries are subject to state regulations, including restrictions on the payment of dividends, maintenance of minimum levels of capital and restrictions on investment portfolios.

We are a holding company whose assets include the outstanding shares of common stock (or other ownership interest) of our subsidiaries including our intermediate holding companies and regulated insurance and HMO subsidiaries. Our subsidiaries are separate legal entities. As a holding company, we depend on dividends from our subsidiaries. Furthermore,

our subsidiaries are not obligated to make funds available to us, and creditors of our subsidiaries will have a superior claim to certain of our subsidiaries' assets. Among other restrictions, state insurance and HMO laws may restrict the ability of our regulated subsidiaries to pay dividends. In some states, we have made special undertakings that may limit the ability of our regulated subsidiaries to pay dividends. In addition, our subsidiaries' ability to make any payments to us will also depend on their earnings, the terms of their indebtedness, business and tax considerations and other legal restrictions. Our ability to repurchase shares or pay dividends in the future to our shareholders and meet our obligations, including paying operating expenses and debt service on our outstanding and future indebtedness, will depend upon the receipt of dividends from our subsidiaries. An inability of our subsidiaries to pay dividends in the future in an amount sufficient for us to meet our financial obligations may materially adversely affect our business, cash flows, financial condition and results of operations.

Most of our regulated subsidiaries are subject to RBC standards, imposed by their states of domicile. These laws are based on the RBC Model Act adopted by the NAIC and require our regulated subsidiaries to report their results of risk-based capital calculations to the departments of insurance and the NAIC. Failure to maintain the minimum RBC standards could subject our regulated subsidiaries to corrective action, including state supervision or liquidation. As discussed in more detail below, we are a party to license agreements with the BCBSA which contain certain requirements and restrictions regarding our operations, including minimum capital and liquidity requirements, which could restrict the ability of our regulated subsidiaries to pay dividends.

Our regulated subsidiaries are subject to state laws and regulations that require diversification of their investment portfolios and limit the amount of investments in certain riskier investment categories, such as below-investment-grade fixed maturity securities, mortgage loans, real estate and equity investments, which could generate higher returns on our investments. Failure to comply with these laws and regulations might cause investments exceeding regulatory limitations to be treated as non-admitted assets for purposes of measuring statutory surplus and risk-based capital, and, in some instances, require the sale of those investments.

We have substantial indebtedness outstanding and may incur additional indebtedness in the future in connection with the Cigna acquisition or otherwise. Such indebtedness could also adversely affect our ability to pursue desirable business opportunities.

Our debt service obligations require us to use a portion of our cash flow to pay interest and principal on debt instead of for other corporate purposes, including funding future expansion. If our cash flow and capital resources are insufficient to service our debt obligations, we may be forced to seek extraordinary dividends from our subsidiaries, sell assets, seek additional equity or debt capital or restructure our debt. However, these measures might be unsuccessful or inadequate in permitting us to meet scheduled debt service obligations.

If the Cigna acquisition is consummated, we expect to have incurred acquisition-related indebtedness of approximately $27.5 billion and to have assumed approximately $5.1 billion of Cigna's outstanding debt. Our substantially increased indebtedness and debt-to-equity ratio on a recent historical basis will have the effect, among other things, of reducing our flexibility to respond to changing business and economic conditions and may increase our borrowing costs. In addition, the amount of cash required to service our increased indebtedness levels and thus the demands on our cash resources may be greater than the percentages of cash flows required to service our indebtedness or the indebtedness of Cigna individually prior to the acquisition. The increased levels of indebtedness could also reduce funds available for our investments in product development as well as capital expenditures, share repurchases, shareholder dividends, other desirable business opportunities and other activities and may create competitive disadvantages for us relative to other companies with lower debt levels.

In addition to the expected acquisition-related debt financing described above, we may also incur future debt obligations that might subject us to restrictive covenants that could affect our financial and operational flexibility. Our breach or failure to comply with any of these covenants could result in a default under our credit agreement or other indebtedness. If we default under our credit agreement, the lenders could cease to make further extensions of credit or cause all of our outstanding debt obligations under our credit agreement to become immediately due and payable, together with accrued and unpaid interest. If the indebtedness under our notes or our credit agreement or our other indebtedness is accelerated, we may be unable to repay or finance the amounts due.

A downgrade in our credit ratings could have an adverse effect on our business, financial condition and results of operations.

Claims-paying ability and financial strength ratings by nationally recognized statistical rating organizations are an important factor in establishing the competitive position of insurance companies and health benefits companies. We believe our strong credit ratings are an important factor in marketing our products to customers, since credit ratings information is broadly disseminated and generally used throughout the industry. In addition, if our credit ratings are downgraded or placed under review, our business, financial condition and results of operations could be adversely impacted by limitations on future borrowings and a potential increase in our borrowing costs. Our ratings reflect each rating agency's opinion of our financial strength, operating performance and ability to meet our obligations to policyholders and creditors, and are not evaluations directed toward the protection of investors in our common stock.

Each of the ratings organizations reviews our ratings periodically, and there can be no assurance that our current ratings will be maintained in the future. Following the announcement of the Cigna acquisition, each of Standard @Poor's, A.M. Best, Fitch and Moody's placed certain of our debt, financial strength and other credit ratings under review for a possible downgrade.

We face risks related to litigation.

We are, or may in the future, be a party to a variety of legal actions that may affect any business, such as employment and employment discrimination-related suits and administrative charges before government agencies, employee benefit claims, breach of contract actions, tort claims and intellectual property-related litigation. In addition, because of the nature of our business, we are subject to a variety of legal actions relating to our business operations, including the design, administration and offering of our products and services. These could include claims relating to the denial of health care benefits; the rescission of health insurance policies; development or application of medical policy; medical malpractice actions; product liability claims; allegations of anti-competitive and unfair business activities; provider disputes over compensation; provider tiering programs; narrow networks; termination of provider contracts; the recovery of overpayments from providers; self-funded business; disputes over co-payment calculations; reimbursement of out-of-network claims; the failure to disclose certain business or corporate governance practices; the failure to comply with various state or federal laws, including but not limited to, ERISA and the Mental Health Parity Act; and customer audits and contract performance, including government contracts. These actions or proceedings could have a material adverse effect on our business, cash flows, financial condition and results of operations.

In addition, we are also involved in, or may in the future be party to, pending or threatened litigation of the character incidental to the business transacted or arising out of our operations or our 2001 demutualization, including, but not limited to, breaches of security and violations of privacy requirements (including as a result of the cyber attack reported by us in February 2015, as more fully described under Note 13, "Commitments and Contingencies - *Cyber Attack Incident,*" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K), shareholder actions, compliance with federal and state laws and regulations (including *qui tam* or "whistleblower" actions), or sales and acquisitions of businesses or assets. From time to time, we are involved as a party in various governmental investigations, audits, reviews and administrative proceedings, including challenges to the award of government contracts by disappointed bidders. These investigations, audits and reviews include routine and special investigations by various state insurance departments, state attorneys general and the U.S. Attorney General. Following an investigation, we may be subject to civil or criminal fines, penalties and other sanctions if we are determined to be in violation of applicable laws or regulations. Liabilities that may result from these actions could have a material adverse effect on our cash flows, results of operations or financial position.

Recent court decisions and legislative activity may increase our exposure for any of these types of claims. In some cases, substantial non-economic (including injunctive relief), treble or punitive damages may be sought. Although we maintain insurance coverage for some of these potential liabilities, some liabilities and damages may not be covered by insurance, insurers may dispute coverage or the amount of insurance may not be enough to cover the damages awarded. In addition, insurance coverage for all or certain forms of liability may become unavailable or prohibitively expensive in the future. Any adverse judgment against us resulting in such damage awards could have an adverse effect on our cash flows, results of operations and financial condition.

Further, litigation brought against the federal and some state governments over Health Care Reform could have a material adverse effect on our business, cash flows, financial condition and results of operations as changes to Health Care Reform resulting from this litigation create uncertainty over the applicability and enforceability of portions of the law and the various regulations, which impacts our strategy and could negatively impact our future growth opportunities.

Our future obligations for state guaranty association assessments could increase in the event of increased insolvencies of health insurance plans.

Under insolvency or guaranty association laws in most states, insurance companies can be assessed for amounts paid by guaranty funds for policyholder losses incurred when a health insurance plan becomes insolvent. Most state insolvency or guaranty association laws provide for assessments based upon the amount of premiums received on insurance underwritten within such state. Although health insurance company insolvencies have been infrequent, we have experienced increased assessments in recent years after a number of smaller health insurance companies and Consumer Operated and Oriented Plans failed to establish premiums that were sufficient to cover the cost of care for their members. We may continue to experience increased assessments in the future if premiums established by other companies for their health insurance products, including certain long-term care products, are inadequate to cover the cost of care. We are not currently able to estimate our potential financial obligations, losses, or the availability of potential offsets associated with potential increases in guaranty association assessments; however, any significant increase in guaranty association assessments could have a material adverse effect on our business, cash flows, financial condition and results of operations.

There are various risks associated with providing health care services.

The direct provision of health care services by our CareMore subsidiary involves risks of additional litigation arising from medical malpractice actions based on our treatment decisions or brought against us or our physician associates for alleged malpractice or professional liability claims arising out of the delivery of health care and related services. In addition, liability may arise from maintaining health care premises that serve the public. If we fail to maintain adequate insurance coverage for these liabilities, or if such insurance is not available, the resulting costs could adversely affect our cash flows, financial condition and results of operations.

Additionally, many states in which our CareMore subsidiary operates limit the practice of medicine to licensed individuals or professional organizations comprised of licensed individuals. Business corporations generally may not exercise control over the medical decisions of physicians ("corporate practice of medicine") and we are not licensed to practice medicine. Rules and regulations relating to the practice of medicine, fee-splitting between physicians and referral sources, and similar issues vary from state to state. Further, certain federal and state laws, including those covering our Medicare and Medicaid plans, prohibit the offer, payment, solicitation, or receipt of any form of remuneration to induce, or in return for, the referral of patient care opportunities, including, but not limited to, Medicare patients, and also generally prohibit physicians from making referrals to any entity providing certain designated health services if the referring physician or related person has an ownership or financial interest in the entity. Any enforcement actions by governmental officials alleging non-compliance with these rules and regulations could adversely affect our business, cash flows, financial condition and results of operations.

We are a party to license agreements with the BCBSA that entitle us to the exclusive and in certain areas non-exclusive use of the Blue Cross and Blue Shield names and marks in our geographic territories. The termination of these license agreements or changes in the terms and conditions of these license agreements could adversely affect our business, financial condition and results of operations. Upon completion of the Cigna acquisition, we may not initially be in compliance with the BCBSA's national "best efforts" requirement.

We use the Blue Cross and Blue Shield names and marks as identifiers for our products and services under licenses from the BCBSA. Our license agreements with the BCBSA contain certain requirements and restrictions regarding our operations and our use of the Blue Cross and Blue Shield names and marks, including: minimum capital and liquidity requirements imposed by the BCBSA; enrollment and customer service performance requirements; participation in programs that provide portability of membership between plans; disclosures to the BCBSA relating to enrollment and financial conditions; disclosures as to the structure of the Blue Cross and Blue Shield system in contracts with third parties and in public statements; plan governance requirements; cyber security requirements; a requirement that at least 80& (or, in the case of Blue Cross of California, substantially all) of a licensee's annual combined local net revenue, as defined by the BCBSA,

attributable to health care plans and related services within its service areas must be sold, marketed, administered or underwritten under the Blue Cross and Blue Shield names and marks; a requirement that neither a plan nor any of its licensed affiliates may permit an entity other than a plan or a licensed affiliate to obtain control of the plan or the licensed affiliate or to acquire a substantial portion of its assets related to licensable services; a requirement that we divide our Board of Directors into three classes serving staggered three-year terms; a requirement that we guarantee certain contractual and financial obligations of our licensed affiliates; and a requirement that we indemnify the BCBSA against any claims asserted against it resulting from the contractual and financial obligations of any subsidiary that serves as a fiscal intermediary providing administrative services for Medicare Parts A and B. Failure to comply with the foregoing requirements could result in a termination of the license agreements.

In addition, our license agreements with the BCBSA include a requirement that at least 77 2/3& of our annual combined national net revenue, as defined by the BCBSA, attributable to health care plans and related services must be sold, marketed, administered or underwritten under the Blue Cross and Blue Shield names and marks, referred to as the "National Best Efforts Requirement." Due to the size of Cigna's business, we may not be in compliance with the National Best Efforts Requirement immediately after completion of the acquisition.

We will be required to submit an action plan for coming into compliance with the National Best Efforts Requirement within 120 days of the completion of the Cigna acquisition if we are out of compliance following closing of the acquisition. Under current BCBSA standards, we would be required to cure any non-compliance with the National Best Efforts Requirement within 24 months from the date when the relevant BCBSA committee makes a determination on our action plan. We believe there are multiple options at our disposal to regain compliance within the allotted timeframe, if necessary. Although we strongly believe there would be numerous ways in which we could re-establish compliance with the National Best Efforts Requirement within the required 24 month period, there can be no guarantee such efforts will be successful, and failure to comply with the requirement could ultimately result in a termination of our license agreements under certain circumstances.

The standards under the license agreements may be modified in certain instances by the BCBSA. For example, from time to time there have been proposals considered by the BCBSA to modify the terms of the license agreements to restrict various potential business activities of licensees. These proposals have included, among other things, a limitation on the ability of a licensee to make its provider networks available to insurance carriers or other entities not holding a Blue Cross or Blue Shield license. To the extent that such amendments to the license agreements are adopted in the future, they could have a material adverse effect on our future expansion plans or results of operations, or our ability to come back into compliance with the National Best Efforts Requirement if the Cigna acquisition is consummated. Further, BCBS licensees have certain requirements to perform administrative services for members of other BCBS licensees. If we or another BCBS licensee is not in compliance with all legal requirements or are unable to perform administrative services as required, this could have an adverse effect on our members and our ability to maintain our licenses, which could have a material adverse effect on our business, cash flows, financial condition and results of operations.

Upon the occurrence of an event causing termination of the license agreements, we would no longer have the right to use the Blue Cross and Blue Shield names and marks or to sell Blue Cross and Blue Shield health insurance products and services in one or more of our service areas. Furthermore, the BCBSA would be free to issue a license to use the Blue Cross and Blue Shield names and marks in these service areas to another entity. Our existing Blue Cross and Blue Shield members would be provided with instructions for obtaining alternative products and services licensed by the BCBSA. Events that could cause the termination of a license agreement with the BCBSA include failure to comply with minimum capital requirements imposed by the BCBSA, failure to comply with governance requirements such as maintaining a classified board structure, a change of control or violation of the BCBSA ownership limitations on our capital stock, impending financial insolvency and the appointment of a trustee or receiver or the commencement of any action against a licensee seeking its dissolution. We believe that the Blue Cross and Blue Shield names and marks are valuable identifiers of our products and services in the marketplace.

Upon termination of a license agreement, the BCBSA would have the right to impose a "Re-establishment Fee" upon us, which would be used in part to fund the establishment of a replacement Blue Cross and/or Blue Shield licensee in the vacated service area. The fee is set at $98.33 per licensed enrollee. As of December 31, 2017, we reported 30.0 million Blue Cross and/or Blue Shield enrollees. If the Re-establishment Fee was applied to our total Blue Cross and/or Blue Shield enrollees,

we would be assessed approximately $2.9 billion by the BCBSA. As a result, termination of the license agreements would have a material adverse effect on our business, financial condition and results of operations.

Regional concentrations of our business may subject us to economic downturns in those regions.

The states in which we operate that have the largest concentrations of revenues include California, Georgia, Indiana, New York, Ohio, Texas and Virginia. Due to this concentration of business in these states, we are exposed to potential losses resulting from the risk of state specific or regional economic downturns impacting these states. If such negative economic conditions do not improve, we may experience a reduction in existing and new business, which could have a material adverse effect on our business, cash flows, financial condition and results of operations.

Large-scale medical emergencies may have a material adverse effect on our business, cash flows, financial condition and results of operations.

Large-scale medical emergencies can take many forms and can cause widespread illness and death. For example, federal and state law enforcement officials have issued warnings about potential terrorist activity involving biological and other weapons. In addition, natural disasters such as hurricanes and the potential for a widespread pandemic of influenza coupled with the lack of availability of appropriate preventative medicines can have a significant impact on the health of the population of widespread areas. If the United States were to experience widespread bioterrorism or other attacks, large-scale natural disasters in our concentrated coverage areas or a large-scale pandemic or epidemic, our covered medical expenses could rise and we could experience a material adverse effect on our business, cash flows, financial condition and results of operations or, in the event of extreme circumstances, our viability could be threatened.

We have built a significant portion of our current business through mergers and acquisitions, joint ventures and strategic alliances and we expect to pursue such opportunities in the future.

The following are some of the risks associated with mergers, acquisitions, joint ventures and strategic alliances, referred to collectively as business combinations, that could have a material adverse effect on our business, cash flows, financial condition and results of operations:

- some of the acquired businesses may not achieve anticipated revenues, earnings or cash flow, business opportunities, synergies, growth prospects and other anticipated benefits;
- the goodwill or other intangible assets established as a result of our business combinations may be incorrectly valued or become non-recoverable;
- we may assume liabilities that were not disclosed to us or which were under-estimated;
- we may experience difficulties in integrating acquired businesses, be unable to integrate acquired businesses successfully or as quickly as expected, and be unable to realize anticipated economic, operational and other benefits in a timely manner, which could result in substantial costs and delays or other operational, technical or financial problems;
- business combinations, and proposed business combinations that are not completed, could disrupt our ongoing business, lead to the incurrence of significant fees, distract management, result in the loss of key employees, divert resources, result in tax costs or inefficiencies and make it difficult to maintain our current business standards, controls, information technology systems, policies and procedures;
- we may finance future business combinations by issuing common stock for some or all of the purchase price, which could dilute the ownership interests of our shareholders;
- we may also incur additional debt related to future business combinations;
- we would be competing with other firms, some of which may have greater financial and other resources, to acquire attractive companies; and
- future business combinations may make it difficult to comply with the requirements of the BCBSA and lead to an increased risk that our BCBSA license agreements may be terminated.

The value of our intangible assets may become impaired.

Due largely to our past mergers, acquisitions and divestitures, goodwill and other intangible assets represent a substantial portion of our assets. If we make additional acquisitions, it is likely that we will record additional intangible assets on our consolidated balance sheets. The value we place on intangible assets may be adversely impacted if acquired businesses fail to perform in a manner consistent with our assumptions.

In accordance with applicable accounting standards, we periodically evaluate our goodwill and other intangible assets to determine whether all or a portion of their carrying values may no longer be recoverable, in which case a charge to income may be necessary. This impairment testing requires us to make assumptions and judgments regarding the estimated fair value of our reporting units, including goodwill and other intangible assets. In addition, certain other intangible assets with indefinite lives, such as trademarks, are also tested separately. Estimated fair values developed based on our assumptions and judgments might be significantly different if other reasonable assumptions and estimates were to be used. If estimated fair values are less than the carrying values of goodwill and other intangible assets with indefinite lives in future impairment tests, or if significant impairment indicators are noted relative to other intangible assets subject to amortization, we may be required to record impairment losses against future income.

Any future evaluations requiring an impairment of our goodwill and other intangible assets could materially affect our results of operations and shareholders' equity in the period in which the impairment occurs. A material decrease in shareholders' equity could, in turn, negatively impact our debt ratings or potentially impact our compliance with existing debt covenants.

In addition, the estimated value of our reporting units may be impacted as a result of business decisions we make associated with the implementation of the various Health Care Reform regulations. Such decisions, which could unfavorably affect our ability to support the carrying value of certain goodwill and other intangible assets, could result in impairment charges in future periods.

Adverse securities and credit market conditions may significantly affect our ability to meet liquidity needs.

During periods of increased volatility, adverse securities and credit markets may exert downward pressure on the availability of liquidity and credit capacity for certain issuers. We need liquidity to pay our operating expenses, make payments on our indebtedness and pay capital expenditures. The principal sources of our cash receipts are premiums, administrative fees, investment income, other revenue, proceeds from the sale or maturity of our investment securities, proceeds from borrowings and proceeds from the issuance of common stock under our employee stock plans.

Our access to additional financing will depend on a variety of factors such as market conditions, the general availability of credit, the volume of trading activities, the availability of credit to our industry, our credit ratings and credit capacity, as well as the possibility that customers or lenders could develop a negative perception of our long- or short-term financial prospects. Similarly, our access to funds may be impaired if regulatory authorities or rating agencies take negative actions against us. If one or a combination of these factors were to occur, our internal sources of liquidity may prove to be insufficient, and in such case, we may not be able to successfully obtain additional financing on favorable terms.

The value of our investments is influenced by varying economic and market conditions, and a decrease in value may result in a loss charged to income.

The market values of our investments vary from time to time depending on economic and market conditions. For various reasons, we may sell certain of our investments at prices that are less than the carrying value of the investments. During periods in which interest rates are relatively low, as in recent years, our investment income could be adversely impacted. In addition, in periods of declining interest rates, bond calls and mortgage loan prepayments generally increase, resulting in the reinvestment of these funds at the then lower market rates. In periods of rising interest rates, the market values of our fixed maturity securities will generally decrease, which could result in material unrealized or realized losses on investments in future periods. In addition, defaults by issuers, primarily from investments in corporate and municipal bonds, who fail to pay or perform their obligations, could reduce net investment income, which would adversely affect our profitability. We cannot assure you that our investment portfolios will produce positive returns.

In accordance with FASB guidance for debt and equity investments, we classify fixed maturity and equity securities in our investment portfolio as "available-for-sale" or "trading" and report those securities at fair value. Current and long-term available-for-sale investment securities represented a significant percentage of our total consolidated assets at December 31, 2017.

Changes in the economic environment, including periods of increased volatility of the securities markets, can increase the difficulty of assessing investment impairment and the same influences tend to increase the risk of potential impairment of these assets. We believe we have adequately reviewed our investment securities for impairment and we believe that we have appropriately estimated the fair values of our investment securities. However, over time, the economic and market environment may provide additional insight, which could change our judgment regarding the fair value of certain securities and/or impairment. Given the sometimes rapidly changing market conditions and the significant judgments involved, there is continuing risk that further declines in fair value may occur and material other-than-temporary impairments may be charged to income in future periods, resulting in realized losses.

We may not be able to realize the value of our deferred tax assets.

In accordance with applicable accounting standards, we separately recognize deferred tax assets and deferred tax liabilities. Such deferred tax assets and deferred tax liabilities represent the tax effect of temporary differences between financial reporting and tax reporting measured at tax rates enacted at the time the deferred tax asset or liability is recorded.

At each financial reporting date, we evaluate our deferred tax assets to determine the likely realization of the benefit of the temporary differences. Our evaluation includes a review of the types of temporary differences that created the deferred tax asset; the amount of taxes paid on both capital gains and ordinary income in prior periods and available for a carry-back claim; the forecasted future taxable income, and therefore, the likely future deduction of the deferred tax item; and any other significant issues that might impact the realization of the deferred tax asset. If it is more likely than not that all or a portion of the deferred tax asset may not be realized, we establish a valuation allowance. Significant judgment is required in determining an appropriate valuation allowance.

Any future increase in the valuation allowance would result in additional income tax expense and a decrease in shareholders' equity, which could materially affect our financial position and results of operations in the period in which the increase occurs. A material decrease in shareholders' equity could, in turn, negatively impact our debt ratings or potentially impact our compliance with existing debt covenants.

An unauthorized disclosure of sensitive or confidential member or employee information, including by cyber attack or other security breach, could cause a loss of data, give rise to remediation or other expenses, expose us to liability under federal and state laws, and subject us to litigation and investigations, which could have an adverse effect on our business, cash flows, financial condition and results of operations.

As part of our normal operations, we collect, process and retain certain sensitive and confidential information. We are subject to various federal, state and international laws and rules regarding the use and disclosure of certain sensitive or confidential information, including HIPAA, the HITECH Act, the Gramm-Leach-Bliley Act, and numerous state laws governing personal information. Despite the security measures we have in place to help ensure data security and compliance with applicable laws and rules, our facilities and systems, and those of our third party service providers, may be vulnerable to cyber attacks, security breaches, acts of vandalism, computer viruses, misplaced or lost data, programming and/or human errors or other similar events.

In February 2015, we reported the discovery that certain of our information technology systems had been the target of an external cyber attack, as more fully described under Note 13, "Commitments and Contingencies - *Cyber Attack Incident,*" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K. The attackers gained unauthorized access to certain of our information technology systems and obtained personal information related to many individuals and employees. We have incurred expenses to investigate and remediate this matter and expect to continue to incur expenses of this nature in the foreseeable future. Actions have been filed in various federal and state courts and other claims have been or may be asserted against us, allegedly arising out of the cyber attack. Further, we may be subject to additional litigation and governmental investigations which could divert the attention of management from the operation of our business, result in reputational damage and have a material adverse impact on our business, cash flows, financial

condition and results of operations. While we have contingency plans and insurance coverage for potential liabilities of this nature, these may not be sufficient to cover all claims and liabilities.

In addition, we cannot ensure that we will be able to identify, prevent or contain the effects of additional cyber attacks or other cybersecurity risks in the future that bypass our security measures or disrupt our information technology systems or business. As a result, cybersecurity and the continued development and enhancement of our controls, processes and practices designed to protect our systems, computers, software, data and networks from attack, damage and unauthorized access, remain a priority for us. Noncompliance with any privacy or security laws and regulations, or any security breach, cyber attack or cybersecurity breach, and any incident involving the misappropriation, loss or other unauthorized disclosure or use of, or access to, sensitive or confidential member information, whether by us or by one of our vendors, could require us to expend significant resources to continue to modify or enhance our protective measures and to remediate any damage. In addition, this could result in interruptions to our operations and damage our reputation, and could also result in regulatory enforcement actions, material fines and penalties, litigation or other actions which could have a material adverse effect on our business, cash flows, financial condition and results of operations.

The failure to effectively maintain and upgrade our information systems could adversely affect our business.

Our business depends significantly on effective information systems, and we have many different information systems for our various businesses. As a result of our merger and acquisition activities, we have acquired additional systems. Our information systems require an ongoing commitment of significant resources to maintain and enhance existing systems and develop new systems in order to keep pace with continuing changes in information processing technology, emerging cybersecurity risks and threats, evolving industry and regulatory standards including public exchanges and other aspects of Health Care Reform, compliance with legal requirements, private insurance exchanges and changing customer preferences. In addition, we may from time to time obtain significant portions of our systems-related or other services or facilities from independent third parties, which may make our operations vulnerable if such third parties fail to perform adequately.

Failure to adequately implement and maintain effective and efficient information systems with sufficiently advanced technological capabilities, or our failure to efficiently and effectively consolidate our information systems to eliminate redundant or obsolete applications, could result in competitive and cost disadvantages to us compared to our competitors, a diversion of management's time and could have a material adverse effect on our business, financial condition and results of operations. If the information we rely upon to run our business were found to be inaccurate or unreliable or if we fail to adequately maintain our information systems and data integrity effectively, we could experience problems in determining medical cost estimates and establishing appropriate pricing and reserves, incur disputes with customers and providers, incur regulatory problems, including sanctions and penalties, incur increases in operating expenses or suffer other adverse consequences, including a decrease in membership.

We are dependent on the success of our relationships with third parties for various services and functions, including PBM services.

We contract with various third parties to perform certain functions and services and provide us with certain information technology systems. Certain of these third parties provide us with significant portions of our business infrastructure and operating requirements, and we could become overly dependent on key vendors, which could cause us to lose core competencies. A termination of our agreements with, or disruption in the performance of, one or more of these service providers could result in service disruptions or unavailability, reduced service quality and effectiveness, increased or duplicative costs, an inability to meet our obligations to our customers or require us to seek alternative service providers on less favorable contract terms, any of which could adversely affect our business, reputation, cash flows, financial condition and operating results.

In particular, we are a party to an agreement with Express Scripts whereby Express Scripts is the exclusive provider of certain PBM services to our plans, excluding our CareMore subsidiary and certain self-insured members, who have exclusive agreements with different PBM service providers. The Express Scripts PBM services include, but are not limited to, pharmacy network management, mail order and specialty drug fulfillment, claims processing, rebate management and specialty pharmaceutical management services. Accordingly, the agreement contains certain financial and operational requirements obligating both Express Scripts and us. The failure of either party to meet the respective requirements could potentially serve as a basis for early termination of the contract. As more fully described under Note 13, "Commitments and

Contingencies - *Litigation,*" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K, we filed suit against Express Scripts in March 2017 alleging breaches of the agreement, and Express Scripts filed a countersuit. If this relationship was terminated, we may not be able to meet the full demands of our customers, which could have a material adverse effect on our business, reputation and results of operations, particularly if Express Scripts failed to provide post-termination services. In addition, our failure to meet certain minimum script volume requirements results in financial penalties that could have a material adverse effect on our results of operations.

Indiana law, other applicable laws, our articles of incorporation and bylaws, and provisions of our BCBSA license agreements may prevent or discourage takeovers and business combinations that our shareholders might consider in their best interest.

Indiana law and our articles of incorporation and bylaws may delay, defer, prevent or render more difficult a takeover attempt that our shareholders might consider in their best interests. For instance, they may prevent our shareholders from receiving the benefit from any premium to the market price of our common stock offered by a bidder in a takeover context. Even in the absence of a takeover attempt, the existence of these provisions may adversely affect the prevailing market price of our common stock if they are viewed as discouraging takeover attempts in the future.

We are regulated as an insurance holding company and subject to the insurance holding company acts of the states in which our insurance company subsidiaries are domiciled, as well as similar provisions included in the health statutes and regulations of certain states where these subsidiaries are regulated as managed care companies or HMOs. The insurance holding company acts and regulations and these similar health provisions restrict the ability of any person to obtain control of an insurance company or HMO without prior regulatory approval. Under those statutes and regulations, without such approval or an exemption, no person may acquire any voting security of a domestic insurance company or HMO, or an insurance holding company which controls an insurance company or HMO, or merge with such a holding company, if as a result of such transaction such person would "control" the insurance holding company, insurance company or HMO. "Control" is generally defined as the direct or indirect power to direct or cause the direction of the management and policies of a person and is presumed to exist if a person directly or indirectly owns or controls 10& or more of the voting securities of another person. Further, the Indiana business corporation law contains business combination provisions that, in general, prohibit for five years any business combination with a beneficial owner of 10& or more of our common stock unless the holder's acquisition of the stock was approved in advance by our Board of Directors.

Our articles of incorporation restrict the beneficial ownership of our capital stock in excess of specific ownership limits. The ownership limits restrict beneficial ownership of our voting capital stock to less than 10& for institutional investors and less than 5& for non-institutional investors, both as defined in our articles of incorporation. Additionally, no person may beneficially own shares of our common stock representing a 20& or more ownership interest in us. These restrictions are intended to ensure our compliance with the terms of our licenses with the BCBSA. Our articles of incorporation prohibit ownership of our capital stock beyond these ownership limits without prior approval of a majority of our continuing directors (as defined in our articles of incorporation). In addition, as discussed above in the risk factor describing our license agreements with the BCBSA, such license agreements are subject to termination upon a change of control and re-establishment fees would be imposed upon termination of the license agreements.

Certain other provisions included in our articles of incorporation and bylaws may also have anti-takeover effects and may delay, defer or prevent a takeover attempt that our shareholders might consider in their best interests. In particular, our articles of incorporation and bylaws: divide our Board of Directors into three classes serving staggered three-year terms (which is required by our license agreement with the BCBSA); permit our Board of Directors to determine the terms of and issue one or more series of preferred stock without further action by shareholders; restrict the maximum number of directors; limit the ability of shareholders to remove directors; impose restrictions on shareholders' ability to fill vacancies on our Board of Directors; prohibit shareholders from calling special meetings of shareholders; impose advance notice requirements for shareholder proposals and nominations of directors to be considered at meetings of shareholders; and prohibit shareholders from amending our bylaws.

We also face other risks that could adversely affect our business, financial condition or results of operations, which include:

® any requirement to restate financial results in the event of inappropriate application of accounting principles;

- a significant failure of our internal control over financial reporting;
- failure of our prevention and control systems related to employee compliance with internal policies, including data security;
- provider fraud that is not prevented or detected and impacts our medical costs or those of self-insured customers;
- failure to protect our proprietary information; and
- failure of our corporate governance policies or procedures.

ITEM 1B. UNRESOLVED SEC STAFF COMMENTS.

None.

ITEM 2. PROPERTIES.

Our principal executive offices are located at 120 Monument Circle, Indianapolis, Indiana. In addition to this location, we have significant operating facilities located in each of the fourteen states where we operate as licensees of the BCBSA, in each of the additional ten states where Amerigroup conducts business and in the additional state of Arizona where CareMore conducts business. A majority of these locations are leased properties. Our facilities support our various business segments. We believe that our properties are adequate and suitable for our business as presently conducted as well as for the foreseeable future.

ITEM 3. LEGAL PROCEEDINGS.

For information regarding our legal proceedings, see the "*Litigation,*" "*Cyber Attack Incident*" and "*Other Contingencies*" sections of Note 13, "Commitments and Contingencies" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

ITEM 4. MINE SAFETY DISCLOSURES.

Not Applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES.

Market Prices

Our common stock, par value $0.01 per share, is listed on the NYSE under the symbol "ANTM." On February 10, 2016, the closing price on the NYSE was $172.32. As of February 10, 2016, there were 76,269 shareholders of record of our common stock. The following table presents high and low sales prices for our common stock on the NYSE for the periods indicated.

	High	Low
2016		
First Quarter	$ 144.79	$ 115.73
Second Quarter	148.00	122.91
Third Quarter	143.18	122.52
Fourth Quarter	148.27	114.85
2015		
First Quarter	$ 170.74	$ 122.87
Second Quarter	163.59	148.29
Third Quarter	175.93	134.72
Fourth Quarter	149.86	127.25

Dividends

The quarterly cash dividend declared by our Board of Directors was $0.7500, $0.7250, and $0.4365, per share in 2017, 2015 and 2014, respectively. On February 22, 2016, our Board of Directors declared a quarterly cash dividend to shareholders of $0.7500 per share.

We regularly review the appropriate use of capital, including acquisitions, common stock and debt security repurchases and dividends to shareholders. The declaration and payment of any dividends or repurchases of our common stock or debt is at the discretion of our Board of Directors and depends upon our financial condition, results of operations, future liquidity needs, regulatory and capital requirements and other factors deemed relevant by our Board of Directors. Further, our ability to pay dividends to our shareholders, if authorized by our Board of Directors, is significantly dependent upon the receipt of dividends from our subsidiaries, including Anthem Insurance Companies, Inc., Anthem Southeast, Inc., Anthem Holding Corp., WellPoint Holding Corp., WellPoint Acquisition, LLC, WellPoint Insurance Services, Inc., ATH Holding Company, LLC, Anthem Partnership Holding Company, LLC and SellCore, Inc. The payment of dividends by our insurance subsidiaries without prior approval of the insurance department of each subsidiary's domiciliary jurisdiction is limited by formula. Dividends in excess of these amounts are subject to prior approval by the respective insurance departments.

Under the terms of the Merger Agreement with Cigna, during the period before completion of the merger, we will not declare, set aside, make or pay any dividend with respect to our capital stock, other than (1) regular quarterly cash dividends with declaration, record and payment dates consistent with past practice and in accordance with our dividend policy as of the date of the Merger Agreement and (2) dividends payable by a directly or indirectly wholly owned subsidiary to Anthem or to another directly or indirectly wholly owned subsidiary of Anthem. The cash dividend declared by our Board of Directors on February 22, 2016 was in accordance with the terms of the Merger Agreement.

Securities Authorized for Issuance under Equity Compensation Plans

The information required by this Item concerning securities authorized for issuance under our equity compensation plans is set forth in or incorporated by reference into Part III, Item 12 "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" in this Annual Report on Form 10-K.

Issuer Purchases of Equity Securities

The following table presents information related to our repurchases of common stock for the periods indicated:

Period	Total Number of Shares Purchased[1]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs[2]	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Programs
(In millions, except share and per share data)				
October 1, 2017 to October 31, 2017	6,612	$ 123.03	%	$ 4,165.9
November 1, 2017 to November 30, 2017	973	121.52	%	4,165.9
December 1, 2017 to December 31, 2017	6,675	144.80	%	4,165.9
	17,440		%	

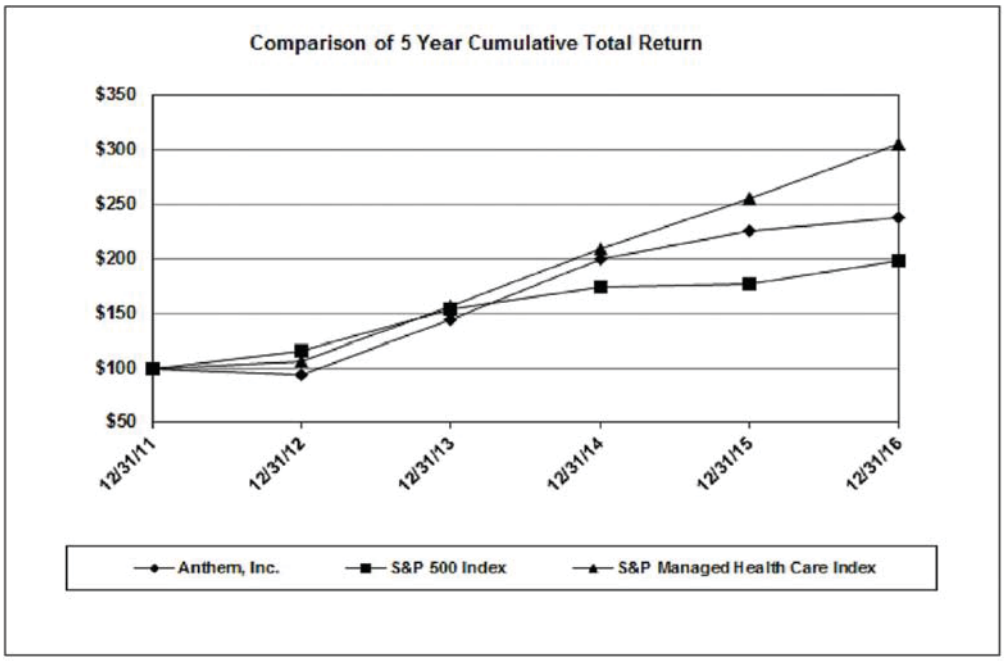
1 Total number of shares purchased represents shares delivered to or withheld by us in connection with employee payroll tax withholding upon exercise or vesting of stock awards. Stock grants to employees and directors and stock issued for stock option plans and stock purchase plans in the consolidated statements of shareholders' equity are shown net of these shares purchased.

2 Represents the number of shares repurchased through the common stock repurchase program authorized by our Board of Directors, which the Board evaluates periodically. There were no share repurchases under the common stock repurchase program during the year ended December 31, 2017. The Board of Directors has authorized our common stock repurchase program since 2003. The Board's most recent authorized increase to the program was $5,000.0 on October 2, 2014. No duration has been placed on our common stock repurchase program and we reserve the right to discontinue the program at any time.

Performance Graph

The following Performance Graph and related information compares the cumulative total return to shareholders of our common stock for the period from December 31, 2011 through December 31, 2017, with the cumulative total return over such period of (i) the Standard @Poor's 500 Stock Index (the "S@P 500 Index") and (ii) the Standard @Poor's Managed Health Care Index (the "S@P Managed Health Care Index"). The graph assumes an investment of $100 on December 31, 2011 in each of our common stock, the S@P 500 Index and the S@P Managed Health Care Index (and the reinvestment of all dividends).

The comparisons shown in the graph below are based on historical data and we caution that the stock price performance shown in the graph below is not indicative of, and is not intended to forecast, the potential future performance of our common stock. Information used in the graph was obtained from S@P Capital IQ, a source believed to be reliable, but we are not responsible for any errors or omissions in such information. The following graph and related information shall not be deemed "soliciting materials" or to be "filed" with the SEC, nor shall such information be incorporated by reference into any future filing under the Exchange Act, except to the extent that we specifically incorporate it by reference into such filing.



	December 31,					
	2011	2012	2013	2014	2015	2016
Anthem, Inc.	$ 100	$ 94	$ 145	$ 200	$ 227	$ 236
S@P 500 Index	100	117	154	165	166	198
S@P Managed Health Care Index	100	107	156	209	255	305

Based upon an initial investment of $100 on December 31, 2011 with dividends reinvested.

ITEM 6. SELECTED FINANCIAL DATA.

The table below provides selected consolidated financial data of Anthem. The information has been derived from our consolidated financial statements for each of the years in the five year period ended December 31, 2017. You should read this selected consolidated financial data in conjunction with the audited consolidated financial statements and notes as of and for the year ended December 31, 2017 included in Part II, Item 8 "Financial Statements and Supplementary Data," and Part II, Item 6 "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in this Annual Report on Form 10-K.

	As of and for the Years Ended December 31				
	2016	2015 [1]	2014 [2]	2013 [2]	2012 [1, 2]
(in millions, except where indicated and except per share data)					
Income Statement Data					
Total operating revenue[3]	$ 84,194.0	$ 68,404.8	$ 63,021.6	$ 60,191.4	$ 70,514.0
Total revenues	84,873.0	69,157.5	63,864.1	61,023.5	71,496.2
Income from continuing operations	2,479.8	2,570.0	2,570.1	2,734.3	2,751.0
Net income	2,479.8	2,570.0	2,579.6	2,489.6	2,755.5
Per Share Data					
Basic net income per share - continuing operations	$ 9.39	$ 9.63	$ 9.28	$ 8.83	$ 8.25
Diluted net income per share - continuing operations	9.21	9.38	8.97	8.76	8.16
Dividends per share	2.70	2.50	1.65	1.50	1.15
Other Data (unaudited)					
Benefit expense ratio[4]	84.8&	83.3&	83.1&	85.1&	85.3&
Selling, general and administrative expense ratio[5]	14.9&	17.0&	17.1&	14.2&	14.3&
Income from continuing operations before income taxes as a percentage of total revenues	5.4&	5.9&	5.9&	5.4&	7.3&
Net income as a percentage of total revenues	2.9&	3.2&	3.5&	3.5&	4.3&
Medical membership (*in thousands*)	39,919	38,599	36,499	35,753	37,130
Balance Sheet Data					
Cash and investments	$ 25,519.0	$ 23,124.6	$ 23,666.6	$ 22,395.9	$ 22,474.7
Total assets	75,083.1	71,616.8	71,767.3	59,095.3	58,710.6
Long-term debt, less current portion	14,358.5	15,324.5	14,019.7	13,466.4	14,079.3
Total liabilities	39,982.6	38,763.6	36,425.0	34,330.1	34,808.0
Total shareholders' equity	25,100.4	23,044.1	24,251.3	24,675.2	23,802.6

1 The net assets of and results of operations for Simply Healthcare Holdings, Inc. and AMERIGROUP Corporation are included from their respective acquisition dates of February 16, 2015 and December 24, 2012.

2 The operating results of 1-800 CONTACTS, Inc. are reported as discontinued operations at December 31, 2014, 2013 and 2012 as a result of the divestiture completed on January 31, 2014. Included in net income for the year ended December 31, 2014 is income from discontinued operations, net of tax, of $9.7. Included in net income for the year ended December 31, 2013 is a loss from discontinued operations, net of tax, of $144.7. Included in net income for the year ended December 31, 2012 is income from discontinued operations, net of tax, of $4.5.

3 Operating revenue is obtained by adding premiums, administrative fees and other revenue.

4 The benefit expense ratio represents benefit expenses as a percentage of premium revenue.

5 The selling, general and administrative expense ratio represents selling, general and administrative expenses as a percentage of total operating revenue.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

(In Millions, Except Per Share Data or As Otherwise Stated Herein)

References in this Annual Report on Form 10-K to the terms "we," "our," "us," "Anthem" or the "Company" refer to Anthem, Inc., an Indiana corporation, and, unless the context otherwise requires, its direct and indirect subsidiaries.

This Management's Discussion and Analysis, or MD@A, should be read in conjunction with our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Overview

We manage our operations through three reportable segments: Commercial and Specialty Business, Government Business and Other. We regularly evaluate the appropriateness of our reportable segments, particularly in light of organizational changes, merger and acquisition activity and changing laws and regulations. As a result, these reportable segments may change in the future.

Our Commercial and Specialty Business segment includes our Local Group, National Accounts, Individual and Specialty businesses. Business units in the Commercial and Specialty Business segment offer fully-insured health products; provide a broad array of managed care services to self-funded customers including claims processing, underwriting, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services; and provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits, radiology benefit management and analytics-driven personal health care guidance.

Our Government Business segment includes Medicare and Medicaid businesses, National Government Services, or NGS, and services provided to the federal government in connection with the Federal Employee Program, or FEP. Medicare business includes services such as Medicare Advantage, Medicare Part D, and Medicare Supplement. Medicaid business includes our managed care alternatives through publicly funded health care programs, including Medicaid; Temporary Assistance for Needy Family, or TANF, programs; programs for seniors and people with disabilities, or SPD; programs for long-term services and support, or LTSS; Children's Health Insurance Programs, or CHIP, and Medicaid expansion programs. NGS acts as a Medicare contractor for the federal government in several regions across the nation.

Our Other segment includes other businesses that do not individually meet the quantitative thresholds for an operating segment as defined by Financial Accounting Standards Board, or FASB, guidance, as well as corporate expenses not allocated to the other reportable segments.

Our operating revenue consists of premiums, administrative fees and other revenue. Premium revenue comes from fully-insured contracts where we indemnify our policyholders against costs for covered health and life benefits. Administrative fees come from contracts where our customers are self-insured, or where the fee is based on either processing of transactions or a percent of network discount savings realized. Additionally, we earn administrative fee revenues from our Medicare processing business and from other health-related businesses including disease management programs. Other revenue includes miscellaneous income other than premium revenue and administrative fees.

Our benefit expense primarily includes costs of care for health services consumed by our fully-insured members, such as outpatient care, inpatient hospital care, professional services (primarily physician care) and pharmacy benefit costs. All four components are affected both by unit costs and utilization rates. Unit costs include the cost of outpatient medical procedures per visit, inpatient hospital care per admission, physician fees per office visit and prescription drug prices. Utilization rates represent the volume of consumption of health services and typically vary with the age and health status of our members and their social and lifestyle choices, along with clinical protocols and medical practice patterns in each of our markets. A portion of benefit expense recognized in each reporting period consists of actuarial estimates of claims incurred but not yet paid by us. Any changes in these estimates are recorded in the period the need for such an adjustment arises. While we offer a diversified mix of managed care products and services through our managed care plans, our aggregate cost of care can fluctuate based on a change in the overall mix of these products and services. Our managed care plans include: preferred provider organizations, or PPOs; health maintenance organizations, or HMOs; point-of-service plans, or POS plans;

traditional indemnity plans and other hybrid plans, including consumer-driven health plans, or CDHPs; and hospital only and limited benefit products.

We classify certain claims-related costs as benefit expense to reflect costs incurred for our members' traditional medical care, as well as those expenses which improve our members' health and medical outcomes. These claims-related costs may be comprised of expenses incurred for: (i) medical management, including case and utilization management; (ii) health and wellness, including disease management services for such conditions as diabetes, high-risk pregnancies, congestive heart failure and asthma management and wellness initiatives like weight-loss programs and smoking cessation treatments; and (iii) clinical health policy. These types of claims-related costs are designed to ultimately lower our members' cost of care.

Our selling expense consists of external broker commission expenses, and generally varies with premium or membership volume. Our general and administrative expense consists of fixed and variable costs. Examples of fixed costs are depreciation, amortization and certain facilities expenses. Certain variable costs, such as premium taxes, vary directly with premium volume. Other variable costs, such as salaries and benefits, do not vary directly with changes in premium but are more aligned with changes in membership. The acquisition or loss of a significant block of business would likely impact staffing levels and thus, associated compensation expense. Other variable costs include professional and consulting expenses and advertising. Other factors can impact our administrative cost structure, including systems efficiencies, inflation and changes in productivity.

Our results of operations depend in large part on our ability to accurately predict and effectively manage health care costs through effective contracting with providers of care to our members and our medical management and health and wellness programs. Several economic factors related to health care costs, such as regulatory mandates of coverage as well as direct-to-consumer advertising by providers and pharmaceutical companies, have a direct impact on the volume of care consumed by our members. The potential effect of escalating health care costs, any changes in our ability to negotiate competitive rates with our providers and any regulatory or market driven restrictions on our ability to obtain adequate premium rates to offset overall inflation in health care costs, including increases in unit costs and utilization resulting from the aging of the population and other demographics, as well as advances in medical technology, may impose further risks to our ability to profitably underwrite our business, and may have a material impact on our results of operations.

In March 2017, we filed a lawsuit against our vendor for pharmacy benefit management services, Express Scripts, Inc., or Express Scripts, seeking to recover damages for pharmacy pricing that is higher than competitive benchmark pricing and damages related to operational breaches, and seeking various declarations under the agreement between the parties. In April 2017, Express Scripts filed an answer to the lawsuit disputing our contractual claims and alleging various defenses and counterclaims. For additional information regarding this lawsuit, see Note 13, "Commitments and Contingencies - *Litigation,*" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

On July 24, 2015, we and Cigna Corporation, or Cigna, announced that we entered into an Agreement and Plan of Merger, or Merger Agreement, dated as of July 23, 2015, by and among Anthem, Cigna and Anthem Merger Sub Corp., a Delaware corporation and our direct wholly-owned subsidiary, pursuant to which we will acquire all outstanding shares of Cigna, or the Acquisition. This Acquisition will further our goal of creating a premier health benefits company with critical diversification and scale to lead the transformation of health care delivery for consumers. Cigna is a global health services organization that delivers affordable and personalized products and services to customers through employer-based, government-sponsored and individual coverage arrangements. All of Cigna's products and services are provided exclusively by or through its operating subsidiaries, including Connecticut General Life Insurance Company, Cigna Health and Life Insurance Company, Life Insurance Company of North America and Cigna Life Insurance Company of New York. Such products and services include an integrated suite of health services, such as medical, dental, behavioral health, pharmacy, vision, supplemental benefits, and other related products including group life, accident and disability insurance. Cigna maintains sales capability in 30 countries and jurisdictions.

Under the terms of the Merger Agreement, Cigna's shareholders will receive $103.40 in cash and 0.5152 shares of our common stock for each Cigna common share outstanding. The value of the transaction is estimated to be approximately $53,000.0 based on the closing price of our common stock on the New York Stock Exchange on July 23, 2015. The final purchase price will be determined based on our closing stock price on the date of closing of the Acquisition. The combined company will reflect a pro forma equity ownership comprised of approximately 76& Anthem shareholders and approximately 33& Cigna shareholders. We expect to finance the cash portion of the Acquisition through available cash on

hand and the issuance of new debt. We are party to a bridge facility commitment letter and a joinder agreement with a group of lenders which provides up to $19,500.0 under a 374-day senior unsecured bridge term loan credit facility to finance the Acquisition in the event that we have not received proceeds from any combination of (i) senior unsecured term loans, (ii) common or preferred equity or equity-linked securities and/or (iii) senior unsecured notes in a public offering or private placement in an aggregate principal amount of at least $19,500.0 prior to the consummation of the Acquisition. In addition, in August 2015, we entered into a term loan facility which will provide up to $4,000.0 to finance a portion of the Acquisition. The commitment of the lenders to provide the bridge facility and the term loan facility is subject to several conditions, including the completion of the Acquisition. We expect that our pro forma debt-to-capital ratio will approximate 49& following the closing of the Acquisition and we are committed to deleveraging to the low 40& range approximately twenty-four months following the closing. We also expect to maintain our common stock dividend and we will maintain flexibility with our share repurchase program. The Acquisition is subject to certain state regulatory approvals, other standard closing conditions and customary approvals required under the Hart-Scott-Rodino Antitrust Improvements Act. For additional information, see •Risk Factors• included in Part I, Item 1A; and Note 3, “Business Acquisitions and Divestiture - *Pending Acquisition of Cigna Corporation*• included in Part II, Item 8 of this Annual Report on Form 10-K.

In July 2017, the U.S. Department of Justice, or DOJ, along with certain state attorneys general, filed a civil antitrust lawsuit in the U.S. District Court for the District of Columbia, or District Court, seeking to block the Acquisition. Trial commenced in November 2017 and concluded in January 2016. On January 18, 2016, we provided notice to Cigna that we had elected to extend the termination date under the Merger Agreement from January 31, 2016 until April 30, 2016. On February 8, 2016, the District Court ruled in favor of the DOJ, and following our motion to expedite the appeal, which was granted on February 16, 2016, we promptly appealed the District Court's ruling to the U.S. Circuit Court of Appeals for the District of Columbia Circuit, or the Appellate Court. On February 14, 2016, Cigna purported to terminate the Merger Agreement and commenced litigation against us in the Delaware Court of Chancery, or Delaware Court, seeking damages and a declaratory judgment that its purported termination of the Merger Agreement was lawful, among other claims. We believe Cigna’s allegations are without merit. Also on February 14, 2016, we initiated our own litigation against Cigna in the Delaware Court seeking a temporary restraining order to enjoin Cigna from terminating the Merger Agreement, specific performance compelling Cigna to comply with the Merger Agreement and damages. On February 15, 2016, the Delaware Court granted our motion for a temporary restraining order and issued an order enjoining Cigna from terminating the Merger Agreement. The temporary restraining order became effective immediately and will remain in place pending any further order from the Delaware Court. A hearing will be scheduled the week of April 10, 2016. We intend to vigorously defend the Acquisition in both the Circuit Court and the Delaware Court and remain committed to completing the Acquisition as soon as practicable. If the Merger Agreement is terminated because the required regulatory approvals cannot be obtained, under certain conditions, we could be obligated to pay a $1,850.0 termination fee to Cigna.

On February 16, 2015, we completed our acquisition of Simply Healthcare Holdings, Inc., or Simply Healthcare, a leading managed care company for people enrolled in Medicaid and Medicare programs in the state of Florida. This acquisition aligns with our strategy for continued growth in our Government Business segment. For additional information about this acquisition, see Note 3, “Business Acquisitions and Divestiture - *Acquisition of Simply Healthcare*• included in Part II, Item 8 of this Annual Report on Form 10-K.

The future results of our operations will also be impacted by certain external forces and resulting changes in our business model and strategy. In 2010, the Patient Protection and Affordable Care Act, or ACA, as well as the Health Care and Education Reconciliation Act of 2010, or collectively, Health Care Reform, became law, causing significant changes to the U.S. health care system. Since then, significant regulations have been enacted by the U.S. Department of Health and Human Services, or HHS, the Department of Labor and the Department of the Treasury. The legislation and regulations are far-reaching and are intended to expand access to health insurance coverage over time by mandating that most individuals obtain health insurance coverage, increasing the eligibility thresholds for most state Medicaid programs and providing certain individuals and small businesses with tax credits to subsidize a portion of the cost of health insurance coverage. As a result of the complexity of the law, its impact on health care in the United States, the continuing modification and interpretation of Health Care Reform rules and the potential for significant future changes to the law, we continue to analyze and refine our estimates of the ultimate impact of Health Care Reform on our business, cash flows, financial condition and results of operations. Health Care Reform presented us with new growth opportunities, but also introduced new risks, regulatory challenges and uncertainties, and required changes in the way products are designed, underwritten, priced, distributed and administered. Changes to our business are likely to continue for the next several years as elected officials at the national and state level have proposed significant modification to existing laws and regulations, including the potential repeal or

replacement of Health Care Reform. For additional discussion, see Part I, Item 1 “Business - Regulation,” and Part I, Item 1A “Risk Factors” in this Annual Report on Form 10-K.

Pricing in our Commercial and Specialty Business segment, including our Individual and Small Group lines of business, remains competitive and we strive to price our health care benefit products consistent with anticipated underlying medical trends. We believe our pricing strategy, based on predictive modeling, proprietary research and data-driven processes have positioned us to benefit from the potential growth opportunities available in fully-insured commercial products as a result of Health Care Reform and any subsequent changes to the current regulatory scheme. In the Individual and Small Group markets, we offer on-exchange products through state or federally facilitated marketplaces, referred to as public exchanges, and off-exchange products. Federal premium subsidies are available for certain members, subject to income and family size, who purchase public exchange products. We believe that our pricing strategy, brand name and network quality will provide a strong foundation for commercial risk membership growth opportunities in the future.

In our Individual markets we offer bronze, silver and gold products, both on and off the public exchanges, in California, Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri, Nevada, New Hampshire, New York, Ohio, Virginia and Wisconsin. Additionally, we offer platinum products, both on and off the public exchanges, in California and New York.

In our Small Group markets, we offer bronze, silver and gold products, off the public exchanges, in California, Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri, Nevada, New Hampshire, New York, Ohio, Virginia and Wisconsin. We offer platinum products, off the public exchanges, in California, Colorado, Connecticut, Georgia, Indiana, Kentucky, New York, Virginia and Wisconsin. We offer bronze, silver and gold products, on the public exchanges, in Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri, Nevada, New Hampshire, Ohio and Virginia. Additionally, we offer platinum products on the public exchange in Connecticut.

Private exchanges have gained visibility in the marketplace based on the promise of helping employers reduce costs, increase consumer engagement and manage the complexities created by the ACA and other market forces. While private exchanges have been a distribution channel in the Medicare and Individual markets for some time, in more recent years the Commercial market has received an increased level of attention from the consulting and broker communities as well as health insurance carriers. In response, we have continued our broad-based strategy of offering Anthem Health Marketplace's consumer experience platform to groups, while also participating in four large national consultant-led exchanges, several regional broker-led exchanges and various Individual, Commercial and Medicare exchanges. To date, adoption levels in the Commercial market overall have been lower than analyst predictions. While the ultimate volume, pace of growth and winning business models remain highly uncertain in this space, we continue to believe we are well positioned to adapt with the market as it evolves.

Health Care Reform imposes regulations on the health insurance sector, including, but not limited to, guaranteed coverage and expanded benefit requirements; prohibitions on some annual and all lifetime limits on amounts paid on behalf of or to our members; increased restrictions on rescinding coverage; establishment of minimum medical loss ratio, or MLR, and customer rebate requirements; establishment of a mandatory annual Health Insurance Provider Fee, or HIP Fee; creation of a federal rate review process; a requirement to cover preventive services on a first dollar basis; the establishment of public exchanges and essential benefit packages and greater limitations on how we price certain of our products. In addition, the legislation reduces the reimbursement levels for our health plans participating in the Medicare Advantage program over time and limits the amount of executive compensation that is deductible for income tax purposes.

As a result of Health Care Reform, HHS issued MLR regulations that require us to meet minimum MLR thresholds for Large Group, Small Group and Individual lines of business. Plans that do not meet the minimum thresholds will have to pay a MLR rebate. For purposes of determining MLR rebates, HHS has defined the types of costs that should be included in the MLR rebate calculation. However, certain components of the MLR calculation as defined by HHS cannot be classified consistently under U.S. generally accepted accounting principles, or GAAP. While considered benefit expense or a reduction of premium revenue by HHS, certain of these costs are classified as other types of expense, such as income tax expense or general and administrative expense, in our GAAP basis financial statements. Accordingly, the benefit expense ratio determined using our consolidated GAAP operating results is not comparable to the MLR calculated under HHS regulations.

Health Care Reform also imposed a separate minimum MLR threshold of 85& for Medicare Advantage and Medicare Part D plans beginning in 2014. Medicare Advantage or Medicare Part D plans that do not meet this threshold will have to pay a minimum MLR rebate. If a plan’s MLR is below 85& for three consecutive years beginning with 2014, enrollment will

be restricted. A Medicare Advantage or Medicare Part D plan contract will be terminated if the plan's MLR is below 85& for five consecutive years.

Beginning in 2014, Health Care Reform imposed an annual HIP Fee on health insurers that write certain types of health insurance on U.S. risks. The annual HIP Fee is allocated to health insurers based on the ratio of the amount of an insurer's net premium revenues written during the preceding calendar year to an adjusted amount of health insurance for all U.S. health risk for those certain lines of business written during the preceding calendar year. The HIP Fee is non-deductible for federal income tax purposes. The total amount collected from allocations to health insurers was $11,300.0 for each of 2017 and 2015 and $8,000.0 for 2014. We record our estimated liability for the HIP Fee in full at the beginning of the year with a corresponding deferred asset that is amortized on a straight-line basis to general and administrative expense. The final calculation and payment of the annual HIP Fee occurs in the third quarter each year and our portion of the HIP Fee for 2017, 2015 and 2014 was $1,167.3, $1,206.5 and $893.3, respectively. The annual HIP Fee to be allocated to all health insurers has been suspended for 2016 and is scheduled to resume and be increased to $14,300.0 for 2018, without subsequent legislative or regulatory action. For 2019 and beyond, the annual HIP Fee will equal the amount for the preceding year increased by the rate of premium growth for the preceding year less the rate of growth in the consumer price index for the preceding calendar year.

These and other provisions of Health Care Reform are likely to have significant effects on our future operations, which, in turn, could impact the value of our business model and results of operations, including potential impairments of our goodwill and other intangible assets. We will continue to evaluate the impact of Health Care Reform including any substantial changes to existing laws or regulations that may impact our business. For additional discussion regarding Health Care Reform, see Part I, Item 1 “Business% Regulation” and Part I, Item 1A “Risk Factors” in this Annual Report on Form 10-K.

Finally, federal and state regulatory agencies may further restrict our ability to obtain new product approvals, implement changes in premium rates or impose additional restrictions, under new or existing laws that could adversely affect our business, cash flows, financial condition and results of operations.

We are also subject to regulations that may result in assessments under state insurance guaranty association laws. The National Organization of Life @ Health Insurance Guaranty Associations, or NOLHGA, is a voluntary organization consisting of the state life and health insurance guaranty associations located throughout the U.S. Such associations, working together with NOLHGA, provide a safety net for their state’s policyholders, ensuring that they continue to receive coverage, subject to state maximum limits, even if their insurer is declared insolvent. In 2009, the Pennsylvania Insurance Commissioner placed Penn Treaty Network America Insurance Company and its subsidiary American Network Insurance Company, or collectively Penn Treaty, in rehabilitation, an intermediate action before insolvency. After failing to develop a viable rehabilitation plan, the Pennsylvania Insurance Commissioner filed a petition to convert the rehabilitation to a liquidation, with the liquidation expected to commence following the coordination of certain scheduling matters. When Penn Treaty is placed in liquidation, we and other insurers will be obligated to pay a portion of their policyholder claims through state guaranty association assessments in future periods. At December 31, 2017, we estimate our portion of the assessments for the Penn Treaty insolvency will approximate $190.0 to $220.0. In accordance with FASB guidance, the ultimate amount of the assessments will be recognized as an expense in the period in which a court ordered liquidation is entered. Payment of the assessments will be largely recovered through premium billing surcharges and premium tax credits over future years.

In addition to the external forces discussed in the preceding paragraphs, our results of operations are impacted by levels and mix of membership. In recent years, we have experienced membership growth due to the quality and pricing of our health benefits products and services, improved economic conditions, decreases in unemployment, acquisitions, entry into new markets and expansions in existing markets. In addition, we believe the self-insured portion of our group membership base will continue to increase as a percentage of total group membership. However, these membership trends could be negatively impacted by various factors that could have a material adverse effect on our future results of operations such as general economic downturns that result in business failures, failure to obtain new customers or retain existing customers, premium increases, benefit changes or our exit from a specific market. Further, our mix of membership may include more individuals with a higher acuity level obtaining coverage through our products available on the public exchanges, which may not be appropriately adjusted for in our premium rates.

In February 2015, we reported that we were the target of a sophisticated external cyber attack. The attackers gained unauthorized access to certain of our information technology systems and obtained personal information related to many individuals and employees. We have continued to implement security enhancements since this incident. For additional information about the cyber attack, see Note 13, "Commitments and Contingencies - *Cyber Attack Incident*," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Also see Part I, Item 1A "Risk Factors" in this Annual Report on Form 10-K, for a discussion of the factors identified above and other risk factors that could cause actual results to differ materially from those contained in forward-looking statements made in this Annual Report on Form 10-K and presented elsewhere by management from time to time.

Executive Summary

We are one of the largest health benefits companies in the United States in terms of medical membership, serving 39.9 medical members through our affiliated health plans as of December 31, 2017. We are an independent licensee of the Blue Cross and Blue Shield Association, or BCBSA, an association of independent health benefit plans. We serve our members as the Blue Cross licensee for California and as the Blue Cross and Blue Shield, or BCBS, licensee for Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri (excluding 30 counties in the Kansas City area), Nevada, New Hampshire, New York (as BCBS in 10 New York City metropolitan and surrounding counties, and as Blue Cross or BCBS in selected upstate counties), Ohio, Virginia (excluding the Northern Virginia suburbs of Washington, D.C.) and Wisconsin. In a majority of these service areas we do business as Anthem Blue Cross, Anthem Blue Cross and Blue Shield, Blue Cross and Blue Shield of Georgia, and Empire Blue Cross Blue Shield or Empire Blue Cross (in our New York service areas). We also conduct business through arrangements with other BCBS licensees in South Carolina and Western New York. Through our AMERIGROUP Corporation, or Amerigroup, subsidiary, we conduct business in Florida, Georgia, Iowa, Kansas, Louisiana, Maryland, Nevada, New Jersey, New Mexico, New York, Tennessee, Texas, and Washington. In addition, we conduct business through our Simply Healthcare Holdings, Inc., or Simply Healthcare, subsidiary in Florida. We also serve customers throughout the country as HealthLink, UniCare (including a non-risk arrangement with Massachusetts), and in certain Arizona, California, Nevada and Virginia markets through our CareMore Health Group, Inc., or CareMore, subsidiary. We are licensed to conduct insurance operations in all 50 states through our subsidiaries.

On January 31, 2014, we sold our 1-800 CONTACTS, Inc. business and our glasses.com related assets, or collectively, 1-800 CONTACTS. The operating results for 1-800 CONTACTS for the one month ended January 31, 2014 are reported as discontinued operations within the consolidated statements of income included in Part II, Item 8 of this Annual Report on Form 10-K. These results were previously reported in the Commercial and Specialty Business segment. Unless otherwise specified, all financial information disclosed in this MD@A is from continuing operations, other than net income, diluted earnings per share and cash flows. In accordance with FASB guidance, we have elected to not separately disclose net cash provided by or used in operating, investing, and financing activities and the net effect of those cash flows on cash and cash equivalents for discontinued operations during the periods presented. For additional information regarding these transactions, see Note 3, "Business Acquisitions and Divestiture - *Divestiture of 1-800 CONTACTS*,• to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Operating revenue for the year ended December 31, 2017 was $84,194.0, an increase of $5,689.2, or 6.4&, from the year ended December 31, 2015. The increase in operating revenue was primarily a result of higher premium revenue in both our Government Business and Commercial and Specialty Business segments, and, to a lesser extent, increased administrative fees in our Commercial and Specialty Business segment. These increases were partially offset by lower administrative fees in our Government Business segment.

Net income for the year ended December 31, 2017 was $2,479.8, a decrease of $90.2, or 3.5&, from the year ended December 31, 2015. The decrease in net income was primarily due to lower operating results in our Government Business segment, an increase in transaction costs associated with our pending acquisition of Cigna, a decrease in net earnings from investment activities and an increase in interest expense.

Our diluted earnings per share, or EPS, for the year ended December 31, 2017 was $9.21, a decrease of $0.16, or 1.8&, from the year ended December 31, 2015. Our diluted shares for the year ended December 31, 2017 were 278.1, a decrease of 4.8, or 1.8& compared to the year ended December 31, 2015. The decrease in EPS resulted from the decrease in net income, partially offset by the impact of a lower number of shares outstanding in 2017.

Operating cash flow for the year ended December 31, 2017 was $3,204.5, or 1.3 times net income. Operating cash flow for the year ended December 31, 2015 was $4,117.0, or 1.7 times net income. The decrease in operating cash flow from 2015 of $911.5 was primarily attributable to an increase in claims payments due to higher medical cost experience and growth in membership. The decrease was further due to the timing of claim reimbursements from our self-insured customers. These decreases were partially offset by an increase in premium receipts as a result of rate increases across our businesses designed to cover overall cost trends and growth in membership. The decrease was further offset by an increase in pharmacy rebates received.

Our results of operations discussed throughout this MD@A are determined in accordance with GAAP. We also calculate operating revenue and operating gain to further aid investors in understanding and analyzing our core operating results and comparing them among periods. We define operating revenue as premium income, administrative fees and other revenues. Operating gain is calculated as total operating revenue less benefit expense, and selling, general and administrative expense. We use these measures as a basis for evaluating segment performance, allocating resources, forecasting future operating performance and setting incentive compensation targets. This information is not intended to be considered in isolation or as a substitute for income before income tax expense, net income or EPS prepared in accordance with GAAP, and may not be comparable to similarly titled measures reported by other companies. For additional details on operating gain, see our “Reportable Segments Results of Operations” discussion included in this MD@A. For a reconciliation of reportable segment operating revenue to the amounts of total revenue included in the consolidated statements of income and a reconciliation of reportable segment operating gain to income from continuing operations before income tax expense, see Note 19, •Segment Information,• to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

We intend to expand through a combination of organic growth, strategic acquisitions, including the pending acquisition of Cigna, and efficient use of capital in both existing and new markets. Our growth strategy is designed to enable us to take advantage of additional economies of scale as well as providing us access to new and evolving technologies and products. In addition, we believe geographic and product diversity reduces our exposure to local or regional regulatory, economic and competitive pressures and provides us with increased opportunities for growth. While we have achieved strong growth as a result of strategic mergers and acquisitions, we have also achieved organic growth in our existing markets over time by delivering excellent service, offering competitively priced products, providing access to high quality provider networks and effectively capitalizing on the brand strength of the Blue Cross and Blue Shield names and marks.

Significant Transactions

While Health Care Reform has caused significant changes to the U.S. health care system in recent years, the significant transactions that have occurred over the last three years that have impacted or will impact our capital structure or that have or will influence how we conduct our business operations include:

- ® Pending acquisition of Cigna;
- ® Acquisition of Simply Healthcare (2015);
- ® Board of Directors declaration of dividends on common stock (2014 through February 2016); authorization for repurchases of our common stock (2016 and prior); and debt repurchases and new debt issuance (2015 and prior); and
- ® Divestiture of 1-800 CONTACTS (2014).

For additional information regarding these transactions, see Note 3, “Business Acquisitions and Divestiture,” Note 12, •Debt• and Note 14, “Capital Stock,” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Membership

Our medical membership includes seven different customer types: Local Group, Individual, National Accounts, BlueCard—, Medicare, Medicaid and FEP. BCBS-branded business generally refers to members in our service areas licensed by the BCBSA. Non-BCBS-branded business refers to Amerigroup, CareMore and Simply Healthcare members as well as HealthLink and UniCare members predominantly outside of our BCBSA service areas.

® Local Group consists of those employer customers with less than 5& of eligible employees located outside of the headquarter state, as well as customers with more than 5& of eligible employees located outside of the headquarter state with up to 5,000 eligible employees. In addition, Local Group includes UniCare members and Employer Group Medicare Advantage members, or retired members of Local Group accounts who have selected a Medicare Advantage product. Local Group accounts are generally sold through brokers or consultants working with industry specialists from our in-house sales force and are offered both on and off the public exchanges. Local Group insurance premiums may be based on claims incurred by the group or sold on a self-insured basis. The customer's buying decision is typically based upon the size and breadth of our networks, customer service, the quality of our medical management services, the administrative cost included in our quoted price, our financial stability, reputation and our ability to effectively service large complex accounts. Local Group accounted for 38.6&, 39.5& and 40.4& of our medical members at December 31, 2017, 2015 and 2014, respectively.

® Individual consists of individual customers under age 75 and their covered dependents. Individual policies are generally sold through independent agents and brokers, retail partnerships, our in-house sales force or via the Internet. Individual business is sold on a fully-insured basis. We offer on-exchange products through public exchanges and off-exchange products. Federal premium subsidies are available only for certain public exchange Individual products. Individual customers are generally more sensitive to product pricing and, to a lesser extent, the configuration of the network, and the efficiency of administration. Customer turnover is generally higher with Individual as compared to Local Group. Individual business accounted for 4.2&, 4.3& and 4.8& of our medical members at December 31, 2017, 2015 and 2014, respectively.

® National Accounts generally consist of multi-state employer groups primarily headquartered in an Anthem service area with at least 5& of the eligible employees located outside of the headquarter state and with more than 5,000 eligible employees. Some exceptions are allowed based on broker and consultant relationships. Service area is defined as the geographic area in which we are licensed to sell BCBS products. National Accounts are generally sold through independent brokers or consultants retained by the customer working with our in-house sales force. We believe we have an advantage when competing for very large National Accounts due to the size and breadth of our networks and our ability to access the national provider networks of BCBS companies at their competitive local market rates. In addition, Employer Group Medicare Advantage members related to National Accounts groups are reported as part of National Accounts membership. The Employer Group Medicare Advantage members represent less than 1.0& of National Accounts membership. National Accounts represented 19.4&, 19.1& and 19.1& of our medical members at December 31, 2017, 2015 and 2014, respectively.

® BlueCard—host customers represent enrollees of Blue Cross and/or Blue Shield plans not owned by Anthem who receive health care services in our BCBSA licensed markets. BlueCard—membership consists of estimated host members using the national BlueCard—program. Host members are generally members who reside in or travel to a state in which an Anthem subsidiary is the Blue Cross and/or Blue Shield licensee and who are covered under an employer-sponsored health plan issued by a non-Anthem controlled BCBSA licensee (i.e., the "home plan"). We perform certain administrative functions for BlueCard—members, for which we receive administrative fees from the BlueCard—members' home plans. Other administrative functions, including maintenance of enrollment information and customer service, are performed by the home plan. Host members are computed using, among other things, the average number of BlueCard—claims received per month. BlueCard—host membership accounted for 13.9&, 14.0& and 14.1& of our medical members at December 31, 2017, 2015 and 2014, respectively.

® Medicare customers are Medicare-eligible individual members age 75 and over who have enrolled in Medicare Advantage, a managed care alternative for the Medicare program, who have purchased Medicare Supplement benefit coverage, some disabled members under age 75, or members of all ages with end stage renal disease. We also include in the Medicare category members enrolled in our dual eligible Medicare-Medicaid Plans, or MMPs, in the states where we participate. Medicare Supplement policies are sold to Medicare recipients as supplements to the benefits they receive from the Medicare program. Rates are filed with and in some cases approved by state insurance

departments. Most of the premium for Medicare Advantage is paid directly by the federal government on behalf of the participant who may also be charged a small premium. Medicare Supplement and Medicare Advantage products are marketed in the same manner, primarily through independent agents and brokers. Medicare business accounted for 3.7&, 3.6& and 3.6& of our medical members at December 31, 2017, 2015 and 2014, respectively.

® Medicaid membership represents eligible members who receive health care benefits through publicly funded health care programs, including Medicaid, TANF, SPD, LTSS, CHIP and Medicaid expansion programs. Total Medicaid program business accounted for 17.4&, 15.3& and 13.8& of our medical members at December 31, 2017, 2015 and 2014, respectively.

® FEP members consist of United States government employees and their dependents within our geographic markets through our participation in the national contract between the BCBSA and the U.S. Office of Personnel Management. FEP business accounted for 3.9&, 4.1& and 4.1& of our medical members at December 31, 2017, 2015 and 2014, respectively.

In addition to reporting our medical membership by customer type, we report by funding arrangement according to the level of risk that we assume in the product contract. Our two principal funding arrangement categories are fully-insured and self-funded. Fully-insured products are products in which we indemnify our policyholders against costs for health benefits. Self-funded products are offered to customers, generally larger employers, who elect to retain most or all of the financial risk associated with their employees' health care costs. Some self-funded customers choose to purchase stop loss coverage to limit their retained risk.

The following table presents our medical membership by customer type, funding arrangement and reportable segment as of December 31, 2017, 2015 and 2014. Also included below is other membership by product. The medical membership and other membership presented are unaudited and in certain instances include estimates of the number of members represented by each contract at the end of the period.

	December 31			2016 vs. 2015		2015 vs. 2014	
(In thousands)	2016	2015	2014	Change	% Change	Change	% Change
Medical Membership							
Customer Type							
Local Group	15,429	15,241	15,136	188	1.2 &	104	0.6 &
Individual	1,774	1,765	1,693	(11)	(0.6)&	(118)	(7.7)&
National:							
National Accounts	6,641	6,355	6,155	387	5.2 &	200	2.8 &
BlueCard—	5,550	5,406	5,269	143	2.7 &	128	2.4 &
Total National	13,291	12,672	12,434	529	4.1 &	328	2.7 &
Medicare	1,438	1,439	1,404	(1)	(0.1)&	35	2.5 &
Medicaid	7,526	5,914	5,193	713	10.4 &	621	13.9 &
FEP	1,560	1,578	1,538	2	0.1 &	30	2.0 &
Total Medical Membership	39,919	38,599	36,499	1,320	3.4 &	1,100	2.9 &
Funding Arrangement							
Self-Funded	24,788	23,777	22,800	1,022	4.3 &	877	3.8 &
Fully-Insured	15,231	14,933	14,799	298	2.0 &	234	1.7 &
Total Medical Membership	39,919	38,599	36,499	1,320	3.4 &	1,100	2.9 &
Reportable Segment							
Commercial and Specialty Business	30,384	29,768	29,374	607	2.4 &	314	1.1 &
Government Business	9,535	8,921	8,135	714	7.9 &	687	9.6 &
Total Medical Membership	39,919	38,599	36,499	1,320	3.4 &	1,100	2.9 &
Other Membership							
Life and Disability Members	4,632	4,849	4,672	(116)	(2.4)&	86	1.8 &
Dental Members	5,487	5,207	4,995	280	5.4 &	211	4.2 &
Dental Administration Members	5,294	5,282	4,918	12	0.2 &	374	6.4 &
Vision Members	7,388	5,741	5,097	646	13.2 &	545	10.6 &
Medicare Advantage Part D Members	729	722	790	6	1.1 &	(78)	(9.9)&
Medicare Part D Standalone Members	350	361	476	(21)	(5.6)&	(97)	(20.7)&

December 31, 2016 Compared to December 31, 2015

Medical Membership (in thousands)

During the year ended December 31, 2017, total medical membership increased 1,320, or 3.4&, primarily due to increases in our Medicaid, National Accounts, Local Group and BlueCard—membership.

Self-funded medical membership increased 1,022, or 4.3&, primarily due to increases in our National Accounts, Large Group accounts and BlueCard—membership.

Fully-insured membership increased 298, or 2.0&, primarily due to growth in our Medicaid business, partially offset by declines in Local Group fully-insured membership.

Local Group membership increased 188, or 1.2&, primarily due to growth in our Large Group self-funded accounts as a result of new sales and conversions of fully-insured contracts to self-funded administrative service only, or ASO contracts. The increase was partially offset by attrition in our fully-insured product offerings resulting from competitive pressures and conversions to self-funded ASO contracts.

Individual membership decreased 11, or 0.6&, primarily due to attrition in non-ACA-compliant product offerings, partially offset by growth in ACA-compliant off- and on-exchange product offerings.

National Accounts membership increased 387, or 5.2&, primarily due to the implementation of new large multi-state employer group contracts and expansion in existing employer group accounts.

BlueCard—membership increased 143, or 2.7&, primarily due to higher membership activity at other BCBSA plans whose members reside in or travel to our licensed areas.

Medicare membership decreased 1, or 0.1&, primarily due to membership losses from strategic market exits, partially offset by growth in certain existing markets.

Medicaid membership increased 713, or 10.4&, primarily due to new business expansions and organic growth in existing markets.

FEP membership increased 2, or 0.1&, primarily due to higher sales during the open enrollment period.

Other Membership (in thousands)

Our Other products are often ancillary to our health business and can therefore be impacted by corresponding changes in our medical membership.

Life and disability membership decreased 116, or 2.4&, primarily due to higher lapses in our fully-insured Local Group business.

Dental membership increased 280, or 5.4&, primarily due to new sales and growth in our Local Group and ACA-compliant Individual product offerings.

Dental administration membership increased 12, or 0.2&, primarily due to membership expansion under current contracts.

Vision membership increased 646, or 13.2&, primarily due to growth in our Local Group, National accounts and ACA-compliant Individual product offerings.

Medicare Advantage Part D membership increased 6, or 1.1&, primarily due to higher sales during the open enrollment period.

Medicare Part D standalone membership decreased 21, or 5.6&, primarily due to our product repositioning strategies and select strategic actions in certain markets.

December 31, 2015 Compared to December 31, 2014

Medical Membership (in thousands)

During the year ended December 31, 2015, total medical membership increased 1,100, or 2.9&, primarily due to increases in our Medicaid, National Accounts, BlueCard—and Local Group membership, partially offset by decreases in our Individual membership.

Self-funded medical membership increased 877, or 3.8&, primarily due to increases in our Local Group self-funded accounts as a result of new sales and conversions of fully-insured contracts to self-funded ASO contracts, and growth in our National Accounts and BlueCard—membership.

Fully-insured membership increased 234, or 1.7&, primarily due to growth in our Medicaid and Medicare businesses including membership acquired with the acquisition of Simply Healthcare, and increased sales in our Individual business ACA-compliant on- and off-exchange product offerings. These increases were partially offset by Local Group fully-insured membership declines, largely driven by conversions of fully-insured contracts to self-funded ASO contracts and our decision to exit the Georgia employer group Medicare product offering. The increase was further offset by attrition in our Individual business non-ACA-compliant product offerings.

Local Group membership increased 104, or 0.6&, primarily due to increases in our self-funded accounts. The increase in membership was partially offset by attrition in our Small Group line of business resulting from product mix changes as members moved into Health Care Reform product offerings and competitive pressures. The increase was further offset by fully-insured membership declines resulting from our decision to exit the Georgia employer group Medicare product offering.

Individual membership decreased 118, or 7.7&, primarily due to attrition in non-ACA-compliant product offerings, partially offset by increased sales in ACA-compliant on- and off-exchange product offerings.

National Accounts membership increased 200, or 2.8&, primarily due to new sales and in-group change.

BlueCard—membership increased 128, or 2.4&, primarily due to favorable membership activity at other BCBSA plans whose members reside in or travel to our licensed areas.

Medicare membership increased 35, or 2.5&, primarily due to membership acquired through the acquisition of Simply Healthcare and growth in our MMPs primarily due to commencement of operations in new dual eligible markets.

Medicaid membership increased 621, or 13.9&, primarily due to commencement of operations in new markets including membership acquired through the acquisition of Simply Healthcare, and growth through Health Care Reform expansions.

FEP membership increased 30, or 2.0&, primarily due to higher sales during open enrollment.

Other Membership (in thousands)

Our Other products are often ancillary to our health business and can therefore be impacted by corresponding changes in our medical membership.

Life and disability membership increased 86, or 1.8&, primarily due to growth and higher sales in our Local Group business.

Dental membership increased 211, or 4.2&, primarily due to new sales and growth in our Local Group and Individual businesses, partially offset by attrition in our off-exchange Local Group and Individual business product offerings.

Dental administration membership increased 374, or 6.4&, primarily due to the acquisition of a large managed dental contract pursuant to which we provide dental administrative services.

Vision membership increased 545, or 10.6&, primarily due to increased sales and penetration in our Medicare business, and growth in our Local Group, National Accounts and Individual businesses. These increases were partially offset by attrition in our off-exchange Local Group and Individual business product offerings.

Medicare Advantage Part D membership decreased 78, or 9.9&, primarily due to membership declines resulting from our decision to exit the Georgia employer group Medicare product offering, partially offset by commencement of operations in new dual eligible markets and membership acquired through the acquisition of Simply Healthcare.

Medicare Part D standalone membership decreased 97, or 20.7&, primarily due to our product repositioning strategies and select strategic actions in certain markets.

Cost of Care

The following discussion summarizes our aggregate underlying cost of care trends for the year ended December 31, 2017 for our Local Group fully-insured business only.

Our cost of care trends are calculated by comparing the year-over-year change in average per member per month claim costs. While our cost of care trend varies by geographic location, based on underlying medical cost trends, we estimate that our aggregate cost of care trend was in the lower end of the 6.0& to 6.5& range for the full year of 2017. We anticipate that medical cost trends will be in the range of 7.5& to 6.0& in 2016.

Outpatient and professional utilization have been consistent with prior years. Inpatient and pharmacy utilization have been lower than in prior years. Consistent with prior years, provider rate increases were a primary driver of medical cost trends. We continually negotiate with hospitals and physicians to manage these cost trends. We commonly negotiate multi-year contracts with hospitals and physicians, minimizing annual fluctuations in medical cost trend. We remain committed to optimizing our reimbursement rates and strategies to help address the cost pressures faced by employers and consumers. Unit cost increases, as well as increases in high cost specialty drug offerings and usage, were also a driver of pharmacy cost. For example, high cost Hepatitis C drug therapies continued to put upward pressure on pharmacy trend. We have negotiated to lower the cost of these Hepatitis C drug therapies and continue to review clinical appropriateness of these new Hepatitis C drug therapies to ensure members receive the most appropriate treatment and length of therapy.

In response to cost trends, we continue to pursue contracting and plan design changes, promote and implement performance-based contracts that reward clinical outcomes and quality, and expand care management programs. We are taking a leadership role in the area of payment reform as evidenced by our Enhanced Personal Health Care program. By establishing the primary care doctor as central to the coordination of a patient's health care needs, the initiative builds on the success of current patient-centered medical home programs in helping to improve patient care while lowering costs.

A number of clinical management initiatives are in place to help mitigate inpatient trend. Focused review efforts continue in key areas, including targeting outlier facilities for length of stay and readmission, and high risk maternity and neonatal intensive care unit cases, as noted below. Additionally, we continue to refine our programs related to readmission management, focused behavioral health readmission reduction and post-discharge follow-up care.

- *Neonatal Intensive Care Unit Focused Review* - Collaborative teams focus on developing a comprehensive plan of care and safe and effective discharge planning so that individuals can be released from the Neonatal Intensive Care Unit as soon as medically appropriate.

Outpatient costs are a collection of different types of expenses, such as outpatient facilities, labs, x-rays, emergency room, occupational and physical therapy and many others. Example programs developed to mitigate outpatient costs are as follows:

® *Cancer Care Quality Program* - This program, developed in collaboration with our subsidiary AIM Specialty Health, identifies certain cancer treatment pathways selected based upon current medical evidence, peer-reviewed published literature, consensus guidelines and our clinical policies to support oncologists in identifying cancer treatment therapies that are highly effective and provide greater value.

® *Avoidable Emergency Room Visits* - This program seeks to help educate members and providers about potentially avoidable emergency room visits. Phone calls and mailings are used to inform members of alternate sites of care, such as primary care physicians, urgent care facilities, and walk-in doctor's offices that can replace visits to the emergency room in certain situations.

® *Specialty Drug Site of Care* - This program, when clinically appropriate and safe, uses clinical site of care review to encourage utilization of certain specialty drugs in more effective settings such as physician offices, ambulatory infusion suites and in the home using home infusion therapy.

® *Fraud and Abuse* - This program, through investigation and identification of providers with an invalid medical license and/or expired prescribing privileges, seeks to prevent improper payment of medical or pharmacy claims.

Consolidated Results of Operations

Our consolidated summarized results of operations for the years ended December 31, 2017, 2015 and 2014 are discussed in the following section.

	Years Ended December 31			Change			
				2016 vs. 2015		2015 vs. 2014	
	2016	2015	2014	$	%	$	%
Total operating revenue	$ 84,194.0	$ 68,404.8	$ 63,021.6	$ 5,689.2	6.4 &	$ 5,383.1	6.4 &
Net investment income	669.5	766.7	624.4	101.9	15.0 &	(47.8)	(7.5)&
Net realized gains on financial instruments	4.9	156.5	166.0	(152.7)	(97.9)&	(19.5)	(11.0)&
Other-than-temporary impairment losses on investments	(115.4)	(83.4)	(49.0)	(32.0)	(38.4)&	(34.4)	(60.2)&
Total revenues	84,873.0	69,157.5	63,864.1	5,607.5	6.2 &	5,282.4	6.2 &
Benefit expense	77,834.4	71,117.9	57,854.9	5,616.5	9.4 &	4,272.0	6.5 &
Selling, general and administrative expense	12,556.9	12,534.8	11,648.4	23.1	0.2 &	687.4	7.6 &
Other expense[1]	915.3	863.8	902.6	41.5	4.6 &	(28.9)	(3.2)&
Total expenses	80,306.7	64,525.5	79,507.0	5,682.1	6.8 &	5,019.5	6.2 &
Income from continuing operations before income tax expense	4,555.4	4,731.0	4,378.1	(65.7)	(1.7)&	272.9	7.0 &
Income tax expense	2,085.7	2,061.0	1,808.0	14.7	0.6 &	273.0	14.5 &
Income from continuing operations	2,479.8	2,570.0	2,570.1	(90.2)	(3.5)&	(0.1)	% &
Income from discontinued operations, net of tax[2]	%	%	9.7	%	NM[3]	(9.7)	NM[3]
Net income	$ 2,479.8	$ 2,570.0	$ 2,579.6	$ (90.2)	(3.5)&	$ (9.6)	(0.4)&
Average diluted shares outstanding	278.1	262.9	285.9	(4.8)	(1.8)&	(13.0)	(4.5)&
Diluted net income per share:							
Diluted - continuing operations	$ 9.21	$ 9.38	$ 8.97	$ (0.16)	(1.8)&	$ 0.42	4.6 &
Diluted - discontinued operations[2]	%	%	0.03	%	NM[3]	(0.03)	NM[3]
Diluted net income per share	$ 9.21	$ 9.38	$ 8.99	$ (0.16)	(1.8)&	$ 0.39	4.3 &
Benefit expense ratio[4]	84.8&	83.3&	83.1&		150bp[5]		20bp[5]
Selling, general and administrative expense ratio[7]	14.9&	17.0&	17.1&		(110)bp[5]		(10)bp[5]
Income from continuing operations before income taxes as a percentage of total revenue	5.4&	5.9&	5.9&		(50)bp[5]		0bp[5]
Net income as a percentage of total revenue	2.9&	3.2&	3.5&		(30)bp[5]		(30)bp[5]

Certain of the following definitions are also applicable to all other results of operations tables in this discussion:

1 Includes interest expense, amortization of other intangible assets and gain/loss on extinguishment of debt.
2 The operating results of 1-800 CONTACTS are reported as discontinued operations as a result of the divestiture completed on January 31, 2014.
3 Calculation not meaningful.
4 Benefit expense ratio represents benefit expense as a percentage of premium revenue. Premiums for the years ended December 31, 2017, 2015 and 2014 were $68,870.1, $63,385.1 and $78,389.8, respectively. Premiums are included in total operating revenue presented above.
5 bp " basis point; one hundred basis points " 1&.
7 Selling, general and administrative expense ratio represents selling, general and administrative expense as a percentage of total operating revenue.

Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015

Total operating revenue increased $5,689.2, or 6.4&, to $84,194.0 in 2017, resulting primarily from higher premiums, and, to a lesser extent, increased administrative fees. Higher premiums were largely due to rate increases across our businesses designed to cover overall cost trends. The increase was further attributable to membership increases in our Medicaid and ACA-compliant off- and on-exchange Individual business product offerings. Additionally, adjustments to accruals for the Health Care Reform risk adjustment premium stabilization program and increased reimbursed benefit utilization in our FEP business contributed to the increase in premiums. The increase in premiums was partially offset by the declines in fully-insured membership in our Small Group business and lapses in non-ACA-compliant Individual business product offerings. The increase in administrative fees primarily resulted from membership growth and rate increases for self-funded members in our National Accounts and Large Group businesses.

Net investment income increased $101.9, or 15.0&, to $669.5 in 2017, primarily due to higher income from alternative investments.

Net realized gains on financial instruments decreased $152.7, or 97.9&, to $4.9 in 2017, primarily due to an increase in net realized losses on derivative financial instruments, largely as a result of losses recognized on options entered in to economically hedge the variability of cash flows in the interest payments on anticipated future financings. The decrease was further due to lower net realized gains on sales of equity securities. These decreases were partially offset by an increase in net realized gains on sales of fixed maturity securities.

Other-than-temporary impairment losses on investments increased $32.0, or 38.4&, to $115.4 in 2017, primarily due to an increase in impairment losses on fixed maturity securities, partially offset by a decrease in impairment losses on equity securities.

Benefit expense increased $5,616.5, or 9.4&, to $77,834.4 in 2017, primarily due to increased costs as a result of overall cost trends across our businesses. The increase was further attributable to membership growth in our Medicaid business and ACA-compliant off- and on-exchange Individual business product offerings. These increases were partially offset by the declines in fully-insured membership in our Small Group business and non-ACA-compliant Individual business product offerings.

Our benefit expense ratio increased 150 basis points to 84.8& in 2017. The increase in the ratio was largely driven by our Medicaid business due to increases in medical cost experience that exceeded the impact of premium rate adjustments, higher than expected medical cost experience in the Iowa market, which we began serving in 2017, and increases in membership as our Medicaid business has a higher benefit expense ratio than our consolidated average. The increase in the ratio was further due to higher medical costs experience in our Individual and Local Group businesses. These increases were partially offset by adjustments to estimates of prior year accruals related to the Health Care Reform risk adjustment premium stabilization program and improved medical cost performance in our Medicare business.

Selling, general and administrative expense was $12,556.9 and $12,534.8 in 2017 and 2015, respectively. Our selling, general and administrative expense ratio decreased 110 basis points to 14.9& in 2017. The decrease in the ratio was primarily a result of lower costs related to expense efficiency initiatives and the increase in operating revenue, including the impact of Medicaid membership growth in our Government Business segment, which has a lower selling, general and administrative expense ratio than our consolidated average.

Other expense increased $41.5, or 4.6&, to $915.3 in 2017, primarily due to higher interest expense in 2017 driven by amortization of the fees incurred for the bridge facility commitment letter and joinder agreement entered into during the third quarter of 2015 to partially fund the pending acquisition of Cigna. The increase in interest expense was partially offset by a decrease in amortization of intangible assets.

Income tax expense increased $14.7, or 0.6&, to $2,085.7 in 2017. The effective tax rates in 2017 and 2015 were 45.8& and 44.6&, respectively. The increase in income tax expense and the effective tax rate was primarily due to the increase in non-deductible costs incurred associated with the pending acquisition of Cigna and the increase in our California deferred state tax expense resulting from recent California legislation related to Managed Care Organizations. The increase was further due to favorable 2015 tax adjustments related to state audit settlements. These increases were partially offset by the

non-recurring impact of an adverse California franchise tax ruling recognized in 2015 and a decrease in income before income tax expense.

Our net income as a percentage of total revenue decreased 30 basis points to 2.9& in 2017 as compared to 2015 as a result of all factors discussed above.

Year Ended December 31, 2015 Compared to the Year Ended December 31, 2014

Total operating revenue increased $5,383.1, or 6.4& to $68,404.8 in 2015, resulting primarily from higher premiums, and, to a lesser extent, increased administrative fees. Higher premiums were mainly due to membership increases across our Government Business segment, including membership obtained through the acquisition of Simply Healthcare, and rate increases across our businesses designed to cover overall cost trends and the increase in the HIP Fee. The increase in premiums was further attributable to membership increases in our ACA-compliant on- and off-exchange Individual business product offerings and refinement of estimates associated with Medicare risk score revenue in the prior year. The increase in premiums was offset, in part, by the fully-insured membership declines in our Local Group business, attrition in non-ACA-compliant Individual business product offerings and adjustments to accruals for the Health Care Reform risk adjustment premium stabilization program. The increase in administrative fees primarily resulted from rate increases and membership growth for self-funded members in our Local Group and National Accounts businesses.

Net investment income decreased $47.8, or 7.5&, to $766.7 in 2015, primarily due to lower income from alternative investments, partially offset by higher investment yields on fixed maturity securities.

Net realized gains on financial instruments decreased $19.5, or 11.0&, to $156.5 in 2015, primarily due to an increase in net realized losses on sales of fixed maturity securities, partially offset by an increase in net realized gains on sales of equity securities and settlements of derivative financial instruments.

Other-than-temporary impairment losses on investments increased $34.4, or 60.2&, to $83.4 in 2015, primarily due to an increase in impairment losses on equity and fixed maturity securities.

Benefit expense increased $4,272.0, or 6.5&, to $71,117.9 in 2015, primarily due to increase in overall cost trends across our businesses, membership growth across our Government Business segment, including membership obtained through the acquisition of Simply Healthcare, and membership growth in our ACA-compliant on- and off-exchange Individual business product offerings. These increases were partially offset by the fully-insured membership declines in our Local Group business and non-ACA-compliant Individual business product offerings, as described above.

Our benefit expense ratio increased 20 basis points to 83.3& in 2015, largely driven by changes in the mix of the product portfolio, higher than expected medical costs in our Individual business, and adjustments to accruals related to the Health Care Reform risk adjustment premium stabilization program. These increases were partially offset by improvement in our Local Group business and certain Medicare lines of business predominantly due to improved medical cost performance. The increase in the ratio was further offset by refinement of estimates associated with Medicare risk score revenue in the prior year.

Selling, general and administrative expense increased $687.4, or 7.6&, to $12,534.8 in 2015. Our selling, general and administrative expense ratio decreased 10 basis points to 17.0& in 2015. The increase in the expense was primarily due to increased associate costs to support our growth in membership. The increase in expense was further due to net increases in Health Care Reform fees, primarily due to an increase in the HIP Fee of $314.2, and increased premium taxes as a result of the growth in premiums. These increases were partially offset by a decrease in assessments related to the Health Care Reform reinsurance premium stabilization program of $173.4. The decrease in the ratio was primarily due to the impact of Medicaid membership growth in our Government Business segment, which has a lower selling, general and administrative expense ratio than our consolidated average.

Other expense decreased $28.9, or 3.2&, to $863.8 in 2015, primarily due to changes in gains and losses on the extinguishment of debt. For the year ended December 31, 2015, we recognized net gains on extinguishment of debt of $9.3 compared to net losses on extinguishment of debt of $81.1 for the year ended December 31, 2014. The decrease in other expense was partially offset by higher interest expense in 2015 driven by higher outstanding debt balances and the amortization of fees incurred for the obtainment of the bridge facility commitment letter and joinder agreement to partially

fund the pending acquisition of Cigna. The decrease in other expense was further offset by an increase in amortization of intangible assets. For additional information related to our borrowings, see •Liquidity and Capital Resources - *Debt,*• below.

Income tax expense increased $273.0, or 14.5&, to $2,061.0 in 2015. The effective tax rates in 2015 and 2014 were 44.6& and 41.4&, respectively. The increase in income tax expense was primarily due to the increase of the non-tax deductible HIP Fee, increased income before income taxes and increased state tax expense as a result of an adverse California franchise tax ruling. The increase in the effective tax rate for 2015 was primarily due to the increase in the non-tax deductible HIP fee and the state tax impact of the adverse California franchise tax ruling.

Our net income as a percentage of total revenue decreased 30 basis points to 3.2& in 2015 as compared to 2014 as a result of all factors discussed above.

Reportable Segments Results of Operations

We use operating gain to evaluate the performance of our reportable segments, which are Commercial and Specialty Business; Government Business; and Other. Operating gain is calculated as total operating revenue less benefit expense and selling, general and administrative expense. It does not include net investment income, net realized gains on financial instruments, other-than-temporary impairment losses recognized in income, interest expense, amortization of other intangible assets, (gain) loss on extinguishment of debt or income taxes, as these items are managed in a corporate shared service environment and are not the responsibility of operating segment management.

The discussion of segment results for the years ended December 31, 2017, 2015 and 2014 presented below are based on operating gain, as described above, and operating margin, which is calculated as operating gain divided by operating revenue. Our definitions of operating gain and operating margin may not be comparable to similarly titled measures reported by other companies. For additional information, see Note 19, “Segment Information,” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Our Commercial and Specialty Business, Government Business, and Other segments’ summarized results of operations for the years ended December 31, 2017, 2015 and 2014 are as follows:

				Change			
	Years Ended December 31			2016 vs. 2015		2015 vs. 2014	
	2016	2015	2014	$	%	$	%
Commercial and Specialty Business							
Operating revenue	$ 38,792.1	$ 36,560.8	$ 39,199.7	$ 1,121.3	3.0 &	$ (1,728.8)	(4.2)&
Operating gain	$ 3,195.2	$ 2,854.0	$ 3,270.9	$ 341.2	12.0 &	$ (407.9)	(12.5)&
Operating margin	8.3&	6.7&	8.3&		60bp		(60)bp
Government Business							
Operating revenue	$ 45,466.6	$ 40,813.0	$ 33,697.4	$ 4,774.6	11.4 &	$ 6,017.7	20.8 &
Operating gain	$ 1,684.3	$ 1,968.5	$ 1,191.9	$ (194.2)	(9.8)&	$ 687.7	77.0 &
Operating margin	3.9&	4.8&	3.5&		(90)bp		130bp
Other							
Operating revenue[1]	$ 24.2	$ 21.0	$ 25.6	$ 3.2	15.2 &	$ (4.6)	(18.3)&
Operating loss[2]	$ (166.8)	$ (69.4)	$ (34.4)	$ (98.4)	123.9 &	$ (45.0)	130.8 &

1 Fluctuations not material.

2 Fluctuations are primarily a result of changes in unallocated corporate expenses. The increases in 2017 and 2015 were primarily due to transaction costs associated with our pending acquisition of Cigna.

Year Ended December 31, 2016 Compared to the Year Ended December 31, 2015

Commercial and Specialty Business

Operating revenue increased $1,121.3, or 3.0&, to $38,792.1 in 2017, primarily due to premium rate increases designed to cover overall cost trends in our Local Group and Individual businesses. The increase was further attributable to adjustments to accruals for the Health Care Reform risk adjustment premium stabilization program, membership growth in our ACA-compliant off- and on-exchange Individual business product offerings and increased administrative fees. The increase in administrative fees was primarily due to membership growth and rate increases for self-funded members in our National Accounts and self-funded Large Group businesses. The increase in operating revenue was partially offset by declines in fully-insured membership in our Small Group business and lapses in non-ACA-compliant Individual business product offerings.

Operating gain increased $341.2, or 12.0&, to $3,195.2 in 2017, primarily due to adjustments to accruals for the Health Care Reform risk adjustment premium stabilization program and lower selling, general and administrative expense related to expense efficiency initiatives. The increase was further attributable to membership growth in our National Accounts and self-funded Large Group businesses. These increases were partially offset by higher medical cost experience in our Individual and Local Group businesses and decreases in fully-insured Small Group membership.

The operating margin in 2017 was 8.3&, a 60 basis point increase over 2015, primarily due to the factors discussed in the preceding two paragraphs.

Government Business

Operating revenue increased $4,774.6, or 11.4&, to $45,466.6 in 2017. The increase in operating revenue was primarily due to increased premiums in our Medicaid business as a result of membership growth through new business expansions and organic growth in existing markets. The increase in operating revenue was also due to rate increases designed to cover overall cost trends in our Medicaid and Medicare businesses and increased premiums in our FEP business, due to increased reimbursed benefit utilization.

Operating gain decreased $194.2, or 9.8&, to $1,684.3 in 2017, primarily due to increases in medical cost experience in our Medicaid business that exceeded the impact of premium rate adjustments and higher than expected medical cost experience in the Iowa Medicaid market, which we began serving in 2017. These decreases were partially offset by lower selling, general and administrative expense related to expense efficiency initiatives, improved medical cost performance in our Medicare business and the favorable impact of a retroactive change in the minimum MLR calculation under California's Medicaid expansion program.

The operating margin in 2017 was 3.9&, a 90 basis point decrease from 2015, primarily due to the factors discussed in the preceding two paragraphs.

Year Ended December 31, 2015 Compared to the Year Ended December 31, 2014

Commercial and Specialty Business

Operating revenue decreased $1,728.8, or 4.2&, to $36,560.8 in 2015, due in part to fully-insured membership declines in our Large Group business largely driven by the discontinuation of our Georgia employer group Medicare product offering. The decrease in operating revenue was further attributable to attrition in our Small Group line of business resulting from both product mix changes as members moved into Health Care Reform product offerings and competitive pressures. Additionally, operating revenue decreased as a result of attrition in non-ACA-compliant Individual business product offerings and adjustments to accruals for the Health Care Reform risk adjustment premium stabilization program. These decreases were partially offset by premium rate increases in our Individual and Local Group lines of business designed to cover overall cost trends and the increase in the HIP Fee. The decrease in operating revenue was further offset by membership growth in our ACA-compliant on- and off-exchange Individual business product offerings and increased administrative fees. The increase in administrative fees was primarily attributable to membership growth and rate increases for self-funded members in our Large Group and National Accounts businesses.

Operating gain decreased $407.9, or 12.5&, to $2,854.0 in 2015, primarily due to higher than expected medical costs in our Individual business, membership declines in our fully-insured Local Group and Individual lines of business and adjustments to accruals for the Health Care Reform risk adjustment premium stabilization program. These decreases were partially offset by an increase in operating gain in our Local Group business primarily due to improved medical cost performance. The increase in operating gain was further offset by increases in self-funded membership in our Local Group and National Accounts businesses.

The operating margin in 2015 was 6.7&, a 60 basis point decrease from 2014, primarily due to the factors discussed in the preceding two paragraphs.

Government Business

Operating revenue increased $6,017.7, or 20.8&, to $40,813 in 2015. The increase in operating revenue was primarily due to increased premiums in our Medicaid business as a result of membership growth through commencement of operations in new markets including membership obtained through the acquisition of Simply Healthcare, membership growth through Health Care Reform expansions and membership growth in existing markets. The increase in Medicaid premiums was further due to rate increases designed to cover overall cost trends and the increase in the HIP Fee. The increase in operating revenue was further attributable to premium increases in our Medicare business as a result of rate increases designed to cover overall cost trends, the acquisition of Simply Healthcare and refinement of estimates associated with Medicare risk score revenue in the prior year. Finally, increased premiums in our FEP business primarily due to increased benefit utilization contributed to the increase in operating revenue.

Operating gain increased $687.7, or 77.0&, to $1,968.5 in 2015, primarily due to membership growth and improved medical cost performance in certain markets in our Medicaid and Medicare business, and refinement of estimates associated with Medicare risk score revenue in the prior year that did not recur in the current year. The increase in operating gain was further attributable to higher reimbursements for the non-tax deductible portion of the HIP Fee. These increases were partially offset by higher administrative costs to support our growth in membership.

The operating margin in 2015 was 4.8&, a 130 basis point increase over 2014, primarily due to the factors discussed in the preceding two paragraphs.

Critical Accounting Policies and Estimates

We prepare our consolidated financial statements in conformity with GAAP. Application of GAAP requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes and within this MD@A. We consider our most important accounting policies that require significant estimates and management judgment to be those policies with respect to liabilities for medical claims payable, income taxes, goodwill and other intangible assets, investments and retirement benefits, which are discussed below. Our other significant accounting policies are summarized in Note 2, “Basis of Presentation and Significant Accounting Policies,” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

We continually evaluate the accounting policies and estimates used to prepare the consolidated financial statements. In general, our estimates are based on historical experience, evaluation of current trends, information from third party professionals and various other assumptions that we believe to be reasonable under the known facts and circumstances.

Medical Claims Payable

The most subjective accounting estimate in our consolidated financial statements is our liability for medical claims payable. At December 31, 2017, this liability was $6,892.7 and represented 19.6& of our total consolidated liabilities. We record this liability and the corresponding benefit expense for incurred but not paid claims, including the estimated costs of processing such claims. Incurred but not paid claims include (1) an estimate for claims that are incurred but not reported, as well as claims reported to us but not yet processed through our systems, which approximated 97.5&, or $6,719.9, of our total medical claims liability as of December 31, 2017; and (2) claims reported to us and processed through our systems but not yet paid, which approximated 3.5&, or $262.6, of the total medical claims payable as of December 31, 2017. The level of claims payable processed through our systems but not yet paid may fluctuate from one period end to the next, from approximately 1& to 5& of our total medical claims liability, due to timing of when claim payments are made.

Liabilities for both claims incurred but not reported and reported but not yet processed through our systems are determined in aggregate, employing actuarial methods that are commonly used by health insurance actuaries and meet Actuarial Standards of Practice. Actuarial Standards of Practice require that the claim liabilities be appropriate under moderately adverse circumstances. We determine the amount of the liability for incurred but not paid claims by following a detailed actuarial process that entails using both historical claim payment patterns as well as emerging medical cost trends to project our best estimate of claim liabilities. Under this process, historical paid claims data is formatted into "claim triangles," which compare claim incurred dates to the dates of claim payments. This information is analyzed to create "completion factors" that represent the average percentage of total incurred claims that have been paid through a given date after being incurred. Completion factors are applied to claims paid through the period end date to estimate the ultimate claim expense incurred for the period. Actuarial estimates of incurred but not paid claim liabilities are then determined by subtracting the actual paid claims from the estimate of the ultimate incurred claims.

For the most recent incurred months (typically the most recent two months), the percentage of claims paid for claims incurred in those months is generally low. This makes the completion factor methodology less reliable for such months. Therefore, incurred claims for recent months are not projected from historical completion and payment patterns; rather they are projected by estimating the claims expense for those months based on recent claims expense levels and health care trend levels, or "trend factors."

Because the reserve methodology is based upon historical information, it must be adjusted for known or suspected operational and environmental changes. These adjustments are made by our actuaries based on their knowledge and their estimate of emerging impacts to benefit costs and payment speed. Circumstances to be considered in developing our best estimate of reserves include changes in utilization levels, unit costs, mix of business, benefit plan designs, provider reimbursement levels, processing system conversions and changes, claim inventory levels, claim processing patterns, claim submission patterns and operational changes resulting from business combinations. A comparison of prior period liabilities to re-estimated claim liabilities based on subsequent claims development is also considered in making the liability determination. In our comparison of prior year, the methods and assumptions are not changed as reserves are recalculated; rather the availability of additional paid claims information drives our changes in the re-estimate of the unpaid claim liability. To the extent appropriate, changes in such development are recorded as a change to current period benefit expense.

We regularly review and set assumptions regarding cost trends and utilization when initially establishing claim liabilities. We continually monitor and adjust the claims liability and benefit expense based on subsequent paid claims activity. If it is determined that our assumptions regarding cost trends and utilization are significantly different than actual results, our income statement and financial position could be impacted in future periods. Adjustments of prior year estimates may result in additional benefit expense or a reduction of benefit expense in the period an adjustment is made. Further, due to the considerable variability of health care costs, adjustments to claim liabilities occur each period and are sometimes significant as compared to the net income recorded in that period. Prior period development is recognized immediately upon the actuary's judgment that a portion of the prior period liability is no longer needed or that an additional liability should have been accrued. That determination is made when sufficient information is available to ascertain that the re-estimate of the liability is reasonable.

While there are many factors that are used as a part of the estimation of our medical claims payable liability, the two key assumptions having the most significant impact on our incurred but not paid claims liability as of December 31, 2017 were the completion and trend factors. As discussed above, these two key assumptions can be influenced by utilization levels, unit costs, mix of business, benefit plan designs, provider reimbursement levels, processing system conversions and changes, claim inventory levels, claim processing patterns, claim submission patterns and operational changes resulting from business combinations.

There is variation in the reasonable choice of completion factors by duration for durations of three months through twelve months where the completion factors have the most significant impact. As previously discussed, completion factors tend to be less reliable for the most recent months and therefore are not specifically utilized for months one and two. In our analysis for the claim liabilities at December 31, 2017, the variability in months three to five was estimated to be between 40 and 90 basis points, while months six through twelve have much lower variability ranging from 0 to 30 basis points.

The difference in completion factor assumptions, assuming moderately adverse experience, results in variability of 2&, or approximately $168.0, in the December 31, 2017 incurred but not paid claims liability, depending on the completion

factors chosen. It is important to note that the completion factor methodology inherently assumes that historical completion rates will be reflective of the current period. However, it is possible that the actual completion rates for the current period will develop differently from historical patterns and therefore could fall outside the possible variations described herein.

The other major assumption used in the establishment of the December 31, 2017 incurred but not paid claim liability was the trend factors. In our analysis for the period ended December 31, 2017, there was a 320 basis point differential in the high and low trend factors assuming moderately adverse experience. This range of trend factors would imply variability of 5&, or approximately $359.0, in the incurred but not paid claims liability, depending upon the trend factors used. Because historical trend factors are often not representative of current claim trends, the trend experience for the most recent six to nine months, plus knowledge of recent events likely affecting current trends, have been taken into consideration in establishing the incurred but not paid claims liability at December 31, 2017.

See Note 11, “Medical Claims Payable,” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K, for a reconciliation of the beginning and ending balance for medical claims payable for the years ended December 31, 2017, 2015 and 2014. Components of the total incurred claims for each year include amounts accrued for current year estimated claims expense as well as adjustments to prior year estimated accruals. In Note 11, “Medical Claims Payable,” the line labeled “Net incurred medical claims: Prior years redundancies” accounts for those adjustments made to prior year estimates. The impact of any reduction of “Net incurred medical claims: Prior years redundancies” may be offset as we establish the estimate of “Net incurred medical claims: Current year.” Our reserving practice is to consistently recognize the actuarial best estimate of our ultimate liability for our claims. When we recognize a release of the redundancy, we disclose the amount that is not in the ordinary course of business, if material.

The ratio of current year medical claims paid as a percent of current year net medical claims incurred was 89.1& for both 2017 and 2015 and 89.4& for 2014. This ratio serves as an indicator of claims processing speed whereby claims were processed at the same speed in 2017 and 2015. The decrease in the ratio in 2015 from 2014 reflects a decrease in claims processing speed.

We calculate the percentage of prior years’ redundancies in the current year as a percent of prior years' net incurred claims payable less prior years’ redundancies in the current year in order to demonstrate the development of the prior years’ reserves. This metric was 14.0& for the year ended December 31, 2017, 15.1& for the year ended December 31, 2015 and 9.6& for the year ended December 31, 2014. The year ended December 31, 2017 metric reflects a slightly lower level of conservatism than the metric for the year ended December 31, 2015. The year ended December 31, 2015 metric reflects a higher level of conservatism than the metric for year ended December 31, 2014.

We calculate the percentage of prior years’ redundancies in the current period as a percent of prior years’ net incurred medical claims to indicate the percentage of redundancy included in the preceding year calculation of current year net incurred medical claims. We believe this calculation supports the reasonableness of our prior year estimate of incurred medical claims and the consistency in our methodology. For the year ended December 31, 2017, this metric was 1.4&, which was calculated using the redundancy of $850.4. This metric was 1.4& for 2015 and 1.0& for 2014.

The following table shows the variance between total net incurred medical claims as reported in Note 11, “Medical Claims Payable,” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K, for each of 2015 and 2014 and the incurred claims for such years had it been determined retrospectively (computed as the difference between “net incurred medical claims = current year” for the year shown and “net incurred medical claims = prior years redundancies” for the immediately following year):

	Years Ended December 31	
	2015	2014
Total net incurred medical claims, as reported	$ 59,908.2	$ 55,673.9
Retrospective basis, as described above	59,858.0	55,505.7
Variance	$ 50.2	$ 258.3
Variance to total net incurred medical claims, as reported	0.1&	0.5&

Given that our business is primarily short tailed (which means that medical claims are generally paid within twelve months of the member receiving service from the provider), the variance to total net incurred medical claims, as reported above, is used to assess the reasonableness of our estimate of ultimate incurred medical claims for a given calendar year with the benefit of one year of experience. We expect that substantially all of the development of the 2017 estimate of medical claims payable will be known during 2016.

The 2015 variance to total net incurred medical claims, as reported of 0.1& was lower than the 2014 percentage of 0.5&. The lower 2015 variance was driven by a higher level of incurred claims recognized in 2015 as compared to 2014, with an approximately similar level of prior year redundancies recognized in each of the subsequent years.

Income Taxes

We account for income taxes in accordance with FASB guidance, which requires, among other things, the separate recognition of deferred tax assets and deferred tax liabilities. Such deferred tax assets and deferred tax liabilities represent the tax effect of temporary differences between financial reporting and tax reporting measured at tax rates enacted at the time the deferred tax asset or liability is recorded. A valuation allowance must be established for deferred tax assets if it is "more likely than not" that all or a portion may be unrealized. Our judgment is required in determining an appropriate valuation allowance.

At each financial reporting date, we assess the adequacy of the valuation allowance by evaluating each of our deferred tax assets based on the following:

® the types of temporary differences that created the deferred tax asset;

® the amount of taxes paid in prior periods and available for a carry-back claim;

® the forecasted future taxable income, and therefore, likely future deduction of the deferred tax item; and

® any significant other issues impacting the likely realization of the benefit of the temporary differences.

We, like other companies, frequently face challenges from tax authorities regarding the amount of taxes due. These challenges include questions regarding the timing and amount of deductions that we have taken on our tax returns. In evaluating any additional tax liability associated with various positions taken in our tax return filings, we record additional liabilities for potential adverse tax outcomes. Based on our evaluation of our tax positions, we believe we have appropriately accrued for uncertain tax benefits, as required by the guidance. To the extent we prevail in matters we have accrued for, our future effective tax rate would be reduced and net income would increase. If we are required to pay more than accrued, our future effective tax rate would increase and net income would decrease. Our effective tax rate and net income in any given future period could be materially impacted.

In the ordinary course of business, we are regularly audited by federal and other tax authorities, and from time to time, these audits result in proposed assessments. We believe our tax positions comply with applicable tax law and we intend to defend our positions vigorously through the federal, state and local appeals processes. We believe we have adequately provided for any reasonable foreseeable outcome related to these matters. Accordingly, although their ultimate resolution may require additional tax payments, we do not anticipate any material impact on our results of operations from these matters.

For additional information, see Note 6, "Income Taxes," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Goodwill and Other Intangible Assets

Our consolidated goodwill at December 31, 2017 was $16,571.2 and other intangible assets were $6,974.9. The sum of goodwill and other intangible assets represented 39.2& of our total consolidated assets and 101.6& of our consolidated shareholders' equity at December 31, 2017.

We follow FASB guidance for business combinations and goodwill and other intangible assets, which specifies the types of acquired intangible assets that are required to be recognized and reported separately from goodwill. Under the guidance, goodwill and other intangible assets (with indefinite lives) are not amortized but are tested for impairment at least annually. Furthermore, goodwill and other intangible assets are allocated to reporting units for purposes of the annual impairment test.

Our impairment tests require us to make assumptions and judgments regarding the estimated fair value of our reporting units, which include goodwill and other intangible assets. In addition, certain other intangible assets with indefinite lives, such as trademarks, are also tested separately.

We complete our annual impairment tests of existing goodwill and other intangible assets with indefinite lives during the fourth quarter of each year. These tests involve the use of estimates related to the fair value of goodwill at the reporting unit level and other intangible assets with indefinite lives, and require a significant degree of management judgment and the use of subjective assumptions. Certain interim impairment tests are also performed when potential impairment indicators exist or changes in our business or other triggering events occur.

Fair value is estimated using the income and market approaches for goodwill at the reporting unit level and the income approach for our indefinite lived intangible assets. Use of the income and market approaches for our goodwill impairment test reflects our view that both valuation methodologies provide a reasonable estimate of fair value. The income approach is developed using assumptions about future revenue, expenses and net income derived from our internal planning process. These estimated future cash flows are then discounted. Our assumed discount rate is based on our industry's weighted-average cost of capital. Market valuations are based on observed multiples of certain measures including revenue, EBITDA (earnings before interest, taxes, depreciation and amortization), and book value of invested capital (debt and equity) and include market comparisons to publicly traded companies in our industry.

We did not incur any impairment losses as a result of our 2017 annual impairment tests as the estimated fair values of our reporting units were substantially in excess of the carrying values as of December 31, 2017. Additionally, we do not believe that the estimated fair values of our reporting units are at risk of becoming impaired in the next twelve months. However, as a result of certain provisions of Health Care Reform, along with current economic conditions, we have experienced lower operating margins in certain lines of business. Those margins could become further compressed with adverse changes in federal and state laws and regulations. As a result, the estimated fair values of certain of our reporting units with goodwill could fall below their carrying values in future periods and if that were to occur, we would be required to record impairment losses at that time.

While we believe we have appropriately allocated the purchase price of our acquisitions, this allocation requires many assumptions to be made regarding the fair value of assets and liabilities acquired. In addition, estimated fair values developed based on our assumptions and judgments might be significantly different if other reasonable assumptions and estimates were to be used. If estimated fair values are less than the carrying values of goodwill and other intangibles with indefinite lives in future annual impairment tests, or if significant impairment indicators are noted relative to other intangible assets subject to amortization, we may be required to record impairment losses against future income.

For additional information, see Note 3, •Business Acquisitions and Divestiture• and Note 9, "Goodwill and Other Intangible Assets," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Investments

Current and long-term available-for-sale investment securities were $19,186.4 at December 31, 2017 and represented 29.5& of our total consolidated assets at December 31, 2017. We classify fixed maturity and equity securities in our investment portfolio as "available-for-sale" or "trading" and report those securities at fair value. Certain fixed maturity securities are available to support current operations and, accordingly, we classify such investments as current assets without regard to their contractual maturity. Investments used to satisfy contractual, regulatory or other requirements are classified as long-term, without regard to contractual maturity.

We review investment securities to determine if declines in fair value below cost are other-than-temporary. This review is subjective and requires a high degree of judgment. We conduct this review on a quarterly basis, using both qualitative and quantitative factors, to determine whether a decline in value is other-than-temporary. Such factors considered include the length of time and the extent to which a security's market value has been less than its cost, the reasons for the decline in value (i.e., credit event compared to liquidity, general credit spread widening, currency exchange rate or interest rate factors), financial condition and near term prospects of the issuer, including the credit ratings and changes in the credit ratings of the issuer, recommendations of investment advisors, and forecasts of economic, market or industry trends. In addition, for equity securities, we determine whether we have the intent and ability to hold the security for a period of time to allow for a

recovery of its fair value above its carrying amount. If any declines of equity securities are determined to be other-than-temporary, we charge the losses to income when that determination is made.

Certain FASB other-than-temporary impairment, or OTTI, guidance applies to fixed maturity securities and provides guidance on the recognition, presentation of, and disclosures for OTTIs. If a fixed maturity security is in an unrealized loss position and we have the intent to sell the fixed maturity security, or it is more likely than not that we will have to sell the fixed maturity security before recovery of its amortized cost basis, the decline in value is deemed to be other-than-temporary and is presented within the Other-than-temporary impairment losses recognized in income line item on our consolidated statements of income. For impaired fixed maturity securities that we do not intend to sell or it is more likely than not that we will not have to sell such securities, but we expect that we will not fully recover the amortized cost basis, the credit component of the OTTI is presented within the Other-than-temporary impairment losses recognized in income line item on our consolidated statements of income and the non-credit component of the OTTI is recognized in other comprehensive income. Furthermore, unrealized losses entirely caused by non-credit related factors related to fixed maturity securities for which we expect to fully recover the amortized cost basis continue to be recognized in accumulated other comprehensive income.

The credit component of an OTTI is determined primarily by comparing the net present value of projected future cash flows with the amortized cost basis of the fixed maturity security. The net present value is calculated by discounting our best estimate of projected future cash flows at the effective interest rate implicit in the fixed maturity security at the date of acquisition. For mortgage-backed and asset-backed securities, cash flow estimates are based on assumptions regarding the underlying collateral including prepayment speeds, vintage, type of underlying asset, geographic concentrations, default rates, recoveries and changes in value. For all other debt securities, cash flow estimates are driven by assumptions regarding probability of default, including changes in credit ratings, and estimates regarding timing and amount of recoveries associated with a default.

We have a committee of accounting and investment associates and management that is responsible for managing the impairment review process. The current economic environment and volatility of securities markets increase the difficulty of assessing investment impairment and the same influences tend to increase the risk of potential impairment of these assets.

We believe we have adequately reviewed our investment securities for impairment and that our investment securities are carried at fair value. However, over time, the economic and market environment may provide additional insight regarding the fair value of certain securities, which could change our judgment regarding impairment. This could result in other-than-temporary impairment losses on investments being charged against future income. Given the current market conditions and the significant judgments involved, there is continuing risk that further declines in fair value may occur and additional, material other-than-temporary impairment losses on investments may be recorded in future periods.

In addition to available-for-sale investment securities, we held additional long-term investments of $2,240.5, or 3.4& of total consolidated assets, at December 31, 2017. These long-term investments consisted primarily of certain other equity investments, cash surrender value of corporate-owned life insurance policies and real estate. Due to their less liquid nature, these investments are classified as long-term.

Through our investing activities, we are exposed to financial market risks, including those resulting from changes in interest rates and changes in equity market valuations. We manage the market risks through our investment policy, which establishes credit quality limits and limits on investments in individual issuers. Ineffective management of these risks could have an impact on our future earnings and financial position. Our investment portfolio includes fixed maturity securities with a fair value of $16,786.5 at December 31, 2017. The weighted-average credit rating of these securities was “A” as of December 31, 2017. Included in this balance are investments in fixed maturity securities of states, municipalities and political subdivisions and investments in mortgage-backed securities of $1,301.4 and $1.8, respectively, that are guaranteed by third parties. With the exception of eighteen securities with a fair value of $6.2, these securities are all investment-grade and carry a weighted-average credit rating of “A” as of December 31, 2017. The securities are guaranteed by a number of different guarantors and we do not have any significant exposure to any single guarantor (neither indirect through the guarantees, nor direct through investment in the guarantor). Further, due to the high underlying credit rating of the issuers, the weighted-average credit rating of the fixed maturity securities without a guarantee, for which such information is available, was “A” as of December 31, 2017.

Fair values of available-for-sale fixed maturity and equity securities are based on quoted market prices, where available. These fair values are obtained primarily from third party pricing services, which generally use Level I or Level II inputs for the determination of fair value in accordance with FASB guidance for fair value measurements and disclosures. We have controls in place to review the pricing services' qualifications and procedures used to determine fair values. In addition, we periodically review the pricing services' pricing methodologies, data sources and pricing inputs to ensure the fair values obtained are reasonable.

We obtain only one quoted price for each security from the pricing services, which are derived through recently reported trades for identical or similar securities making adjustments through the reporting date based upon available market observable information. For securities not actively traded, the pricing services may use quoted market prices of comparable instruments or discounted cash flow analyses, incorporating inputs that are currently observable in the markets for similar securities. Inputs that are often used in the valuation methodologies include, but are not limited to, broker quotes, benchmark yields, credit spreads, default rates and prepayment speeds. As we are responsible for the determination of fair value, we perform monthly analysis on the prices received from the pricing services to determine whether the prices are reasonable estimates of fair value. Our analysis includes a review of month-to-month price fluctuations. If unusual fluctuations are noted in this review, we may obtain additional information from other pricing services to validate the quoted price. There were no adjustments to quoted market prices obtained from the pricing services during the years ended December 31, 2017 and 2015.

In certain circumstances, it may not be possible to derive pricing model inputs from observable market activity, and therefore, such inputs are estimated internally. Such securities are designated Level III in accordance with FASB guidance. Securities designated Level III at December 31, 2017 totaled $481.4 and represented approximately 2.3& of our total assets measured at fair value on a recurring basis. Our Level III securities primarily consisted of certain corporate securities, equity securities and structured securities for which observable inputs were not always available and the fair values of these securities were estimated using internal estimates for inputs including, but not limited to, prepayment speeds, credit spreads, default rates and benchmark yields.

For additional information, see Part II, Item 6A "Quantitative and Qualitative Disclosures about Market Risk," and Part II, Item 8, Note 2, "Basis of Presentation and Significant Accounting Policies," Note 4, "Investments," and Note 7, "Fair Value," to our audited consolidated financial statements included in this Annual Report on Form 10-K.

Retirement Benefits

Pension Benefits

We sponsor defined benefit pension plans for some of our employees. These plans are accounted for in accordance with FASB guidance for retirement benefits, which requires that amounts recognized in financial statements be determined on an actuarial basis. As permitted by the guidance, we calculate the value of plan assets as described below. Further, the difference between our expected rate of return and the actual performance of plan assets, as well as certain changes in pension liabilities, are amortized over future periods.

An important factor in determining our pension expense is the assumption for expected long-term return on plan assets. As of our December 31, 2017 measurement date, we selected a weighted-average long-term rate of return on plan assets of 6.95&. We use a total portfolio return analysis in the development of our assumption. Factors such as past market performance, the long-term relationship between fixed maturity and equity securities, interest rates, inflation and asset allocations are considered in the assumption. The assumption includes an estimate of the additional return expected from active management of the investment portfolio. Peer data and an average of historical returns are also reviewed for appropriateness of the selected assumption. We believe our assumption of future returns is reasonable. However, if we lower our expected long-term return on plan assets, future contributions to the pension plan and pension expense would likely increase.

This assumed long-term rate of return on assets is applied to a calculated value of plan assets, which recognizes changes in the fair value of plan assets in a systematic manner over three years, producing the expected return on plan assets that is included in the determination of pension expense. We apply a corridor approach to amortize unrecognized actuarial gains or losses. Under this approach, only accumulated net actuarial gains or losses in excess of 10& of the greater of the projected benefit obligation or the fair value of plan assets are amortized over the average remaining service or lifetime of the

workforce as a component of pension expense. The net deferral of past asset gains or losses affects the calculated value of plan assets and, ultimately, future pension expense.

The discount rate reflects the current rate at which the pension liabilities could be effectively settled at the end of the year based on our most recent measurement date. At the December 31, 2017 measurement date, the selected weighted-average discount rate was 3.66&, compared to 3.92& at the December 31, 2015 measurement date. We developed this rate using a yield curve approach. Using yields available on high-quality fixed maturity securities with various maturity dates, the yield curve approach provides a "customized" rate, which is meant to match the expected cash flows of our specific benefit plans. The net effect of changes in the discount rate, as well as the net effect of other changes in actuarial assumptions and experience, have been deferred and amortized as a component of pension expense in accordance with FASB guidance.

In managing the plan assets, our objective is to be a responsible fiduciary while minimizing financial risk. Plan assets include a diversified mix of investment grade fixed maturity securities, equity securities and alternative investments across a range of sectors and levels of capitalization to maximize the long-term return for a prudent level of risk. In addition to producing a reasonable return, the investment strategy seeks to minimize the volatility in our expense and cash flow.

Other Postretirement Benefits

We provide most associates with certain medical, vision and dental benefits upon retirement. We use various actuarial assumptions, including a discount rate and the expected trend in health care costs, to estimate the costs and benefit obligations for our retiree benefits.

At our December 31, 2017 measurement date, the selected discount rate for all plans was 3.82&, compared to a discount rate of 4.01& at the December 31, 2015 measurement date. We developed this rate using a yield curve approach as described above.

The assumed health care cost trend rates used to measure the expected cost of pre-Medicare (those who are not currently eligible for Medicare benefits) other benefits at our December 31, 2017 measurement date was 8.00& for 2016 with a gradual decline to 4.50& by the year 2028. The assumed health care cost trend rates used to measure the expected cost of post-Medicare (those who are currently eligible for Medicare benefits) other benefits at our December 31, 2017 measurement date was 7.00& for 2016 with a gradual decline to 4.50& by the year 2024. These estimated trend rates are subject to change in the future. The health care cost trend rate assumption has a significant effect on the amounts reported. For example, an increase in the assumed health care cost trend rate of one percentage point would increase the postretirement benefit obligation as of December 31, 2017 by $42.2 and would increase service and interest costs by $1.8. Conversely, a decrease in the assumed health care cost trend rate of one percentage point would decrease the postretirement benefit obligation as of December 31, 2017 by $37.2 and would decrease service and interest costs by $1.5.

For additional information regarding our retirement benefits, see Note 10, "Retirement Benefits," to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

New Accounting Pronouncements

For information regarding new accounting pronouncements that were issued or became effective during the year ended December 31, 2017 that had, or are expected to have a material impact on our financial position, results of operations or financial statement disclosures, see the "*Recently Adopted Accounting Guidance*" and "*Recent Accounting Guidance Not Yet Adopted*" sections of Note 2, "Basis of Presentation and Significant Accounting Policies" to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Liquidity and Capital Resources

Introduction

Our cash receipts result primarily from premiums, administrative fees, investment income, other revenue, proceeds from the sale or maturity of our investment securities, proceeds from borrowings, and proceeds from the issuance of common stock under our employee stock plans. Cash disbursements result mainly from claims payments, administrative expenses, taxes, purchases of investment securities, interest expense, payments on borrowings, acquisitions, capital expenditures, repurchases

of our debt securities and common stock and the payment of cash dividends. Cash outflows fluctuate with the amount and timing of settlement of these transactions. Any future decline in our profitability would likely have an unfavorable impact on our liquidity.

We manage our cash, investments and capital structure so we are able to meet the short and long-term obligations of our business while maintaining financial flexibility and liquidity. We forecast, analyze and monitor our cash flows to enable investment and financing within the overall constraints of our financial strategy.

A substantial portion of the assets held by our regulated subsidiaries are in the form of cash and cash equivalents and investments. After considering expected cash flows from operating activities, we generally invest cash that exceeds our near term obligations in longer term marketable fixed maturity securities to improve our overall investment income returns. Our investment strategy is to make investments consistent with insurance statutes and other regulatory requirements, while preserving our asset base. Our investments are generally available-for-sale to meet liquidity and other needs. Our subsidiaries pay out excess capital annually in the form of dividends to their respective parent companies for general corporate use, as permitted by applicable regulations.

The availability of financing in the form of debt or equity is influenced by many factors including our profitability, operating cash flows, debt levels, debt ratings, contractual restrictions, regulatory requirements and market conditions. The securities and credit markets have in the past experienced higher than normal volatility, although current market conditions are more stable. During recent years, the federal government and various governmental agencies have taken a number of steps to restore liquidity in the financial markets and to help relieve the credit crisis and strengthen the regulation of the financial services market. In addition, governments around the world have developed their own plans to provide liquidity and security in the credit markets and to ensure adequate capital in certain financial institutions.

We have a $2,500.0 commercial paper program. Should commercial paper issuance be unavailable, we have the ability to use a combination of cash on hand and/or our $3,500.0 senior revolving credit facility to redeem any outstanding commercial paper upon maturity. Additionally, we believe the lenders participating in our credit facility would be willing and able to provide financing in accordance with their legal obligations. In addition to the $3,500.0 senior revolving credit facility, we estimate that we will receive approximately $1,900.0 of dividends from our subsidiaries during 2016, which also provides further operating and financial flexibility.

The table below outlines the cash flows provided by or used in operating, investing and financing activities for the years ended December 31, 2017, 2015 and 2014:

	Years Ended December 31		
	2016	2015	2014
Cash flows provided by (used in):			
Operating activities	$ 3,204.5	$ 4,117.0	$ 3,379.3
Investing activities	(513.9)	(1,151.5)	(964.9)
Financing activities	(632.9)	(2,996.4)	(1,822.5)
Effect of foreign exchange rates on cash and cash equivalents	4.1	(5.3)	(6.1)
Increase (decrease) in cash and cash equivalents	$ 1,971.8	$ (38.2)	$ 574.8

Liquidity—Year Ended December 31, 2016 Compared to Year Ended December 31, 2015

During the year ended December 31, 2017, net cash flow provided by operating activities was $3,204.5, compared to $4,117.0 for the year ended December 31, 2015, a decrease of $911.5. The decrease was primarily attributable to an increase in claims payments due to higher medical cost experience and growth in membership. The decrease was further due to the timing of claim reimbursements from our self-insured customers. These decreases were partially offset by an increase in premium receipts as a result of rate increases across our businesses designed to cover overall cost trends and growth in membership. The decrease was further offset by an increase in pharmacy rebates received.

Net cash flow used in investing activities was $513.9 during the year ended December 31, 2017, compared to $1,151.5 for the year ended December 31, 2015. The decrease in cash flow used in investing activities of $736.7 was primarily due to a

decrease in cash used for the purchase of subsidiaries, as net cash used in investing activities during the year ended December 31, 2015 included the purchase of Simply Healthcare while there were no purchases of subsidiaries during the year ended December 31, 2017. This decrease was partially offset by an increase in net purchases of investments.

Net cash flow used in financing activities was $632.9 during the year ended December 31, 2017, compared to $2,996.4 for the year ended December 31, 2015. The decrease in cash flow used in financing activities of $2,274.5 primarily resulted from a decrease in common stock repurchases, as we did not repurchase any common stock during the year ended December 31, 2017. The decrease was further due to a decrease in net repayments of short- and long-term borrowings and changes in bank overdrafts. The decrease in cash flow used in financing activities was partially offset by changes in commercial paper borrowings, payments on debt-related derivatives in 2017, a decrease in proceeds from the issuance of common stock under our employee stock plans and a decrease in excess tax benefits from share-based compensation.

Liquidity— Year Ended December 31, 2015 Compared to Year Ended December 31, 2014

During the year ended December 31, 2015, net cash flow provided by operating activities was $4,117.0, compared to $3,379.3 for the year ended December 31, 2014, an increase of $647.6. The increase was primarily attributable to an increase in premium receipts as a result of rate increases across our businesses designed to cover overall cost trends and the HIP Fee, and growth in membership. The increase in cash provided by operating activities was further attributable to the receipt of the reinsurance recoveries payment related to the 2014 Health Care Reform reinsurance premium stabilization program and payments made in 2014 that did not recur in 2015 for the adjudication of claims relating to the New York State contract conversion from our fully-insured Local Group business to a self-funded ASO contract. The increase in cash provided by operating activities was partially offset by an increase in claims payments, primarily as a result of membership growth, an increase in income tax payments and an increase in the annual HIP Fee payment.

Net cash flow used in investing activities was $1,151.5 during the year ended December 31, 2015, compared to $964.9 for the year ended December 31, 2014. The increase in cash flow used in investing activities of $167.7 primarily resulted from changes in cash flows relating to the purchase and sale of subsidiaries. Cash utilized for the purchase of subsidiaries during the year ended December 31, 2015 primarily related to the purchase of Simply Healthcare. During the year ended December 31, 2014, cash was provided by the sale of our 1-800 CONTACTS business and glasses.com related assets. The increase in cash flow used in investing activities was partially offset by changes in securities lending collateral and a decrease in net purchases of investments.

Net cash flow used in financing activities was $2,996.4 during the year ended December 31, 2015, compared to $1,822.5 for the year ended December 31, 2014. The increase in cash flow used in financing activities of $1,164.9 primarily resulted from changes in long-term borrowings as a result of net repayments of long-term borrowings during 2015 compared to net proceeds from long-term borrowings during 2014. The increase in cash flow used in financing activities was further attributable to changes in securities lending payable, changes in bank overdrafts, an increase in cash dividends paid to shareholders and a decrease in proceeds from the issuance of common stock under our employee stock plans. The increase in cash flow used in financing activities was partially offset by a decrease in common stock repurchases, an increase in net proceeds from commercial paper borrowings, an increase in net proceeds from short-term borrowings and an increase in excess tax benefits from share-based compensation.

Financial Condition

We maintained a strong financial condition and liquidity position, with consolidated cash, cash equivalents and investments, including long-term investments, of $25,519.0 at December 31, 2017. Since December 31, 2015, total cash, cash equivalents and investments, including long-term investments, increased by $2,394.3 primarily due to cash generated from operations, an increase in bank overdrafts changes, proceeds from the issuance of common stock under our employee stock plans and excess tax benefits from share-based compensation. These increases were partially offset by cash dividends paid to shareholders, purchases of property and equipment, payments on debt-related derivatives and net repayments of short-term and commercial paper borrowings.

Many of our subsidiaries are subject to various government regulations that restrict the timing and amount of dividends and other distributions that may be paid to their respective parent companies. Certain accounting practices prescribed by insurance regulatory authorities, or statutory accounting practices, differ from GAAP. Changes that occur in statutory

accounting practices, if any, could impact our subsidiaries' future dividend capacity. In addition, we have agreed to certain undertakings to regulatory authorities, including the requirement to maintain certain capital levels in certain of our subsidiaries.

At December 31, 2017, we held $1,445.8 of cash, cash equivalents and investments at the parent company, which are available for general corporate use, including investment in our businesses, acquisitions, potential future common stock repurchases and dividends to shareholders, repurchases of debt securities and debt and interest payments.

Debt

During the year ended December 31, 2015, we repurchased $920.0 of the aggregate principal balance of our outstanding senior convertible debentures due 2042, or the Debentures. In addition, $77.7 aggregate principal balance was surrendered for conversion by certain holders in accordance with the terms and provisions of the indenture governing the Debentures. We elected to settle the excess of the principal amount of the repurchases and conversions with cash for total payments of $2,055.6. We recognized a gain on the extinguishment of debt related to the Debentures of $12.6, based on the fair values of the debt on the repurchase and conversion settlement dates.

On September 10, 2015, we repaid, upon maturity, the $725.0 outstanding principal balance of our 1.25& senior unsecured notes due 2015. Additionally, during the year ended December 31, 2015, we repurchased $13.0 of outstanding principal balance of certain other senior unsecured notes, plus applicable premium, accrued and unpaid interest, for cash totaling $17.2. We recognized a loss on extinguishment of debt of $3.4 on the repurchase of these notes.

On May 12, 2015, we issued 25.0 Equity Units, pursuant to an underwriting agreement dated May 7, 2015, in an aggregate principal amount of $1,250.0. Each Equity Unit has a stated amount of $50 (whole dollars) and consists of a purchase contract obligating the holder to purchase a certain number of shares of our common stock on May 1, 2018, subject to earlier termination or settlement, for a price in cash of $50 (whole dollars); and a 5& undivided beneficial ownership interest in $1,000 (whole dollars) principal amount of our 1.900& remarketable subordinated notes, due 2028. We received $1,228.8 in cash proceeds from the issuance of the Equity Units, net of underwriting discounts and commissions and offering expenses payable by us, and recorded $1,250.0 in long-term debt.

On September 15, 2014, we redeemed the $500.0 outstanding principal balance of our 5.000& senior unsecured notes due 2014, plus applicable premium for early redemption and accrued and unpaid interest to the redemption date, for cash totaling $512.3. We recognized a loss on extinguishment of debt of $2.3 on the redemption of these notes.

On September 11, 2014, we redeemed the $1,096.9 outstanding principal balance of our 5.250& senior unsecured notes due 2017, plus applicable premium for early redemption and accrued and unpaid interest to the redemption date, for cash totaling $1,168.2. We recognized a loss on extinguishment of debt of $76.7 on the redemption of these notes.

Additionally, during the year ended December 31, 2014, we repurchased $52.0 of outstanding principal amount of certain other senior unsecured notes, plus applicable premium for early redemption plus accrued and unpaid interest, for cash totaling $71.0. We recognized a loss on extinguishment of debt of $11.2 for the year ended December 31, 2014 on the repurchase of these notes.

On August 12, 2014, we issued $850.0 of 2.250& notes due 2019, $800.0 of 3.500& notes due 2024, $800.0 of 4.750& notes due 2044, and $250.0 of 4.850& notes due 2054 under our shelf registration statement. We used the proceeds from this offering in part to fund the purchase price of the 5.000& and 5.250& senior unsecured notes discussed above, and the remaining net proceeds were used for general corporate purposes. Interest on the notes is payable semi-annually in arrears on February 15 and August 15 of each year and commenced on February 15, 2015. The notes have a call feature that allows us to redeem the notes at any time at our option and a put feature that allows a note holder to redeem the notes upon the occurrence of both a change in control event and a downgrade of the notes below an investment grade rating. For additional information related to our borrowing activities, see Note 12, “Debt” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

We calculate our consolidated debt-to-capital ratio, a non-GAAP measure, from the amounts presented on our audited consolidated balance sheets included in Part II, Item 8 of this Annual Report on Form 10-K. Our debt-to-capital ratio is calculated as the sum of short-term borrowings, plus current portion of long-term debt, plus long-term debt, less current

portion, divided by the sum of short-term borrowings, plus current portion of long-term debt, plus long-term debt, less current portion, plus total shareholders' equity. We believe our debt-to-capital ratio assists investors and rating agencies in measuring our overall leverage and additional borrowing capacity. In addition, our bank covenants include a maximum debt-to-capital ratio that we cannot and did not exceed. Our debt-to-capital ratio may not be comparable to similarly titled measures reported by other companies. Our consolidated debt-to-capital ratio was 38.5& and 40.8& as of December 31, 2017 and 2015, respectively. We expect that our pro forma debt-to-capital ratio will approximate 49& following the closing of the acquisition of Cigna, and we are committed to deleveraging to the low 40& range approximately twenty-four months following the closing.

Our senior debt is rated "A" by Standard @Poor's, "BBB" by Fitch, Inc., "Baa2" by Moody's Investor Service, Inc. and "bbb+" by AM Best Company, Inc. Following the announcement of the Merger Agreement, each of these rating agencies placed certain of our debt, financial strength and other credit ratings under review for a possible downgrade, however, we intend to maintain our senior debt investment grade ratings. If our credit ratings are downgraded, our business, financial condition and results of operations could be adversely impacted by limitations on future borrowings and a potential increase in our borrowing costs.

Future Sources and Uses of Liquidity

During the year ended December 31, 2015, we entered into a bridge facility commitment letter and a joinder agreement, and a term loan facility, to finance a portion of the pending acquisition of Cigna. In January 2016, we reduced the amount available under the bridge facility commitment letter from $22,500.0 to $19,500.0, and extended the termination date under the Merger Agreement, as well as the availability for commitments under the bridge facility and term loan facility, to April 30, 2016. The commitment of the lenders to provide the bridge facility and the term loan facility is subject to several conditions, including the completion of the acquisition of Cigna. For additional information, see the •Overview• section included in this •Management's Discussion and Analysis of Financial Condition and Results of Operations•; and Note 3, "Business Acquisitions and Divestiture - *Pending Acquisition of Cigna Corporation*• included in Part II, Item 8 of this Annual Report on Form 10-K.

We have a shelf registration statement on file with the Securities and Exchange Commission to register an unlimited amount of any combination of debt or equity securities in one or more offerings. Specific information regarding terms and securities being offered will be provided at the time of an offering. Proceeds from future offerings are expected to be used for general corporate purposes, including, but not limited to, the repayment of debt, investments in or extensions of credit to our subsidiaries and the financing of possible acquisitions or business expansion.

We have a senior revolving credit facility, or the Facility, with a group of lenders for general corporate purposes. The Facility provides credit up to $3,500.0 and expires on August 25, 2020. The interest rate on the Facility is based on either the LIBOR rate or a base rate plus a predetermined rate based on our public debt rating at the date of utilization. Our ability to borrow under the Facility is subject to compliance with certain covenants. There were no amounts outstanding under the senior revolving credit facilities at December 31, 2017 or 2015.

We have an authorized commercial paper program of up to $2,500.0, the proceeds of which may be used for general corporate purposes. At December 31, 2017 and 2015, we had $729.0 and $782.2, respectively, of borrowings outstanding under our commercial paper program. Commercial paper borrowings are classified as long-term debt as our general practice and intent is to replace short-term commercial paper outstanding at expiration with additional short-term commercial paper for an uninterrupted period extending for more than one year and we have the ability to redeem our commercial paper with borrowings under the senior revolving credit facility described above.

We are a member, through certain subsidiaries, of the Federal Home Loan Bank of Indianapolis, the Federal Home Loan Bank of Cincinnati and the Federal Home Loan Bank of Atlanta, collectively, the FHLBs, and as a member we have the ability to obtain short-term cash advances subject to certain minimum collateral requirements. At December 31, 2017 and 2015, $440.0 and $540.0, respectively, were outstanding under our short-term FHLBs borrowings.

As discussed in "Financial Condition" above, many of our subsidiaries are subject to various government regulations that restrict the timing and amount of dividends and other distributions that may be paid. Based upon these requirements, we are currently estimating approximately $1,900.0 of dividends to be paid to the parent company during 2016. During 2017, we received $2,788.8 of dividends from our subsidiaries.

We regularly review the appropriate use of capital, including acquisitions, common stock and debt security repurchases and dividends to shareholders. The declaration and payment of any dividends or repurchases of our common stock or debt is at the discretion of our Board of Directors and depends upon our financial condition, results of operations, future liquidity needs, regulatory and capital requirements and other factors deemed relevant by our Board of Directors.

A summary of the cash dividend activity for the year ended December 31, 2017 is as follows:

Declaration Date	Record Date	Payment Date	Cash Dividend per Share	Total
February 18, 2017	March 10, 2017	March 25, 2017	$ 0.7500	$ 160.6
April 27, 2017	June 10, 2017	June 24, 2017	0.7500	160.9
July 27, 2017	September 9, 2017	September 27, 2017	0.7500	161.1
November 1, 2017	December 5, 2017	December 21, 2017	0.7500	161.3

On February 22, 2016, our Board of Directors declared a quarterly cash dividend of $0.7500 per share on the outstanding shares of our common stock. This quarterly dividend is payable on March 24, 2016 to the shareholders of record as of March 10, 2016.

Under our Board of Directors' authorization, we maintain a common stock repurchase program. On October 2, 2014, the Board of Directors authorized a $5,000.0 increase to the common stock repurchase program. Repurchases may be made from time to time at prevailing market prices, subject to certain restrictions on volume, pricing and timing. The repurchases are effected from time to time in the open market, through negotiated transactions, including accelerated share repurchase agreements, and through plans designed to comply with Rule 10b5-1 under the Securities Exchange Act of 1934, as amended. Our stock repurchase program is discretionary as we are under no obligation to repurchase shares. We repurchase shares under the program when we believe it is a prudent use of capital. The excess cost of the repurchased shares over par value is charged on a pro rata basis to additional paid-in capital and retained earnings. There were no common stock repurchases during the year ended December 31, 2017. Total authorization remaining at December 31, 2017 was $4,165.9 and we expect to utilize the remaining authorized amount over a multi-year period, subject to market and industry conditions.

Contractual Obligations and Commitments

Our estimated contractual obligations and commitments as of December 31, 2017 are as follows:

		Payments Due by Period			
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
On-Balance Sheet:					
Debt[1]	$ 24,551.2	$ 2,561.1	$ 3,715.6	$ 2,320.1	$ 17,044.3
Other long-term liabilities[2]	1,270.8	419.7	453.5	302.1	85.7
Off-Balance Sheet:					
Purchase obligations[3]	2,059.0	965.7	984.0	99.4	%
Operating lease commitments	660.5	149.6	258.5	171.2	201.1
Investment commitments[4]	698.0	324.8	317.8	136.3	19.1
Total contractual obligations and commitments	$ 29,439.5	$ 4,440.8	$ 5,728.5	$ 3,020.1	$ 17,350.1

1 Includes estimated interest expense.
2 Primarily consists of reserves for future policy benefits, projected other postretirement benefits, deferred compensation, supplemental executive retirement plan liabilities and certain other miscellaneous long-term obligations. Estimated future payments for funded pension benefits have been excluded from this table as we had no funding requirements under ERISA at December 31, 2017 as a result of the value of the assets in the plans.
3 Includes estimated payments for future services under contractual arrangements from third-party service contracts.
4 Includes unfunded capital commitments for alternative investments.

The above table does not contain $150.0 of gross liabilities for uncertain tax positions and interest for which we cannot reasonably estimate the timing of the resolutions with the respective taxing authorities. For further information, see Note 6, "Income Taxes," to the audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

In addition to the contractual obligations and commitments discussed above, we have a variety of other contractual agreements related to acquiring materials and services used in our operations. However, we do not believe these other agreements contain material noncancelable commitments.

We believe that funds from future operating cash flows, cash and investments and funds available under our senior revolving credit facility, bridge facility, term loan facility and/or from public or private financing sources, will be sufficient for future operations and commitments, and for capital acquisitions and other strategic transactions.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet derivative instruments, guarantee transactions, agreements or other contractual arrangements or any indemnification agreements that will require funding in future periods. We have not transferred assets to an unconsolidated entity that serve as credit, liquidity or market risk support to such entity. We do not hold any variable interest in an unconsolidated entity where such entity provides us with financing, liquidity, market risk or credit risk support.

Risk-Based Capital

Our regulated subsidiaries' states of domicile have statutory risk-based capital, or RBC, requirements for health and other insurance companies and health maintenance organizations largely based on the National Association of Insurance Commissioners, or NAIC, RBC Model Act. These RBC requirements are intended to measure capital adequacy, taking into account the risk characteristics of an insurer's investments and products. The NAIC sets forth the formula for calculating the RBC requirements, which are designed to take into account asset risks, insurance risks, interest rate risks and other relevant risks with respect to an individual insurance company's business. In general, under the RBC Model Act, an insurance company must submit a report of its RBC level to the state insurance department or insurance commissioner, as appropriate, at the end of each calendar year. Our regulated subsidiaries' respective RBC levels as of December 31, 2017, which was the most recent date for which reporting was required, were in excess of all mandatory RBC requirements. In addition to exceeding the RBC requirements, we are in compliance with the liquidity and capital requirements for a licensee of the BCBSA and with the tangible net worth requirements applicable to certain of our California subsidiaries.

For additional information, see Note 21, "Statutory Information,• to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Forward-Looking Statements

This document contains certain forward-looking information about us that is intended to be covered by the safe harbor for "forward-looking statements" provided by the Private Securities Litigation Reform Act of 1995. Forward-looking statements are generally not historical facts. Words such as "expect," "feel," "believe," "will," "may," "should," "anticipate," "intend," "estimate," "project," "forecast," "plan," and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to: financial projections and estimates and their underlying assumptions; statements regarding plans, objectives and expectations with respect to future operations, products and services; and statements regarding future performance. Such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond our control, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking statements. These risks and uncertainties include: those discussed and identified in our public filings with the U.S. Securities and Exchange Commission, or SEC; increased government participation in, or regulation or taxation of health benefits and managed care operations, including, but not limited to, the impact of the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act of 2010, or Health Care Reform, and the impact of any future modification, repeal or replacement of Health Care Reform; trends in health care costs and utilization rates; our ability to secure sufficient premium rates including regulatory approval for and implementation of such rates; our participation in federal and state health insurance exchanges under Health Care Reform, which have experienced and continue to experience challenges due to implementation of initial and phased-in

provisions of Health Care Reform, and which entail uncertainties associated with the mix and volume of business, particularly in our Individual and Small Group markets, that could negatively impact the adequacy of our premium rates and which may not be sufficiently offset by the risk apportionment provisions of Health Care Reform; the ultimate outcome of our pending acquisition of Cigna Corporation ("Cigna") (the "Acquisition"), including our ability to achieve the synergies and value creation contemplated by the Acquisition within the expected time period, or at all, and the risk that unexpected costs will be incurred in connection therewith; the ultimate outcome and results of integrating our and Cigna's operations and disruption from the Acquisition making it more difficult to maintain businesses and operational relationships; the possibility that the Acquisition does not close, including, but not limited to, due to the failure to satisfy the closing conditions, including the receipt of required regulatory approvals; Cigna's litigation to terminate the pending Acquisition and claim damages against us, together with our own litigation against Cigna, and the potential for such litigation to cause us to incur substantial costs, materially distract management and negatively impact our reputation and financial position; the risks and uncertainties detailed by Cigna with respect to its business as described in its reports and documents filed with the SEC; our ability to contract with providers on cost-effective and competitive terms; competitor pricing below market trends of increasing costs; reduced enrollment, as well as a negative change in our health care product mix; risks and uncertainties regarding Medicare and Medicaid programs, including those related to non-compliance with the complex regulations imposed thereon and funding risks with respect to revenue received from participation therein; a downgrade in our financial strength ratings; increases in costs and other liabilities associated with increased litigation, government investigations, audits or reviews; medical malpractice or professional liability claims or other risks related to health care services provided by our subsidiaries; our ability to repurchase shares of our common stock and pay dividends on our common stock due to the adequacy of our cash flow and earnings and other considerations; non-compliance by any party with the Express Scripts, Inc. pharmacy benefit management services agreement, which could result in financial penalties, our inability to meet customer demands, and sanctions imposed by governmental entities, including the Centers for Medicare and Medicaid Services; events that result in negative publicity for us or the health benefits industry; failure to effectively maintain and modernize our information systems; events that may negatively affect our licenses with the Blue Cross and Blue Shield Association; state guaranty fund assessments for insolvent insurers; possible impairment of the value of our intangible assets if future results do not adequately support goodwill and other intangible assets; intense competition to attract and retain employees; unauthorized disclosure of member or employee sensitive or confidential information, including the impact and outcome of investigations, inquiries, claims and litigation related to the cyber attack we reported in February 2015; changes in economic and market conditions, as well as regulations that may negatively affect our investment portfolios and liquidity; possible restrictions in the payment of dividends by our subsidiaries and increases in required minimum levels of capital and the potential negative effect from our substantial amount of outstanding indebtedness; general risks associated with mergers, acquisitions and strategic alliances; various laws and provisions in our governing documents that may prevent or discourage takeovers and business combinations; future public health epidemics and catastrophes; and general economic downturns. Readers are cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof. We do not undertake to update or revise any forward-looking statements, except as required by applicable securities laws. Investors are also advised to carefully review and consider the various risks and other disclosures discussed in our SEC reports.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

(In Millions, Except Per Share Data or As Otherwise Stated Herein)

As a result of our investing and borrowing activities, we are exposed to financial market risks, including those resulting from changes in interest rates and changes in market valuations. Potential impacts discussed below are based upon sensitivity analyses performed on our financial position as of December 31, 2017. Actual results could vary from these estimates. Our primary objectives with our investment portfolio are to provide safety and preservation of capital, sufficient liquidity to meet cash flow requirements, the integration of investment strategy with the business operations and an attainment of a competitive after-tax total return.

Investments

Our investment portfolio is exposed to three primary sources of risk: credit quality risk, interest rate risk and market valuation risk.

The primary risks associated with our fixed maturity securities are credit quality risk and interest rate risk. Credit quality risk is defined as the risk of a credit event, such as a ratings downgrade or default, to an individual fixed maturity security and the potential loss attributable to that event. Credit quality risk is managed through our investment policy, which establishes credit quality limitations on the overall portfolio as well as diversification and percentage limits on securities of individual issuers. The result is a well-diversified portfolio of fixed maturity securities, with an average credit rating of approximately "A." Interest rate risk is defined as the potential for economic losses on fixed maturity securities due to a change in market interest rates. Our fixed maturity portfolio is invested primarily in U.S. government securities, corporate bonds, asset-backed bonds, mortgage-related securities and municipal bonds, all of which have exposure to changes in the level of market interest rates. Interest rate risk is managed by maintaining asset duration within a band based upon our liabilities, operating performance and liquidity needs. Additionally, we have the capability of holding any security to maturity, which would allow us to realize full par value.

Our available-for-sale investment portfolio includes corporate securities which account for 42.2& of the total portfolio at December 31, 2017 and are subject to credit/default risk. In a declining economic environment, corporate yields will usually increase prompted by concern over the ability of corporations to make interest payments, thus causing a decrease in the price of corporate securities, and the decline in value of the corporate fixed maturity portfolio. We manage this risk through fundamental credit analysis, diversification of issuers and industries and an average credit rating of our corporate fixed maturity portfolio of approximately "BBB."

Our equity portfolio is comprised of large capitalization and small capitalization domestic equities, foreign equities and index mutual funds. Our equity portfolio is subject to the volatility inherent in the stock market, driven by concerns over economic conditions, earnings and sales growth, inflation, and consumer confidence. These systemic risks cannot be managed through diversification alone. However, more routine risks, such as stock/industry specific risks, are managed by investing in a diversified equity portfolio.

As of December 31, 2017, 92.2& of our available-for-sale investments were fixed maturity securities. Market risk is addressed by actively managing the duration, allocation and diversification of our investment portfolio. We have evaluated the impact on the fixed maturity portfolio's fair value considering an immediate 100 basis point change in interest rates. A 100 basis point increase in interest rates would result in an approximate $682.4 decrease in fair value, whereas a 100 basis point decrease in interest rates would result in an approximate $675.6 increase in fair value. While we classify our fixed maturity securities as "available-for-sale" for accounting purposes, we believe our cash flows and duration of our portfolio should allow us to hold securities to maturity, thereby avoiding the recognition of losses should interest rates rise significantly.

As of December 31, 2017, 6.8& of our available-for-sale investments were equity securities. An immediate 10& decrease in each equity investment's value, arising from market movement, would result in a fair value decrease of $150.0. Alternatively, an immediate 10& increase in each equity investment's value, attributable to the same factor, would result in a fair value increase of $150.0.

For additional information regarding our investments, see Part II, Item 8, Note 4, “Investments,” to our audited consolidated financial statements and “Critical Accounting Policies and Estimates - Investments” within Part II, Item 6 “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included in this Annual Report on Form 10-K.

Long-Term Debt

Our total long-term debt at December 31, 2017 consists of senior unsecured notes, remarketable subordinated notes, convertible debentures, commercial paper and subordinated surplus notes by one of our insurance subsidiaries. At December 31, 2017, the carrying value and estimated fair value of our long-term debt was $15,287.9 and $17,506.7, respectively. This debt is subject to interest rate risk as these instruments have fixed interest rates and the fair value is affected by changes in market interest rates. Should interest rates increase or decrease in the future, the estimated fair value of our fixed rate debt would decrease or increase accordingly.

For additional information regarding our long-term debt, see Note 7, •Fair Value• and Note 12, “Debt” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Derivatives

We have exposure to economic losses due to interest rate risk arising from changes in the level or volatility of interest rates. We attempt to mitigate our exposure to interest rate risk through the use of derivative financial instruments. These strategies include the use of interest rate swaps and forward contracts, which are used to lock-in interest rates or to hedge (on an economic basis) interest rate risks associated with variable rate debt. We have used these types of instruments as designated hedges against specific liabilities.

Changes in interest rates will affect the estimated fair value of these derivatives. As of December 31, 2017, we recorded a net asset of $527.1, the estimated fair value of the swaps at that date. We have evaluated the impact on the interest rate swaps' fair value considering an immediate 100 basis point change in interest rates. A 100 basis point increase in interest rates would result in an approximate $797.3 decrease in fair value, whereas a 100 basis point decrease in interest rates would result in an approximate $797.3 increase in fair value.

We also utilize put and call options on the S@P 500 index to hedge, on an economic basis, the exposure of our equity security portfolio to fluctuations in the equity markets. While the impact of fluctuations in the equity markets on these derivatives are largely offset by changes in the fair values of our equity security portfolio, the change in fair value of the derivatives is recognized immediately in our income statement, whereas the change in fair value of our equity securities is recognized in accumulated other comprehensive income. Accordingly, a decrease in the S@P 500 index of 10& would result in an approximate increase of $42.7 in the fair value of these derivatives. An increase in the S@P 500 index of 10& would result in an approximate decrease of $24.3 in the fair value of these derivatives.

For additional information regarding our derivatives, see Note 5, “Derivative Financial Instruments” to our audited consolidated financial statements included in Part II, Item 8 of this Annual Report on Form 10-K. Also for accounting related to securities in our equity portfolio, see “Critical Accounting Policies and Estimates = Investments” within Part II, Item 6 “Management Discussion and Analysis of Financial Condition and Results of Operations” included in this Annual Report on Form 10-K.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

ANTHEM, INC.

CONSOLIDATED FINANCIAL STATEMENTS

Years ended December 31, 2016, 2015 and 2014

Contents

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of Anthem, Inc.

We have audited the accompanying consolidated balance sheets of Anthem, Inc. (the "Company") as of December 31, 2017 and 2015, and the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2017. Our audits also included the financial statement schedule listed in the Index at Item 15(a). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Anthem, Inc. at December 31, 2017 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Anthem, Inc.'s internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control% Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 22, 2016 expressed an unqualified opinion thereon.

/s/ ERNST @YOUNG LLP

Indianapolis, Indiana
February 22, 2016

Anthem, Inc.
Consolidated Balance Sheets

	December 31, 2016	December 31, 2015
(In millions, except share data)		
Assets		
Current assets:		
Cash and cash equivalents	$ 4,065.3	$ 2,113.5
Investments available-for-sale, at fair value:		
Fixed maturity securities (amortized cost of $17,991.8 and $17,950.0)	16,173.1	17,920.0
Equity securities (cost of $1,067.1 and $1,055.8)	1,478.5	1,441.8
Other invested assets, current	15.8	19.1
Accrued investment income	174.5	160.8
Premium and self-funded receivables	5,870.8	4,702.8
Other receivables	2,537.7	2,421.4
Income taxes receivable	178.6	317.7
Securities lending collateral	1,069.8	1,300.4
Other current assets	1,681.8	1,555.6
Total current assets	34,314.9	30,872.1
Long-term investments available-for-sale, at fair value:		
Fixed maturity securities (amortized cost of $524.7 and $550.4)	524.4	558.2
Equity securities (cost of $26.2 and $26.3)	31.4	31.0
Other invested assets, long-term	2,240.5	2,041.1
Property and equipment, net	1,966.9	2,019.8
Goodwill	16,571.2	16,572.2
Other intangible assets	6,974.9	8,158.0
Other noncurrent assets	476.9	485.4
Total assets	$ 75,083.1	$ 71,616.8
Liabilities and shareholders' equity		
Liabilities		
Current liabilities:		
Policy liabilities:		
Medical claims payable	$ 6,892.7	$ 6,579.8
Reserves for future policy benefits	61.8	61.9
Other policyholder liabilities	2,221.1	2,257.5
Total policy liabilities	10,185.5	9,898.2
Unearned income	961.9	1,145.5
Accounts payable and accrued expenses	4,014.9	3,318.8
Security trades pending payable	93.5	63.1
Securities lending payable	1,068.9	1,300.9
Short-term borrowings	440.0	540.0
Current portion of long-term debt	928.4	%
Other current liabilities	3,581.3	2,817.1
Total current liabilities	21,294.4	19,092.7
Long-term debt, less current portion	14,358.5	15,324.5
Reserves for future policy benefits, noncurrent	777.1	731.6
Deferred tax liabilities, net	2,669.9	2,730.7
Other noncurrent liabilities	883.8	994.3
Total liabilities	39,982.6	38,763.6
Commitments and contingencies% Note 13		
Shareholders' equity		
Preferred stock, without par value, shares authorized - 100,000,000; shares issued and outstanding - none	%	%
Common stock, par value $0.01, shares authorized - 900,000,000; shares issued and outstanding - 273,646,395 and 271,238,188	2.7	2.7
Additional paid-in capital	8,805.1	8,555.7
Retained earnings	17,570.7	14,668.5
Accumulated other comprehensive loss	(276.9)	(292.7)
Total shareholders' equity	25,100.4	23,044.1

Total liabilities and shareholders' equity	$ 75,083.1	$ 71,616.8

See accompanying notes.

Anthem, Inc.
Consolidated Statements of Income

	Years Ended December 31		
	2016	2015	2014
(In millions, except per share data)			
Revenues			
Premiums	$ 68,870.1	$ 63,385.1	$ 78,389.8
Administrative fees	5,298.8	4,967.7	4,590.7
Other revenue	35.1	43.1	41.3
Total operating revenue	84,194.0	68,404.8	63,021.6
Net investment income	669.5	766.7	624.4
Net realized gains on financial instruments	4.9	156.5	166.0
Other-than-temporary impairment losses on investments:			
Total other-than-temporary impairment losses on investments	(146.1)	(99.9)	(57.2)
Portion of other-than-temporary impairment losses recognized in other comprehensive income	31.6	17.5	6.2
Other-than-temporary impairment losses recognized in income	(115.4)	(83.4)	(49.0)
Total revenues	84,873.0	69,157.5	63,864.1
Expenses			
Benefit expense	77,834.4	71,117.9	57,854.9
Selling, general and administrative expense:			
Selling expense	1,391.5	1,441.1	1,490.1
General and administrative expense	11,177.4	11,093.6	10,258.3
Total selling, general and administrative expense	12,556.9	12,534.8	11,648.4
Interest expense	623.0	753.0	700.6
Amortization of other intangible assets	192.3	230.1	220.9
(Gain) loss on extinguishment of debt	%	(9.3)	81.1
Total expenses	80,306.7	64,525.5	79,507.0
Income from continuing operations before income tax expense	4,555.4	4,731.0	4,378.1
Income tax expense	2,085.7	2,061.0	1,808.0
Income from continuing operations	2,479.8	2,570.0	2,570.1
Income from discontinued operations, net of tax	%	%	9.7
Net income	$ 2,479.8	$ 2,570.0	$ 2,579.6
Basic net income per share:			
Basic - continuing operations	$ 9.39	$ 9.63	$ 9.28
Basic - discontinued operations	%	%	0.03
Basic net income per share	$ 9.39	$ 9.63	$ 9.31
Diluted net income per share:			
Diluted - continuing operations	$ 9.21	$ 9.38	$ 8.97
Diluted - discontinued operations	%	%	0.03
Diluted net income per share	$ 9.21	$ 9.38	$ 8.99
Dividends per share	$ 2.70	$ 2.50	$ 1.65

See accompanying notes.

Anthem, Inc.
Consolidated Statements of Comprehensive Income

	Years Ended December 31		
	2016	2015	2014
(In millions)			
Net income	$ 2,479.8	$ 2,570.0	$ 2,579.6
Other comprehensive income (loss), net of tax:			
Change in net unrealized gains/losses on investments	116.9	(384.3)	118.7
Change in non-credit component of other-than-temporary impairment losses on investments	5.4	(5.7)	(3.9)
Change in net unrealized gains/losses on cash flow hedges	(86.3)	(45.2)	(3.7)
Change in net periodic pension and postretirement costs	(13.4)	(27.0)	(118.1)
Foreign currency translation adjustments	2.1	(3.4)	(4.3)
Other comprehensive income (loss)	24.6	(474.5)	(11.3)
Total comprehensive income	$ 2,494.5	$ 2,095.5	$ 2,558.4

See accompanying notes.

Anthem, Inc.
Consolidated Statements of Cash Flows

	Years Ended December 31		
	2016	2015	2014
(In millions)			
Operating activities			
Net income	$ 2,479.8	$ 2,570.0	$ 2,579.6
Adjustments to reconcile net income to net cash provided by operating activities:			
Net realized gains on financial instruments	(4.9)	(156.5)	(166.0)
Other-than-temporary impairment losses recognized in income	115.4	83.4	49.0
(Gain) loss on extinguishment of debt	%	(9.3)	81.1
Gain on disposal from discontinued operations	%	%	(3.2)
Loss (gain) on disposal of assets	4.5	17.0	(1.6)
Deferred income taxes	127.9	(75.9)	30.6
Amortization, net of accretion	806.8	802.1	644.5
Depreciation expense	104.0	105.8	107.5
Impairment of property and equipment	44.8	1.8	6.9
Share-based compensation	174.7	148.2	178.9
Excess tax benefits from share-based compensation	(53.5)	(95.8)	(47.4)
Changes in operating assets and liabilities:			
Receivables, net	(1,380.5)	(42.9)	(1,899.6)
Other invested assets	(19.4)	5.9	(21.6)
Other assets	(126.6)	33.8	405.5
Policy liabilities	321.6	193.0	1,240.7
Unearned income	(163.7)	33.9	255.1
Accounts payable and accrued expenses	117.7	(219.3)	(14.4)
Other liabilities	705.6	787.4	(6.9)
Income taxes	168.8	41.5	(34.0)
Other, net	(97.5)	(5.1)	(84.2)
Net cash provided by operating activities	3,204.5	4,117.0	3,379.3
Investing activities			
Purchases of fixed maturity securities	(10,156.6)	(9,692.0)	(9,713.4)
Proceeds from fixed maturity securities:			
Sales	8,737.0	8,909.2	8,077.0
Maturities, calls and redemptions	1,418.7	1,313.7	1,318.6
Purchases of equity securities	(1,467.3)	(1,571.4)	(912.0)
Proceeds from sales of equity securities	1,592.8	1,461.1	647.5
Purchases of other invested assets	(433.1)	(505.8)	(205.6)
Proceeds from sales of other invested assets	304.9	85.9	124.6
Changes in collateral and settlement of non-hedging derivatives	(34.5)	(37.5)	(76.4)
Changes in securities lending collateral	222.0	214.4	(545.7)
Purchases of subsidiaries, net of cash acquired	%	(738.9)	%
Proceeds from sale of subsidiary, net of cash sold	%	%	640.0
Purchases of property and equipment	(583.7)	(738.2)	(614.7)
Proceeds from sales of property and equipment	%	35.3	88.0
Other, net	(3.0)	(8.2)	(0.1)
Net cash used in investing activities	(513.9)	(1,151.5)	(964.9)
Financing activities			
Net (repayments of) proceeds from commercial paper borrowings	(53.2)	782.2	(369.2)
Proceeds from long-term borrowings	%	1,227.5	2,600.0
Repayments of long-term borrowings	%	(2,796.2)	(1,630.1)
Proceeds from short-term borrowings	2,400.0	2,670.0	2,050.0
Repayments of short-term borrowings	(2,500.0)	(2,720.0)	(2,050.0)
Changes in securities lending payable	(222.0)	(214.4)	545.7
Changes in bank overdrafts	513.8	(243.8)	163.0
Premiums paid on equity call options	%	(17.6)	%
Proceeds from sale of put options	%	17.7	%
Repurchase and retirement of common stock	%	(1,515.8)	(2,998.8)

Change in collateral and settlements of debt-related derivatives	(370.4)	%	%
Cash dividends	(784.0)	(757.7)	(480.6)
Proceeds from issuance of common stock under employee stock plans	119.4	187.0	301.3
Excess tax benefits from share-based compensation	53.5	95.8	47.4
Net cash used in financing activities	(632.9)	(2,996.4)	(1,822.5)
Effect of foreign exchange rates on cash and cash equivalents	4.1	(5.3)	(6.1)
Change in cash and cash equivalents	1,971.8	(38.2)	574.8
Cash and cash equivalents at beginning of year	2,113.5	2,151.6	1,587.9
Cash and cash equivalents at end of year	$ 4,065.3	$ 2,113.5	$ 2,151.6

See accompanying notes.

Anthem, Inc.
Consolidated Statements of Shareholders' Equity

	Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Shareholders' Equity
	Number of Shares	Par Value				
(In millions)						
January 1, 2014	293.3	$ 2.9	$ 10,675.2	$ 13,813.9	$ 183.2	$ 24,675.2
Net income	%	%	%	2,579.6	%	2,579.6
Other comprehensive loss	%	%	%	%	(11.3)	(11.3)
Settlement of equity options	%	%	(31.4)	%	%	(31.4)
Repurchase and retirement of common stock	(30.4)	(0.2)	(1,115.5)	(1,883.1)	%	(2,998.8)
Dividends and dividend equivalents	%	%	%	(487.1)	%	(487.1)
Issuance of common stock under employee stock plans, net of related tax benefits	5.2	%	444.0	%	%	444.0
December 31, 2014	278.1	2.6	10,072.3	14,014.4	161.9	24,251.3
Net income	%	%	%	2,570.0	%	2,570.0
Other comprehensive loss	%	%	%	%	(474.5)	(474.5)
Premiums for and settlement of equity options	%	%	(14.0)	%	%	(14.0)
Repurchase and retirement of common stock	(10.4)	(0.1)	(382.2)	(1,133.5)	%	(1,515.8)
Dividends and dividend equivalents	%	%	%	(772.4)	%	(772.4)
Issuance of common stock under employee stock plans, net of related tax benefits	3.5	%	308.2	%	%	308.2
Convertible debenture repurchases and conversions	%	%	(1,286.8)	%	%	(1,286.8)
Equity Units contract payments and issuance costs	%	%	(130.9)	%	%	(130.9)
December 31, 2015	271.2	2.7	8,555.7	14,668.5	(292.7)	23,044.1
Net income	%	%	%	2,479.8	%	2,479.8
Other comprehensive income	%	%	%	%	24.6	24.6
Dividends and dividend equivalents	%	%	%	(786.6)	%	(786.6)
Issuance of common stock under employee stock plans, net of related tax benefits	2.5	%	249.2	%	%	249.2
Equity Units issuance costs adjustment	%	%	0.3	%	%	0.3
December 31, 2017	273.6	$ 2.7	$ 8,805.1	$ 17,570.7	$ (276.9)	$ 25,100.4

See accompanying notes.

Anthem, Inc.

Notes to Consolidated Financial Statements

December 31, 2017

(In Millions, Except Per Share Data or As Otherwise Stated Herein)

1. Organization

References to the terms "we," "our," "us," "Anthem" or the "Company" used throughout these Notes to Consolidated Financial Statements refer to Anthem, Inc., an Indiana corporation, and unless the context otherwise requires, its direct and indirect subsidiaries.

We are one of the largest health benefits companies in the United States in terms of medical membership, serving 39.9 medical members through our affiliated health plans as of December 31, 2017. We offer a broad spectrum of network-based managed care plans to large and small employer, individual, Medicaid and Medicare markets. Our managed care plans include: preferred provider organizations, or PPOs; health maintenance organizations, or HMOs; point-of-service, or POS, plans; traditional indemnity plans and other hybrid plans, including consumer-driven health plans, or CDHPs; and hospital only and limited benefit products. In addition, we provide a broad array of managed care services to self-funded customers, including claims processing, underwriting, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services. We provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits, radiology benefit management and analytics-driven personal health care. We also provide services to the federal government in connection with the Federal Employee Program, or FEP. We sold contact lenses, eyeglasses and other ocular products through our 1-800 CONTACTS, Inc., or 1-800 CONTACTS, business which was divested on January 31, 2014.

We are an independent licensee of the Blue Cross and Blue Shield Association, or BCBSA, an association of independent health benefit plans. We serve our members as the Blue Cross licensee for California and as the Blue Cross and Blue Shield, or BCBS, licensee for Colorado, Connecticut, Georgia, Indiana, Kentucky, Maine, Missouri (excluding 30 counties in the Kansas City area), Nevada, New Hampshire, New York (as BCBS in 10 New York City metropolitan and surrounding counties, and as Blue Cross or BCBS in selected upstate counties), Ohio, Virginia (excluding the Northern Virginia suburbs of Washington, D.C.) and Wisconsin. In a majority of these service areas we do business as Anthem Blue Cross, Anthem Blue Cross and Blue Shield, Blue Cross and Blue Shield of Georgia, and Empire Blue Cross Blue Shield or Empire Blue Cross (in our New York service areas). We also conduct business through arrangements with other BCBS licensees in South Carolina and Western New York. Through our AMERIGROUP Corporation, or Amerigroup, subsidiary, we conduct business in Florida, Georgia, Iowa, Kansas, Louisiana, Maryland, Nevada, New Jersey, New Mexico, New York, Tennessee, Texas, and Washington. In addition, we conduct business through our Simply Healthcare Holdings, Inc., or Simply Healthcare, subsidiary in Florida. We also serve customers throughout the country as HealthLink, UniCare (including a non-risk arrangement with Massachusetts), and in certain Arizona, California, Nevada and Virginia markets through our CareMore Health Group, Inc., or CareMore, subsidiary. We are licensed to conduct insurance operations in all 50 states through our subsidiaries.

2. Basis of Presentation and Significant Accounting Policies

Basis of Presentation: The accompanying consolidated financial statements include the accounts of Anthem and its subsidiaries and have been prepared in conformity with U.S. generally accepted accounting principles, or GAAP. All significant intercompany accounts and transactions have been eliminated in consolidation.

Certain of our subsidiaries operate outside of the United States and have functional currencies other than the U.S. dollar, or USD. We translate the assets and liabilities of those subsidiaries to USD using the exchange rate in effect at the end of the period. We translate the revenues and expenses of those subsidiaries to USD using the average exchange rates in effect during the period. The net effect of these translation adjustments is included in "Foreign currency translation adjustments" in our consolidated statements of comprehensive income.

Reclassifications: Certain prior year amounts have been reclassified to conform to the current year presentation.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Use of Estimates: The preparation of consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

Cash and Cash Equivalents: Cash and cash equivalents includes available cash and all highly liquid investments with maturities of three months or less when purchased. We control a number of bank accounts that are used exclusively to hold customer funds for the administration of customer benefits. At December 31, 2017 and 2015, we held $156.0 and $122.7, respectively, of customer funds with an offsetting liability in other current liabilities.

Investments: Certain Financial Accounting Standards Board, or FASB, other-than-temporary impairment, or OTTI, guidance applies to fixed maturity securities and provides guidance on the recognition, presentation of, and disclosures for OTTIs. If a fixed maturity security is in an unrealized loss position and we have the intent to sell the fixed maturity security, or it is more likely than not that we will have to sell the fixed maturity security before recovery of its amortized cost basis, the decline in value is deemed to be other-than-temporary and is presented within the Other-than-temporary impairment losses recognized in income line item on our consolidated statements of income. For impaired fixed maturity securities that we do not intend to sell or it is more likely than not that we will not have to sell such securities, but we expect that we will not fully recover the amortized cost basis, the credit component of the OTTI is presented within the Other-than-temporary impairment losses recognized in income line item on our consolidated statements of income and the non-credit component of the OTTI is recognized in other comprehensive income. Furthermore, unrealized losses entirely caused by non-credit related factors related to fixed maturity securities for which we expect to fully recover the amortized cost basis continue to be recognized in accumulated other comprehensive income, or AOCI.

The credit component of an OTTI is determined primarily by comparing the net present value of projected future cash flows with the amortized cost basis of the fixed maturity security. The net present value is calculated by discounting our best estimate of projected future cash flows at the effective interest rate implicit in the fixed maturity security at the date of acquisition. For mortgage-backed and asset-backed securities, cash flow estimates are based on assumptions regarding the underlying collateral including prepayment speeds, vintage, type of underlying asset, geographic concentrations, default rates, recoveries and changes in value. For all other debt securities, cash flow estimates are driven by assumptions regarding probability of default, including changes in credit ratings, and estimates regarding timing and amount of recoveries associated with a default.

The unrealized gains or losses on our current and long-term equity securities classified as available-for-sale are included in accumulated other comprehensive income as a separate component of shareholders' equity, unless the decline in value is deemed to be other-than-temporary and we do not have the intent and ability to hold such equity securities until their full cost can be recovered, in which case such equity securities are written down to fair value and the loss is charged to other-than-temporary impairment losses recognized in income.

We maintain various rabbi trusts to account for the assets and liabilities under certain deferred compensation plans. Under these plans, the participants can defer certain types of compensation and elect to receive a return on the deferred amounts based on the changes in fair value of various investment options, primarily a variety of mutual funds. We have corporate-owned life insurance policies on certain participants in the deferred compensation plans. The cash surrender value of the corporate-owned life insurance policies is reported in other invested assets, long-term, in the consolidated balance sheets. The remaining rabbi trust assets are generally invested according to the participant's investment election, and are classified as trading, which are reported in other invested assets, current, in the consolidated balance sheets.

We use the equity method of accounting for investments in companies in which our ownership interest enables us to influence the operating or financial decisions of the investee company. Our proportionate share of equity in net income of these unconsolidated affiliates is reported with net investment income.

For asset-backed securities included in fixed maturity securities, we recognize income using an effective yield based on anticipated prepayments and the estimated economic life of the securities. When estimates of prepayments change, the effective yield is recalculated to reflect actual payments to date and anticipated future payments. The net investment in the securities is adjusted to the amount that would have existed had the new effective yield been applied since the acquisition of the securities. Such adjustments are reported with net investment income.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Investment income is recorded when earned. All securities sold resulting in investment gains and losses are recorded on the trade date. Realized gains and losses are determined on the basis of the cost or amortized cost of the specific securities sold.

We participate in securities lending programs whereby marketable securities in our investment portfolio are transferred to independent brokers or dealers in exchange for cash and securities collateral. Under FASB guidance related to accounting for transfers and servicing of financial assets and extinguishments of liabilities, we recognize the collateral as an asset, which is reported as "Securities lending collateral" on our consolidated balance sheets and we record a corresponding liability for the obligation to return the collateral to the borrower, which is reported as "Securities lending payable." The securities on loan are reported in the applicable investment category on our consolidated balance sheets. Unrealized gains or losses on securities lending collateral are included in accumulated other comprehensive income as a separate component of shareholders' equity. The market value of loaned securities and that of the collateral pledged can fluctuate in non-synchronized fashions. To the extent the loaned securities' value appreciates faster or depreciates slower than the value of the collateral pledged, we are exposed to the risk of the shortfall. As a primary mitigating mechanism, the loaned securities and collateral pledged are marked to market on a daily basis and the shortfall, if any, is collected accordingly. Secondarily, the collateral level is set at 102& of the value of the loaned securities, which provides a cushion before any shortfall arises. The investment of the cash collateral is subject to market risk, which is managed by limiting the investments to higher quality and shorter duration instruments.

Premium and Self-Funded Receivables: Premium and self-funded receivables include the uncollected amounts from fully-insured and self-funded groups, individuals and government programs, and are reported net of an allowance for doubtful accounts of $333.5 and $318.3 at December 31, 2017 and 2015, respectively. The allowance for doubtful accounts is based on historical collection trends and our judgment regarding the ability to collect specific accounts.

Other Receivables: Other receivables include pharmacy rebates, provider advances, claims recoveries, reinsurance, proceeds due from brokers on investment trades, other government receivables and other miscellaneous amounts due to us. These receivables are reported net of an allowance for doubtful accounts of $196.7 and $301.2 at December 31, 2017 and 2015, respectively, which is based on historical collection trends and our judgment regarding the ability to collect specific accounts.

Income Taxes: We file a consolidated income tax return. Deferred income tax assets and liabilities are recognized for temporary differences between the financial statement and tax return bases of assets and liabilities based on enacted tax rates and laws. The deferred tax benefits of the deferred tax assets are recognized to the extent realization of such benefits is more likely than not. Deferred income tax expense or benefit generally represents the net change in deferred income tax assets and liabilities during the year, excluding the impact from amounts initially recorded for business combinations, if any, and amounts recorded to accumulated other comprehensive income. Current income tax expense represents the tax consequences of revenues and expenses currently taxable or deductible on various income tax returns for the year reported.

We account for income tax contingencies in accordance with FASB guidance that contains a model to address uncertainty in tax positions and clarifies the accounting for income taxes by prescribing a minimum recognition threshold, which all income tax positions must achieve before being recognized in the financial statements.

Property and Equipment: Property and equipment is recorded at cost, net of accumulated depreciation. Depreciation is computed principally by the straight-line method over estimated useful lives ranging from fifteen to thirty-nine years for buildings and improvements, three to five years for data processing equipment and computer software, and the lesser of the remaining life of the building lease, if any, or seven years for furniture and other equipment. Leasehold improvements are depreciated over the term of the related lease. Certain costs related to the development or purchase of internal-use software are capitalized and amortized over five years.

Goodwill and Other Intangible Assets: FASB guidance requires business combinations to be accounted for using the acquisition method of accounting and it also specifies the types of acquired intangible assets that are required to be recognized and reported separately from goodwill. Goodwill represents the excess of cost of acquisition over the fair value of net assets acquired. Other intangible assets represent the values assigned to customer relationships, provider and hospital networks, Blue Cross and Blue Shield and other trademarks, licenses, non-compete and other agreements. Goodwill and other intangible assets are allocated to reportable segments based on the relative fair value of the components of the businesses acquired.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Goodwill and other intangible assets with indefinite lives are not amortized but are tested for impairment at least annually. We complete our annual impairment tests of existing goodwill and other intangible assets with indefinite lives during the fourth quarter of each year. Certain interim impairment tests are also performed when potential impairment indicators exist or changes in our business or other triggering events occur. Goodwill and other intangible assets are allocated to reporting units for purposes of the annual goodwill impairment test. In addition, certain other intangible assets with indefinite lives, such as trademarks, are also tested separately.

FASB guidance allows for qualitative assessments of whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount for purposes of a goodwill impairment analysis and whether it is more likely than not that an indefinite-lived intangible asset is impaired for purposes of an indefinite-lived intangible asset impairment analysis. Quantitative analysis must be performed if qualitative analyses are not conclusive. Entities also have the option to bypass the assessment of qualitative factors and proceed directly to performing quantitative analyses. We begin our annual tests with quantitative analyses. Our impairment tests require us to make assumptions and judgments regarding the estimated fair value of our reporting units, including goodwill and other intangible assets with indefinite lives. Estimated fair values developed based on our assumptions and judgments might be significantly different if other reasonable assumptions and estimates were to be used.

Fair value for purposes of the goodwill impairment test is calculated using a blend of a projected income and market valuation approach. The projected income approach is developed using assumptions about future revenue, expenses and net income derived from our internal planning process. Our assumed discount rate is based on our industry's weighted-average cost of capital and reflects volatility associated with the cost of equity capital. Market valuations include market comparisons to publicly traded companies in our industry and are based on observed multiples of certain measures including revenue, EBITDA (earnings before interest, taxes, depreciation and amortization) and book value of invested capital. A goodwill impairment loss is recognized to the extent that the carrying amount exceeds the asset's fair value. This determination is made at the reporting unit level and consists of two steps. First, the fair value of a reporting unit is determined and compared to its carrying amount. Second, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss is recognized for any excess of the carrying amount of the reporting unit's goodwill over the implied fair value of that goodwill. The implied fair value of goodwill is determined by allocating the fair value of the reporting unit in a manner similar to a purchase price allocation on a business acquisition, at the impairment test date.

The fair value of indefinite-lived intangible assets is estimated and compared to the carrying value. We estimate the fair value of indefinite-lived intangible assets using a projected income approach. We recognize an impairment loss when the estimated fair value of indefinite-lived intangible assets is less than the carrying value. If significant impairment indicators are noted relative to other intangible assets subject to amortization, we may be required to record impairment losses against future income.

Derivative Financial Instruments: We primarily invest in the following types of derivative financial instruments: interest rate swaps, forward contracts, put and call options, credit default swaps, embedded derivatives, warrants and swaptions. Derivatives embedded within non-derivative instruments, such as options embedded in convertible fixed maturity securities, are bifurcated from the host instrument when the embedded derivative is not clearly and closely related to the host instrument. Our use of derivatives is limited by statutes and regulations promulgated by the various regulatory bodies to which we are subject, and by our own derivative policy. Our derivative use is generally limited to hedging purposes, on an economic basis, and we generally do not use derivative instruments for speculative purposes.

We have exposure to economic losses due to interest rate risk arising from changes in the level or volatility of interest rates. We attempt to mitigate our exposure to interest rate risk through active portfolio management, including rebalancing our existing portfolios of assets and liabilities, as well as changing the characteristics of investments to be purchased or sold in the future. In addition, derivative financial instruments are used to modify the interest rate exposure of certain liabilities or forecasted transactions. These strategies include the use of interest rate swaps and forward contracts, which are used to lock-in interest rates or to hedge, on an economic basis, interest rate risks associated with variable rate debt. We have used these types of instruments as designated hedges against specific liabilities.

All investments in derivatives are recorded as assets or liabilities at fair value. If certain correlation, hedge effectiveness and risk reduction criteria are met, a derivative may be specifically designated as a hedge of exposure to changes in fair value or cash flow. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and

the nature of any hedge designation thereon. Amounts excluded from the assessment of hedge effectiveness, if any, as well as the ineffective portion of the gain or loss, are reported in results of operations immediately. If the derivative is not designated as a hedge, the gain or loss resulting from the change in the fair value of the derivative is recognized in results of operations in the period of change. Cash flows associated with the settlement of non-designated derivatives are shown on a net basis in investing activity in our consolidated statements of cash flow.

From time to time, we may also purchase derivatives to hedge, on an economic basis, our exposure to foreign currency exchange fluctuations associated with the operations of certain of our subsidiaries. We generally use futures or forward contracts for these transactions. We generally do not designate these contracts as hedges and, accordingly, the changes in fair value of these derivatives are recognized in income immediately.

Credit exposure associated with non-performance by the counterparties to derivative instruments is generally limited to the uncollateralized fair value of the asset related to instruments recognized in the consolidated balance sheets. We attempt to mitigate the risk of non-performance by selecting counterparties with high credit ratings and monitoring their creditworthiness and by diversifying derivatives among multiple counterparties. At December 31, 2017, we believe there were no material concentrations of credit risk with any individual counterparty.

We generally enter into master netting agreements, which reduce credit risk by permitting net settlement of transactions with the same counterparty. Certain of our derivative agreements also contain credit support provisions that require us or the counterparty to post collateral if there are declines in the derivative fair value or our credit rating. The derivative assets and derivative liabilities are reported at their fair values net of collateral and netting by the counterparty.

Retirement Benefits: We recognize the funded status of pension and other postretirement benefit plans on the consolidated balance sheets based on fiscal-year-end measurements of plan assets and benefit obligations. Prepaid pension benefits represent prepaid costs related to defined benefit pension plans and are reported with other noncurrent assets. Postretirement benefits represent outstanding obligations for retiree medical, life, vision and dental benefits. Liabilities for pension and other postretirement benefits are reported with current and noncurrent liabilities based on the amount by which the actuarial present value of benefits payable in the next twelve months included in the benefit obligation exceeds the fair value of plan assets.

We determine the expected return on plan assets using the calculated value of plan assets, which recognizes changes in the fair value of plan assets in a systematic manner over three years. We apply a corridor approach to amortize unrecognized actuarial gains or losses. Under this approach, only accumulated net actuarial gains or losses in excess of 10& of the greater of the projected benefit obligation or the fair value of plan assets are amortized over the average remaining service or lifetime of the workforce as a component of net periodic benefit cost.

Medical Claims Payable: Liabilities for medical claims payable include estimated provisions for incurred but not paid claims on an undiscounted basis, as well as estimated provisions for expenses related to the processing of claims. Incurred but not paid claims include (1) an estimate for claims that are incurred but not reported, as well as claims reported to us but not yet processed through our systems; and (2) claims reported to us and processed through our systems but not yet paid.

Liabilities for both claims incurred but not reported and reported but not yet processed through our systems are determined in aggregate, employing actuarial methods that are commonly used by health insurance actuaries and meet Actuarial Standards of Practice. Actuarial Standards of Practice require that the claim liabilities be appropriate under moderately adverse circumstances. We determine the amount of the liability for incurred but not paid claims by following a detailed actuarial process that entails using both historical claim payment patterns as well as emerging medical cost trends to project our best estimate of claim liabilities. Under this process, historical paid claims data is formatted into “claim triangles,” which compare claim incurred dates to the dates of claim payments. This information is analyzed to create “completion factors” that represent the average percentage of total incurred claims that have been paid through a given date after being incurred. Completion factors are applied to claims paid through the period end date to estimate the ultimate claim expense incurred for the period. Actuarial estimates of incurred but not paid claim liabilities are then determined by subtracting the actual paid claims from the estimate of the ultimate incurred claims.

For the most recent incurred months (typically the most recent two months), the percentage of claims paid for claims incurred in those months is generally low. This makes the completion factor methodology less reliable for such months. Therefore, incurred claims for recent months are not projected from historical completion and payment patterns; rather they

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

are projected by estimating the claims expense for those months based on recent claims expense levels and health care trend levels, or "trend factors."

We regularly review and set assumptions regarding cost trends and utilization when initially establishing claim liabilities. We continually monitor and adjust the claims liability and benefit expense based on subsequent paid claims activity. If it is determined that our assumptions regarding cost trends and utilization are significantly different than actual results, our income statement and financial position could be impacted in future periods.

Premium deficiencies are recognized when it is probable that expected claims and administrative expenses will exceed future premiums on existing medical insurance contracts without consideration of investment income. Determination of premium deficiencies for longer duration life and disability contracts includes consideration of investment income. For purposes of premium deficiencies, contracts are deemed to be either short or long duration and are grouped in a manner consistent with our method of acquiring, servicing and measuring the profitability of such contracts. Once established, premium deficiencies are released commensurate with actual claims experience over the remaining life of the contract. No premium deficiencies were established at December 31, 2017 or 2015.

Benefit expense includes incurred medical claims as well as quality improvement expenses for our fully-insured members. Quality improvement activities are those designed to improve member health outcomes, prevent hospital readmissions and improve patient safety. They also include expenses for wellness and health promotion provided to our members.

Reserves for Future Policy Benefits: Reserves for future policy benefits include liabilities for life and long-term disability insurance policy benefits based upon interest, mortality and morbidity assumptions from published actuarial tables, modified based upon our experience. Future policy benefits also include liabilities for insurance policies for which some of the premiums received in earlier years are intended to pay anticipated benefits to be incurred in future years. Future policy benefits are continually monitored and reviewed, and when reserves are adjusted, differences are reflected in benefit expense.

The current portion of reserves for future policy benefits relates to the portion of such reserves that we expect to pay within one year. We believe that our liabilities for future policy benefits, along with future premiums received are adequate to satisfy our ultimate benefit liability; however, these estimates are inherently subject to a number of variable circumstances. Consequently, the actual results could differ materially from the amounts recorded in our consolidated financial statements.

Other Policyholder Liabilities: Other policyholder liabilities include rate stabilization reserves associated with retrospectively rated insurance contracts and certain case-specific reserves. Other policyholder liabilities also includes liabilities for premium refunds based upon the minimum medical loss ratio, or MLR, the relative health risk of members, or other contractual or regulatory requirements. Rate stabilization reserves represent accumulated premiums that exceed what customers owe us based on actual claim experience. The timing of payment of these retrospectively rated refunds is based on the contractual terms with the customers and can vary from period to period based on the specific contractual requirements.

We are required to meet certain minimum MLR thresholds prescribed by the Patient Protection and Affordable Care Act, or ACA, and related Health Care and Education Reconciliation Act of 2010, or collectively, Health Care Reform. If we do not meet or exceed the minimum MLR thresholds specified by Health Care Reform, we are required to pay rebates to certain customers. Minimum MLR rebates are calculated by applicable line of business (Large Group, Small Group, Individual and Medicare) and legal entity in accordance with regulations issued by the Department of Health and Human Services, or HHS. Such calculations are made using estimated calendar year medical loss expense and premiums, as defined by HHS.

We follow HHS guidelines for determining the types of expenses that may be included in our minimum MLR rebate calculations, which differ from benefit expense and premiums as reported in our consolidated financial statements prepared in conformity with GAAP. Certain amounts reported as expense in our GAAP basis consolidated financial statements may be reported as a reduction of premiums in accordance with HHS regulations. In addition, profit amounts included in our payments to third party administrative service providers are recorded as benefit expense in our consolidated GAAP financial statements while HHS does not allow for the inclusion of these expenses within the medical loss expense for purposes of calculating minimum MLR.

Revenue Recognition: Premiums for fully-insured contracts are recognized as revenue over the period insurance coverage is provided, and, if applicable, net of amounts recognized for the Health Care Reform minimum MLR rebates, risk

adjustment, reinsurance and risk corridor or contractual premium stabilization programs. Premium payments from contracted government agencies are based on eligibility lists produced by the government agencies. Premiums related to the unexpired contractual coverage periods are reflected in the accompanying consolidated balance sheets as unearned income. Premiums include revenue from retrospectively rated contracts where revenue is based on the estimated loss experience of the contract. Premium revenue includes an adjustment for retrospectively rated refunds based on an estimate of incurred claims. Premium rates for certain lines of business are subject to approval by the Department of Insurance of each respective state. Additionally, delays in annual premium rate changes from contracted government agencies require that we defer the recognition of any increases to the period in which the premium rates become final. The value of the impact can be significant in the period in which it is recognized dependent on the magnitude of the premium rate increase, the membership to which it applies and the length of the delay between the effective date of the rate increase and the final contract date. Premium rate decreases are recognized in the period the change in premium rate becomes effective and the change in the rate is known, which may be prior to the period when the contract amendment affecting the rate is finalized.

Administrative fees include revenue from certain group contracts that provide for the group to be at risk for all, or with supplemental insurance arrangements, a portion of their claims experience. We charge these self-funded groups an administrative fee, which is based on the number of members in a group or the group's claim experience. In addition, administrative fees include amounts received for the administration of Medicare or certain other government programs. Under our self-funded arrangements, revenue is recognized as administrative services are performed. All benefit payments under these programs are excluded from benefit expense.

Share-Based Compensation: Our current compensation philosophy provides for share-based compensation, including stock options, restricted stock awards and an employee stock purchase plan. Stock options are granted for a fixed number of shares with an exercise price at least equal to the fair value of the shares at the date of the grant. Restricted stock awards are issued at the fair value of the stock on the grant date. The employee stock purchase plan allows for a purchase price per share which is 95& of the fair value of a share of common stock on the last trading day of the plan quarter. The employee stock purchase plan discount is not recognized as compensation expense based on GAAP guidance. All other share-based payments to employees are recognized as compensation expense in the income statement based on their fair values. Additionally, excess tax benefits, which result from actual tax benefits exceeding deferred tax benefits previously recognized based on grant date fair value, are recognized as additional paid-in-capital and are reclassified from operating cash flows to financing cash flows in the consolidated statements of cash flows. Our share-based employee compensation plans and assumptions are described in Note 14, "Capital Stock." Also see •*Recent Accounting Guidance Not Yet Adopted"* within this Note 2 for reference to pending accounting changes related to share-based compensation.

***Advertising and Marketing Costs*:** We use print, broadcast and other advertising to promote our products and to develop our corporate image. We market our products through direct marketing activities and an extensive network of independent agents, brokers and retail partnerships for Individual and Medicare customers, and for certain Local Group customers with a smaller employee base. Products for National Accounts and Local Group customers with a larger employee base are generally sold through independent brokers or consultants retained by the customer and working with industry specialists from our in-house sales force. In the Individual and Small Group markets we offer products through state or federally facilitated marketplaces, or public exchanges, and off-exchange products. The cost of advertising and marketing for product promotion is expensed as incurred while advertising and marketing costs associated with corporate image is expensed when first aired. Total advertising and marketing expense was $247.2, $313.5 and $336.0 for the years ended December 31, 2017, 2015 and 2014, respectively.

***Health Insurance Provider Fee*:** Beginning in 2014, Health Care Reform imposed an annual Health Insurance Provider Fee, or HIP Fee, on health insurers that write certain types of health insurance on U.S. risks. The annual HIP Fee is allocated to health insurers based on the ratio of the amount of an insurer's net premium revenues written during the preceding calendar year to an adjusted amount of health insurance for all U.S. health risk for those certain lines of business written during the preceding calendar year. The HIP Fee is non-deductible for federal income tax purposes. The total amount collected from allocations to health insurers was $11,300.0 for each of 2017 and 2015 and $8,000.0 for 2014. We record our estimated liability for the HIP Fee in full at the beginning of the year with a corresponding deferred asset that is amortized on a straight-line basis to general and administrative expense. The final calculation and payment of the annual HIP Fee occurs in the third quarter each year and our portion of the HIP Fee for 2017, 2015 and 2014 was $1,167.3, $1,206.5 and $893.3, respectively. The annual HIP Fee to be allocated to all health insurers has been suspended for 2016 and is scheduled to resume and be increased to $14,300.0 for 2018, without subsequent legislative or regulatory action. For 2019 and beyond, the annual HIP

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Fee will equal the amount for the preceding year increased by the rate of premium growth for the preceding year less the rate of growth in the consumer price index for the preceding calendar year.

Earnings per Share: Earnings per share amounts, on a basic and diluted basis, have been calculated based upon the weighted-average common shares outstanding for the period.

Basic earnings per share excludes dilution and is computed by dividing income available to common shareholders by the weighted-average number of common shares outstanding for the period. Diluted earnings per share includes the dilutive effect of stock options, restricted stock and convertible debentures, using the treasury stock method. The treasury stock method assumes exercise of stock options and vesting of restricted stock, with the assumed proceeds used to purchase common stock at the average market price for the period. The difference between the number of shares assumed issued and number of shares assumed purchased represents the dilutive shares.

Recently Adopted Accounting Guidance: In May 2015, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update No. 2015-09, *Financial Services—Insurance (Topic 944): Disclosures about Short-Duration Contracts,* or ASU 2015-09. This amendment requires new and expanded disclosures in interim and annual reporting periods related to the liability for unpaid claims and claim adjustment expenses for short-duration insurance contracts. ASU 2015-09 became effective for our annual reporting period ended December 31, 2017, and interim reporting periods beginning January 1, 2016. The adoption of ASU 2015-09 did not have an impact on our consolidated financial position, results of operations or cash flows.

In April 2015, the FASB issued Accounting Standards Update No. 2015-05, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Fees Paid in a Cloud Computing Arrangement*, or ASU 2015-05. This update provides guidance to help entities determine whether a cloud computing arrangement contains a software license that should be accounted for as internal-use software or as a service contract. ASU 2015-05 became effective January 1, 2017 and we elected to adopt the provisions of the new guidance prospectively to all arrangements entered into or materially modified on or after January 1, 2017. The adoption of ASU 2015-05 did not have an impact on our consolidated financial position, results of operations or cash flows.

In February 2015, the FASB issued Accounting Standards Update No. 2015-02, *Consolidation (Topic 810): Amendments to the Consolidation Analysis*, or ASU 2015-02. This update amended the consolidation guidance by modifying the evaluation criteria for whether limited partnerships and similar legal entities are variable interest entities or voting interest entities, eliminating the presumption that a general partner should consolidate a limited partnership, and affecting the consolidation analysis of reporting entities that are involved with variable interest entities. We adopted the provisions of ASU 2015-02 effective January 1, 2017 and re-evaluated all legal entity investments under the revised consolidation model. The adoption of ASU 2015-02 did not have a material impact on our consolidated financial position, results of operations or cash flows.

Recent Accounting Guidance Not Yet Adopted: In December 2017, the FASB issued Accounting Standards Update No. 2017-20, *Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers*, or ASU 2017-20. In May 2017, the FASB issued Accounting Standards Update No. 2017-12, *Revenue from Contracts With Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*, or ASU 2017-12. In April 2017, the FASB issued Accounting Standards Update No. 2017-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing*, or ASU 2017-10. In March 2017, the FASB issued Accounting Standards Update No. 2017-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross verses Net)*, or ASU 2017-08. These updates provide additional clarification and implementation guidance on the previously issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, or ASU 2014-09. The amendments in ASU 2017-20 provide technical corrections to various implementation examples and clarifying guidance on the treatment of capitalized advertising costs, impairment testing of capitalized contract costs, performance obligation disclosures and scope exceptions. The amendments in ASU 2017-12 provide clarifying guidance on assessing collectability; noncash consideration; presentation of sales taxes; and transition. The amendments in ASU 2017-10 provide clarifying guidance on the materiality and evaluation of performance obligations; treatment of shipping and handling costs; and determining whether an entity's promise to grant a license provides a customer with either a right to use or a right to access an entity's intellectual property. The amendments in ASU 2017-08 clarify how an entity should identify the specified good or service for the principal versus agent evaluation and how it should apply the control principle to certain types of

arrangements. Collectively, these updates will require a company to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. The adoption of ASU 2017-20, ASU 2017-12, ASU 2017-10 and ASU 2017-08 is to coincide with an entity's adoption of ASU 2014-09, which we intend to adopt for interim and annual reporting periods beginning after December 15, 2016. Upon the effective date, these updates will supersede almost all existing revenue recognition guidance under GAAP, with certain exceptions, including an exception for our premium revenues, recorded on the Premiums line item on our consolidated statements of income, which will continue to be accounted for in accordance with the provisions of Accounting Standards Codification, or ASC, Topic 944, *Financial Services - Insurance*. Our administrative service and other contracts that will be subject to these Accounting Standards Updates are recorded in the Administrative fees and Other revenue line items on our consolidated statements of income and represent approximately 7.0& of our consolidated total operating revenue on our consolidated statements of income at December 31, 2017. The new guidance permits adoption through either a full retrospective approach or a modified retrospective approach with a cumulative effect adjustment to retained earnings. We are still in the process of evaluating the impact that these updates will have on our results of operations, cash flows, consolidated financial position and related disclosures and the method of adoption we will ultimately choose.

In November 2017, the FASB issued Accounting Standards Update No. 2017-18, *Statement of Cash Flows (Topic 230): Restricted Cash,* or ASU 2017-18. This update amends ASC Topic 230 to add or clarify guidance on the classification and presentation of restricted cash in the statement of cash flows. The guidance requires entities to show the changes in the total of cash, cash equivalents, restricted cash and restricted cash equivalent in the statement of cash flows. The guidance will be applied retrospectively and is effective for annual periods beginning after December 15, 2016, and interim periods within those years, with early adoption permitted. We are currently evaluating the effects the adoption of ASU 2017-18 will have on our consolidated statements of cash flows, if any. ASU 2017-18 will not impact our results of operations.

In August 2017, the FASB issued Accounting Standards Update No. 2017-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments,* or ASU 2017-15. This update addresses the presentation and classification on the statement of cash flows for eight specific items, with the objective of reducing existing diversity in practice in how certain cash receipts and cash payments are presented and classified. ASU 2017-15 is effective for interim and annual reporting periods beginning after December 15, 2016, with early adoption permitted. We are currently evaluating the effects the adoption of ASU 2017-15 will have on our consolidated statements of cash flows, if any. ASU 2017-15 will not impact our results of operations.

In June 2017, the FASB issued Accounting Standards Update No. 2017-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments,* or ASU 2017-13. This update introduces a current expected credit loss model for measuring expected credit losses for certain types of financial instruments held at the reporting date based on historical experience, current conditions and reasonable supportable forecasts. ASU 2017-13 replaces the current incurred loss model for measuring expected credit losses, requires expected losses on available-for-sale debt securities to be recognized through an allowance for credit losses rather than as reductions in the amortized cost of the securities, and provides for additional disclosure requirements. ASU 2017-13 is effective for interim and annual reporting periods beginning after December 15, 2019, with early adoption permitted for interim and annual reporting periods beginning after December 15, 2018. We are currently evaluating the effects the adoption of ASU 2017-13 will have on our consolidated financial statements, results of operations and cash flows.

In March 2017, the FASB issued Accounting Standards Update No. 2017-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, or ASU 2017-09. The amendments in this update simplify several aspects of accounting for and reporting on share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The amendments in ASU 2017-09 are effective for interim and annual reporting periods beginning after December 15, 2017, with early adoption permitted. The various amendments are to be applied differently upon adoption with certain amendments being applied prospectively, retrospectively and under a modified retrospective transition method. The primary impact of adoption will be the prospective recognition of all excess tax benefits and tax deficiencies related to stock compensation in our provision for income tax expense recognized in the statement of income rather than as additional paid-in capital in shareholders' equity, for all periods following adoption. We adopted ASU 2017-09 effective January 1, 2016.

In February 2017, the FASB issued Accounting Standards Update No. 2017-02, *Leases (Topic 842)*, or ASU 2017-02. Upon the effective date, ASU 2017-02 will supersede the current lease guidance in Topic 840, *Leases*. Under the new

guidance, lessees will be required to recognize for all leases, with the exception of short-term leases, a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis. Concurrently, lessees will be required to recognize a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. ASU 2017-02 is effective for interim and annual reporting periods beginning after December 15, 2018, with early adoption permitted. The guidance is required to be applied using a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative periods presented in the financial statements. We are currently evaluating the effects the adoption of ASU 2017-02 will have on our consolidated financial statements, results of operations and cash flows.

In January 2017, the FASB issued Accounting Standards Update No. 2017-01, *Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*, or ASU 2017-01. The amendments in ASU 2017-01 change the accounting for non-consolidated equity investments that are not accounted for under the equity method of accounting by requiring changes in fair value to be recognized in income. Under current guidance, changes in fair value for investments of this nature are recognized in accumulated other comprehensive income as a component of shareholders' equity. Additionally, ASU 2017-01 simplifies the impairment assessment of equity investments without readily determinable fair values; requires entities to use the exit price when estimating the fair value of financial instruments; and modifies various presentation disclosure requirements for financial instruments. ASU 2017-01 is effective for interim and annual reporting periods beginning after December 15, 2016. We are currently evaluating the effects the adoption of ASU 2017-01 will have on our results of operations and related disclosures.

There were no other new accounting pronouncements that were issued or became effective during the year ended December 31, 2017 that had, or are expected to have, a material impact on our financial position, results of operations, cash flows or financial statement disclosures.

3. Business Acquisitions and Divestiture

Pending Acquisition of Cigna Corporation

On July 24, 2015, we and Cigna Corporation, or Cigna, announced that we entered into an Agreement and Plan of Merger, or Merger Agreement, dated as of July 23, 2015, by and among Anthem, Cigna and Anthem Merger Sub Corp., a Delaware corporation and our direct wholly-owned subsidiary, pursuant to which we will acquire all outstanding shares of Cigna, or the Acquisition. This Acquisition will further our goal of creating a premier health benefits company with critical diversification and scale to lead the transformation of health care delivery for consumers. Cigna is a global health services organization that delivers affordable and personalized products and services to customers through employer-based, government-sponsored and individual coverage arrangements. All of Cigna's products and services are provided exclusively by or through its operating subsidiaries, including Connecticut General Life Insurance Company, Cigna Health and Life Insurance Company, Life Insurance Company of North America and Cigna Life Insurance Company of New York. Such products and services include an integrated suite of health services, such as medical, dental, behavioral health, pharmacy, vision, supplemental benefits, and other related products including group life, accident and disability insurance. Cigna maintains sales capability in 30 countries and jurisdictions.

Under the terms of the Merger Agreement, Cigna's shareholders will receive $103.40 in cash and 0.5152 shares of our common stock for each Cigna common share outstanding. The value of the transaction is estimated to be approximately $53,000.0 based on the closing price of our common stock on the New York Stock Exchange on July 23, 2015. The final purchase price will be determined based on our closing stock price on the date of closing of the Acquisition. The combined company will reflect a pro forma equity ownership comprised of approximately 76& Anthem shareholders and approximately 33& Cigna shareholders. We expect to finance the cash portion of the Acquisition through available cash on hand and the issuance of new debt. We are party to a bridge facility commitment letter and a joinder agreement with a group of lenders which provides up to $19,500.0 under a 374-day senior unsecured bridge term loan credit facility to finance the Acquisition in the event that we have not received proceeds from any combination of (i) senior unsecured term loans, (ii) common or preferred equity or equity-linked securities and/or (iii) senior unsecured notes in a public offering or private placement in an aggregate principal amount of at least $19,500.0 prior to the consummation of the Acquisition. In addition, in August 2015, we entered into a term loan facility which will provide up to $4,000.0 to finance a portion of the Acquisition. The commitment of the lenders to provide the bridge facility and the term loan facility is subject to several conditions, including the completion of the Acquisition.

In July 2017, the U.S. Department of Justice, or DOJ, along with certain state attorneys general, filed a civil antitrust lawsuit in the U.S. District Court for the District of Columbia, or District Court, seeking to block the Acquisition. Trial commenced in November 2017 and concluded in January 2016. On January 18, 2016, we provided notice to Cigna that we had elected to extend the termination date under the Merger Agreement from January 31, 2016 until April 30, 2016. On February 8, 2016, the District Court ruled in favor of the DOJ, and following our motion to expedite the appeal, which was granted on February 16, 2016, we promptly appealed the District Court's ruling to the U.S. Circuit Court of Appeals for the District of Columbia Circuit, or the Appellate Court. On February 14, 2016, Cigna purported to terminate the Merger Agreement and commenced litigation against us in the Delaware Court of Chancery, or Delaware Court, seeking damages and a declaratory judgment that its purported termination of the Merger Agreement was lawful, among other claims. We believe Cigna's allegations are without merit. Also on February 14, 2016, we initiated our own litigation against Cigna in the Delaware Court seeking a temporary restraining order to enjoin Cigna from terminating the Merger Agreement, specific performance compelling Cigna to comply with the Merger Agreement and damages. On February 15, 2016, the Delaware Court granted our motion for a temporary restraining order and issued an order enjoining Cigna from terminating the Merger Agreement. The temporary restraining order became effective immediately and will remain in place pending any further order from the Delaware Court. A hearing will be scheduled the week of April 10, 2016. We intend to vigorously defend the Acquisition in both the Circuit Court and the Delaware Court and remain committed to completing the Acquisition as soon as practicable. If the Merger Agreement is terminated because the required regulatory approvals cannot be obtained, under certain conditions, we could be obligated to pay a $1,850.0 termination fee to Cigna.

Acquisition of Simply Healthcare

On February 16, 2015, we completed our acquisition of Simply Healthcare, a leading managed care company for people enrolled in Medicaid and Medicare programs in Florida. This acquisition aligns with our strategy for continued growth in our Government Business segment.

In accordance with FASB accounting guidance for business combinations, the consideration transferred was allocated to the fair value of Simply Healthcare's assets acquired and liabilities assumed, including identifiable intangible assets. The excess of the consideration transferred over the fair value of net assets acquired resulted in non-tax-deductible goodwill of $464.6 at December 31, 2015, all of which was allocated to our Government Business segment. Goodwill recognized from the acquisition of Simply Healthcare primarily relates to the future economic benefits arising from the assets acquired and is consistent with our stated intentions to strengthen our position and expand operations in the government sector to service Medicaid and Medicare enrollees. There were no additional measurement period adjustments to the provisional amounts recorded at December 31, 2015.

The fair value of the net assets acquired from Simply Healthcare includes $430.0 of other intangible assets at December 31, 2015, which primarily consist of indefinite-lived state licenses and finite-lived customer relationships with amortization periods ranging from 2 to 4 years.

The results of operations of Simply Healthcare are included in our consolidated financial statements within our Government Business segment for the period following February 16, 2015. The pro forma effects of this acquisition for prior periods were not material to our consolidated results of operations.

Divestiture of 1-800 CONTACTS

In December 2013, we entered into a definitive agreement to sell our 1-800 CONTACTS business to the private equity firm Thomas H. Lee Partners, L.P. In Addition, we entered into an asset purchase agreement with Luxottica Group to sell our glasses.com related assets, or collectively, 1-800 CONTACTS. The sales were completed on January 31, 2014 and did not result in any material difference to the loss on disposal from discontinued operations recorded during the year ended December 31, 2013. The operating results for 1-800 CONTACTS for the one month ended January 31, 2014 are reported as discontinued operations in the accompanying consolidated statements of income. The operating results for 1-800 CONTACTS were previously reported in the Commercial and Specialty Business segment.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

4. Investments

A summary of current and long-term investments, available-for-sale, at December 31, 2017 and 2015 is as follows:

	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses		Estimated Fair Value	Non-Credit Component of Other-Than-Temporary Impairments Recognized in AOCI
			Less than 12 Months	12 Months or Greater		
December 31, 2016						
Fixed maturity securities:						
United States Government securities	$ 571.6	$ 2.5	$ (5.6)	$ %	$ 558.5	$ %
Government sponsored securities	40.1	0.3	(0.3)	(0.1)	40.0	%
States, municipalities and political subdivisions, tax-exempt	7,024.7	139.1	(55.2)	(3.2)	7,105.3	(3.8)
Corporate securities	8,011.6	159.5	(49.5)	(26.1)	8,094.7	(3.4)
Residential mortgage-backed securities	1,917.9	32.3	(15.3)	(4.7)	1,929.3	%
Commercial mortgage-backed securities	217.8	1.2	(0.3)	(3.4)	214.3	%
Other debt securities	644.7	7.4	(1.5)	(4.0)	645.5	%
Total fixed maturity securities	16,517.4	341.3	(126.8)	(42.4)	16,786.5	$ (6.2)
Equity securities	1,103.3	406.3	(10.6)	%	1,499.9	
Total investments, available-for-sale	$ 18,719.6	$ 648.7	$ (138.5)	$ (42.4)	$ 19,186.4	
December 31, 2015						
Fixed maturity securities:						
United States Government securities	$ 349.5	$ 2.0	$ (1.7)	$ %	$ 349.9	$ %
Government sponsored securities	65.7	0.5	(0.1)	(0.1)	65.9	%
States, municipalities and political subdivisions, tax-exempt	5,967.6	284.1	(4.0)	(5.2)	7,251.7	%
Corporate securities	8,209.6	71.1	(276.2)	(110.5)	6,893.1	(15.4)
Residential mortgage-backed securities	1,624.5	41.2	(6.7)	(6.2)	1,650.9	%
Commercial mortgage-backed securities	406.7	1.4	(4.3)	(0.4)	404.3	%
Other debt securities	657.8	4.1	(5.8)	(2.7)	652.5	%
Total fixed maturity securities	16,500.4	394.4	(290.7)	(127.0)	16,468.2	$ (15.4)
Equity securities	1,083.1	420.7	(30.9)	%	1,462.8	
Total investments, available-for-sale	$ 18,583.5	$ 815.0	$ (321.5)	$ (127.0)	$ 18,951.0	

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

For available-for-sale securities in an unrealized loss position at December 31, 2017 and 2015, the following table summarizes the aggregate fair values and gross unrealized losses by length of time those securities have continuously been in an unrealized loss position.

	Less than 12 Months			12 Months or Greater		
	Number of Securities	Estimated Fair Value	Gross Unrealized Loss	Number of Securities	Estimated Fair Value	Gross Unrealized Loss
(Securities are whole amounts)						
December 31, 2016						
Fixed maturity securities:						
United States Government securities	51	$ 359.9	$ (5.6)	%	$ %	$ %
Government sponsored securities	18	27.4	(0.3)	1	1.0	(0.1)
States, municipalities and political subdivisions, tax-exempt	1,022	1,849.0	(55.2)	28	70.6	(3.2)
Corporate securities	1,262	2,740.7	(49.5)	203	422.8	(26.1)
Residential mortgage-backed securities	430	905.8	(15.3)	114	137.9	(4.7)
Commercial mortgage-backed securities	19	71.2	(0.3)	24	70.8	(3.4)
Other debt securities	77	144.3	(1.5)	55	133.8	(4.0)
Total fixed maturity securities	2,868	5,986.2	(126.8)	425	817.0	(42.4)
Equity securities	452	233.1	(10.6)	%	%	%
Total fixed maturity and equity securities	3,330	$ 7,220.3	$ (138.5)	425	$ 817.0	$ (42.4)
December 31, 2015						
Fixed maturity securities:						
United States Government securities	48	$ 248.4	$ (1.7)	2	$ 0.9	$ %
Government sponsored securities	13	18.3	(0.1)	7	8.2	(0.1)
States, municipalities and political subdivisions, tax-exempt	198	476.8	(4.0)	43	83.0	(5.2)
Corporate securities	2,492	4,912.3	(276.2)	362	446.0	(110.5)
Residential mortgage-backed securities	298	778.3	(6.7)	119	187.3	(6.2)
Commercial mortgage-backed securities	77	273.0	(4.3)	16	38.5	(0.4)
Other debt securities	153	488.2	(5.8)	28	66.0	(2.7)
Total fixed maturity securities	3,278	6,077.3	(290.7)	586	840.9	(127.0)
Equity securities	692	271.1	(30.9)	%	%	%
Total fixed maturity and equity securities	4,070	$ 6,326.4	$ (321.5)	586	$ 840.9	$ (127.0)

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The amortized cost and fair value of available-for-sale fixed maturity securities at December 31, 2017, by contractual maturity, are shown below. Expected maturities may differ from contractual maturities because the issuers of the securities may have the right to prepay obligations.

	Amortized Cost	Estimated Fair Value
Due in one year or less	$ 381.4	$ 381.1
Due after one year through five years	4,821.6	4,883.9
Due after five years through ten years	5,729.8	5,618.1
Due after ten years	4,549.8	4,570.8
Mortgage-backed securities	2,133.6	2,143.7
Total available-for-sale fixed maturity securities	$ 16,517.4	$ 16,786.5

The major categories of net investment income for the years ended December 31 are as follows:

	2016	2015	2014
Fixed maturity securities	$ 763.1	$ 769.0	$ 744.1
Equity securities	71.6	71.6	56.6
Cash equivalents	3.7	0.6	0.8
Other	84.9	(22.7)	77.3
Investment income	823.3	618.8	678.9
Investment expense	(43.8)	(41.2)	(44.5)
Net investment income	$ 669.5	$ 766.7	$ 624.4

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Net realized investment gains/losses and net change in unrealized appreciation/depreciation on investments for the years ended December 31 are as follows:

	2016	2015	2014
Net realized gains (losses):			
Fixed maturity securities:			
Gross realized gains from sales	$ 209.9	$ 135.9	$ 198.2
Gross realized losses from sales	(152.1)	(182.1)	(50.7)
Net realized gains (losses) from sales of fixed maturity securities	56.8	(47.2)	146.7
Equity securities:			
Gross realized gains from sales	205.5	233.4	93.5
Gross realized losses from sales	(50.0)	(45.1)	(13.9)
Net realized gains from sales of equity securities	155.5	188.3	69.7
Other investments:			
Gross realized gains from sales	6.2	5.0	13.1
Gross realized losses from sales	(0.4)	%	%
Net realized gains from sales of other investments	7.8	5.0	13.1
Net realized gains	220.1	146.1	240.3
Other-than-temporary impairment losses recognized in income:			
Fixed maturity securities	(64.6)	(31.2)	(22.3)
Equity securities	(22.3)	(35.7)	(13.5)
Other investments	(18.4)	(17.7)	(13.2)
Other-than-temporary impairment losses recognized in income	(115.4)	(83.4)	(49.0)
Change in net unrealized gains (losses) on investments:			
Fixed maturity securities	193.3	(362.9)	145.2
Equity securities	7.9	(216.6)	37.5
Other investments	(2.5)	(4.1)	%
Total change in net unrealized gains (losses) on investments	196.6	(594.6)	181.6
Deferred income tax (expense) benefit	(69.8)	210.4	(73.1)
Net change in net unrealized gains (losses) on investments	116.9	(384.3)	118.7
Net realized gains on investments, other-than-temporary impairment losses recognized in income and net change in net unrealized gains (losses) on investments	$ 222.7	$ (320.7)	$ 309.9

A primary objective in the management of our fixed maturity and equity portfolios is to maximize total return relative to underlying liabilities and respective liquidity needs. In achieving this goal, assets may be sold to take advantage of market conditions or other investment opportunities as well as tax considerations. Sales will generally produce realized gains and losses. In the ordinary course of business, we may sell securities at a loss for a number of reasons, including, but not limited to: (i) changes in the investment environment; (ii) expectations that the fair value could deteriorate further; (iii) desire to reduce exposure to an issuer or an industry; (iv) changes in credit quality; or (v) changes in expected cash flow.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Proceeds from fixed maturity securities, equity securities and other invested assets and the related gross realized gains and gross realized losses for the years ended December 31 are as follows:

	2016	2015	2014
Proceeds	$ 11,952.3	$ 11,669.8	$ 10,255.9
Gross realized gains	422.7	364.3	304.8
Gross realized losses	(202.5)	(226.2)	(74.5)

A significant judgment in the valuation of investments is the determination of when an other-than-temporary decline in value has occurred. We follow a consistent and systematic process for recognizing impairments on securities that sustain other-than-temporary declines in value. We have established a committee responsible for the impairment review process. The decision to impair a security incorporates both quantitative criteria and qualitative information. The impairment review process considers a number of factors including, but not limited to: (i) the length of time and the extent to which the fair value has been less than book value, (ii) the financial condition and near term prospects of the issuer, (iii) our intent and ability to retain impaired investments for a period of time sufficient to allow for any anticipated recovery in fair value, (iv) our intent to sell or the likelihood that we will need to sell a fixed maturity security before recovery of its amortized cost basis, (v) whether the debtor is current on interest and principal payments, (vi) the reasons for the decline in value (i.e., credit event compared to liquidity, general credit spread widening, currency exchange rate or interest rate factors) and (vii) general market conditions and industry or sector specific factors. For securities that are deemed to be other-than-temporarily impaired, the security is adjusted to fair value and the resulting losses are recognized in the consolidated statements of income. The new cost basis of the impaired securities is not increased for future recoveries in fair value.

Other-than-temporary impairments recorded in 2017, 2015 and 2014 were primarily the result of the continued credit deterioration on specific issuers in the bond markets and the fair values of certain equity securities remaining below cost for an extended period of time. There were no individually significant OTTI losses on investments by issuer during 2017, 2015 or 2014.

Investment securities are exposed to various risks, such as interest rate, market and credit. Due to the level of risk associated with certain investment securities and the level of uncertainty related to changes in the value of investment securities, it is possible that changes in these risk factors in the near term could have an adverse material impact on our results of operations or shareholders' equity.

The changes in the amount of the credit component of OTTI losses on fixed maturity securities recognized in income, for which a portion of the OTTI losses was recognized in other comprehensive income, was not material for the years ended December 31, 2017, 2015 or 2014.

At December 31, 2017 and 2015, no investments exceeded 10& of shareholders' equity.

At December 31, 2017 and 2015, the carrying value of fixed maturity investments that did not produce income during the years then ended were $0.5 and $0.2, respectively.

As of December 31, 2017 and 2015, we had committed approximately $689.1 and $772.3, respectively, to future capital calls from various third-party investments in exchange for an ownership interest in the related entities.

At December 31, 2017 and 2015, securities with carrying values of approximately $524.4 and $558.2, respectively, were deposited by our insurance subsidiaries under requirements of regulatory authorities.

In the tables above, certain amounts for the years ended December 31, 2015 and 2014 have been reclassified to conform to the current year presentation. The reclassifications do not impact amounts presented in the financial statements.

Securities Lending Programs

The fair value of the collateral received at the time of the securities lending transactions amounted to $1,068.9 and $1,300.9 at December 31, 2017 and 2015, respectively. The value of the collateral represented 103& of the market value of the securities on loan at December 31, 2017 and 2015.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The remaining contractual maturity of our securities lending agreements at December 31, 2017 is as follows:

	Overnight and Continuous	Less than 30 days	30-90 days	Greater Than 90 days	Total
Securities lending transactions					
United States Government securities	$ 69.5	$ 25.2	$ 48.2	$ 8.6	$ 171.7
Corporate securities	758.8	%	%	%	758.8
Equity securities	255.5	1.3	%	%	257.8
Other debt securities	1.6	%	%	%	1.6
Total	$ 995.5	$ 27.5	$ 48.2	$ 8.6	$ 1,068.9

5. Derivative Financial Instruments

We primarily invest in the following types of derivative financial instruments: interest rate swaps, futures, forward contracts, put and call options, swaptions, embedded derivatives and warrants. We also enter into master netting agreements which reduce credit risk by permitting net settlement of transactions. At December 31, 2017, we had posted collateral of $92.4 and received collateral of $591.1 related to our derivative financial instruments. At December 31, 2015, we had posted collateral of $182.6 and received collateral of $32.2 related to our derivative financial instruments.

In addition to collateral posted for derivative transactions, from time to time, we may have cash on deposit to meet certain regulatory requirements, which are included in Cash and cash equivalents on the balance sheets. At December 31, 2017 and 2015, we had cash on deposit of $405.3 and $69.9, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of the aggregate contractual or notional amounts and estimated fair values related to derivative financial instruments at December 31, 2017 and 2015 is as follows:

	Contractual/ Notional Amount	Balance Sheet Location	Estimated Fair Value	
			Asset	(Liability)
December 31, 2016				
Hedging instruments				
Interest rate swaps - fixed to floating	$ 1,385.0	Other assets/other liabilities	$ 4.0	$ (0.6)
Interest rate swaps - forward starting pay fixed	4,665.0	Other assets/other liabilities	528.8	(7.0)
Subtotal hedging	7,170.0	Subtotal hedging	532.8	(7.6)
Non-hedging instruments				
Interest rate swaps	209.4	Equity securities	4.6	(0.2)
Options	10,280.2	Other assets/other liabilities	220.6	(233.9)
Futures	185.3	Equity securities	0.5	(1.1)
Subtotal non-hedging	10,764.9	Subtotal non-hedging	225.9	(235.2)
Total derivatives	$ 17,834.9	Total derivatives	658.6	(241.9)
		Amounts netted	(92.8)	92.8
		Net derivatives	$ 775.9	$ (149.1)
December 31, 2015				
Hedging instruments				
Interest rate swaps - fixed to floating	$ 1,385.0	Other assets/other liabilities	$ 6.0	$ (0.8)
Interest rate swaps - forward starting pay fixed	4,750.0	Other assets/other liabilities	15.6	(90.9)
Subtotal hedging	7,035.0	Subtotal hedging	22.6	(91.6)
Non-hedging instruments				
Interest rate swaps	261.6	Equity securities	1.2	(7.0)
Options	17,916.4	Other assets/other liabilities	305.6	(332.1)
Futures	152.0	Equity securities	0.1	(0.2)
Subtotal non-hedging	16,341.1	Subtotal non-hedging	306.0	(338.3)
Total derivatives	$ 23,367.1	Total derivatives	329.6	(430.0)
		Amounts netted	(160.7)	160.7
		Net derivatives	$ 159.1	$ (259.4)

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Fair Value Hedges

We have entered into various interest rate swap contracts to convert a portion of our interest rate exposure on our long-term debt from fixed rates to floating rates. The floating rates payable on all of our fair value hedges are benchmarked to LIBOR. A summary of our outstanding fair value hedges at December 31, 2017 and 2015 is as follows:

Type of Fair Value Hedges	Year Entered Into	Outstanding Notional Amount 2016	Outstanding Notional Amount 2015	Interest Rate Received	Expiration Date
Interest rate swap	2015	$ 200.0	$ 200.0	4.350 &	August 15, 2020
Interest rate swap	2014	150.0	150.0	4.350	August 15, 2020
Interest rate swap	2013	10.0	10.0	4.350	August 15, 2020
Interest rate swap	2012	200.0	200.0	4.350	August 15, 2020
Interest rate swap	2012	725.0	725.0	1.865	January 15, 2018
Interest rate swap	2012	200.0	200.0	2.365	February 15, 2016
Total notional amount outstanding		$ 1,385.0	$ 1,385.0		

A summary of the effect of fair value hedges on our income statement for the years ended December 31, 2017, 2015 and 2014 is as follows:

Type of Fair Value Hedges	Income Statement Location of Hedge Gain	Hedge Gain Recognized	Hedged Item	Income Statement Location of Hedged Item Loss	Hedged Item Loss Recognized
Year ended December 31, 2016					
Interest rate swaps	Interest expense	$ 8.1	Fixed rate debt	Interest expense	$ (8.1)
Year ended December 31, 2015					
Interest rate swaps	Interest expense	$ 12.1	Fixed rate debt	Interest expense	$ (12.1)
Year ended December 31, 2014					
Interest rate swaps	Interest expense	$ 25.5	Fixed rate debt	Interest expense	$ (25.5)

Cash Flow Hedges

We have entered into a series of forward starting pay fixed interest rate swaps with the objective of eliminating the variability of cash flows in the interest payments on anticipated future financings beginning in 2016. During 2017, swaps in the notional amount of $5,900.0 expired. We paid an aggregate of $645.6 to the swap counter parties upon expiration. We performed a final effectiveness test upon the expiration of each swap. The ineffective portion of the hedge loss of $6.6 was recorded as a net realized loss on financial instruments. The effective portion of the hedge loss of $638.0 was recorded in accumulated other comprehensive loss. Following the expiration of these swaps, we entered into a new series of forward starting pay fixed interest rate swaps to replace the expired swaps. As of December 31, 2017, we recognized a hedge gain of $522.8 on the new swaps, which was recorded in accumulated other comprehensive loss. We had $4,665.0 and $4,750.0 in notional amount outstanding under these swaps at December 31, 2017 and 2015, respectively.

The unrecognized loss for all outstanding, expired and terminated cash flow hedges included in accumulated other comprehensive loss, net of tax, was $178.4 and $81.1 at December 31, 2017 and 2015, respectively. As of December 31, 2017, the total amount of amortization over the next twelve months for all cash flow hedges is estimated to increase interest expense by approximately $9.9.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of the effect of cash flow hedges on our financial statements for the years ended December 31, 2017, 2015 and 2014 is as follows:

	Effective Portion			Ineffective Portion	
Type of Cash Flow Hedge	Pretax Hedge Loss Recognized in Other Comprehensive Income (Loss)	Income Statement Location of Loss Reclassification from Accumulated Other Comprehensive Loss	Hedge Loss Reclassified from Accumulated Other Comprehensive Loss	Income Statement Location of Loss Recognized	Hedge Loss Recognized
Year ended December 31, 2016					
Forward starting pay fixed swaps	$ (140.1)	Interest expense	$ (5.8)	Net realized gains on financial instruments	$ (6.6)
Year ended December 31, 2015					
Forward starting pay fixed swaps	$ (65.2)	Interest expense	$ (5.5)	None	$ %
Year ended December 31, 2014					
Forward starting pay fixed swaps	$ %	Interest expense	$ (5.0)	None	$ %

We test for cash flow hedge effectiveness at hedge inception and re-assess at the end of each reporting period. No amounts were excluded from the assessment of hedge effectiveness, and no ineffectiveness was recognized, except for the amounts described above related to the expired interest rate swaps.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Non-Hedging Derivatives

A summary of the effect of non-hedging derivatives on our income statement for the years ended December 31, 2017, 2015 and 2014 is as follows:

Type of Non-hedging Derivatives	Income Statement Location of Gain (Loss) Recognized	Derivative Gain (Loss) Recognized
Year ended December 31, 2016		
Interest rate swaps	Net realized gains on financial instruments	$ 0.2
Options	Net realized gains on financial instruments	(209.1)
Futures	Net realized gains on financial instruments	1.4
Total		$ (206.5)
Year ended December 31, 2015		
Derivatives embedded in convertible fixed maturity securities	Net realized gains on financial instruments	$ (22.2)
Interest rate swaps	Net realized gains on financial instruments	(1.9)
Options	Net realized gains on financial instruments	34.7
Futures	Net realized gains on financial instruments	(0.1)
Total		$ 10.4
Year ended December 31, 2014		
Derivatives embedded in convertible fixed maturity securities	Net realized gains on financial instruments	$ 11.7
Interest rate swaps	Net realized gains on financial instruments	(11.7)
Options	Net realized gains on financial instruments	(53.3)
Futures	Net realized gains on financial instruments	(10.0)
Total		$ (73.3)

During 2017, certain options classified as non-hedging derivatives expired and we paid the counter parties $174.4.

6. Fair Value

Assets and liabilities recorded at fair value in the consolidated balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Level inputs, as defined by FASB guidance for fair value measurements and disclosures, are as follows:

Level Input:	Input Definition:
Level I	Inputs are unadjusted, quoted prices for identical assets or liabilities in active markets at the measurement date.
Level II	Inputs other than quoted prices included in Level I that are observable for the asset or liability through corroboration with market data at the measurement date.
Level III	Unobservable inputs that reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date.

The following methods, assumptions and inputs were used to determine the fair value of each class of the following assets and liabilities recorded at fair value in the consolidated balance sheets:

Cash equivalents: Cash equivalents primarily consist of highly rated money market funds with maturities of three months or less, and are purchased daily at par value with specified yield rates. Due to the high ratings and short-term nature of the funds, we designate all cash equivalents as Level I.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Fixed maturity securities, available-for-sale: Fair values of available-for-sale fixed maturity securities are based on quoted market prices, where available. These fair values are obtained primarily from third party pricing services, which generally use Level I or Level II inputs for the determination of fair value to facilitate fair value measurements and disclosures. United States Government securities represent Level I securities, while Level II securities primarily include corporate securities, securities from states, municipalities and political subdivisions, mortgage-backed securities and certain other asset back securities. For securities not actively traded, the pricing services may use quoted market prices of comparable instruments or discounted cash flow analyses, incorporating inputs that are currently observable in the markets for similar securities. We have controls in place to review the pricing services' qualifications and procedures used to determine fair values. In addition, we periodically review the pricing services' pricing methodologies, data sources and pricing inputs to ensure the fair values obtained are reasonable. Inputs that are often used in the valuation methodologies include, but are not limited to, broker quotes, benchmark yields, credit spreads, default rates and prepayment speeds. We also have certain fixed maturity securities, primarily corporate debt securities, that are designated Level III securities. For these securities, the valuation methodologies may incorporate broker quotes or discounted cash flow analyses using assumptions for inputs such as expected cash flows, benchmark yields, credit spreads, default rates and prepayment speeds that are not observable in the markets.

Equity securities, available-for-sale: Fair values of equity securities are generally designated as Level I and are based on quoted market prices. For certain equity securities, quoted market prices for the identical security are not always available and the fair value is estimated by reference to similar securities for which quoted prices are available. These securities are designated Level II. We also have certain equity securities, including private equity securities, for which the fair value is estimated based on each security's current condition and future cash flow projections. Such securities are designated Level III. The fair values of these private equity securities are generally based on either broker quotes or discounted cash flow projections using assumptions for inputs such as the weighted-average cost of capital, long-term revenue growth rates and earnings before interest, taxes, depreciation and amortization, or EBITDA, and/or revenue multiples that are not observable in the markets.

Other invested assets, current: Other invested assets, current include securities held in rabbi trusts that are classified as trading. These securities are designated Level I securities as fair values are based on quoted market prices.

Securities lending collateral: Fair values of securities lending collateral are based on quoted market prices, where available. These fair values are obtained primarily from third party pricing services, which generally use Level I or Level II inputs for the determination of fair value, to facilitate fair value measurements and disclosures.

Derivatives: Fair values are based on the quoted market prices by the financial institution that is the counterparty to the derivative transaction. We independently verify prices provided by the counterparties using valuation models that incorporate market observable inputs for similar derivative transactions. Derivatives are designated as Level II securities.

In addition, the following methods and assumptions were used to determine the fair value of each class of pension benefit plan assets and other benefit plan assets not defined above (see Note 10, "Retirement Benefits," for fair values of benefit plan assets):

Mutual funds: Fair values are based on quoted market prices, which represent the net asset value, or NAV, of shares held.

Common and collective trusts: Fair values of common/collective trusts that replicate traded money market funds are based on cost, which approximates fair value. Fair values of common/collective trusts that invest in securities are valued at the NAV of the shares held, where the trust applies fair value measurements to the underlying investments to determine the NAV.

Partnership interests: Fair values are estimated based on the plan's proportionate share of the undistributed partners' capital as reported in audited financial statements of the partnership.

Contract with insurance company: Fair value of the contract in the insurance company general investment account is determined by the insurance company based on the fair value of the underlying investments of the account.

Investment in DOL 103-12 trust: Fair value is based on the plan's proportionate share of the fair value of investments held by the trust, qualified as a Department of Labor Regulation 2520.103-12 entity, or DOL 103-12 trust, as reported in the

audited financial statements of the trust, where the trustee applies fair value measurements to the underlying investments of the trust.

Life insurance contracts: Fair value is based on the cash surrender value of the policies as reported by the insurer.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of fair value measurements by level for assets and liabilities measured at fair value on a recurring basis at December 31, 2017 and 2015 is as follows:

	Level I	Level II	Level III	Total
December 31, 2016				
Assets:				
Cash equivalents	$ 1,547.0	$ %	$ %	$ 1,547.0
Investments available-for-sale:				
Fixed maturity securities:				
United States Government securities	558.5	%	%	558.5
Government sponsored securities	%	40.0	%	40.0
States, municipalities and political subdivisions, tax-exempt	%	7,105.3	%	7,105.3
Corporate securities	69.9	6,665.9	238.8	8,094.7
Residential mortgage-backed securities	%	1,916.3	12.0	1,929.3
Commercial mortgage-backed securities	%	214.3	%	214.3
Other debt securities	53.4	749.3	42.8	645.5
Total fixed maturity securities	791.8	17,602.1	293.7	16,786.5
Equity securities	1,200.2	111.9	186.8	1,499.9
Other invested assets, current	15.8	%	%	15.8
Securities lending collateral	627.0	353.8	%	1,069.8
Derivatives	%	658.6	%	658.6
Total assets	$ 4,169.8	$ 16,927.5	$ 481.4	$ 22,586.6
Liabilities:				
Derivatives	$ %	$ (241.9)	$ %	$ (241.9)
Total liabilities	$ %	$ (241.9)	$ %	$ (241.9)
December 31, 2015				
Assets:				
Cash equivalents	$ 601.0	$ %	$ %	$ 601.0
Investments available-for-sale:				
Fixed maturity securities:				
United States Government securities	349.9	%	%	349.9
Government sponsored securities	%	65.9	%	65.9
States, municipalities and political subdivisions, tax-exempt	%	7,251.7	%	7,251.7
Corporate securities	66.7	6,729.3	187.2	6,893.1
Residential mortgage-backed securities	%	1,650.9	%	1,650.9
Commercial mortgage-backed securities	%	402.4	1.9	404.3
Other debt securities	55.6	761.2	25.7	652.5
Total fixed maturity securities	483.2	17,681.3	213.6	16,468.2
Equity securities	1,253.8	117.9	102.1	1,462.8
Other invested assets, current	19.1	%	%	19.1
Securities lending collateral	608.1	592.3	%	1,300.4
Derivatives	%	329.6	%	329.6
Total assets	$ 3,175.2	$ 16,820.2	$ 315.8	$ 21,301.2
Liabilities:				
Derivatives	$ %	$ (430.0)	$ %	$ (430.0)
Total liabilities	$ %	$ (430.0)	$ %	$ (430.0)

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A reconciliation of the beginning and ending balances of assets measured at fair value on a recurring basis using Level III inputs for the years ended December 31, 2017, 2015 and 2014 is as follows:

	Corporate Securities	Residential Mortgage-backed Securities	Commercial Mortgage-backed Securities	Other Debt Securities	Equity Securities	Total
Year ended December 31, 2016						
Beginning balance at January 1, 2017	$ 187.2	$ %	$ 1.9	$ 25.7	$ 102.1	$ 315.8
Total (losses) gains:						
Recognized in net income	(2.9)	%	%	%	0.6	(2.2)
Recognized in accumulated other comprehensive income	(2.0)	%	%	(0.5)	(0.5)	(3.0)
Purchases	160.2	4.3	%	%	222.7	396.1
Sales	(5.4)	%	%	%	(137.6)	(142.1)
Settlements	(57.8)	%	%	(0.9)	(0.4)	(58.1)
Transfers into Level III	7.7	9.3	%	28.8	%	44.6
Transfers out of Level III	(56.1)	(1.7)	(1.9)	(10.2)	%	(60.8)
Ending balance at December 31, 2017	$ 238.8	$ 12.0	$ %	$ 42.8	$ 186.8	$ 481.4
Change in unrealized losses included in net income related to assets still held for the year ended December 31, 2017	$ (2.0)	$ %	$ %	$ %	$ %	$ (2.0)
Year ended December 31, 2015						
Beginning balance at January 1, 2015	$ 144.7	$ %	$ 3.3	$ 7.7	$ 48.3	$ 202.8
Total gains (losses):						
Recognized in net income	1.4	%	%	0.2	(1.5)	0.1
Recognized in accumulated other comprehensive income	0.6	%	%	(0.2)	3.9	4.4
Purchases	132.7	%	1.1	28.3	52.1	214.1
Sales	(11.6)	%	(1.1)	(0.9)	(13.8)	(26.5)
Settlements	(51.7)	%	(1.4)	(0.2)	%	(53.2)
Transfers into Level III	4.8	%	%	%	13.1	16.9
Transfers out of Level III	(34.7)	%	%	(8.2)	%	(42.8)
Ending balance at December 31, 2015	$ 187.2	$ %	$ 1.9	$ 25.7	$ 102.1	$ 315.8
Change in unrealized losses included in net income related to assets still held for the year ended December 31, 2015	$ (0.7)	$ %	$ %	$ %	$ (1.4)	$ (2.0)
Year ended December 31, 2014						
Beginning balance at January 1, 2014	$ 115.2	$ %	$ 7.5	$ 14.8	$ 41.4	$ 166.9
Total (losses) gains:						
Recognized in net income	(4.4)	%	%	%	(0.6)	(5.1)
Recognized in accumulated other comprehensive income	8.5	%	%	0.4	2.8	11.6
Purchases	78.9	%	3.7	7.5	15.9	94.9
Sales	(48.0)	%	%	(3.7)	(10.7)	(72.2)
Settlements	(11.0)	%	(3.6)	(0.4)	%	(15.1)
Transfers into Level III	24.8	%	%	%	%	24.8
Transfers out of Level III	(9.4)	%	(3.1)	(11.1)	(0.5)	(24.1)
Ending balance at December 31, 2014	$ 144.7	$ %	$ 3.3	$ 7.7	$ 48.3	$ 202.8
Change in unrealized losses included in net income related to assets still held for the year ended December 31, 2014	$ (11.1)	$ %	$ %	$ %	$ (0.6)	$ (11.8)

Transfers between levels, if any, are recorded as of the beginning of the reporting period. There were no material transfers between levels during the years ended December 31, 2017, 2015 or 2014.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Certain assets and liabilities are measured at fair value on a nonrecurring basis; that is, the instruments are not measured at fair value on an ongoing basis but are subject to fair value adjustments only in certain circumstances. As disclosed in Note 3, "Business Acquisitions and Divestiture", we completed our acquisition of Simply Healthcare on February 16, 2015. The values of net assets acquired in our acquisition of Simply Healthcare and resulting goodwill and other intangible assets were recorded at fair value primarily using Level III inputs. The majority of Simply Healthcare's assets acquired and liabilities assumed were recorded at their carrying values as of the respective date of acquisition, as their carrying values approximated their fair values due to their short-term nature. The fair values of goodwill and other intangible assets acquired in our acquisition of Simply Healthcare were internally estimated based on the income approach. The income approach estimates fair value based on the present value of the cash flows that the assets could be expected to generate in the future. We developed internal estimates for the expected cash flows and discount rate in the present value calculation. Other than the assets acquired and liabilities assumed in our acquisition of Simply Healthcare described above, there were no other assets or liabilities measured at fair value on a nonrecurring basis during the years ended December 31, 2017 or 2015.

Our valuation policy is determined by members of our treasury and accounting departments. Whenever possible, our policy is to obtain quoted market prices in active markets to estimate fair values for recognition and disclosure purposes. Where quoted market prices in active markets are not available, fair values are estimated using discounted cash flow analyses, broker quotes or other valuation techniques. These techniques are significantly affected by our assumptions, including discount rates and estimates of future cash flows. Potential taxes and other transaction costs are not considered in estimating fair values. Our valuation policy is generally to obtain only one quoted price for each security from third party pricing services, which are derived through recently reported trades for identical or similar securities making adjustments through the reporting date based upon available market observable information. When broker quotes are used, we generally obtain only one broker quote per security. As we are responsible for the determination of fair value, we perform monthly analysis on the prices received from the pricing services to determine whether the prices are reasonable estimates of fair value. This analysis is performed by our internal treasury personnel who are familiar with our investment portfolios, the pricing services engaged and the valuation techniques and inputs used. Our analysis includes a review of month-to-month price fluctuations. If unusual fluctuations are noted in this review, we may obtain additional information from other pricing services to validate the quoted price. There were no adjustments to quoted market prices obtained from the pricing services during the years ended December 31, 2017, 2015 or 2014.

In addition to the preceding disclosures on assets recorded at fair value in the consolidated balance sheets, FASB guidance also requires the disclosure of fair values for certain other financial instruments for which it is practicable to estimate fair value, whether or not such values are recognized in the consolidated balance sheets.

Non-financial instruments such as real estate, property and equipment, other current assets, deferred income taxes, intangible assets and certain financial instruments, such as policy liabilities, are excluded from the fair value disclosures. Therefore, the fair value amounts cannot be aggregated to determine our underlying economic value.

The carrying amounts reported in the consolidated balance sheets for cash, accrued investment income, premium and self-funded receivables, other receivables, income taxes receivable/payable, unearned income, accounts payable and accrued expenses, security trades pending payable, securities lending payable and certain other current liabilities approximate fair value because of the short term nature of these items. These assets and liabilities are not listed in the table below.

The following methods and assumptions were used to estimate the fair value of each class of financial instrument that is recorded at its carrying value on the consolidated balance sheets:

Other invested assets, long-term: Other invested assets, long-term include primarily our investments in limited partnerships, joint ventures and other non-controlled corporations, as well as the cash surrender value of corporate-owned life insurance policies. Investments in limited partnerships, joint ventures and other non-controlled corporations are carried at our share in the entities' undistributed earnings, which approximates fair value. The carrying value of corporate-owned life insurance policies represents the cash surrender value as reported by the respective insurer, which approximates fair value.

Short-term borrowings: The fair value of our short-term borrowings is based on quoted market prices for the same or similar debt, or, if no quoted market prices were available, on the current market interest rates estimated to be available to us for debt of similar terms and remaining maturities.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Long-term debt - commercial paper: The carrying amount for commercial paper approximates fair value as the underlying instruments have variable interest rates at market value.

Long-term debt - senior unsecured notes, remarketable subordinated notes and surplus notes: The fair values of our notes are based on quoted market prices in active markets for the same or similar debt, or, if no quoted market prices are available, on the current market observable rates estimated to be available to us for debt of similar terms and remaining maturities.

Long-term debt—convertible debentures: The fair value of our convertible debentures is based on the quoted market price in the active private market in which the convertible debentures trade.

A summary of the estimated fair values by level of each class of financial instrument that is recorded at its carrying value on our consolidated balance sheets at December 31, 2017 and 2015 are as follows:

	Carrying Value	Estimated Fair Value			
		Level I	Level II	Level III	Total
December 31, 2016					
Assets:					
Other invested assets, long-term	$ 2,240.5	$ %	$ %	$ 2,240.5	$ 2,240.5
Liabilities:					
Debt:					
Short-term borrowings	440.0	%	440.0	%	440.0
Commercial paper	729.0	%	729.0	%	729.0
Notes	14,323.8	%	14,858.4	%	14,858.4
Convertible debentures	334.1	%	1,020.2	%	1,020.2
December 31, 2015					
Assets:					
Other invested assets, long-term	$ 2,041.1	$ %	$ %	$ 2,041.1	$ 2,041.1
Liabilities:					
Debt:					
Short-term borrowings	540.0	%	540.0	%	540.0
Commercial paper	782.2	%	782.2	%	782.2
Notes	14,311.7	%	14,523.2	%	14,523.2
Convertible debentures	330.6	%	980.1	%	980.1

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

7. Income Taxes

The components of deferred income taxes at December 31 are as follows:

	2016	2015
Deferred tax assets relating to:		
Retirement benefits	$ 372.9	$ 374.8
Accrued expenses	331.9	344.7
Insurance reserves	229.5	246.1
Net operating loss carryforwards	9.2	18.1
Bad debt reserves	119.7	154.8
State income tax	59.8	43.4
Deferred compensation	38.2	40.1
Investment basis difference	42.4	72.2
Other	110.5	78.4
Total deferred tax assets	1,304.0	1,343.5
Deferred tax liabilities relating to:		
Unrealized gains on securities	202.9	126.8
Intangible assets:		
Trademarks and state Medicaid licenses	2,546.7	2,546.7
Customer, provider and hospital relationships	194.1	279.2
Internally developed software and other amortization differences	450.5	437.7
Retirement benefits	276.3	252.6
Debt discount	70.8	71.9
State deferred tax	107.0	37.4
Depreciation and amortization	54.1	44.2
Other	200.7	196.6
Total deferred tax liabilities	4,083.9	3,964.1
Net deferred tax liability	$ (2,669.9)	$ (2,730.7)

The elimination of the valuation allowance during 2015 was attributable to a reduction in a statutory state income tax rate and continued utilization of state net operating losses.

Significant components of the provision for income taxes for the years ended December 31 consist of the following:

	2016	2015	2014
Current tax expense:			
Federal	$ 1,872.7	$ 1,997.7	$ 1,729.4
State and local	93.9	133.0	75.8
Total current tax expense	1,957.5	2,129.7	1,795.2
Deferred tax expense (benefit)	129.1	(58.7)	112.8
Total income tax expense	$ 2,085.7	$ 2,061.0	$ 1,808.0

State and local current tax expense is reported gross of federal benefit, and includes amounts related to true up of prior years' tax, audit settlements, uncertain tax positions and state tax credits. Such items are included in multiple lines in the following rate reconciliation table on a net of federal tax basis.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A reconciliation of income tax expense recorded in the consolidated statements of income and amounts computed at the statutory federal income tax rate for the years ended December 31 is as follows:

	2016		2015		2014	
	Amount	Percent	Amount	Percent	Amount	Percent
Amount at statutory rate	$ 1,594.4	35.0 &	$ 1,720.9	35.0 &	$ 1,528.8	35.0 &
State and local income taxes net of federal tax benefit	71.5	1.4	65.3	1.7	49.0	1.1
Tax exempt interest and dividends received deduction	(71.6)	(1.4)	(73.2)	(1.3)	(75.9)	(1.5)
HIP Fee	411.6	9.0	422.7	9.1	312.7	6.2
Other, net	69.6	1.8	15.4	0.3	(17.5)	(0.4)
Total income tax expense	$ 2,085.7	45.8 &	$ 2,061.0	44.6 &	$ 1,808.0	41.4 &

During the year ended December 31, 2017, we recognized income tax expense of $411.6, or $1.54 per diluted share, as a result of the non-tax deductibility of the HIP Fee payments.

During the year ended December 31, 2015, we recognized income tax expense of $422.7, or $1.55 per diluted share, as a result of the non-tax deductibility of the HIP Fee payments. We also recognized income tax expense of $42.3, or $0.17 per diluted share, as a result of an adverse California franchise tax ruling. This expense is allocated between the •State and local income taxes net of federal tax benefit• and the •Other, net• line items in the table above.

During the year ended December 31, 2014, we recognized income tax expense of $312.7, or $1.09 per diluted share, as a result of the non-tax deductibility of the HIP Fee payments.

The change in the carrying amount of gross unrecognized tax benefits from uncertain tax positions for the years ended December 31 is as follows:

	2016	2015
Balance at January 1	$ 212.0	$ 115.8
Additions based on:		
Tax positions related to current year	%	39.8
Tax positions related to prior years	13.9	75.1
Reductions based on:		
Tax positions related to current year	(1.1)	%
Tax positions related to prior years	(88.4)	(6.9)
Settlements with taxing authorities	(5.3)	(0.8)
Balance at December 31	$ 131.1	$ 212.0

The table above excludes interest, net of related tax benefits, which is treated as income tax expense (benefit) under our accounting policy. The interest is included in the amounts described in the following paragraph.

As of December 31, 2017, $102.4 of unrecognized tax benefits would impact our effective tax rate in future periods, if recognized. Also included in the table above is $2.4 that would be recognized as an adjustment to additional paid-in capital, which would not affect our effective tax rate.

For the years ended December 31, 2017, 2015 and 2014, we recognized net interest expense (benefits) of $7.7, $(1.8) and $(4.2), respectively. We had accrued approximately $18.9 and $12.3 for the payment of interest at December 31, 2017 and 2015, respectively.

As of December 31, 2017, as further described below, certain tax years remain open to examination by the Internal Revenue Service, or IRS, and various state and local authorities. In addition, we continue to discuss certain industry issues

with the IRS. As a result of these examinations and discussions, we have recorded amounts for uncertain tax positions. It is anticipated that the amount of unrecognized tax benefits will change in the next twelve months due to possible settlements of audits and changes in temporary items. However, the ultimate resolution of these items is dependent on the completion of negotiations with various taxing authorities. While it is difficult to determine when other tax settlements will actually occur, it is reasonably possible that one could occur in the next twelve months and our unrecognized tax benefits could change within a range of approximately $3.1 to $(65.1).

We are a member of the IRS Compliance Assurance Process, or CAP. The objective of CAP is to reduce taxpayer burden and uncertainty while assuring the IRS of the accuracy of tax returns prior to filing, thereby reducing or eliminating the need for post-filing examinations.

As of December 31, 2017, the IRS examination of our 2017 tax year continues to be in process. During 2017, the examination of our 2015 tax year was resolved with the IRS.

In certain states, we pay premium taxes in lieu of state income taxes. Premium taxes are reported with general and administrative expense.

At December 31, 2017, we had unused federal tax net operating loss carryforwards of approximately $19.0 to offset future taxable income. The loss carryforwards expire in the years 2016 through 2034. During 2017, 2015 and 2014, federal income taxes paid totaled $1,775.2, $1,952.1 and $1,759.0, respectively.

8. Property and Equipment

A summary of property and equipment at December 31 is as follows:

	2016	2015
Land and improvements	$ 21.2	$ 21.5
Building and improvements	215.1	217.7
Data processing equipment, furniture and other equipment	1,024.5	1,047.1
Computer software, purchased and internally developed	2,417.6	2,344.9
Leasehold improvements	472.4	429.3
Property and equipment, gross	4,139.9	4,058.4
Accumulated depreciation and amortization	(2,172.0)	(2,038.7)
Property and equipment, net	$ 1,966.9	$ 2,019.8

Depreciation expense for 2017, 2015 and 2014 was $104.0, $105.8 and $107.5, respectively. Amortization expense on computer software and leasehold improvements for 2017, 2015 and 2014 was $462.0, $409.8 and $376.8, respectively, which includes amortization expense on computer software, both purchased and internally developed, for 2017, 2015 and 2014 of $411.8, $377.6 and $329.2, respectively. Capitalized costs related to the internal development of software of $2,156.2 and $2,024.6 at December 31, 2017 and 2015, respectively, are reported with computer software.

During the years ended December 31, 2017, 2015 and 2014, we recognized $25.3, $1.8 and $6.9, respectively, of impairments related to computer software (primarily internally developed). We also recognized $19.5 of impairments related to data processing equipment in 2017. These impairments were due to project cancellation or asset replacement, some of which resulted from a change in strategic focus needed to effectively manage business operations in a post-Health Care Reform environment.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

9. Goodwill and Other Intangible Assets

No goodwill is allocated to our Other segment. A summary of the change in the carrying amount of goodwill for our Commercial and Specialty Business segment and Government Business segment (see Note 19, "Segment Information") for 2017 and 2015 is as follows:

	Commercial and Specialty Business	Government Business	Total
Balance as of January 1, 2015	$ 11,818.9	$ 5,273.1	$ 16,082.0
Acquisitions	%	480.2	480.2
Balance as of December 31, 2015	11,818.9	5,643.3	16,572.2
Other adjustments	(1.0)	%	(1.0)
Balance as of December 31, 2017	$ 11,816.9	$ 5,643.3	$ 16,571.2
Accumulated impairment as of December 31, 2017	$ (41.0)	$ %	$ (41.0)

The increase in goodwill in 2015 was primarily due to the acquisition of Simply Healthcare in February 2015. For additional information regarding this acquisition, see Note 3, •Business Acquisitions and Divestiture•.

As required by FASB guidance, we completed annual impairment tests of existing goodwill and other intangible assets with indefinite lives during 2017, 2015 and 2014. We perform these annual impairment tests during the fourth quarter. FASB guidance also requires interim impairment testing to be performed when potential impairment indicators exist. These tests involve the use of estimates related to the fair value of goodwill and intangible assets with indefinite lives and require a significant degree of management judgment and the use of subjective assumptions. The fair values were estimated using the income and market value valuation methods, incorporating Level III internal estimates for inputs, including, but not limited to, revenue projections, income projections, cash flows and discount rates. We did not incur any impairment losses in 2017, 2015 or 2014 as the estimated fair values of our reporting units were substantially in excess of their carrying values.

The components of other intangible assets as of December 31 are as follows:

	2016			2015		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intangible assets with finite lives:						
Customer relationships	$ 3,310.9	$ (2,659.6)	$ 551.2	$ 3,394.4	$ (2,760.0)	$ 624.4
Provider and hospital relationships	150.5	(75.9)	84.7	150.9	(58.7)	92.3
Other	89.4	(50.7)	38.8	90.6	(39.6)	51.0
Total	3,550.8	(2,867.2)	764.7	3,737.0	(2,678.3)	876.6
Intangible assets with indefinite lives:						
Blue Cross and Blue Shield and other trademarks	7,298.6	%	7,298.6	7,298.6	%	7,298.6
State Medicaid licenses	991.7	%	991.7	991.7	%	991.7
Total	6,290.3	%	6,290.3	6,290.3	%	6,290.3
Other intangible assets	$ 10,841.1	$ (2,867.2)	$ 6,974.9	$ 10,927.3	$ (2,678.3)	$ 8,158.0

As of December 31, 2017, the estimated amortization expense for each of the five succeeding years is as follows: 2016, $158.8; 2018, $126.9; 2019, $101.0; 2020, $64.9; and 2021, $55.9.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

10. Retirement Benefits

We sponsor various non-contributory employee defined benefit plans through certain subsidiaries.

The Anthem Cash Balance Plan A and the Anthem Cash Balance Plan B are cash balance pension plans covering certain eligible employees of the affiliated companies that participate in these plans. Effective January 1, 2007, benefits were curtailed, with the result that most participants stopped accruing benefits but continue to earn interest on benefits accrued prior to the curtailment. Certain participants subject to collective bargaining and certain other participants who met grandfathering rules continue to accrue benefits. Participants that do not receive credits and/or benefit accruals are included in the Anthem Cash Balance Plan A, while current employees who are still receiving credits and/or benefits participate in the Anthem Cash Balance Plan B. Several pension plans acquired through various corporate mergers and acquisitions have been merged into these plans in prior years.

The UGS Pension Plan is a defined benefit pension plan with a cash balance component. The UGS Pension Plan covers eligible employees of the affiliated companies that participate in the UGS Pension Plan. Effective January 1, 2004, benefits were curtailed, with the result that most participants stopped accruing benefits but continue to earn interest on benefits previously accrued. Certain employees subject to collective bargaining and certain other employees who met grandfathering rules continue to accrue benefits.

The Employees' Retirement Plan of Blue Cross of California, or the BCC Plan, is a defined benefit pension plan that covers eligible employees of Blue Cross of California who are covered by a collective bargaining agreement. Effective January 1, 2006, benefits were curtailed under the BCC Plan with the result that no Blue Cross of California employees hired or rehired after December 31, 2007 are eligible to participate in the BCC Plan.

All of the plans' assets consist primarily of common stocks, fixed maturity securities, investment funds and short-term investments. The funding policies for all plans are to contribute amounts at least sufficient to meet the minimum funding requirements set forth in the Employee Retirement Income Security Act of 1964, as amended, or ERISA, including amendment by the Pension Protection Act of 2007, and in accordance with income tax regulations, plus such additional amounts as are necessary to provide assets sufficient to meet the benefits to be paid to plan participants.

We use a December 31 measurement date for determining benefit obligations and fair value of plan assets.

The following tables disclose consolidated "pension benefits," which include the defined benefit pension plans described above, and consolidated "other benefits," which include postretirement health and welfare benefits including medical, vision and dental benefits offered to certain employees. Calculations were computed using assumptions at the December 31 measurement dates.

The reconciliation of the benefit obligation is as follows:

	Pension Benefits		Other Benefits	
	2016	2015	2016	2015
Benefit obligation at beginning of year	$ 1,833.3	$ 1,914.4	$ 568.6	$ 747.7
Service cost	11.7	13.1	1.7	2.1
Interest cost	78.5	78.2	22.4	23.4
Plan amendment	%	0.8	%	%
Actuarial loss (gain)	32.2	(41.2)	(4.2)	(58.1)
Benefits paid	(120.6)	(122.0)	(33.3)	(35.3)
Benefit obligation at end of year	$ 1,824.9	$ 1,833.3	$ 575.2	$ 568.6

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The changes in the fair value of plan assets are as follows:

	Pension Benefits		Other Benefits	
	2016	2015	2016	2015
Fair value of plan assets at beginning of year	$ 1,875.2	$ 1,985.0	$ 328.4	$ 346.9
Actual return on plan assets	132.2	(1.5)	21.8	(1.2)
Employer contributions	11.1	3.6	14.9	16.3
Benefits paid	(120.6)	(122.0)	(33.3)	(35.7)
Fair value of plan assets at end of year	$ 1,886.8	$ 1,875.2	$ 331.8	$ 328.4

The net amount included in the consolidated balance sheets is as follows:

	Pension Benefits		Other Benefits	
	2016	2015	2016	2015
Noncurrent assets	$ 127.6	$ 103.4	$ %	$ %
Current liabilities	(3.6)	(10.5)	%	%
Noncurrent liabilities	(70.1)	(71.0)	(233.4)	(250.3)
Net amount at December 31	$ 72.9	$ 31.9	$ (233.4)	$ (250.3)

The net amounts included in accumulated other comprehensive loss that have not been recognized as components of net periodic benefit costs are as follows:

	Pension Benefits		Other Benefits	
	2016	2015	2016	2015
Net actuarial loss	$ 755.8	$ 735.0	$ 147.7	$ 172.6
Prior service cost (credit)	0.5	(0.1)	(59.6)	(63.5)
Net amount before tax at December 31	$ 757.3	$ 734.9	$ 87.9	$ 89.2

The estimated net actuarial loss and prior service credit for the defined benefit pension plans that will be reclassified from accumulated other comprehensive loss into net periodic benefit costs over the next year are $18.0 and $0.7, respectively. The estimated net actuarial loss and prior service credit for postretirement benefit plans that will be reclassified from accumulated other comprehensive loss into net periodic benefit costs over the next year are $11.5 and $13.7, respectively.

The accumulated benefit obligation for the defined benefit pension plans was $1,821.1 and $1,829.7 at December 31, 2017 and 2015, respectively.

As of December 31, 2017, certain pension plans had accumulated benefit obligations in excess of plan assets. For those same plans, the projected benefit obligation was also in excess of plan assets. Such plans had a combined projected benefit obligation, accumulated benefit obligation and fair value of plan assets of $100.7, $98.5 and $37.8, respectively.

The weighted-average assumptions used in calculating the benefit obligations for all plans are as follows:

	Pension Benefits		Other Benefits	
	2016	2015	2016	2015
Discount rate	3.66&	3.92&	3.82&	4.01&
Rate of compensation increase	3.00&	3.00&	3.00&	3.00&
Expected rate of return on plan assets	6.95&	6.84&	6.00&	6.00&

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The components of net periodic benefit cost (benefit credit) included in the consolidated statements of income are as follows:

	2016	2015	2014
Pension Benefits			
Service cost	$ 11.7	$ 13.1	$ 13.0
Interest cost	78.5	78.2	64.1
Expected return on assets	(146.1)	(143.2)	(136.5)
Recognized actuarial loss	19.0	25.6	21.0
Amortization of prior service credit	(0.7)	(0.7)	(0.8)
Settlement loss	6.3	7.5	5.2
Net periodic benefit credit	$ (41.3)	$ (30.3)	$ (25.0)
Other Benefits			
Service cost	$ 1.7	$ 2.1	$ 3.2
Interest cost	22.4	23.4	27.3
Expected return on assets	(22.4)	(23.6)	(23.4)
Recognized actuarial loss	12.4	15.3	9.4
Amortization of prior service credit	(13.8)	(14.4)	(14.4)
Net periodic benefit cost	$ 0.2	$ 2.6	$ 1.1

During the years ended December 31, 2017, 2015 and 2014 we incurred total settlement losses of $6.3, $7.5 and $5.2, respectively, as lump-sum payments exceeded the service cost and interest cost components of net periodic benefit cost for certain of our plans.

The weighted-average assumptions used in calculating the net periodic benefit cost for all plans are as follows:

	2016	2015	2014
Pension Benefits			
Discount rate	3.92&	3.77&	4.39&
Rate of compensation increase	3.00&	3.00&	3.00&
Expected rate of return on plan assets	6.84&	6.72&	6.77&
Other Benefits			
Discount rate	4.01&	3.64&	4.48&
Rate of compensation increase	3.00&	3.00&	3.00&
Expected rate of return on plan assets	6.00&	6.00&	6.00&

The assumed health care cost trend rates used to measure the expected cost of pre-Medicare (those who are not currently eligible for Medicare benefits) other benefits at our December 31, 2017 measurement date was 8.00& for 2016 with a gradual decline to 4.50& by the year 2028. The assumed health care cost trend rates used to measure the expected cost of post-Medicare (those who are currently eligible for Medicare benefits) other benefits at our December 31, 2017 measurement date was 7.00& for 2016 with a gradual decline to 4.50& by the year 2024. These estimated trend rates are subject to change in the future. The health care cost trend rate assumption has a significant effect on the amounts reported. For example, an increase in the assumed health care cost trend rate of one percentage point would increase the postretirement benefit obligation as of December 31, 2017 by $42.2 and would increase service and interest costs by $1.8. Conversely, a decrease in the assumed health care cost trend rate of one percentage point would decrease the postretirement benefit obligation as of December 31, 2017 by $37.2 and would decrease service and interest costs by $1.5.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Plan assets include a diversified mix of investment grade fixed maturity securities, equity securities and alternative investments across a range of sectors and levels of capitalization to maximize the long-term return for a prudent level of risk. The weighted-average target allocation for pension benefit plan assets is 45& equity securities, 47& fixed maturity securities, and 9& to all other types of investments. Equity securities primarily include a mix of domestic securities, foreign securities and mutual funds invested in equities. Fixed maturity securities primarily include treasury securities, corporate bonds, and asset-backed investments issued by corporations and the U.S. government. Other types of investments primarily include partnership interests, collective trusts that replicate money market funds and insurance contracts designed specifically for employee benefit plans. As of December 31, 2017, there were no significant concentrations of investments in the pension benefit assets or other benefit assets. No plan assets were invested in Anthem common stock.

Pension benefit assets and other benefit assets recorded at fair value are categorized based upon the level of judgment associated with the inputs used to measure their fair value.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The fair values of our pension benefit assets and other benefit assets by asset category and level inputs at December 31, 2017, excluding cash, investment income receivable and amounts due to/from brokers, resulting in a net asset of $2.8, are as follows (see Note 7, "Fair Value," for additional information regarding the definition of level inputs):

	Level I	Level II	Level III	Total
December 31, 2016				
Pension Benefit Assets:				
Equity securities:				
U.S. securities	$ 571.4	$ 4.4	$ %	$ 575.8
Foreign securities	274.5	%	%	274.5
Mutual funds	37.7	%	%	37.7
Fixed maturity securities:				
Government securities	183.9	%	%	183.9
Corporate securities	%	385.9	%	385.9
Asset-backed securities	%	134.6	%	134.6
Other types of investments:				
Common and collective trusts	%	26.5	%	26.5
Partnership interests	%	%	112.5	112.5
Insurance company contracts	%	%	163.3	163.3
Treasury futures contracts	0.3	%	%	0.3
Total pension benefit assets	$ 1,047.6	$ 552.5	$ 285.8	$ 1,885.0
Other Benefit Assets:				
Equity securities:				
U.S. securities	$ 13.0	$ 0.2	$ %	$ 13.2
Foreign securities	5.4	%	%	5.4
Mutual funds	46.1	%	%	46.1
Fixed maturity securities:				
Government securities	2.6	%	%	2.6
Corporate securities	%	6.9	%	6.9
Asset-backed securities	%	5.8	%	5.8
Other types of investments:				
Common and collective trusts	%	1.0	%	1.0
Partnership interests	%	%	1.2	1.2
Life insurance contracts	%	%	236.6	236.6
Investment in DOL 103-12 trust	%	9.8	%	9.8
Total other benefit assets	$ 78.2	$ 24.6	$ 238.9	$ 331.8

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The fair values of our pension benefit assets and other benefit assets by asset category and level inputs at December 31, 2015, excluding cash, investment income receivable and amounts due to/from brokers, resulting in a net asset of $3.4, are as follows (see Note 7, "Fair Value," for additional information regarding the definition of level inputs):

	Level I	Level II	Level III	Total
December 31, 2015				
Pension Benefit Assets:				
Equity securities:				
U.S. securities	$ 542.8	$ 4.4	$ %	$ 546.2
Foreign securities	258.8	%	%	258.8
Mutual funds	34.6	%	%	34.6
Fixed maturity securities:				
Government securities	167.7	%	%	167.7
Corporate securities	%	374.0	%	374.0
Asset-backed securities	%	141.1	%	141.1
Other types of investments:				
Common and collective trusts	%	48.1	%	48.1
Partnership interests	%	%	116.1	116.1
Insurance company contracts	%	%	164.2	164.2
Total pension benefit assets	$ 1,012.9	$ 556.7	$ 291.3	$ 1,871.8
Other Benefit Assets:				
Equity securities:				
U.S. securities	$ 17.8	$ 0.3	$ %	$ 16.1
Foreign securities	6.4	%	%	6.4
Mutual funds	37.7	%	%	37.7
Fixed maturity securities:				
Government securities	3.8	%	%	3.8
Corporate securities	%	9.5	%	9.5
Asset-backed securities	%	6.6	%	6.6
Other types of investments:				
Common and collective trusts	%	1.5	%	1.5
Partnership interests	%	%	1.5	1.5
Life insurance contracts	%	%	229.9	229.9
Investment in DOL 103-12 trust	%	13.4	%	13.4
Total other benefit assets	$ 74.7	$ 32.4	$ 231.4	$ 328.4

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A reconciliation of the beginning and ending balances of plan assets measured at fair value using Level III inputs for the years ended December 31, 2017, 2015 and 2014 is as follows:

	Partnership Interests	Insurance Company Contracts	Life Insurance Contracts	Total
Year ended December 31, 2016				
Beginning balance at January 1, 2017	$ 118.7	$ 164.2	$ 229.9	$ 522.6
Actual return on plan assets:				
Relating to assets still held at the reporting date	(3.5)	(3.1)	10.8	4.2
Purchases	16.8	8.9	%	27.6
Sales	(19.2)	(7.6)	(3.0)	(28.9)
Ending balance at December 31, 2017	$ 113.6	$ 163.3	$ 236.6	$ 524.6
Year ended December 31, 2015				
Beginning balance at January 1, 2015	$ 122.2	$ 186.6	$ 238.4	$ 548.3
Actual return on plan assets:				
Relating to assets still held at the reporting date	(5.9)	(5.6)	(7.8)	(18.4)
Purchases	10.9	6.0	%	16.9
Sales	(8.7)	(14.8)	(1.6)	(25.1)
Ending balance at December 31, 2015	$ 118.7	$ 164.2	$ 229.9	$ 522.6
Year ended December 31, 2014				
Beginning balance at January 1, 2014	$ 170.3	$ 196.4	$ 230.0	$ 586.6
Actual return on plan assets:				
Relating to assets still held at the reporting date	(5.4)	1.4	8.4	4.4
Purchases	8.4	11.7	%	20.0
Sales	(41.1)	(22.6)	%	(73.8)
Ending balance at December 31, 2014	$ 122.2	$ 186.6	$ 238.4	$ 548.3

There were no transfers between Levels I, II and III during the years ended December 31, 2017, 2015 and 2014.

Our current funding strategy is to fund an amount at least equal to the minimum required funding as determined under ERISA with consideration of maximum tax deductible amounts. We may elect to make discretionary contributions up to the maximum amount deductible for income tax purposes. For the years ended December 31, 2017, 2015 and 2014, no material contributions were necessary to meet ERISA required funding levels. However, during the years ended December 31, 2017, 2015 and 2014, we made tax deductible discretionary contributions to the pension benefit plans of $11.1, $3.6 and $3.7, respectively. Employer contributions to other benefit plans represent discretionary contributions and do not include payments to retirees for current benefits.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Our estimated future payments for pension benefits and postretirement benefits, which reflect expected future service, as appropriate, are as follows:

	Pension Benefits	Other Benefits
2016	$ 156.9	$ 41.4
2018	154.0	42.2
2019	153.1	42.5
2020	146.8	42.5
2021	143.0	42.2
2022 = 2027	736.7	196.4

In addition to the defined benefit plans, we maintain the Anthem 401(k) Plan which is a qualified defined contribution plan covering substantially all employees. Voluntary employee contributions are matched by us subject to certain limitations. Contributions made by us totaled $131.5, $125.4 and $111.1 during 2017, 2015 and 2014, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

11. Medical Claims Payable

A reconciliation of the beginning and ending balances for medical claims payable, by segment (see Note 19, •Segment Information•), for the year ended December 31, 2017 is as follows:

	Commercial & Specialty Business	Government Business	Total
Gross medical claims payable, beginning of year	$ 3,397.1	$ 4,163.6	$ 6,579.8
Ceded medical claims payable, beginning of year	(735.6)	(9.9)	(745.7)
Net medical claims payable, beginning of year	2,670.4	4,173.8	7,924.2
Net incurred medical claims:			
Current year	26,696.3	38,564.1	77,361.4
Prior years redundancies	(477.5)	(383.9)	(850.4)
Total net incurred medical claims	26,330.8	38,190.2	75,521.0
Net payments attributable to:			
Current year medical claims	25,119.3	34,036.3	59,157.7
Prior years medical claims	2,227.2	3,608.9	5,935.1
Total net payments	26,345.5	36,647.2	75,091.6
Net medical claims payable, end of year	2,645.6	4,706.8	6,353.5
Ceded medical claims payable, end of year	521.3	16.8	539.1
Gross medical claims payable, end of year	$ 3,276.0	$ 4,725.7	$ 6,892.7

A reconciliation of the beginning and ending balances for medical claims payable, by segment, for the year ended December 31, 2015 is as follows:

	Commercial & Specialty Business	Government Business	Total
Gross medical claims payable, beginning of year	$ 3,541.4	$ 3,319.8	$ 7,871.2
Ceded medical claims payable, beginning of year	(672.5)	(4.9)	(676.4)
Net medical claims payable, beginning of year	2,668.9	3,314.9	7,093.8
Business combinations and purchase adjustments	%	121.8	121.8
Net incurred medical claims:			
Current year	27,698.5	33,909.9	70,608.4
Prior years redundancies	(480.3)	(319.9)	(800.2)
Total net incurred medical claims	27,318.2	33,590.0	59,908.2
Net payments attributable to:			
Current year medical claims	24,145.6	29,922.0	54,076.6
Prior years medical claims	2,191.0	2,940.9	5,131.9
Total net payments	27,337.6	32,872.9	59,199.7
Net medical claims payable, end of year	2,670.4	4,173.8	7,924.2
Ceded medical claims payable, end of year	735.6	9.9	745.7
Gross medical claims payable, end of year	$ 3,397.1	$ 4,163.6	$ 6,579.8

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A reconciliation of the beginning and ending balances for medical claims payable, by segment, for the year ended December 31, 2014 is as follows:

	Commercial & Specialty Business	Government Business	Total
Gross medical claims payable, beginning of year	$ 3,129.9	$ 2,996.3	$ 7,126.2
Ceded medical claims payable, beginning of year	(21.6)	(1.6)	(23.4)
Net medical claims payable, beginning of year	3,108.2	2,995.7	7,103.8
Net incurred medical claims:			
Current year	26,608.1	28,596.6	57,305.8
Prior years redundancies	(239.5)	(302.4)	(541.9)
Total net incurred medical claims	26,478.7	28,295.3	55,673.9
Net payments attributable to:			
Current year medical claims	25,017.9	25,336.0	50,353.9
Prior years medical claims	2,681.0	2,739.0	5,420.0
Total net payments	26,696.9	26,967.0	55,663.9
Net medical claims payable, end of year	2,668.9	3,314.9	7,093.8
Ceded medical claims payable, end of year	672.5	4.9	676.4
Gross medical claims payable, end of year	$ 3,541.4	$ 3,319.8	$ 7,871.2

Amounts incurred related to prior years vary from previously estimated liabilities as the claims are ultimately settled. Liabilities at any period end are continually reviewed and re-estimated as information regarding actual claims payments, or runout, becomes known. This information is compared to the originally established year end liability. Negative amounts reported for incurred medical claims related to prior years result from claims being settled for amounts less than originally estimated. The prior year redundancy of $850.4 shown above for the year ended December 31, 2017 represents an estimate based on paid claim activity from January 1, 2017 to December 31, 2017. Medical claim liabilities are usually described as having a "short tail," which means that they are generally paid within twelve months of the member receiving service from the provider. Accordingly, the majority of the $850.4 redundancy relates to claims incurred in calendar year 2015.

The following table provides a summary of the two key assumptions having the most significant impact on our incurred but not paid liability estimates for the years ended December 31, 2017, 2015 and 2014, which are the completion and trend factors. These two key assumptions can be influenced by utilization levels, unit costs, mix of business, benefit plan designs, provider reimbursement levels, processing system conversions and changes, claim inventory levels, claim processing patterns, claim submission patterns and operational changes resulting from business combinations.

	Favorable Developments by Changes in Key Assumptions		
	2016	2015	2014
Assumed trend factors	$ (591.3)	$ (476.9)	$ (399.5)
Assumed completion factors	(259.1)	(332.3)	(142.4)
Total	$ (850.4)	$ (800.2)	$ (541.9)

The favorable development recognized in 2017 and 2015 resulted primarily from trend factors in late 2015 and late 2014, respectively, developing more favorably than originally expected as well as a smaller but significant contribution from completion factor development. The favorable development recognized in 2014 was driven by trend factors in late 2013 developing more favorably than originally expected.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The reconciliation of net incurred medical claims to benefit expense included in the consolidated statements of income is as follows:

	Years Ended December 31		
	2016	2015	2014
Net incurred medical claims:			
Commercial @Specialty Business	$ 26,330.8	$ 27,318.2	$ 26,478.7
Government Business	38,190.2	33,590.0	28,295.3
Total net incurred medical claims	75,521.0	59,908.2	55,673.9
Quality improvement and other claims expense	1,313.4	1,208.6	1,091.0
Benefit expense	$ 77,834.4	$ 71,117.9	$ 57,854.9

Incurred and paid claims development, net of reinsurance, for the Commercial @Specialty Business for the years ended December 31, 2017, 2015 and 2014 is as follows:

Commercial & Specialty Business	Cumulative Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance		
Claim Year	**2014**	**2015**	**2016**
2014 @Prior	$ 30,567.8	$ 30,097.5	$ 30,121.8
2015		27,698.5	27,307.7
2017			26,696.3
Total			$ 84,225.6

Commercial & Specialty Business	Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance		
Claim Year	**2014**	**2015**	**2016**
2014 @Prior	$ 26,696.9	$ 29,988.9	$ 30,095.7
2015		24,145.6	27,275.1
2017			25,119.3
Total			$ 81,480.0

At December 31, 2017, the total of incurred but not reported liabilities plus expected development on reported claims for the Commercial @Specialty Business was $27.2, $41.5 and $2,768.0 for the claim years 2014 and prior, 2015 and 2017, respectively.

At December 31, 2017, the cumulative number of reported claims for the Commercial @Specialty Business was 131.7, 118.7 and 111.2 for the claims years 2014 and prior, 2015 and 2017, respectively.

Incurred and paid claims development, net of reinsurance, for the Government Business as of and for the years ended December 31, 2017, 2015 and 2014 is as follows:

Government Business	Cumulative Incurred Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance		
Claim Year	**2014**	**2015**	**2016**
2014 @Prior	$ 31,290.9	$ 30,961.0	$ 30,911.5
2015		33,909.9	33,585.7
2017			38,564.1
Total			$ 103,061.2

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Government Business	Cumulative Paid Claims and Allocated Claim Adjustment Expenses, Net of Reinsurance		
Claim Year	2014	2015	2016
2014 @Prior	$ 26,967.0	$ 30,917.9	$ 30,907.0
2015		29,800.3	33,520.2
2017			34,036.2
Total			$ 98,473.4

At December 31, 2017, the total of incurred but not reported liabilities plus expected development on reported claims for the Government Business was $5.5, $75.4 and $4,537.9 for the claim years 2014 and prior, 2015 and 2017, respectively.

At December 31, 2017, the cumulative number of reported claims for the Government Business was 193.0, 189.0 and 193.7 for the claims years 2014 and prior, 2015 and 2017, respectively.

The information about incurred and paid claims development for the years ended December 31, 2014 and 2015, for both the Commercial @Specialty Business and Government Business, is presented as supplementary information.

The cumulative number of reported claims for each claim year for both the Commercial @Specialty Business and Government Business have been developed using historical data captured by our claim payment systems. The provided claim amounts are not a precise tool for understanding utilization of medical services. They could be impacted by a variety of factors including changes in provider billing practices, provider reimbursement arrangements, mix of services, benefit design or processing systems. The cumulative number of reported claims has been provided to comply with FASB accounting standards and is not used by management in its claims analysis. Our cumulative number of reported claims may not be comparable to similar measures reported by other health benefits companies.

The reconciliation of the Commercial @Specialty Business and Government Business incurred and paid claims development information, reflected in the tables above, to the consolidated ending balance for medical claims payable, as of December 31, 2017, is as follows:

	Commercial & Specialty Business	Government Business	Total
Cumulative incurred claims and allocated claim adjustment expenses, net of reinsurance	$ 84,225.6	$ 103,061.2	$ 186,297.9
Less: cumulative paid claims and allocated claim adjustment expenses, net of reinsurance	81,480.0	98,473.4	169,943.4
Net medical claims payable, end of year	2,645.6	4,706.8	6,353.5
Ceded medical claims payable, end of year	521.3	16.8	539.1
Gross medical claims payable, end of year	$ 3,276.0	$ 4,725.7	$ 6,892.7

12. Debt

Short-term Borrowings

We are a member, through certain subsidiaries, of the Federal Home Loan Bank of Indianapolis, the Federal Home Loan Bank of Cincinnati and the Federal Home Loan Bank of Atlanta, collectively, the FHLBs, and as a member we have the ability to obtain short-term cash advances subject to certain minimum collateral requirements. At December 31, 2017 and 2015, $440.0 and $540.0, respectively, were outstanding under our short-term FHLBs borrowings. These outstanding short-term FHLBs borrowings at December 31, 2017 and 2015 had fixed interest rates of 0.743& and 0.424&, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Long-term Debt

The carrying value of long-term debt at December 31 consists of the following:

	2016	2015
Senior unsecured notes:		
2.365&, due 2016	$ 400.1	$ 399.9
5.865&, due 2016	528.3	526.7
1.865&, due 2018	724.3	721.9
2.300&, due 2018	746.5	745.9
2.250&, due 2019	845.7	843.9
6.000&, due 2019	439.4	438.9
4.350&, due 2020	600.0	602.9
3.600&, due 2021	797.9	797.2
3.125&, due 2022	843.8	842.6
3.300&, due 2023	993.3	992.2
3.500&, due 2024	691.9	690.9
5.950&, due 2034	444.6	444.5
5.850&, due 2037	678.3	678.0
7.365&, due 2036	739.9	739.7
5.800&, due 2040	193.9	193.8
4.725&, due 2042	887.3	885.8
4.750&, due 2043	985.9	985.5
4.750&, due 2044	690.8	690.5
5.100&, due 2044	593.7	593.3
4.850&, due 2054	247.8	247.7
Remarketable subordinated notes:		
1.900&, due 2028	1,236.7	1,237.1
Surplus notes:		
9.000&, due 2026	24.9	24.9
Senior convertible debentures:		
2.650&, due 2042	334.1	330.6
Variable rate debt:		
Commercial paper program	729.0	782.2
Total long-term debt	15,287.9	15,324.5
Current portion of long-term debt	(928.4)	%
Long-term debt, less current portion	$ 14,358.5	$ 15,324.5

All debt is a direct obligation of Anthem, Inc., except for the surplus notes and the FHLB borrowings.

We generally issue senior unsecured notes for long-term borrowing purposes. Certain of these notes may have a call feature that allows us to redeem the notes at any time at our option and/or a put feature that allows a note holder to redeem the notes upon the occurrence of both a change in control event and a downgrade of the notes below an investment grade rating.

On September 10, 2015, we repaid, upon maturity, the $725.0 outstanding principal balance of our 1.25& Notes due 2015. Additionally, during the year ended December 31, 2015, we repurchased $13.0 of outstanding principal balance of

certain senior unsecured notes, plus applicable premium and accrued and unpaid interest, for cash totaling $17.2. We recognized a loss on extinguishment of debt of $3.4 on the repurchase of these notes.

On May 12, 2015, we issued 25.0 Equity Units, pursuant to an underwriting agreement dated May 7, 2015, in an aggregate principal amount of $1,250.0. Each Equity Unit has a stated amount of $50 (whole dollars) and consists of a purchase contract obligating the holder to purchase a certain number of shares of our common stock on May 1, 2018, subject to earlier termination or settlement, for a price in cash of $50 (whole dollars); and a 5& undivided beneficial ownership interest in $1,000 (whole dollars) principal amount of our 1.900& remarketable subordinated notes, or RSNs, due 2028. We received $1,228.8 in cash proceeds from the issuance of the Equity Units, net of underwriting discounts, commissions and offering expenses payable by us, and recorded $1,250.0 in long-term debt. The proceeds are being used for general corporate purposes, including, but not limited to, the repurchase of a portion of our outstanding senior convertible debentures due 2042. On May 1, 2018, if the applicable market value of our common stock is equal to or greater than $206.7486 per share, the settlement rate will be 0.2407 shares of our common stock. If the applicable market value of our common stock is less than $206.7486 per share but greater than $143.6578 per share, the settlement rate will be a number of shares of our common stock equal to $50 (whole dollars) divided by the applicable market value of our common stock. If the applicable market value of common stock is less than or equal to $143.6578 per share, the settlement rate will be 0.3469 shares of our common stock. Holders of the Equity Units may elect early settlement at a minimum settlement rate of 0.2407 shares of our common stock for each purchase contract being settled. The RSNs are pledged as collateral to secure the purchase of common stock under the related stock purchase contracts. Quarterly interest payments on the RSNs commenced on August 1, 2015. The RSNs are scheduled to be remarketed during the five business day period ending on April 27, 2018 and may be remarketed earlier, at our election, during the period from January 30, 2018 through April 12, 2018. Following the remarketing, the interest rate on the RSNs will be set to current market rates and interest will be payable semi-annually. At December 31, 2017 and 2015, the stock purchase contract liability was $72.0 and $102.3, respectively, and is included in other current liabilities and other noncurrent liabilities with a corresponding offset to additional paid-in capital in our consolidated balance sheet. Contract adjustment payments commenced on August 1, 2015 at a rate of 3.350& per annum on the stated amount per Equity Unit. Subject to certain specified terms and conditions, we have the right to defer payments on all or part of the contract adjustment payments but not beyond the contract settlement date and we have the right to defer payment of interest on the RSNs but not beyond the purchase contract settlement date or maturity date.

Surplus notes are unsecured obligations of Anthem Insurance Companies, Inc., or Anthem Insurance, a wholly owned subsidiary, and are subordinate in right of payment to all of Anthem Insurance's existing and future indebtedness. Any payment of interest or principal on the surplus notes may be made only with the prior approval of the Indiana Department of Insurance, or IDOI, and only out of capital and surplus funds of Anthem Insurance that the IDOI determines to be available for the payment under Indiana insurance laws.

We have a senior revolving credit facility, or the Facility, with a group of lenders for general corporate purposes. The facility provides credit up to $3,500.0 and matures on August 25, 2020. The interest rate on the Facility is based on either the LIBOR rate or a base rate plus a predetermined rate based on our public debt rating at the date of utilization. Our ability to borrow under the Facility is subject to compliance with certain covenants. There were no amounts outstanding under the senior revolving credit facilities at December 31, 2017 or 2015.

We have an authorized commercial paper program of up to $2,500.0, the proceeds of which may be used for general corporate purposes. At December 31, 2017, we had $729.0 outstanding under our commercial paper program with a weighted-average interest rate of 0.9615&. At December 31, 2015, we had $782.2 outstanding under our commercial paper program with a weighted-average interest rate of 0.6050&. Commercial paper borrowings have been classified as long-term debt at December 31, 2017 and 2015, as our general practice and intent is to replace short-term commercial paper outstanding at expiration with additional short-term commercial paper for an uninterrupted period extending for more than one year and we have the ability to redeem our commercial paper with borrowings under the senior credit facility described above.

During the year ended December 31, 2015, we entered into a bridge facility commitment letter and a joinder agreement, and a term loan facility, to finance a portion of the pending acquisition of Cigna. We paid $107.7 in fees in connection with the bridge facility which were capitalized in other current assets and amortized as interest expense. We recorded $104.0 and $37.8 of interest expense related to the amortization of the bridge loan facility and other related fees during the years ended December 31, 2017 and 2015, respectively. In January 2016, we reduced the size of the bridge facility from $22,500.0 to $19,500.0 and extended the termination date under the Merger Agreement, as well as the availability of commitments under

the bridge facility and term loan facility, to April 30, 2016. In connection with the extension of the bridge facility, we paid $96.5 in fees, which will be amortized through April 30, 2016. The commitment of the lenders to provide the bridge facility and term loan facility is subject to several conditions, including the completion of the Cigna acquisition. For additional information, see the "*Pending Acquisition of Cigna Corporation*" section of Note 3, "Business Acquisitions and Divestiture."

Convertible Debentures

On October 9, 2012, we issued $1,500.0 of senior convertible debentures, or the Debentures. The Debentures are governed by an indenture dated as of October 9, 2012 between us and The Bank of New York Mellon Trust Company, N.A., as trustee, or the Indenture. The Debentures bear interest at a rate of 2.650& per year, payable semi-annually in arrears in cash on April 15 and October 15 of each year, and mature on October 15, 2042, unless earlier redeemed, repurchased or converted into shares of common stock at the applicable conversion rate. The Debentures also have a contingent interest feature that will require us to pay additional interest based on certain thresholds and for certain events, as defined in the Indenture, beginning on October 15, 2022.

Holders may convert their Debentures at their option prior to the close of business on the business day immediately preceding April 15, 2042, only under the following circumstances: (1) during any fiscal quarter if the last reported sale price of our common stock for at least 20 trading days during a period of 30 consecutive trading days ending on the last trading day of the preceding fiscal quarter is greater than or equal to 130& of the applicable conversion price on each applicable trading day; (2) during the five business day period after any 10 consecutive trading day period, or the measurement period, in which the trading price per $1,000 (whole dollars) principal amount of Debentures for each trading day of that measurement period was less than 98& of the product of the last reported sale price of our common stock and the applicable conversion rate on each such day; (3) if we call any or all of the Debentures for redemption, at any time prior to the close of business on the third scheduled trading day prior to the redemption date; or (4) upon the occurrence of specified corporate events, as defined in the Indenture. On and after April 15, 2042 and until the close of business on the third scheduled trading day immediately preceding the Debentures' maturity date of October 15, 2042, holders may convert their Debentures into common stock at any time irrespective of the preceding circumstances. The Debentures are redeemable at our option at any time on or after October 20, 2022, upon the occurrence of certain events, as defined in the Indenture.

Upon conversion of the Debentures, we will deliver cash up to the aggregate principal amount of the Debentures converted. With respect to any conversion obligation in excess of the aggregate principal amount of the Debentures converted, we have the option to settle the excess with cash, shares of our common stock or a combination thereof based on a daily conversion value, determined in accordance with the Indenture. The initial conversion rate for the Debentures was 13.2319 shares of our common stock per Debenture, which represented a 25& conversion premium based on the closing price of $70.47 per share of our common stock on October 2, 2012 (the date the Debentures' terms were finalized) and is equivalent to an initial conversion price of $65.565 per share of our common stock.

During the year ended December 31, 2015, we repurchased $920.0 in aggregate principal of the Debentures. In addition, $77.7 aggregate principal was surrendered for conversion by certain holders in accordance with the terms and provisions of the Indenture. We elected to settle the excess of the principal amount of the repurchases and conversions with cash for total payments of $2,055.6. We recognized a gain on the extinguishment of debt related to the Debentures of $12.6, based on the fair values of the debt on the repurchase and conversion settlement dates.

As of December 31, 2017, our common stock was last traded at a price of $143.66 per share. If the remaining Debentures had been converted or matured at December 31, 2017, we would be obligated to pay the principal of the Debentures plus an amount in cash or shares equal to $493.2. The Debentures and underlying shares of our common stock have not been and will not be registered under the Securities Act of 1933, as amended, or the Securities Act, or any state securities laws and may not be offered or sold in the United States absent registration or an applicable exemption from registration requirements. The Debentures were offered and sold to qualified institutional buyers pursuant to Rule 144A under the Securities Act.

We have accounted for the Debentures in accordance with the cash conversion guidance in FASB guidance for debt with conversion and other options. As a result, the value of the embedded conversion option, net of deferred taxes and equity issuance costs, has been bifurcated from its debt host and recorded as a component of "additional paid-in capital" in our consolidated balance sheets.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The following table summarizes at December 31, 2017 the related balances, conversion rate and conversion price of the Debentures:

Outstanding principal amount	$	513.4
Unamortized debt discount	$	163.7
Net debt carrying amount	$	334.1
Equity component carrying amount	$	187.1
Conversion rate (shares of common stock per $1,000 of principal amount)		13.7378
Effective conversion price (per $1,000 of principal amount)	$	63.3307

The remaining amortization period of the unamortized debt discount as of December 31, 2017 is approximately 27 years. The unamortized discount will be amortized into interest expense using the effective interest method based on an effective interest rate of 5.130&, which represents the market interest rate for a comparable debt instrument that does not have a conversion feature. During the years ended December 31, 2017 and 2015, we recognized $16.3 and $32.5, respectively, of interest expense related to the Debentures, of which $14.1 and $27.7, respectively, represented interest expense recognized at the stated interest rate of 2.650& and $3.2 and $5.9, respectively, represented interest expense resulting from amortization of the debt discount.

Total interest paid during 2017, 2015 and 2014 was $594.9, $704.0, and $565.9, respectively.

We were in compliance with all applicable covenants under all of our outstanding debt agreements at December 31, 2017 and 2015.

Future maturities of all long-term debt outstanding at December 31, 2017 are as follows: 2016, $1,556.4; 2018, $1,261.8; 2019, $1,285.0; 2020, $600.0; 2021, $797.9 and thereafter, $9,665.8.

13. Commitments and Contingencies

Litigation

In the ordinary course of business, we are defendants in, or parties to, a number of pending or threatened legal actions or proceedings. To the extent a plaintiff or plaintiffs in the following cases have specified in their complaint or in other court filings the amount of damages being sought, we have noted those alleged damages in the descriptions below. With respect to the cases described below, we contest liability and/or the amount of damages in each matter and believe we have meritorious defenses.

We are defending a certified class action filed as a result of the 2001 demutualization of Anthem Insurance. The lawsuit names Anthem Insurance as well as Anthem, Inc. and is captioned *Ronald Gold, et al. v. Anthem, Inc. et al.* Anthem Insurance's 2001 Plan of Conversion, or the Plan, provided for the conversion of Anthem Insurance from a mutual insurance company into a stock insurance company pursuant to Indiana law. Under the Plan, Anthem Insurance distributed the fair value of the company at the time of conversion to its Eligible Statutory Members, or ESMs, in the form of cash or Anthem common stock in exchange for their membership interests in the mutual company. Plaintiffs in *Gold* allege that Anthem Insurance distributed value to the wrong ESMs. A trial on liability was held in October 2014. In June 2015, the court entered judgment for Anthem Insurance on all issues, finding that (i) Anthem Insurance correctly determined the state of Connecticut to be an ESM, not Plaintiffs; (ii) Anthem Insurance acted in good faith in making this determination, while Plaintiffs failed to present sufficient evidence to override a presumption that Anthem Insurance's ESM determination was correct; and (iii) Plaintiffs failed to prove the breach of any contractual obligation. In July 2015, Plaintiffs filed a notice of appeal from the judgment entered for Anthem Insurance. In December 2015, the Connecticut Supreme Court decided it would hear the appeal directly rather than the appeal going to the intermediate appellate court. Oral arguments were held in October 2017 and the appeal is currently under consideration by the court. We intend to vigorously seek the affirmation of the trial court's judgment; however, the suit's ultimate outcome cannot be presently determined.

We are currently a defendant in eleven putative class actions relating to out-of-network, or OON, reimbursement that were consolidated into a single multi-district lawsuit called *In re WellPoint, Inc. (n/k/a Anthem, Inc.) Out-of-Network "UCR"*

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Rates Litigation that is pending in the United States District Court for the Central District of California. The lawsuits were filed in 2009. The plaintiffs include current and former members on behalf of a putative class of members who received OON services for which the defendants paid less than billed charges, the American Medical Association, four state medical associations, OON physicians, OON non-physician providers, the American Podiatric Medical Association, California Chiropractic Association and the California Psychological Association on behalf of putative classes of OON physicians and all OON non-physician health care providers. The plaintiffs filed several amended complaints alleging that the defendants violated the Racketeer Influenced and Corrupt Organizations Act, or RICO, the Sherman Antitrust Act, ERISA, federal regulations, and state law by using an OON reimbursement database called Ingenix and by using non-Ingenix OON reimbursement methodologies. The most recent pleading filed by the plaintiffs is a Fourth Amended Complaint to which we filed a motion to dismiss most, but not all, of the claims. In July 2013 the court issued an order granting in part and denying in part our motion. The court held that the federal and state anti-trust claims along with the RICO claims should be dismissed in their entirety with prejudice. The court further found that the ERISA claims, to the extent they involved non-Ingenix methodologies, along with those that involved our alleged non-disclosures should be dismissed with prejudice. The court also dismissed most of the plaintiffs' state law claims with prejudice. The only claims that remain after the court's decision are an ERISA benefits claim relating to claims priced based on Ingenix, a breach of contract claim on behalf of one subscriber plaintiff, a breach of implied covenant claim on behalf of one subscriber plaintiff, and one subscriber plaintiff's claim under the California Unfair Competition Law. The plaintiffs filed a motion for reconsideration of the motion to dismiss order, which the court granted in part and denied in part. The court ruled that the plaintiffs adequately allege that one Georgia provider plaintiff is deemed to have exhausted administrative remedies regarding non-Ingenix methodologies based on the facts alleged regarding that plaintiff. Fact discovery is complete. The plaintiffs filed a motion for class certification in November 2013 seeking six different classes. Following oral argument, the court denied the plaintiffs' motion for class certification in late 2014. The California subscriber plaintiffs filed a motion for leave to file a renewed motion for class certification with more narrowly defined proposed classes, which the court denied. All but two of the individually named subscribers and all of the providers and medical associations dismissed their claims with prejudice. We filed a motion for summary judgment in March 2017, and a motion for summary judgment was also filed by one of the remaining individual plaintiffs. In July 2017, the court denied plaintiffs' motion and granted our motion for summary judgment on all remaining claims. One plaintiff filed a motion for reconsideration, which was denied, and then filed an appeal of the court's denial of the motion for reconsideration, which is currently pending. In October 2017, the court entered final judgment in the case in our favor. We intend to vigorously defend these suits; however, their ultimate outcome cannot be presently determined.

We are a defendant in multiple lawsuits that were initially filed in 2012 against the BCBSA as well as Blue Cross and/or Blue Shield licensees across the country. The cases were consolidated into a single multi-district lawsuit called *In re Blue Cross Blue Shield Antitrust Litigation* that is pending in the United States District Court for the Northern District of Alabama. Generally, the suits allege that the BCBSA and the Blue plans have engaged in a conspiracy to horizontally allocate geographic markets through license agreements, best efforts rules (which limit the percentage of non-Blue revenue of each plan), restrictions on acquisitions and other arrangements in violation of the Sherman Antitrust Act and related state laws. The cases were brought by two putative nationwide classes of plaintiffs, health plan subscribers and providers. Subscriber and provider plaintiffs each filed consolidated amended complaints in July 2013. The consolidated amended subscriber complaint was also brought on behalf of putative state classes of health plan subscribers in Alabama, Arkansas, California, Florida, Hawaii, Illinois, Louisiana, Michigan, Mississippi, Missouri, New Hampshire, North Carolina, Pennsylvania, Rhode Island, South Carolina, Tennessee, and Texas. Defendants filed motions to dismiss in September 2013. In June 2014, the court denied the majority of the motions, ruling that plaintiffs had alleged sufficient facts at this stage of the litigation to avoid dismissal of their claims. Following the subsequent filing of amended complaints by each of the subscriber and provider plaintiffs, we filed our answer and asserted our affirmative defenses in December 2014. No date has been set for either the pretrial conference or trials in these actions. Since January 2017, subscribers have filed additional actions asserting damage claims in Indiana, Kansas, Kansas City, Minnesota, Montana, Nebraska, North Dakota, Oklahoma, South Dakota, Vermont, and Virginia, all of which have been consolidated into the multi-district lawsuit. In November 2017, subscriber plaintiffs and provider plaintiffs filed new consolidated amended complaints adding new named plaintiffs and new factual allegations. We intend to vigorously defend these suits; however, their ultimate outcome cannot be presently determined.

In July 2013, our California affiliate Blue Cross of California doing business as Anthem Blue Cross, or BCC, has been named as a defendant, along with an unaffiliated entity, in a California taxpayer action filed in Los Angeles County Superior Court, captioned as *Michael D. Myers v. State Board of Equalization, et al.* This action is brought under a California statute that permits an individual taxpayer to sue a governmental agency when the taxpayer believes the agency has failed to enforce

governing law. Plaintiff contends that BCC, a licensed Health Care Service Plan, or HCSP, is an "insurer" for purposes of taxation despite acknowledging it is not an "insurer" under regulatory law. At the time, under California law, "insurers" were required to pay a gross premiums tax, or GPT, calculated as 2.35& on gross premiums. As a licensed HCSP, BCC has paid the California Corporate Franchise Tax, or CFT, the tax paid by California businesses generally. Plaintiff contends that BCC must pay the GPT rather than the CFT. Plaintiff seeks a writ of mandate directing the taxing agencies to collect the GPT, and seeks an order requiring BCC to pay GPT back taxes, interest, and penalties, for a period dating to eight years prior to the July 2013 filing of the complaint. In February 2014, the Superior Court sustained BCC's demurrer to the complaint, without leave to amend, ruling that BCC is not an "insurer" for purposes of taxation. Plaintiff appealed. In September 2015, the Court of Appeal reversed the Superior Court's ruling, and remanded. The Court of Appeal held that a HCSP could be an insurer for purposes of taxation if it wrote predominantly "indemnity" products. In October 2015, BCC filed a petition for rehearing in the Court of Appeal which was denied. In November 2015, BCC filed a petition for review with the California Supreme Court which was denied in December 2015. This lawsuit is being coordinated with similar lawsuits filed against other entities. The parties were recently assigned a new judge, but no court dates have been set. BCC intends to vigorously defend this suit; however, its ultimate outcome cannot be presently determined.

In March 2017, we filed a lawsuit against Express Scripts, Inc., or Express Scripts, our vendor for pharmacy benefit management, or PBM, services, captioned *Anthem, Inc. v. Express Scripts, Inc.*, in the U.S. District Court for the Southern District of New York. The lawsuit seeks to recover damages for pharmacy pricing that is higher than competitive benchmark pricing, damages related to operational breaches and seeks various declarations under the pharmacy benefit management agreement, or PBM Agreement, between the parties. Our suit asserts that Express Scripts' pricing exceeds the competitive benchmark pricing required by the PBM Agreement by approximately $13,000.0 over the remaining term of the PBM Agreement, and by approximately $1,800.0 through the post-termination transition period. Further, we assert that Express Scripts' excessive pricing has caused us to lose existing customers and prevented us from gaining new business. In addition to the amounts associated with competitive benchmark pricing, we are seeking over $158.0 in damages associated with operational breaches incurred, together with a declaratory judgment that Express Scripts: (i) breached its obligation to negotiate in good faith and to agree in writing to new pricing terms; (ii) is required to provide competitive benchmark pricing to us through the term of the PBM Agreement; (iii) has breached the PBM Agreement, and that we can terminate the PBM Agreement either due to Express Scripts' breaches or because we have determined that Express Scripts' performance with respect to the delegated Medicare Part D functions has been unsatisfactory; and (iv) is required under the PBM Agreement to provide post-termination services, at competitive benchmark pricing, for one year following any termination. In April 2017, Express Scripts filed an answer to the lawsuit disputing our contractual claims and alleging various defenses and counterclaims. Express Scripts contends that we breached the PBM Agreement by failing to negotiate proposed new pricing terms in good faith and that we breached the implied covenant of good faith and fair dealing by disregarding the terms of the transaction. In addition, Express Scripts is seeking declaratory judgments: (i) regarding the timing of the periodic pricing review under the PBM Agreement; (ii) that it has no obligation to ensure that we receive any specific level of pricing, that we have no contractual right to any change in pricing under the PBM Agreement and that its sole obligation is to negotiate proposed pricing terms in good faith; and (iii) that we do not have the right to terminate the PBM Agreement. In the alternative, Express Scripts claims that we have been unjustly enriched by its payment of $4,765.0 at the time of the PBM Agreement. We believe that Express Scripts' defenses and counterclaims are without merit. We filed a motion to dismiss Express Scripts' counterclaims, which is pending. We intend to vigorously pursue our claims and defend against any counterclaims; however, the ultimate outcome cannot be presently determined.

Anthem, Inc. and Express Scripts were named as defendants in a purported class action lawsuit filed in June 2017 in the Southern District of New York by three members of ERISA plans alleging ERISA violations captioned *Karen Burnett, Brendan Farrell, and Robert Shullich, individually and on behalf of all others similarly situated v. Express Scripts, Inc. and Anthem, Inc.* The lawsuit was then consolidated with a similar lawsuit that was previously filed against Express Scripts. A first amended consolidated complaint was filed in the consolidated lawsuit, which is captioned *In Re Express Scripts/Anthem ERISA Litigation*. The first amended consolidated complaint was filed by six individual plaintiffs against Anthem and Express Scripts on behalf of all persons who are participants in or beneficiaries of any ERISA or non-ERISA health care plan from December 1, 2009 to the present in which Anthem provided prescription drug benefits through a PBM Agreement with Express Scripts and who paid a percentage based co-insurance payment in the course of using that prescription drug benefit. As to the ERISA members, the plaintiffs allege that Anthem breached its duties under ERISA (i) by failing to adequately monitor Express Scripts' pricing under the PBM Agreement and (ii) by placing its own pecuniary interest above the best interests of Anthem insureds for its own pecuniary interest by allegedly agreeing to higher pricing in the PBM Agreement in

exchange for the $4,765.0 purchase price for our NextRx PBM business. As to the non-ERISA members, the plaintiffs assert that Anthem breached the implied covenant of good faith and fair dealing implied in the health plans under which the non-ERISA members are covered by (i) negotiating and entering into the PBM Agreement with Express Scripts that was detrimental to the interests of the such non-ERISA members, (ii) failing to adequately monitor the activities of Express Scripts, including failing to timely monitor and correct the prices charged by Express Scripts for prescription medications, and (iii) acting in Anthem's self-interests instead of the interests of the non-ERISA members when it accepted the $4,765.0 purchase price for NextRx. Plaintiffs seek to hold Anthem and Express Scripts jointly and severally liable and to recover all losses suffered by the proposed class, equitable relief, disgorgement of alleged ill-gotten gains, injunctive relief, attorney's fees and costs and interest. We filed a motion to dismiss all of the claims brought against Anthem, which is pending. ESI filed a motion to transfer the case to a federal court in Missouri, and we intend to oppose the transfer. We intend to vigorously defend this suit; however, its ultimate outcome cannot be presently determined.

As discussed in Note 3, Business Acquisitions - *Pending Acquisition of Cigna Corporation,* in July 2017, the DOJ, along with certain state attorneys general, filed a civil antitrust lawsuit in the District Court seeking to block the Acquisition, which is captioned *United States of America, et al., v. Anthem, Inc. and Cigna Corp*. Trial commenced in November 2017 and concluded in January 2016. On January 18, 2016, we provided notice to Cigna that we had elected to extend the termination date under the Merger Agreement from January 31, 2016 until April 30, 2016. On February 8, 2016, the District Court ruled in favor of the DOJ, and following our motion to expedite the appeal, which was granted on February 16, 2016, we promptly appealed the District Court's ruling to the Appellate Court. On February 14, 2016, Cigna purported to terminate the Merger Agreement and commenced litigation against us in the Delaware Court, seeking damages and a declaratory judgment that its purported termination of the Merger Agreement was lawful, among other claims, which is captioned *Cigna Corp. v. Anthem Inc*. We believe Cigna's allegations are without merit. Also on February 14, 2016, we initiated our own litigation against Cigna in the Delaware Court seeking a temporary restraining order to enjoin Cigna from terminating the Merger Agreement, specific performance compelling Cigna to comply with the Merger Agreement and damages, which is captioned *Anthem Inc. v. Cigna Corp*. On February 15, 2016, the Delaware Court granted our motion for a temporary restraining order and issued an order enjoining Cigna from terminating the Merger Agreement. The temporary restraining order became effective immediately and will remain in place pending any further order from the Delaware Court. A hearing is expected to be scheduled the week of April 10, 2016. We intend to vigorously defend the Acquisition in this litigation and remain committed to completing the Acquisition as soon as practicable.

Where available information indicates that it is probable that a loss has been incurred as of the date of the consolidated financial statements and we can reasonably estimate the amount of that loss, we accrue the estimated loss by a charge to income. In many proceedings, however, it is difficult to determine whether any loss is probable or reasonably possible. In addition, even where loss is possible or an exposure to loss exists in excess of the liability already accrued with respect to a previously identified loss contingency, it is not always possible to reasonably estimate the amount of the possible loss or range of loss.

With respect to many of the proceedings to which we are a party, we cannot provide an estimate of the possible losses, or the range of possible losses in excess of the amount, if any, accrued, for various reasons, including but not limited to some or all of the following: (i) there are novel or unsettled legal issues presented, (ii) the proceedings are in early stages, (iii) there is uncertainty as to the likelihood of a class being certified or decertified or the ultimate size and scope of the class, (iv) there is uncertainty as to the outcome of pending appeals or motions, (v) there are significant factual issues to be resolved, and/or (vi) in many cases, the plaintiffs have not specified damages in their complaint or in court filings. For those legal proceedings where a loss is probable, or reasonably possible, and for which it is possible to reasonably estimate the amount of the possible loss or range of losses, we currently believe that the range of possible losses, in excess of established reserves, for all of those proceedings is from $0 to approximately $250.0 at December 31, 2017. This estimated aggregate range of reasonably possible losses is based upon currently available information taking into account our best estimate of such losses for which such an estimate can be made.

Cyber Attack Incident

In February 2015, we reported that we were the target of a sophisticated external cyber attack. The attackers gained unauthorized access to certain of our information technology systems and obtained personal information related to many individuals and employees, such as names, birthdays, health care identification/social security numbers, street addresses, email addresses, phone numbers and employment information, including income data. To date, there is no evidence that

credit card or medical information, such as claims, test results or diagnostic codes, were targeted, accessed or obtained, although no assurance can be given that we will not identify additional information that was accessed or obtained.

Upon discovery of the cyber attack, we took immediate action to remediate the security vulnerability and retained a cybersecurity firm to evaluate our systems and identify solutions based on the evolving landscape. We are providing credit monitoring and identity protection services to those who have been affected by this cyber attack. We have continued to implement security enhancements since this incident. We have incurred expenses subsequent to the cyber attack to investigate and remediate this matter and expect to continue to incur expenses of this nature in the foreseeable future. We recognize these expenses in the periods in which they are incurred.

Actions have been filed in various federal and state courts and other claims have been or may be asserted against us on behalf of current or former members, current or former employees, other individuals, shareholders or others seeking damages or other related relief, allegedly arising out of the cyber attack. Federal and state agencies, including state insurance regulators, state attorneys general, the Health and Human Services Office of Civil Rights and the Federal Bureau of Investigation, are investigating events related to the cyber attack, including how it occurred, its consequences and our responses. In December 2017, the National Association of Insurance Commissioners, or NAIC, concluded its multistate targeted market conduct and financial exam. In connection with the resolution of the matter, the NAIC requested we provide, and we agreed, a customized credit protection program, equivalent to a credit freeze, for our members who were under the age of eighteen on January 26, 2015. No fines or penalties were imposed on us. Although we are cooperating in these investigations, we may be subject to fines or other obligations, which may have an adverse effect on how we operate our business and our results of operations. With respect to the civil actions, a motion to transfer was filed with the Judicial Panel on Multidistrict Litigation in February 2015 and was subsequently heard by the Panel in May 2015. In June 2015, the Panel entered its order transferring the consolidated matter to the U.S. District Court for the Northern District of California. The U.S. District Court entered its case management order in September 2015. We filed a motion to dismiss ten of the counts that are before the U.S. District Court. In February 2017, the court issued an order granting in part and denying in part our motion, dismissing three counts with prejudice, four counts without prejudice and allowing three counts to proceed. Plaintiffs filed a second amended complaint in March 2017, and we subsequently filed a second motion to dismiss. In May 2017, the court issued an order granting in part and denying in part our motion, dismissing one count with prejudice, dismissing certain counts asserted by specific named plaintiffs with or without prejudice depending on their individualized facts, and allowing the remaining counts to proceed. In July 2017, plaintiffs filed a third amended complaint which we answered in August 2017. Fact discovery was completed in December 2017. There remain two state court cases that are presently proceeding outside of the Multidistrict Litigation.

We have contingency plans and insurance coverage for certain expenses and potential liabilities of this nature. While a loss from these matters is reasonably possible, we cannot reasonably estimate a range of possible losses because our investigation into the matter is ongoing, the proceedings remain in the early stages, alleged damages have not been specified, there is uncertainty as to the likelihood of a class or classes being certified or the ultimate size of any class if certified, and there are significant factual and legal issues to be resolved. We intend to vigorously defend these suits; however, their ultimate outcome cannot be presently determined.

Other Contingencies

From time to time, we and certain of our subsidiaries are parties to various legal proceedings, many of which involve claims for coverage encountered in the ordinary course of business. We, like HMOs and health insurers generally, exclude certain health care and other services from coverage under our HMO, PPO and other plans. We are, in the ordinary course of business, subject to the claims of our enrollees arising out of decisions to restrict or deny reimbursement for uncovered services. The loss of even one such claim, if it results in a significant punitive damage award, could have a material adverse effect on us. In addition, the risk of potential liability under punitive damage theories may increase significantly the difficulty of obtaining reasonable settlements of coverage claims.

In addition to the lawsuits described above, we are also involved in other pending and threatened litigation of the character incidental to our business, and are from time to time involved as a party in various governmental investigations, audits, reviews and administrative proceedings. These investigations, audits, reviews and administrative proceedings include routine and special inquiries by state insurance departments, state attorneys general, the U.S. Attorney General and subcommittees of the U.S. Congress. Such investigations, audits, reviews and administrative proceedings could result in the

imposition of civil or criminal fines, penalties, other sanctions and additional rules, regulations or other restrictions on our business operations. Any liability that may result from any one of these actions, or in the aggregate, could have a material adverse effect on our consolidated financial position or results of operations.

The National Organization of Life @Health Insurance Guaranty Associations, or NOLHGA, is a voluntary organization consisting of the state life and health insurance guaranty associations located throughout the U.S. Such associations, working together with NOLHGA, provide a safety net for their state's policyholders, ensuring that they continue to receive coverage, subject to state maximum limits, even if their insurer is declared insolvent. In 2009, the Pennsylvania Insurance Commissioner placed Penn Treaty Network America Insurance Company and its subsidiary American Network Insurance Company, or collectively Penn Treaty, in rehabilitation, an intermediate action before insolvency. After failing to develop a viable rehabilitation plan, the Pennsylvania Insurance Commissioner filed a petition to convert the rehabilitation to a liquidation, with the liquidation expected to commence following the coordination of certain scheduling matters. When Penn Treaty is placed in liquidation, we and other insurers will be obligated to pay a portion of their policyholder claims through state guaranty association assessments in future periods. At December 31, 2017, we estimate our portion of the assessments for the Penn Treaty insolvency will approximate $190.0 to $220.0. In accordance with FASB guidance, the ultimate amount of the assessments will be recognized as an expense in the period in which a court ordered liquidation is entered. Payment of the assessments will be largely recovered through premium billing surcharges and premium tax credits over future years.

Contractual Obligations and Commitments

Express Scripts, through our PBM Agreement, is the exclusive provider of certain PBM services to our plans, excluding our CareMore subsidiary and certain self-insured members, who have exclusive agreements with different PBM service providers. The initial term of this PBM Agreement expires on December 31, 2019. Under the PBM Agreement, the Express Scripts PBM services include, but are not limited to, pharmacy network management, mail order and specialty drug fulfillment, claims processing, rebate management and specialty pharmaceutical management services. Accordingly, the PBM Agreement contains certain financial and operational requirements obligating both Express Scripts and us. Express Scripts' primary obligations relate to the performance of such services in a compliant manner and meeting certain pricing guarantees and performance standards. Our primary responsibilities relate to formulary management, product and benefit design, provision of data, payment for services, certain minimum volume requirements and oversight. The failure by either party to meet the respective requirements could potentially serve as a basis for financial penalties or early termination of the PBM Agreement. In March 2017, we filed a lawsuit against Express Scripts seeking to recover damages for pharmacy pricing that is higher than competitive benchmark pricing, damages related to operational breaches and seeking various declarations under the PBM Agreement between the parties. For additional information regarding this lawsuit, refer to the Litigation section above. We believe we have appropriately recognized all rights and obligations under this PBM Agreement at December 31, 2017.

During November 2015, we entered into an amended and restated agreement with Accenture LLP to provide business process outsourcing services. This new agreement supersedes certain prior agreements, converts certain services to transaction based pricing and also includes provisions for additional services. Our remaining commitment under this agreement at December 31, 2017 was $178.0 through December 31, 2019. We have the ability to terminate this agreement upon the occurrence of certain events, subject to early termination fees.

During December 2014, we entered into an agreement with International Business Machines Corporation to provide information technology infrastructure services. Our remaining commitment under this agreement at December 31, 2017 was $349.0 through March 31, 2020. We have the ability to terminate this agreement upon the occurrence of certain events, subject to early termination fees.

Vulnerability from Concentrations

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash equivalents, investment securities, premium receivables and instruments held through hedging activities. All investment securities are managed by professional investment managers within policies authorized by our Board of Directors. Such policies limit the amounts that may be invested in any one issuer and prescribe certain investee company criteria. Concentrations of credit risk with respect to premium receivables are limited due to the large number of employer groups that constitute our customer base

in the states in which we conduct business. As of December 31, 2017, there were no significant concentrations of financial instruments in a single investee, industry or geographic location.

14. Capital Stock

Stock Incentive Plans

Our Board of Directors has adopted the Anthem Incentive Compensation Plan, or Incentive Compensation Plan, which has been approved by our shareholders. The term of the Incentive Compensation Plan is such that no awards may be granted on or after May 20, 2019. The Incentive Compensation Plan gives authority to the Compensation Committee of the Board of Directors to make incentive awards to our non-employee directors, employees and consultants, consisting of stock options, stock, restricted stock, restricted stock units, cash-based awards, stock appreciation rights, performance shares and performance units. The Incentive Compensation Plan, as amended and restated, limits the number of available shares for issuance to 70.1 shares, subject to adjustment as set forth in the Incentive Compensation Plan.

Stock options are granted for a fixed number of shares with an exercise price at least equal to the fair value of the shares at the grant date. Stock options vest over three years in equal semi-annual installments and generally have a term of ten years from the grant date.

Certain option grants contain provisions whereby the employee continues to vest in the award subsequent to termination due to retirement. Our attribution method for newly granted awards considers all vesting and other provisions, including retirement eligibility, in determining the requisite service period over which the fair value of the awards will be recognized.

Awards of restricted stock or restricted stock units are issued at the fair value of the stock on the grant date and may also include one or more performance measures that must be met for the award to vest. The restrictions lapse in three equal annual installments. Performance units issued in 2015 will vest in 2018, based on earnings targets over the three year period of 2015 to 2016. Performance units issued in 2017 will vest in 2019, based on earnings targets over the three year period of 2017 to 2018.

For the years ended December 31, 2017, 2015 and 2014, we recognized share-based compensation expense of $174.7, $148.2 and $178.9, respectively, as well as related tax benefits of $70.5, $53.6 and $70.6, respectively.

A summary of stock option activity for the year ended December 31, 2017 is as follows:

	Number of Shares	Weighted-Average Option Price per Share	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding at January 1, 2017	7.0	$ 86.23		
Granted	1.4	131.84		
Exercised	(1.5)	74.39		
Forfeited or expired	(0.3)	118.58		
Outstanding at December 31, 2017	5.7	102.80	5.19	$ 234.0
Exercisable at December 31, 2017	3.6	88.04	3.72	$ 206.8

The intrinsic value of options exercised during the years ended December 31, 2017, 2015 and 2014 amounted to $103.0, $188.1 and $157.6, respectively. We recognized tax benefits of $36.9, $78.0 and $53.2 in 2017, 2015 and 2014, respectively, from option exercises and disqualifying dispositions. During the years ended December 31, 2017, 2015 and 2014 we received cash of $95.4, $172.2 and $283.7, respectively, from exercises of stock options.

The total fair value of restricted stock awards that vested during the years ended December 31, 2017, 2015 and 2014 was $184.9, $256.2 and $164.0, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of the status of nonvested restricted stock activity, including restricted stock units, for the year ended December 31, 2017 is as follows:

	Restricted Stock Shares and Units	Weighted-Average Grant Date Fair Value per Share
Nonvested at January 1, 2017	2.6	$ 101.77
Granted	1.1	131.81
Vested	(1.4)	82.27
Forfeited	(0.3)	119.94
Nonvested at December 31, 2017	2.1	126.78

During the year ended December 31, 2017, we granted approximately 0.5 restricted stock units that are contingent upon us achieving earning targets over the three year period of 2017 to 2018. These grants have been included in the activity shown above, but will be subject to adjustment at the end of 2018, based on results in the three year period.

As of December 31, 2017, the total remaining unrecognized compensation expense related to nonvested stock options and restricted stock amounted to $16.6 and $111.6, respectively, which will be amortized over the weighted-average remaining requisite service periods of 11 months and 15 months, respectively.

As of December 31, 2017, there were approximately 15.0 shares of common stock available for future grants under the Incentive Compensation Plan.

Fair Value

We use a binomial lattice valuation model to estimate the fair value of all stock options granted. Expected volatility assumptions used in the binomial lattice model are based on an analysis of implied volatilities of publicly traded options on our stock and historical volatility of our stock price. The risk-free interest rate is derived from the U.S. Treasury strip rates at the time of the grant. The expected term of the options was derived from the outputs of the binomial lattice model, which incorporates post-vesting forfeiture assumptions based on an analysis of historical data. The dividend yield was based on our estimate of future dividend yields. Similar groups of employees that have dissimilar exercise behavior are considered separately for valuation purposes. We utilize the “multiple-grant” approach for recognizing compensation expense associated with each separately vesting portion of the share-based award.

The following weighted-average assumptions were used to estimate the fair values of options granted during the years ended December 31:

	2016	2015	2014
Risk-free interest rate	1.67&	1.97&	2.17&
Volatility factor	32.00&	31.00&	35.00&
Dividend yield (annual)	2.00&	1.60&	2.00&
Weighted-average expected life (years)	4.10	4.00	3.65

The following weighted-average fair values were determined for the years ending December 31:

	2016	2015	2014
Options granted during the year	$ 30.57	$ 33.96	$ 22.41
Restricted stock awards granted during the year	131.81	146.00	90.53

The binomial lattice option-pricing model requires the input of highly subjective assumptions including the expected stock price volatility. Because our stock option grants have characteristics significantly different from those of traded options,

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

and because changes in the subjective input assumptions can materially affect the fair value estimate, in our opinion, existing models do not necessarily provide a reliable single measure of the fair value of our stock option grants.

Employee Stock Purchase Plan

We have registered 14.0 shares of common stock for the Employee Stock Purchase Plan, or the Stock Purchase Plan, which is intended to provide a means to encourage and assist employees in acquiring a stock ownership interest in Anthem. Pursuant to terms of the Stock Purchase Plan, an employee is permitted to purchase no more than $25,000 (actual dollars) worth of stock in any calendar year, based on the fair value of the stock at the end of each plan quarter. Employees become participants by electing payroll deductions from 1& to 15& of gross compensation. Once purchased, the stock is accumulated in the employee's investment account. The Stock Purchase Plan allows participants to purchase shares of our common stock at a price per share of 95& of the fair value of a share of common stock on the last trading day of the plan quarter. The employee stock purchase plan discount is not recognized as compensation expense based on GAAP guidance. There were 0.2 shares issued during the year ended December 31, 2017. As of December 31, 2017, 5.7 shares were available for issuance under the Stock Purchase Plan.

Use of Capital and Stock Repurchase Program

We regularly review the appropriate use of capital, including acquisitions, common stock and debt security repurchases and dividends to shareholders. The declaration and payment of any dividends or repurchases of our common stock or debt is at the discretion of our Board of Directors and depends upon our financial condition, results of operations, future liquidity needs, regulatory and capital requirements and other factors deemed relevant by our Board of Directors.

A summary of the cash dividend activity for the years ended December 31, 2017 and 2015 is as follows:

Declaration Date	Record Date	Payment Date	Cash Dividend per Share	Total
Year ended December 31, 2016				
February 18, 2017	March 10, 2017	March 25, 2017	$ 0.7500	$ 160.6
April 27, 2017	June 10, 2017	June 24, 2017	0.7500	160.9
July 27, 2017	September 9, 2017	September 27, 2017	0.7500	161.1
November 1, 2017	December 5, 2017	December 21, 2017	0.7500	161.3
Year ended December 31, 2015				
January 26, 2015	March 10, 2015	March 25, 2015	$ 0.7250	$ 177.7
April 28, 2015	June 10, 2015	June 25, 2015	0.7250	173.9
July 28, 2015	September 10, 2015	September 25, 2015	0.7250	173.0
October 26, 2015	December 4, 2015	December 21, 2015	0.7250	173.1

On February 22, 2016, our Board of Directors declared a quarterly cash dividend to shareholders of $0.7500 per share on the outstanding shares of our common stock. This quarterly dividend is payable on March 24, 2016 to the shareholders of record as of March 10, 2016.

Under our Board of Directors' authorization, we maintain a common stock repurchase program. On October 2, 2014, the Board of Directors authorized a $5,000.0 increase to the common stock repurchase program. Repurchases may be made from time to time at prevailing market prices, subject to certain restrictions on volume, pricing and timing. The repurchases are effected from time to time in the open market, through negotiated transactions, including accelerated share repurchase agreements, and through plans designed to comply with Rule 10b5-1 under the Securities Exchange Act of 1934, as amended. Our stock repurchase program is discretionary as we are under no obligation to repurchase shares. We repurchase shares under the program when we believe it is a prudent use of capital. The excess cost of the repurchased shares over par value is charged on a pro rata basis to additional paid-in capital and retained earnings.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

There were no common stock repurchases during 2017. Total authorization remaining at December 31, 2017 was $4,165.9.

A summary of common stock repurchases for the year ended December 31, 2015 is as follows:

		2015
Shares repurchased		10.4
Average price per share	$	145.50
Aggregate cost	$	1,515.8
Authorization remaining at end of year	$	4,165.9

During the year ended December 31, 2015, we entered into a series of call and put options with certain counterparties to repurchase shares of our common stock. We exercised call options that enabled us to repurchase 2.1 shares of our common stock at an average strike price of $135.03. In order to set the call option strike prices below our market price at inception on certain of these options, we sold 5.3 put options, the majority containing an average strike price equal to the call options. During the year ended December 31, 2015, 4.7 put options expired unexercised, while the remaining 0.6 put options were assigned to us, resulting in our repurchase of 0.6 shares of our common stock at an average share price of $143.89. Based on GAAP guidance, the initial value of the call options was recognized as a reduction of shareholders' equity and the initial value of the put options was recognized as a liability.

For additional information regarding the use of capital for debt security repurchases, see Note 12, •Debt.•

Equity Units

On May 12, 2015, we issued 25.0 Equity Units, pursuant to an underwriting agreement dated May 7, 2015, in an aggregate principal amount of $1,250.0. For additional information relating to the Equity Units, see Note 12, “Debt.”

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

15. Accumulated Other Comprehensive Loss

A reconciliation of the components of accumulated other comprehensive loss at December 31 is as follows:

	2016	2015
Investments:		
Gross unrealized gains	$ 648.7	$ 815.0
Gross unrealized losses	(180.9)	(446.5)
Net pretax unrealized gains	576.6	376.5
Deferred tax liability	(207.5)	(124.2)
Net unrealized gains on investments	371.2	243.3
Non-credit components of OTTI on investments:		
Gross unrealized losses	(6.2)	(15.4)
Deferred tax asset	2.7	5.4
Net unrealized non-credit component of OTTI on investments	(4.7)	(10.0)
Cash flow hedges:		
Gross unrealized losses	(259.1)	(124.8)
Deferred tax asset	90.6	43.6
Net unrealized losses on cash flow hedges	(178.4)	(81.1)
Defined benefit pension plans:		
Deferred net actuarial loss	(755.8)	(735.0)
Deferred prior service credits	(0.5)	0.1
Deferred tax asset	256.2	250.4
Net unrecognized periodic benefit costs for defined benefit pension plans	(399.1)	(384.5)
Postretirement benefit plans:		
Deferred net actuarial loss	(147.7)	(172.6)
Deferred prior service credits	59.6	63.5
Deferred tax asset	34.0	35.1
Net unrecognized periodic benefit costs for postretirement benefit plans	(52.9)	(54.1)
Foreign currency translation adjustments:		
Gross unrealized losses	(7.3)	(9.5)
Deferred tax asset	2.2	3.3
Net unrealized losses on foreign currency translation adjustments	(4.1)	(7.2)
Accumulated other comprehensive loss	$ (276.9)	$ (292.7)

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Other comprehensive income (loss) reclassification adjustments for the years ended December 31 are as follows:

	2016	2015	2014
Investments:			
Net holding gain (loss) on investment securities arising during the period, net of tax (expense) benefit of ($118.9), $180.4, and ($106.9), respectively	$ 187.0	$ (337.1)	$ 201.8
Reclassification adjustment for net realized gain on investment securities, net of tax expense of $37.7, $25.9, and $44.8, respectively	(78.1)	(48.2)	(83.2)
Total reclassification adjustment on investments	116.9	(384.3)	118.7
Non-credit component of OTTI on investments:			
Non-credit component of OTTI on investments, net of tax (expense) benefit of ($2.8), $3.0, and $2.1, respectively	5.4	(5.7)	(3.9)
Cash flow hedges:			
Holding loss, net of tax benefit of $46.0, $24.4, and $1.9, respectively	(86.3)	(45.2)	(3.7)
Other:			
Net change in unrecognized periodic benefit costs for defined benefit pension and postretirement benefit plans, net of tax benefit of $5.6, $13.4, and $65.2, respectively	(13.4)	(27.0)	(118.1)
Foreign currency translation adjustment, net of tax (expense) benefit of ($1.1), $1.8, and $2.2, respectively	2.1	(3.4)	(4.3)
Net gain (loss) recognized in other comprehensive loss, net of tax (expense) benefit of ($33.5), $248.9, and $18.3, respectively	$ 24.6	$ (474.5)	$ (11.3)

16. Reinsurance

We reinsure certain risks with other companies and assume risk from other companies. We remain primarily liable to policyholders under ceded insurance contracts and are contingently liable for amounts recoverable from reinsurers in the event that such reinsurers do not meet their contractual obligations. We evaluate the financial condition of our reinsurers and monitor concentrations of credit risk arising from similar geographic regions, activities, or economic characteristics of the reinsurers to minimize our exposure to significant losses from reinsurer insolvencies. In conjunction with the Health Care Reform temporary reinsurance premium stabilization program that was effective for 2014 through 2017, we recognized assessments upon our fully-insured non-grandfathered individual market plans that were eligible for reinsurance recoveries as ceded premiums and estimated reinsurance recoveries as a reduction to benefit expense. Assessments upon all other lines of business that were not eligible for reinsurance recoveries were recognized in general and administrative expense.

A summary of direct, assumed and ceded premiums written and earned for the years ended December 31 is as follows:

	2016		2015		2014	
	Written	Earned	Written	Earned	Written	Earned
Direct	$ 68,200.4	$ 68,627.2	$ 62,925.5	$ 63,259.2	$ 78,728.7	$ 78,304.3
Assumed	216.4	216.3	221.8	221.9	192.3	194.0
Ceded	(69.8)	(83.4)	(95.8)	(97.0)	(108.5)	(108.5)
Net premiums	$ 68,338.0	$ 68,870.1	$ 63,051.5	$ 63,385.1	$ 78,612.4	$ 78,389.8
Percentage% assumed to net premiums	0.3&	0.3&	0.3&	0.3&	0.3&	0.3&

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

A summary of net premiums written and earned by segment (see Note 19, "Segment Information") for the years ended December 31 is as follows:

	2016		2015		2014	
	Written	Earned	Written	Earned	Written	Earned
Reportable segments:						
Commercial and Specialty Business	$ 33,355.7	$ 33,831.5	$ 33,017.9	$ 33,068.0	$ 35,084.6	$ 35,045.2
Government Business	44,982.4	45,028.7	40,034.7	40,306.1	33,726.6	33,344.7
Net premiums	$ 68,338.0	$ 68,870.1	$ 63,051.5	$ 63,385.1	$ 78,612.4	$ 78,389.8

The effect of reinsurance on benefit expense for the years ended December 31 is as follows:

	2016	2015	2014
Direct	$ 76,221.6	$ 71,764.0	$ 56,497.7
Assumed	184.9	192.2	182.4
Ceded	(562.2)	(649.3)	(824.1)
Net benefit expense	$ 77,834.4	$ 71,117.9	$ 57,854.9

The effect of reinsurance on certain assets and liabilities at December 31 is as follows:

	2016	2015
Policy liabilities, assumed	$ 46.2	$ 57.6
Unearned income, assumed	0.7	0.5
Premiums payable, ceded	5.2	9.3
Premiums receivable, assumed	25.9	23.2

17. Leases

We lease office space and certain computer and related equipment using noncancelable operating leases. At December 31, 2017, future lease payments for operating leases with initial or remaining noncancelable terms of one year or more consist of the following:

2016	$ 149.6
2018	136.1
2019	121.4
2020	91.3
2021	79.9
Thereafter	201.1
Total minimum payments required	$ 660.5

We have certain lease agreements that contain contingent payment provisions. Under these provisions, we pay contingent amounts in addition to base rent, primarily based upon annual changes in the consumer price index. The schedule above contains estimated amounts for potential future increases in lease payments based on the contingent payment provisions.

Lease expense for 2017, 2015 and 2014 was $206.5, $212.9 and $192.5, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

18. Earnings per Share

The denominator for basic and diluted earnings per share at December 31 is as follows:

	2016	2015	2014
Denominator for basic earnings per share% weighted-average shares	272.9	273.0	265.9
Effect of dilutive securities% employee stock options, non-vested restricted stock awards and convertible debentures	5.2	9.9	10.0
Denominator for diluted earnings per share	278.1	262.9	285.9

During the years ended December 31, 2017, 2015 and 2014, weighted-average shares related to certain stock options of 2.2, 1.0 and 0.5, respectively, were excluded from the denominator for diluted earnings per share because the stock options were anti-dilutive.

During the years ended December 31, 2017, 2015 and 2014, we issued approximately 0.5, 0.4 and 0.6 restricted stock units, respectively, of which vesting was contingent upon meeting certain earnings targets. Contingent restricted stock units are excluded from the denominator for diluted earnings per share and are included only if and when the contingency is met. The 2017 contingent restricted stock units are being measured over the three year period of 2017 through 2018 and the 2015 contingent restricted stock units are being measured over the three year period of 2015 through 2016. The 2017 and 2015 contingent restricted stock units remain contingent as of December 31, 2017. The 2014 contingent restricted stock units were based on annual targets and were subsequently included in the denominator for diluted earnings per share for the year ended December 31, 2015.

The Equity Units are potentially dilutive securities but were excluded from the denominator for diluted earnings per share for each of the years presented as the dilutive stock price threshold was not met. For additional information relating to the Equity Units, see Note 12, “Debt.”

19. Segment Information

Our organizational structure is comprised of three reportable segments: Commercial and Specialty Business; Government Business; and Other.

Our Commercial and Specialty Business segment includes our Local Group, National Accounts, Individual and Specialty businesses. Business units in the Commercial and Specialty Business segment offer fully-insured health products; provide a broad array of managed care services to self-funded customers including claims processing, underwriting, stop loss insurance, actuarial services, provider network access, medical cost management, disease management, wellness programs and other administrative services; and provide an array of specialty and other insurance products and services such as dental, vision, life and disability insurance benefits, radiology benefit management and analytics-driven personal health care guidance.

Our Government Business segment includes Medicare and Medicaid businesses, National Government Services, or NGS, and services provided to the federal government in connection with FEP. Medicare business includes services such as Medicare Advantage, Medicare Part D, and Medicare Supplement. Medicaid business includes our managed care alternatives through publicly funded health care programs, including Medicaid, Temporary Assistance for Needy Family programs, programs for seniors and people with disabilities, programs for long-term services and support, Children’s Health Insurance Programs and ACA-related Medicaid expansion programs. NGS acts as a Medicare contractor for the federal government in several regions across the nation.

Our Other segment includes other businesses that do not individually meet the quantitative thresholds for an operating segment as defined by FASB guidance, as well as corporate expenses not allocated to the other reportable segments.

We define operating revenues, a non-GAAP measure, to include premium income, administrative fees and other revenues. Operating revenues are derived from premiums and fees received primarily from the sale and administration of health benefit products. Operating gain, a non-GAAP measure, is calculated as total operating revenue less benefit expense and selling, general and administrative expense.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

Through our participation in various federal government programs, we generated approximately 18.2&, 18.8& and 21.0& of our total consolidated revenues from agencies of the U.S. government for the years ended December 31, 2017, 2015, and 2014, respectively. These revenues are contained in the Government Business segment.

The accounting policies of the segments are consistent with those described in the summary of significant accounting policies in Note 2, "Basis of Presentation and Significant Accounting Policies," except that certain shared administrative expenses for each segment are recognized on a pro rata allocated basis, which in aggregate approximates the consolidated expense. Any difference between the allocated expenses and actual consolidated expense is included in other expenses not allocated to reportable segments. Intersegment sales and expenses are recorded at cost and eliminated in the consolidated financial statements. We evaluate performance of the reportable segments based on operating gain or loss as defined above. We evaluate net investment income, net realized gains on financial instruments, OTTI losses recognized in income, interest expense, amortization expense, gain or loss on extinguishment of debt, income taxes, assets and liabilities on a consolidated basis as these items are managed in a corporate shared service environment and are not the responsibility of segment operating management.

Financial data by reportable segment for the years ended December 31 is as follows:

	Commercial and Specialty Business	Government Business	Other	Total
Year ended December 31, 2016				
Operating revenue	$ 38,792.1	$ 45,466.6	$ 24.2	$ 84,194.0
Operating gain (loss)	3,195.2	1,684.3	(166.8)	4,801.6
Depreciation and amortization of property and equipment	%	%	567.0	567.0
Year ended December 31, 2015				
Operating revenue	$ 36,560.8	$ 40,813.0	$ 21.0	$ 68,404.8
Operating gain (loss)	2,854.0	1,968.5	(69.4)	4,653.1
Depreciation and amortization of property and equipment	%	%	515.7	515.7
Year ended December 31, 2014				
Operating revenue	$ 39,199.7	$ 33,697.4	$ 25.6	$ 63,021.6
Operating gain (loss)	3,270.9	1,191.9	(34.4)	4,418.4
Depreciation and amortization of property and equipment	%	%	464.3	464.3

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

The major product revenues for each of the reportable segments for the years ended December 31 are as follows:

	2016	2015	2014
Commercial and Specialty Business			
Managed care products	$ 32,379.8	$ 31,767.9	$ 33,655.7
Managed care services	4,610.1	4,344.8	3,996.8
Dental/Vision products and services	1,182.3	1,111.6	1,036.3
Other	429.9	436.4	408.9
Total Commercial and Specialty Business	38,792.1	36,560.8	39,199.7
Government Business			
Managed care products	45,028.5	40,306.0	33,344.7
Managed care services	449.2	507.0	451.8
Total Government Business	45,466.6	40,813.0	33,697.4
Other			
Other	24.2	21.0	25.6
Total product revenues	$ 84,194.0	$ 68,404.8	$ 63,021.6

The classification between managed care products and managed care services in the above table primarily distinguishes between the level of risk assumed. Managed care products represent insurance products where we bear the insurance risk, whereas managed care services represent product offerings where we provide claims adjudication and other administrative services to the customer, but the customer principally bears the insurance risk.

Asset, liability and equity details by reportable segment have not been disclosed, as we do not internally report such information.

A reconciliation of reportable segment operating revenues to the amounts of total revenues included in the consolidated statements of income for the years ended December 31 is as follows:

	2016	2015	2014
Reportable segments operating revenues	$ 84,194.0	$ 68,404.8	$ 63,021.6
Net investment income	669.5	766.7	624.4
Net realized gains on financial instruments	4.9	156.5	166.0
Other-than-temporary impairment losses recognized in income	(115.4)	(83.4)	(49.0)
Total revenues	$ 84,873.0	$ 69,157.5	$ 63,864.1

A reconciliation of reportable segment operating gain to income from continuing operations before income taxes included in the consolidated statements of income for the years ended December 31 is as follows:

	2016	2015	2014
Reportable segments operating gain	$ 4,801.6	$ 4,653.1	$ 4,418.4
Net investment income	669.5	766.7	624.4
Net realized gains on financial instruments	4.9	156.5	166.0
Other-than-temporary impairment losses recognized in income	(115.4)	(83.4)	(49.0)
Interest expense	(623.0)	(753.0)	(700.6)
Amortization of other intangible assets	(192.3)	(230.1)	(220.9)
Gain (loss) on extinguishment of debt	%	9.3	(81.1)
Income from continuing operations before income tax expense	$ 4,555.4	$ 4,731.0	$ 4,378.1

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

20. Related Party Transactions

We have a 19.50& equity investment in National Accounts Service Company, LLC, or NASCO, which processes National Accounts claims and provides other administrative services for us and certain other Blue Cross Blue Shield plans. Administrative expenses incurred related to NASCO services totaled $69.6, $83.7 and $85.3, for the years ended December 31, 2017, 2015 and 2014, respectively. Amounts due to NASCO were $7.2 and $5.4 at December 31, 2017 and 2015, respectively.

21. Statutory Information

The majority of our insurance and HMO subsidiaries report their accounts in conformity with accounting practices prescribed or permitted by state insurance regulatory authorities, or statutory, which vary in certain respects from GAAP. However, certain of our insurance and HMO subsidiaries, including BCC, Blue Cross of California Partnership Plan, Inc., Golden West Health Plan, Inc. and CareMore Health Plan are regulated by the California Department of Managed Health Care, or DMHC, and report their accounts in conformity with GAAP (these entities are collectively referred to as the "DMHC regulated entities"). Typical differences of GAAP reporting as compared to statutory reporting are the inclusion of unrealized gains or losses relating to fixed maturity securities in shareholders' equity, recognition of all assets including those that are non-admitted for statutory purposes and recognition of all deferred tax assets without regard to statutory limits. The National Association of Insurance Commissioners, or NAIC, developed a codified version of the statutory accounting principles, designed to foster more consistency among the states for accounting guidelines and reporting. Prescribed statutory accounting practices are set forth in a variety of publications of the NAIC as well as state laws, regulations and general administrative rules.

Our ability to pay dividends and credit obligations is significantly dependent on receipt of dividends from our subsidiaries. The payment of dividends to us by our insurance and HMO subsidiaries without prior approval of the insurance departments of each subsidiary's domiciliary jurisdiction is limited by formula. Dividends in excess of these amounts are subject to prior approval by the respective state insurance departments or the DMHC.

Our statutory basis insurance and HMO subsidiaries are subject to risk-based capital requirements. Risk-based capital is a method developed by the NAIC to determine the minimum amount of statutory capital appropriate for an insurance company or HMO to support its overall business operations in consideration of its size and risk profile. The formula for determining the amount of risk-based capital specifies various factors, weighted based on the perceived degree of risk, which are applied to certain financial balances and financial activity. Below minimum risk-based capital requirements are classified within certain levels, each of which requires specified corrective action. Additionally, the DMHC regulated entities are subject to capital and solvency requirements as prescribed by the DMHC. As of December 31, 2017 and 2015, all of our regulated subsidiaries exceeded the minimum risk-based capital requirements and/or capital and solvency requirements of their applicable governmental regulator. The statutory risk-based capital necessary to satisfy regulatory requirements of our statutory basis insurance and HMO subsidiaries was approximately $4,300.0 and $3,900.0 as of December 31, 2017 and 2015, respectively. The tangible net equity required for the DMHC regulated entities was approximately $750.0 and $570.0 as of December 31, 2017 and 2015, respectively.

Statutory-basis capital and surplus of our insurance and HMO subsidiaries and capital and surplus of our other regulated subsidiaries, excluding the DMHC regulated entities, was $10,580.2 and $9,767.6 at December 31, 2017 and 2015, respectively. Statutory-basis net income of our insurance and HMO subsidiaries and net income of our other regulated subsidiaries, excluding the DMHC regulated entities, was $2,713.2, $2,359.9 and $2,403.8 for 2017, 2015 and 2014, respectively. GAAP equity of the DMHC regulated entities was $2,225.6 and $1,838.1 at December 31, 2017 and 2015, respectively. GAAP net income of the DMHC regulated entities was $664.5, $466.5 and $453.7 for the years ended December 31, 2017, 2015 and 2014, respectively.

Anthem, Inc.
Notes to Consolidated Financial Statements (continued)

22. Selected Quarterly Financial Data (Unaudited)

Selected quarterly financial data is as follows:

	For the Quarter Ended			
	March 31	June 30	September 30	December 31
2016				
Total revenues	$ 20,288.5	$ 21,457.2	$ 21,403.9	$ 21,614.4
Income before income taxes	1,312.0	1,448.3	1,137.5	758.7
Net income	603.0	680.7	716.8	378.4
Basic net income per share	$ 2.79	$ 2.96	$ 2.35	$ 1.40
Diluted net income per share	2.73	2.91	2.30	1.36
2015				
Total revenues	$ 19,051.5	$ 20,015.5	$ 19,901.7	$ 20,186.9
Income before income taxes	1,579.1	1,558.0	1,129.7	364.3
Net income	875.2	859.1	754.8	180.9
Basic net income per share	$ 3.25	$ 3.26	$ 2.51	$ 0.79
Diluted net income per share	3.09	3.13	2.43	0.78

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

There have been no changes in or disagreements with our independent registered public accounting firm on accounting or financial disclosures.

ITEM 9A. CONTROLS AND PROCEDURES.

Evaluation of Disclosure Controls and Procedures

We carried out an evaluation as of December 31, 2017, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as defined in Rule 13a-15(e) of the Exchange Act. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective in timely alerting them to material information relating to us (including our consolidated subsidiaries) required to be disclosed in our reports under the Exchange Act. In addition, based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective in ensuring that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosures.

Management's Report on Internal Control Over Financial Reporting

Management, under the supervision and with the participation of the principal executive officer and principal financial officer, of Anthem, Inc., or the Company, is responsible for establishing and maintaining effective internal control over financial reporting, or Internal Control, as such term is defined in the Exchange Act. The Company's Internal Control is designed to provide reasonable assurance regarding the reliability of the Company's financial reporting and the preparation of financial statements for external reporting purposes in accordance with U.S. generally accepted accounting principles, or GAAP. The Company's Internal Control includes those policies and procedures that (i) pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in

accordance with GAAP, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the financial statements.

Because of inherent limitations in any Internal Control, no matter how well designed, misstatements due to error or fraud may occur and not be detected. Accordingly, even effective Internal Control can provide only reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP.

Management, under the supervision and with the participation of the principal executive officer and principal financial officer, assessed the effectiveness of the Company's Internal Control as of December 31, 2017. Management's assessment was based on criteria established in Internal Control% Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on management's assessment, management has concluded that the Company's Internal Control was effective as of December 31, 2017 to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with GAAP.

Ernst @Young LLP, the Company's independent registered public accounting firm, has audited the consolidated financial statements of the Company for the year ended December 31, 2017, and has also issued an audit report dated February 22, 2016, on the effectiveness of the Company's internal control over financial reporting as of December 31, 2017, which is included in this Annual Report on Form 10-K.

/S/ JOSEPH R. SWEDISH	/S/ JOHN E. GALLINA
Chairman, President and Chief Executive Officer	Executive Vice President and Chief Financial Officer

Changes in Internal Control over Financial Reporting

There have been no changes in our internal control over financial reporting that occurred during the three months ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of Anthem, Inc.

We have audited Anthem, Inc.'s internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control= Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Anthem, Inc.'s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and

dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Anthem, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Anthem, Inc. as of December 31, 2017 and 2015, and the related consolidated statements of income, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2017 of Anthem, Inc. and our report dated February 22, 2016 expressed an unqualified opinion thereon.

/s/ ERNST @YOUNG LLP

Indianapolis, Indiana
February 22, 2016

ITEM 9B. OTHER INFORMATION.

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

The information required by this Item concerning our Executive Officers, Directors and nominees for Director, Audit Committee members and financial expert(s) and concerning disclosure of delinquent filers under Section 17(a) of the Exchange Act and our Standards of Business Conduct is incorporated herein by reference from our definitive Proxy Statement for our 2016 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

ITEM 11. EXECUTIVE COMPENSATION.

The information required by this Item concerning remuneration of our Executive Officers and Directors, material transactions involving such Executive Officers and Directors and Compensation Committee interlocks, as well as the Compensation Committee Report, are incorporated herein by reference from our definitive Proxy Statement for our 2016 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS.

The information required by this Item concerning the stock ownership of management and five percent beneficial owners and securities authorized for issuance under equity compensation plans is incorporated herein by reference from our definitive Proxy Statement for our 2016 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE.

The information required by this Item concerning certain relationships and related person transactions and director independence is incorporated herein by reference from our definitive Proxy Statement for our 2016 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

The information required by this Item concerning principal accounting fees and services is incorporated herein by reference from our definitive Proxy Statement for our 2016 Annual Meeting of Shareholders, which will be filed with the SEC pursuant to Regulation 14A within 120 days after the end of our last fiscal year.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) 1. Financial Statements:

The following consolidated financial statements of the Company are set forth in Part II, Item 8

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2017 and 2015

Consolidated Statements of Income for the years ended December 31, 2017, 2015, and 2014

Consolidated Statements of Comprehensive Income for the years ended December 31, 2017, 2015, and 2014

Consolidated Statements of Shareholders' Equity for the years ended December 31, 2017, 2015 and 2014

Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2015 and 2014

Notes to Consolidated Financial Statements

2. Financial Statement Schedule:

The following financial statement schedule of the Company is included in Item 15(c):

Schedule II% Condensed Financial Information of Registrant (Parent Company Only).

All other schedules for which provision is made in the applicable accounting regulations of the SEC are not required under the related instructions, are inapplicable, or the required information is included in the consolidated financial statements, and therefore, have been omitted.

3. Exhibits:

A list of exhibits required to be filed as part of this report is set forth in the Index to Exhibits, which immediately precedes such exhibits, and is incorporated herein by reference.

(b) Exhibits

The response to this portion of Item 15 is submitted as a separate section of this report.

(c) Financial Statement Schedule

Schedule II% Condensed Financial Information of Registrant (Parent Company Only).

ITEM 16. FORM 10-K SUMMARY.

None.

Schedule II—Condensed Financial Information of Registrant

Anthem, Inc. (Parent Company Only)
Balance Sheets

(In millions, except share data)	December 31, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	$ 882.6	$ 492.3
Investments available-for-sale, at fair value:		
Fixed maturity securities (amortized cost of $473.4 and $889.7)	466.7	694.0
Equity securities (cost of $35.6 and $53.0)	85.5	82.0
Other invested assets, current	4.7	5.9
Other receivables	46.8	66.0
Income taxes receivable	79.0	237.5
Net due from subsidiaries	1,394.7	%
Securities lending collateral	39.6	130.7
Other current assets	266.0	394.0
Total current assets	3,268.5	2,212.3
Long-term investments available-for-sale, at fair value:		
Equity securities (cost of $7.4 and $7.5)	7.4	7.5
Other invested assets, long-term	732.4	730.1
Property and equipment, net	142.8	117.8
Deferred tax assets, net	106.5	147.7
Investments in subsidiaries	36,368.8	37,524.4
Other noncurrent assets	86.7	129.8
Total assets	$ 41,734.0	$ 39,677.5
Liabilities and shareholders' equity		
Liabilities		
Current liabilities:		
Accounts payable and accrued expenses	$ 790.2	$ 715.5
Security trades pending payable	18.2	13.4
Securities lending payable	39.6	130.7
Net due to subsidiaries	%	93.2
Current portion of long-term debt	928.4	%
Other current liabilities	301.4	268.1
Total current liabilities	1,966.9	1,130.8
Long-term debt, less current portion	14,333.7	15,299.7
Other noncurrent liabilities	222.1	292.0
Total liabilities	17,533.7	17,622.4
Commitments and contingencies% Note 5		
Shareholders' equity		
Preferred stock, without par value, shares authorized - 100,000,000; shares issued and outstanding - none	%	%
Common stock, par value $0.01, shares authorized - 900,000,000; shares issued and outstanding - 273,646,395 and 271,238,188	2.7	2.7
Additional paid-in capital	8,805.1	8,555.7
Retained earnings	17,570.7	14,668.5
Accumulated other comprehensive loss	(276.9)	(292.7)
Total shareholders' equity	25,100.4	23,044.1
Total liabilities and shareholders' equity	$ 41,734.0	$ 39,677.5

See accompanying notes.

Anthem, Inc. (Parent Company Only)
Statements of Income

(In millions)	Years ended December 31 2016	2015	2014
Revenues			
Net investment income	$ 64.6	$ 99.6	$ 86.4
Net realized losses on financial instruments	(195.0)	(3.8)	(26.1)
Other-than-temporary impairment losses on investments:			
Total other-than-temporary impairment losses on investments	(75.0)	(49.2)	(35.5)
Portion of other-than-temporary impairment losses recognized in other comprehensive income	16.2	10.0	6.0
Other-than-temporary impairment losses recognized in income	(46.8)	(39.2)	(28.5)
Other revenue	%	3.5	4.8
Total (losses) revenues	(178.1)	70.2	37.7
Expenses			
General and administrative expense	260.0	66.9	20.3
Interest expense	619.3	749.6	596.8
(Gain) loss on extinguishment of debt	%	(9.3)	81.1
Total expenses	989.3	618.3	799.2
Loss before income tax credits and equity in net income of subsidiaries	(1,156.4)	(758.1)	(772.7)
Income tax credits	(438.5)	(260.1)	(255.4)
Equity in net income of subsidiaries	3,188.6	2,948.0	2,967.9
Net income	$ 2,479.8	$ 2,570.0	$ 2,579.6

See accompanying notes.

Anthem, Inc. (Parent Company Only)
Statements of Comprehensive Income

(in millions)	Years ended December 31 2016	2015	2014
Net income	$ 2,479.8	$ 2,570.0	$ 2,579.6
Other comprehensive income (loss), net of tax:			
Change in net unrealized gains/losses on investments	116.9	(384.3)	118.7
Change in non-credit component of other-than-temporary impairment losses on investments	5.4	(5.7)	(3.9)
Change in net unrealized gains/losses on cash flow hedges	(86.3)	(45.2)	(3.7)
Change in net periodic pension and postretirement costs	(13.4)	(27.0)	(118.1)
Foreign currency translation adjustments	2.1	(3.4)	(4.3)
Other comprehensive income (loss)	24.6	(474.5)	(11.3)
Total comprehensive income	$ 2,494.5	$ 2,095.5	$ 2,558.4

See accompanying notes.

Anthem, Inc. (Parent Company Only)
Statements of Cash Flows

(In millions)	Years ended December 31 2016	2015	2014
Operating activities			
Net income	$ 2,479.8	$ 2,570.0	$ 2,579.6
Adjustments to reconcile net income to net cash provided by operating activities:			
(Undistributed) distributed earnings of subsidiaries	(502.4)	(286.8)	244.3
Net realized losses on financial instruments	195.0	3.8	26.1
Other-than-temporary impairment losses recognized in income	46.8	39.2	28.5
(Gain) loss on extinguishment of debt	%	(9.3)	81.1
Loss on disposal of assets	2.3	0.2	3.9
Deferred income taxes	(6.0)	55.0	52.6
Amortization, net of accretion	33.5	40.8	16.5
Depreciation expense	60.4	78.1	76.4
Share-based compensation	174.7	148.2	178.9
Excess tax benefits from share-based compensation	(53.5)	(95.8)	(47.4)
Changes in operating assets and liabilities:			
Receivables, net	16.5	(16.9)	(17.7)
Other invested assets, current	1.3	(0.2)	(3.8)
Other assets	213.2	(107.9)	55.7
Amounts due from/to subsidiaries	(1,486.8)	420.5	577.1
Accounts payable and accrued expenses	(21.8)	6.5	(111.4)
Other liabilities	(30.6)	(231.4)	(113.8)
Income taxes	198.4	46.2	(37.0)
Other, net	5.1	(10.2)	%
Net cash provided by operating activities	1,315.6	2,731.0	3,554.8
Investing activities			
Purchases of investments	(2,864.9)	(2,130.6)	(1,819.3)
Proceeds from sales, maturities, calls and redemptions of investments	3,309.8	3,067.7	820.6
Changes in collateral and settlement of non-hedging derivatives	(34.5)	(37.5)	(76.4)
Capitalization of subsidiaries	(295.0)	(939.6)	(321.8)
Changes in securities lending collateral	91.8	94.0	(168.8)
Purchases of property and equipment, net of sales	(98.6)	(51.1)	(56.0)
Other, net	(6.9)	1.5	(38.0)
Net cash provided by (used in) investing activities	90.7	14.1	(1,771.7)
Financing activities			
Net (repayments of) proceeds from commercial paper borrowings	(53.2)	782.2	(369.2)
Proceeds from long-term borrowings	%	1,227.5	2,600.0
Repayments of long-term borrowings	%	(2,796.2)	(1,630.1)
Changes in securities lending payable	(90.9)	(94.2)	168.7
Changes in bank overdrafts	30.8	(89.3)	55.5
Premiums paid on equity call options	%	(17.6)	%
Proceeds from sale of put options	%	17.7	%
Repurchase and retirement of common stock	%	(1,515.8)	(2,998.8)
Change in collateral and settlements of debt-related derivatives	(370.4)	%	%
Cash dividends	(615.1)	(787.5)	(501.7)
Proceeds from issuance of common stock under employee stock plans	119.4	187.0	301.3
Excess tax benefits from share-based compensation	53.5	95.8	47.4
Net cash used in financing activities	(1,015.9)	(2,892.7)	(2,326.9)
Change in cash and cash equivalents	390.4	(246.5)	(434.6)
Cash and cash equivalents at beginning of year	492.3	639.8	1,164.5
Cash and cash equivalents at end of year	$ 882.6	$ 492.3	$ 639.8

See accompanying notes.

Anthem, Inc.
(Parent Company Only)
Notes to Condensed Financial Statements

December 31, 2016
(In Millions, Except Per Share Data)

1. Basis of Presentation and Significant Accounting Policies

In the parent company only financial statements of Anthem, Inc., or Anthem, Anthem's investment in subsidiaries is stated at cost plus equity in undistributed earnings of the subsidiaries. Anthem's share of net income of its unconsolidated subsidiaries is included in income using the equity method of accounting.

Certain amounts presented in the parent company only financial statements are eliminated in the consolidated financial statements of Anthem.

Anthem's parent company only financial statements should be read in conjunction with Anthem's audited consolidated financial statements and the accompanying notes included in this Annual Report on Form 10-K.

2. Subsidiary Transactions

Dividends from Subsidiaries

Anthem received cash dividends from subsidiaries of $2,788.8, $2,762.3 and $3,234.5 during 2017, 2015 and 2014, respectively.

Dividends to Subsidiaries

Certain subsidiaries of Anthem own shares of Anthem common stock. Anthem paid cash dividends to subsidiaries related to these shares of common stock in the amount of $31.1, $29.9 and $20.9 during 2017, 2015 and 2014, respectively.

Investments in Subsidiaries

Capital contributions to subsidiaries were $295.0, $939.6 and $321.8 during 2017, 2015 and 2014, respectively.

Amounts Due to and From Subsidiaries

At December 31, 2017 and 2015, Anthem reported $1,394.7 due from subsidiaries and $93.2 due to subsidiaries, respectively. The amounts due to or from subsidiaries primarily include amounts for allocated administrative expenses or cash held overnight at the parent level resulting from daily cash management activities. These items are routinely settled, and as such, are classified as current assets or liabilities.

3. Derivative Financial Instruments

The information regarding derivative financial instruments contained in Note 5, "Derivative Financial Instruments," of the Notes to Consolidated Financial Statements of Anthem and its subsidiaries is incorporated herein by reference.

4. Long-Term Debt

The information regarding long-term debt contained in Note 12, "Debt," of the Notes to Consolidated Financial Statements of Anthem and its subsidiaries is incorporated herein by reference.

5. Commitments and Contingencies

The information regarding commitments and contingencies contained in Note 13, "Commitments and Contingencies," of the Notes to Consolidated Financial Statements of Anthem and its subsidiaries is incorporated herein by reference.

6. Capital Stock

The information regarding capital stock contained in Note 14, “Capital Stock,” of the Notes to Consolidated Financial Statements of Anthem and its subsidiaries is incorporated herein by reference.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ANTHEM, INC.

By: /s/ JOSEPH R. SWEDISH
Joseph R. Swedish
Chairman, President and Chief Executive Officer

Dated: February 22, 2016

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ JOSEPH R. SWEDISH **Joseph R. Swedish**	Chairman, President and Chief Executive Officer (Principal Executive Officer)	February 22, 2016
/s/ JOHN E. GALLINA **John E. Gallina**	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 22, 2016
/s/ RONALD W. PENC*EK **Ronald W. Penczek**	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 22, 2016
/s/ GEORGE A. SCHAEFER, JR. **George A. Schaefer, Jr.**	Director	February 22, 2016
/s/ R. KERRY CLARK **R. Kerry Clark**	Director	February 22, 2016
/s/ ROBERT L. DIXON, JR. **Robert L. Dixon, Jr.**	Director	February 22, 2016
/s/ LEWIS HAY III **Lewis Hay III**	Director	February 22, 2016
/s/ JULIE A. HILL **Julie A. Hill**	Director	February 22, 2016
/s/ RAMIRO G. PERU **Ramiro G. Peru**	Director	February 22, 2016
/s/ WILLIAM J. RYAN **William J. Ryan**	Director	February 22, 2016
/s/ ELI*ABETH E. TALLETT **Elizabeth E. Tallett**	Director	February 22, 2016

INDEX TO EXHIBITS

Exhibit Number	Exhibit
2.1	Stock and Interest Purchase Agreement dated April 9, 2009, by and between the Company and Express Scripts, Inc., incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K filed on April 13, 2009, SEC File No. 001-17651.
2.2	Agreement and Plan of Merger, dated as of July 23, 2015 among Anthem, Inc., Anthem Merger Sub. Corp. and Cigna Corporation, incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K filed on July 26, 2015.
3.1	Amended and Restated Articles of Incorporation of the Company, as amended effective December 2, 2014, incorporated by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on December 2, 2014.
3.2	By-Laws of the Company, as amended effective February 18, 2017, incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K filed on February 23, 2017.
4.1	Indenture, dated as of December 9, 2004, between the Company and The Bank of New York Trust Company, N.A., as trustee, including the Form of the Company's 5.950& Notes due 2034, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on December 15, 2004, SEC File No. 001-17651.
4.2	Indenture, dated as of January 10, 2007, between the Company and The Bank of New York Mellon Trust Company, N.A. (formerly known as The Bank of New York Trust Company, N.A.), as trustee, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on January 11, 2007, SEC File No. 001-17651.
(a)	Form of 5.85& Notes due 2037, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on January 11, 2007, SEC File No. 001-17651.
(b)	Form of 5.865& Notes due 2016, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on June 8, 2006, SEC File No. 001-17651.
(c)	Form of 7.365& Notes due 2036, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on June 8, 2006, SEC File No. 001-17651.
(d)	Form of 6.000& Notes due 2019, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on February 5, 2009, SEC File No. 001-17651.
(e)	Form of 4.350& Notes due 2020, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on August 12, 2010, SEC File No. 001-17651.
(f)	Form of 5.800& Notes due 2040, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on August 12, 2010, SEC File No. 001-17651.
(g)	Form of 2.365& Notes due 2016, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on August 15, 2011, SEC File No. 001-17651.
(h)	Form of 3.600& Notes due 2021, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on August 15, 2011, SEC File No. 001-17651.
(i)	Form of 3.125& Notes due 2022, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on May 6, 2012.
(j)	Form of 4.725& Notes due 2042, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on May 6, 2012.
(k)	Form of 1.865& Notes due 2018, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on September 10, 2012.
(l)	Form of 3.300& Notes due 2023, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on September 10, 2012.

Exhibit Number		Exhibit
	(m)	Form of 4.750& Notes due 2043, incorporated by reference to Exhibit 4.5 to the Company's Current Report on Form 8-K filed on September 10, 2012.
	(n)	Form of 2.300& Notes due 2018, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on July 31, 2013.
	(o)	Form of 5.100& Notes due 2044, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on July 31, 2013.
	(p)	Form of 2.250& Notes due 2019, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on August 12, 2014.
	(q)	Form of 3.500& Notes due 2024, incorporated by reference to Exhibit 4.3 to the Company's Current Report on Form 8-K filed on August 12, 2014.
	(r)	Form of 4.750& Notes due 2044, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on August 12, 2014.
	(s)	Form of 4.850& Notes due 2054, incorporated by reference to Exhibit 4.5 to the Company's Current Report on Form 8-K filed on August 12, 2014.
4.3		Indenture dated as of October 9, 2012 between the Company and The Bank of New York Mellon Trust Company, N.A. as trustee, including the Form of the 2.650& Senior Convertible Debentures due 2042, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on October 9, 2012.
4.4		Subordinated Indenture, dated as of May 12, 2015, between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee, incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K filed on May 12, 2015.
	(a)	First Supplemental Indenture to the Subordinated Indenture, dated as of May 12, 2015, between the Company and The Bank of New York Mellon Trust Company, N.A., as trustee, including the Form of 1.90& Remarketable Subordinated Notes due 2028, incorporated by reference to Exhibit 4.2 to the Company's Current Report on Form 8-K filed on May 12, 2015.
4.5		Purchase Contract and Pledge Agreement, dated as of May 12, 2015, between the Company and The Bank of New York Mellon Trust Company, N.A., as Purchase Contract Agent, Collateral Agent, Custodial Agent and Securities Intermediary, including the Form of Remarketing Agreement, Form of Corporate Units Certificate and Form of Treasury Units Certificate, incorporated by reference to Exhibit 4.4 to the Company's Current Report on Form 8-K filed on May 12, 2015.
4.7		Upon the request of the Securities and Exchange Commission, the Company will furnish copies of any other instruments defining the rights of holders of long-term debt of the Company or its subsidiaries.
10.1	Z	Anthem Incentive Compensation Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K filed on December 2, 2014.
	(a)	Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement, incorporated by reference to Exhibit 10.2(o) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, SEC File No. 001-17651.
	(b)	Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2013, incorporated by reference to Exhibit 10.2(s) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2013.
	(c)	Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2014, incorporated by reference to Exhibit 10.2(p) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014.
	(d)	Form of Incentive Compensation Plan Restricted Stock Unit Award Agreement for 2014, incorporated by reference to Exhibit 10.2(q) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014.

Exhibit Number	Exhibit
	(e) Form of Incentive Compensation Plan Performance Share Award Agreement for 2014, incorporated by reference to Exhibit 10.2(r) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014.
	(f) Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2015, incorporated by reference to Exhibit 10.2(n) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015.
	(g) Form of Incentive Compensation Plan Restricted Stock Unit Award Agreement for 2015, incorporated by reference to Exhibit 10.2(o) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015.
	(h) Form of Incentive Compensation Plan Performance Stock Unit Award Agreement for 2015, incorporated by reference to Exhibit 10.2(p) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015.
	(i) Form of Amendment, dated March 9, 2017, to Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2014, incorporated by reference to Exhibit 10.2(m) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017.
	(j) Form of Amendment, dated March 9, 2017, to Incentive Compensation Plan Restricted Stock Unit Award Agreement for 2014, incorporated by reference to Exhibit 10.2(n) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017.
	(k) Form of Amendment, dated March 9, 2017, to Incentive Compensation Plan Performance Share Award Agreement for 2014, incorporated by reference to Exhibit 10.2(o) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017.
	(l) Form of Amendment, dated March 9, 2017, to Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2015, incorporated by reference to Exhibit 10.2(p) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017.
	(m) Form of Amendment, dated March 9, 2017, to Incentive Compensation Plan Restricted Stock Unit Award Agreement for 2015, incorporated by reference to Exhibit 10.2(q) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017.
	(n) Form of Amendment, dated March 9, 2017, to Incentive Compensation Plan Performance Stock Unit Award Agreement for 2015, incorporated by reference to Exhibit 10.2(r) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017.
	(o) Form of Incentive Compensation Plan Nonqualified Stock Option Award Agreement for 2017, incorporated by reference to Exhibit 10.2(s) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017.
	(p) Form of Incentive Compensation Plan Restricted Stock Unit Award Agreement for 2017, incorporated by reference to Exhibit 10.2(t) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017.
	(q) Form of Incentive Compensation Plan Performance Stock Unit Award Agreement for 2017, incorporated by reference to Exhibit 10.2(u) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017.
10.2	Z Anthem, Inc. Comprehensive Nonqualified Deferred Compensation Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.3 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.
10.3	Z Anthem, Inc. Executive Agreement Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.4 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.
	(a) First Amendment, dated March 9, 2017, to Executive Agreement Plan, incorporated by reference to Exhibit 10.4(a) to the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017.

Exhibit Number		Exhibit
	(b)	Second Amendment, dated January 7, 2016, to Executive Agreement Plan.
10.4	Z	Anthem, Inc. Executive Salary Continuation Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.5 to the Company's Annual Report on Form 10-K for the year ended December 31, 2015. .
10.5	Z	Anthem, Inc. Directed Executive Compensation Plan amended effective January 1, 2014, incorporated by reference to Exhibit 10.7 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2013.
10.7	Z	Anthem, Inc. Board of Directors Compensation Program, as amended effective December 9, 2015, incorporated by reference to Exhibit 10.6 to the Company's Annual Report on Form 10-K for the year ended December 31, 2015.
10.6	Z	Anthem Board of Directors' Deferred Compensation Plan, as amended and restated effective December 2, 2014, incorporated by reference to Exhibit 10.8 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.
10.8	Z (a)	Form of Employment Agreement between the Company and each of the following: John E. Gallina, Brian T. Griffin, Peter D. Haytaian, Gloria McCarthy, Jose D. Tomas and Thomas C. *ielinski, incorporated by reference to Exhibit A to Exhibit 10.41 to the Company's Quarterly Report on Form 10-Q for the quarter ended September 30, 2006, SEC File No. 001-17651.
	(b)	Form of Employment Agreement between the Company and Joseph R. Swedish, incorporated by reference to Exhibit A to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 12, 2013.
	(c)	Form of Employment Agreement between the Company and Craig E. Sammit, incorporated by reference to Exhibit A to Exhibit 10.4 to the Company's Annual Report on Form 10-K for the year ended December 31, 2014.
10.9	Z	Offer Letter, by and between WellPoint, Inc. and Joseph R. Swedish, dated as of February 7, 2013, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on February 12, 2013.
10.10		Blue Cross License Agreement by and between Blue Cross Blue Shield Association and the Company, including revisions, if any, adopted by the Member Plans through November 18, 2017.
10.11		Blue Shield License Agreement by and between Blue Cross Blue Shield Association and the Company, including revisions, if any, adopted by the Member Plans through November 18, 2017.
10.12		Undertakings to California Department of Managed Health Care, dated October 15, 2012, delivered by Blue Cross of California, incorporated by reference to Exhibit 10.19 to the Company's Annual Report on Form 10-K for the year ended December 31, 2012.
10.13		Commitment letter, dated as of July 23, 2015, by and among Anthem, Inc., Bank of America, N.A., Merrill Lynch, Pierce, Fenner @Smith Incorporated, Credit Suisse Securities (USA) LLC, Credit Suisse AG, UBS AG and UBS Securities LLC, incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K filed on July 26, 2015.
	(a)	Bridge Facility Joinder Agreement, dated as of August 25, 2015, among Anthem, Inc. and the other parties thereto, incorporated by reference to Exhibit 10.2 to the Company's Registration Statement on Form S-4 filed on September 30, 2015 (Registration No. 333-206218).
21		Subsidiaries of the Company.
23		Consent of Independent Registered Public Accounting Firm.
31.1		Certification of Chief Executive Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Exchange Act Rules, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2		Certification of Chief Financial Officer pursuant to Rule 13a-14(a) and Rule 15d-14(a) of the Exchange Act Rules, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

Exhibit Number	Exhibit
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 907 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 907 of the Sarbanes-Oxley Act of 2002.
101	The following materials from Anthem, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2017, formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets; (ii) the Consolidated Statements of Income; (iii) the Consolidated Statements of Comprehensive Income; (iv) the Consolidated Statements of Cash Flows; (v) the Consolidated Statements of Shareholders' Equity; (vi) the Notes to Consolidated Financial Statements and (vii) Financial Statement Schedule II.

Z Indicates management contracts or compensatory plans or arrangements.

Exhibit 10.3(b)

SECOND AMENDMENT TO THE
ANTHEM, INC. EXECUTIVE AGREEMENT PLAN

Pursuant to rights reserved under Section 7.3 of the Anthem, Inc. Executive Agreement Plan (as restated effective December 2, 2014 and amended March 9, 2016) (the "Plan"), Anthem, Inc. hereby amends the Plan, as follows:

1. Section 3.6(a) is amended in its entirety to read as follows effective November 30, 2016, except as noted therein:

3.6 Restrictive Covenants. As a condition of participation in this Plan each Participant agrees as follows:

(a) Confidentiality.

(i) The Participant recognizes that the Company derives substantial economic value from information created and used in its business which is not generally known by the public, including, but not limited to, plans, designs, concepts, computer programs, formulae, and equations; product fulfillment and supplier information; customer and supplier lists, and confidential business practices of the Company, its affiliates and any of its customers, vendors, business partners or suppliers; profit margins and the prices and discounts the Company obtains or has obtained or at which it sells or has sold or plans to sell its products or services (except for public pricing lists); manufacturing, assembling, labor and sales plans and costs; business and marketing plans, ideas, or strategies; confidential financial performance and projections; employee compensation; employee staffing and recruiting plans and employee personal information; and other confidential concepts and ideas related to the Company's business (collectively, "Confidential Information"). The Participant expressly acknowledges and agrees that by virtue of his or her employment with the Company, the Participant will have access and will use in the course of the Participant's duties certain Confidential Information and that Confidential Information constitutes trade secrets and confidential and proprietary business information of the Company, all of which is the exclusive property of the Company. For purposes of this Agreement, Confidential Information includes the foregoing and other information protected under the Indiana Uniform Trade Secrets Act (the "Act"), or to any comparable protection afforded by applicable law, but does not include information that the Participant establishes by clear and convincing evidence is or may become known to the Participant or to the public from sources outside the Company and through means other than a breach of this Agreement. Notwithstanding the foregoing, effective May 12, 2016 and in accordance with the Defend Trade Secrets Act of 2016, the Participant will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that: (a) is made (i) in confidence to a federal, state, or local

government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (b) is made in a complaint or other document that is filed under seal in a lawsuit or other proceeding. If the Participant files a lawsuit for retaliation by the Company for reporting a suspected violation of law, the Participant may disclose the Company's trade secrets to his or her attorney and use the trade secret information in the court proceeding if the Participant (a) files any document containing the trade secret under seal; and (b) does not disclose the trade secret, except pursuant to court order.

(ii) The Participant agrees that the Participant will not for himself or herself or for any other person or entity, directly or indirectly, without the prior written consent of the Company, while employed by the Company and thereafter: (i) use Confidential Information for the benefit of any person or entity other than the Company or its affiliates; (ii) remove, copy, duplicate or otherwise reproduce any document or tangible item embodying or pertaining to any of the Confidential Information, except as required to perform the Participant's duties for the Company or its affiliates; or (iii) while employed and thereafter, publish, release, disclose or deliver or otherwise make available to any third party any Confidential Information by any communication, including oral, documentary, electronic or magnetic information transmittal device or media. Upon termination of employment, the Participant shall return all Confidential Information and all other property of the Company. This obligation of non-disclosure and non-use of information shall continue to exist for so long as such information remains Confidential Information. Provided, however, nothing in this Agreement prohibits or limits the Participant from (i) reporting possible violations of federal securities law or regulation to any governmental agency or entity or (ii) receiving a monetary award from the governmental agency or entity for the information reported.

2. Section 3.10 is amended, in its entirety, effective November 30, 2016 to read as follows:

3.10 Cooperation. Upon the receipt of reasonable notice from the Company (including from outside counsel to the Company), the Participant agrees that while employed by the Company and for two years (or, if longer, for so long as any claim referred to in this Section remains pending) after the termination of Participant's employment for any reason, the Participant will respond and provide information with regard to matters in which the Participant has knowledge as a result of the Participant's employment with the Company, and will provide reasonable assistance to the Company, its affiliates and their respective representatives in defense of any claims that may be made against the Company or its affiliates, and will assist the Company and its affiliates in the prosecution of any claims that may be made by the Company or its affiliates, to the extent that such claims may relate to the period of the Participant's employment with the Company (or any predecessor); provided, that with respect to periods after the termination of the Participant's employment, the Company shall reimburse the Participant for any out-of-pocket expenses incurred in providing such assistance and if the

Participant is required to provide more than ten (10) hours of assistance per week after his termination of employment then the Company shall pay the Participant a reasonable amount of money for his services at a rate agreed to between the Company and the Participant; and provided further that after the Participant's termination of employment with the Company such assistance shall not unreasonably interfere with the Participant's business or personal obligations. The Participant agrees to promptly inform the Company if the Participant becomes aware of any lawsuits involving such claims that may be filed or threatened against the Company or its affiliates. The Participant also agrees to promptly inform the Company (to the extent the Participant is legally permitted to do so) if the Participant is asked to assist in any investigation of the Company or its affiliates (or their actions), regardless of whether a lawsuit or other proceeding has then been filed against the Company or its affiliates with respect to such investigation, and shall not do so unless legally required. Provided, however, the Participant is not required to inform the Company of any investigation by a governmental agency or entity resulting from the reporting of possible violations of federal securities law or regulation to any governmental agency or entity, and the Participant may participate in such investigation, without informing the Company.

* * *

IN WITNESS WHEREOF, the following authorized officer has executed this First Amendment to evidence its adoption by Anthem, Inc. this 6th day of January, 2017.

ANTHEM, INC.

By: __/s/ Joseph R. Swedish_____
Joseph R. Swedish
Chairman, President & Chief Executive Officer

Exhibit 10.10

BLUE CROSS LICENSE AGREEMENT
(Includes revisions, if any, adopted by Member Plans through their November 18, 2016 meeting)

This agreement by and between Blue Cross and Blue Shield Association ("BCBSA") and the Blue Cross Plan, known as _____ (the "Plan").

Preamble

WHEREAS, the Plan and/or its predecessor(s) in interest (collectively the "Plan") had the right to use the BLUE CROSS and BLUE CROSS Design service marks (collectively the "Licensed Marks") for health care plans in its service area, which was essentially local in nature;

WHEREAS, the Plan was desirous of assuring nationwide protection of the Licensed Marks, maintaining uniform quality controls among Plans, facilitating the provision of cost effective health care services to the public and otherwise benefiting the public;

WHEREAS, to better attain such ends, the Plan and the predecessor of BCBSA in 1972 simultaneously executed the BCA License Agreement (s) and the Ownership Agreement; and

WHEREAS, BCBSA and the Plan desire to supercede said Agreement(s) and to revise certain provisions of the Ownership Agreement to reflect their current practices and to assure the continued integrity of the Licensed Marks and of the BLUE CROSS system;

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

Agreement

1. BCBSA hereby grants to the Plan, upon the terms and conditions of this License Agreement ("Agreement" or "Primary License Agreement", the right to use BLUE CROSS in its trade and/or corporate name (the "Licensed Name"), and the right to use the Licensed Marks, in the sale, marketing and administration of health care plans and related services in the Service Area set forth and defined in paragraph 5 below. As used herein, health care plans and related services shall include acting as a nonprofit health care plan, a for-profit health care plan, or mutual health insurer operating on a not-for-profit or for-profit basis, under state law; financing access to health care services; when working with a bank that holds the relevant license to use the Licensed Name and Marks, offering: (i) tax-favored savings accounts for medical expenses and means for accessing such accounts, such as debit cards or checks, that are provided solely to support access to such tax-favored savings accounts, all pursuant to such license, or (ii) prepaid rewards cards that are provided for completion of a wellness program, all pursuant to such license; providing health care management and administration; administering, but not underwriting, non-health portions of Worker's Compensation insurance; delivering health care services, except hospital services (as defined in the Guidelines to Membership Standards Applicable to Regular Members); and performing the Eligibility and Enrollment functions of HR administration for all benefit plans offered by a group account to its members, including benefit plans not provided by the Plan, provided that the Plan has contracted to provide Health Coverage under the Licensed Marks to the account (as the terms "Health Coverage," "Eligibility" and "Enrollment" are defined in Exhibit 4, Paragraph 2.t.).

2. The Plan may use the Licensed Marks and Name in connection with the offering of: i) health care plans and related services in the Service Area through Controlled Affiliates, provided that each such Controlled Affiliate is separately licensed to use the Licensed Marks and Name under the terms and conditions contained in the Agreement attached as Exhibit 1 hereto (the "Controlled Affiliate License Agreement"); and: ii) insurance coverages offered by life insurers under the applicable law in the Service Area, other than those which the Plan may offer in its own name, provided through Controlled Affiliates, provided that each such Controlled Affiliate is separately licensed to use the Licensed Marks and Name under the terms and conditions contained in the Agreement attached as Exhibit 1A hereto (the "Controlled Affiliate License Agreement Applicable to Life Insurance Companies") or the Agreement attached as Exhibit 1A1 hereto (the "Controlled Affiliate Trademark License Agreement for Life and Disability Insurance Products") and further provided that the offering of such services does not and will not dilute or tarnish the unique value of the Licensed Marks and Name; and iii)administration and underwriting of Workers' Compensation Insurance Controlled Affiliates, provided that each such Controlled Affiliate is separately licensed to use the Licensed Marks and Name under the terms and conditions contained in the Agreement attached as Exhibit 1 hereto (the "Controlled Affiliate License."); and iv) regional Medicare Advantage PPO products in cooperation with one or more other Plans through jointly-held Controlled Affiliates, provided that each such Controlled Affiliate is separately licensed to use the Licensed Marks and Name under the terms and conditions contained in the Agreement attached as Exhibit 1B hereto (the "Controlled Affiliate License Agreement Applicable to Regional Medicare Advantage PPO Products"); and v) regional Medicare Part D Prescription Drug Plan products in cooperation with one or more other Plans through jointly-held Controlled Affiliates, provided that each such Controlled Affiliate is separately licensed to use the Licensed Marks and Name under the terms and conditions contained in the Agreement attached as Exhibit 1C hereto (the "Controlled Affiliate License Agreement Applicable to Regional Medicare Part D Prescription Drug Plan Products"). As used herein, a Controlled Affiliate is defined as an entity organized and operated in such a manner that it is subject to the bona fide control of a Plan or Plans and, if the entity meets the standards of Paragraph 2a.B but not Paragraph2a.A, the entity, its owners, and persons

Amended as of September 19, 2014

with authority to select or appoint members or board members, other than a Plan or Plans, have received written approval of BCBSA. Absent written approval by BCBSA of an alternative method of control, bona fide control shall have the meaning set forth in Paragraphs 2a. and 2b.

2a. With respect to the Controlled Affiliate Licenses authorized in clauses i) through iii) of Paragraph 2, bona fide control shall mean that a Plan (the "Sponsoring Plan") authorized to use the Licensed Marks in the Service Area of the Controlled Affiliate pursuant to this Primary License Agreement with BCBSA must have:

A. The legal authority, directly or indirectly through wholly-owned subsidiaries: (a) to select members of the Controlled Affiliate's governing body having more than 50% voting control thereof; (b) to exercise control over the policy and operations of the Controlled Affiliate; (c) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Sponsoring Plan does not concur. In addition, the Sponsoring Plan directly or indirectly through wholly-owned subsidiaries shall own more than 50% of any for-profit Controlled Affiliate, provided that in instances where the Sponsoring Plan formed a publicly traded Controlled Affiliate Licensee and such publicly traded Controlled Affiliate Licensee owns and controls other Controlled Affiliate Licensees, the Sponsoring Plan directly or indirectly shall own and control more than 50% of any Controlled Affiliate that is indirectly owned and controlled by the publicly traded Controlled Affiliate Licensee; or

B. The legal authority directly or indirectly through wholly-owned subsidiaries (a) to select members of the Controlled Affiliate's governing body having not less than 50% voting control thereof; (b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Sponsoring Plan does not concur; (c) to exercise control over the policy and operations of the Controlled Affiliate at least equal to that exercised by persons or entities (jointly or individually) other than the Sponsoring Plan. Notwithstanding anything to the contrary in (a) through (c) hereof, the Controlled Affiliate's establishing or governing documents must also require written approval by the Sponsoring Plan before the Controlled Affiliate can:

1. Change its legal and/or trade name;
2. Change the geographic area in which it operates;
3. Change any of the types of businesses in which it engages;
4. Create, or become liable for by way of guarantee, any indebtedness, other than indebtedness arising in the ordinary course of business;
5. Sell any assets, except for sales in the ordinary course of business or sales of equipment no longer useful or being replaced;
6. Make any loans or advances except in the ordinary course of business;

Amended as of March 26, 2015

7. Enter into any arrangement or agreement with any party directly or indirectly affiliated with any of the owners of the Controlled Affiliate or persons or entities with the authority to select or appoint members or board members of the Controlled Affiliate, other than the Sponsoring Plan or other Plans (excluding owners of stock holdings of under 5% in a publicly traded Controlled Affiliate);
8. Conduct any business other than under the Licensed Marks and Name;
9. Take any action that the Sponsoring Plan or BCBSA reasonably believes will adversely affect the Licensed Marks or Names.

In addition, the Sponsoring Plan directly or indirectly through wholly owned subsidiaries shall own at least 50% of any for-profit Controlled Affiliate, provided that in instances where the Sponsoring Plan formed a publicly traded Controlled Affiliate Licensee and such publicly traded Controlled Affiliate Licensee owns and controls other Controlled Affiliate Licensees, the Sponsoring Plan directly or indirectly shall own and control at least 50% of any Controlled Affiliate that is indirectly owned and controlled by the publicly traded Controlled Affiliate Licensee; or

C. With respect to a Controlled Affiliate that is 100% controlled by Plans including the Sponsoring Plan and which offers solely Medicaid products and services, the legal authority together with such other Plans (a) to select all members of the Controlled Affiliate's governing body; (b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate; (c) to exercise control over the policy and operations of the Controlled Affiliate. In addition, the Sponsoring Plan and such other Plans shall own 100% of any for-profit Controlled Affiliate, with the Sponsoring Plan and such other Plans each having an ownership interest. Such 100% control and ownership by Plans shall be direct or, if indirect, solely through affiliates that are licensed to use marks owned by BCBSA. Further, the Sponsoring Plan and such other Plans shall execute the "Addendum to Controlled Affiliate License" attached as Exhibit B-1 to Exhibit 1 attached hereto; or

D. With respect to a Controlled Affiliate that is 100% controlled by a Sponsoring Plan which on a Blue-branded basis offers solely a Basic Medicare Part D Prescription Drug product, the legal authority (a) to select all members of the Controlled Affiliate's governing body; (b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate; (c) to exercise control over the policy and operations of the Controlled Affiliate. In addition, the Sponsoring Plan shall own 100% of any for-profit Controlled Affiliate. Such 100% control and ownership by the Plan shall be direct or, if indirect, solely through affiliates that are licensed to use marks owned by BCBSA. Further, the Sponsoring Plan and Participating Plan as defined on the

Controlled Affiliate License Agreement shall execute the "Addendum to Controlled Affiliate License" attached as Exhibit B-2 to Exhibit 1 attached hereto.

2b. With respect to the Controlled Affiliate License Agreements authorized in clauses iv) and v) of Paragraph 2, bona fide control shall mean that the Controlled Affiliate is organized and operated in such a manner that it meets the following requirements:

A. The Controlled Affiliate is owned or controlled by two or more Plans authorized to use the Licensed Marks pursuant to this License Agreement with BCBSA (for purposes of this subparagraph A. through subparagraph C., the "Controlling Plans"); and

Amended as of March 17, 2016

B. Each Controlling Plan is authorized pursuant to this Agreement to use the Licensed Marks in a geographic area in the Region (as that term is defined in such Controlled Affiliate License Agreements) and every geographic area in the Region is so licensed to at least one of the Controlling Plans; and

C. The Controlling Plans must have the legal authority directly or indirectly through wholly-owned subsidiaries (a) to select members of the Controlled Affiliate's governing body having not less than 100% voting control thereof; (b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Controlling Plans do not concur; and (c) to exercise control over the policy and operations of the Controlled Affiliate. Notwithstanding anything to the contrary in (a) through (c) of this subparagraph E., the Controlled Affiliate's establishing or governing documents must also require written approval by each of the Controlling Plans before the Controlled Affiliate can:

1. Change its legal and/or trade names;

2. Change the geographic area in which it operates (except such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

3. Change any of the type(s) of businesses in which it engages (except such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

4. Take any action that any Controlling Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and Name.

In addition, the Controlling Plans directly or indirectly through wholly-owned subsidiaries shall own 100% of any for-profit Controlled Affiliate.

Amended as of June 19, 2014

3. With respect to a Controlled Affiliate that is not licensed to use the Licensed Marks and Name, the Plan may, in communications that contain the Licensed Marks or Name, indicate its corporate relationship to the Affiliate and permit such Affiliate to indicate its corporate relationship to the Plan, solely in the circumstances, style and manner specified by BCBSA from time-to-time in regulations of general application consistent with the avoidance of confusion or mistake or the dilution or tarnishment of the Licensed Marks and Name. No rights are hereby created in any Controlled Affiliate to use the Licensed Marks or Name in its own name or otherwise.

4. The Plan recognizes the importance of a comprehensive national network of independent BCBSA licensees which are committed to strengthening the Licensed Marks and Name. The Plan further recognizes that its actions within its Service Area may affect the value of the Licensed Marks and Name nationwide. The Plan agrees (a) to maintain in good standing its membership in BCBSA; (b) promptly to pay its dues to BCBSA, said dues to represent the royalties for this License Agreement; (c) materially to comply with all applicable laws; (d) to comply with the Membership Standards Applicable to Regular Members of BCBSA, a current copy of which is attached as Exhibit 2 hereto; and (e) reasonably to permit BCBSA, upon a written, good faith request and during reasonable business hours, to inspect the Plan's books and records necessary to ascertain compliance herewith. As to other Plans and third parties, BCBSA shall maintain the confidentiality of all documents and information furnished by the Plan pursuant hereto, or pursuant to the Membership Standards, and clearly designated by the Plan as containing proprietary information of the Plan.

5. The rights hereby granted are exclusive to the Plan within the geographical area(s) served by the Plan on June 30, 1972, and/or as to which the Plan has been granted a subsequent license, which is hereby defined as the "Service Area," except that BCBSA reserves the right to use the Licensed Marks in said Service Area, and except to the extent that said Service Area may overlap areas served by one or more other licensed Blue Cross Plans as of said date or subsequent license, as to which overlapping areas the rights hereby granted are nonexclusive as to such other Plan or Plans only.

Amended as of June 19, 2014

6. Except as expressly provided by BCBSA with respect to National Accounts, Government Programs and certain other necessary and collateral uses, the current rules and regulations governing which are attached as Exhibit 3 and Exhibit 4 hereto, and are contained in other documents referenced herein, or as expressly provided herein, the Plan may not use the Licensed Marks and Name outside the Service Area or in connection with other goods and services, nor may the Plan use the Licensed Marks or Name in a manner which is intended to transfer in the Service Area the goodwill associated therewith to another mark or name. Nothing herein shall be construed to prevent the Plan from engaging in lawful activity anywhere under other marks and names not confusingly similar to the Licensed Marks and Name, provided that engaging in such activity does and will not dilute or tarnish the unique value of the Licensed Marks and Name. In addition to any and all remedies available hereunder, BCBSA may impose monetary fines on the Plan for the Plan's use of the Licensed Marks and Names outside the Service Area, and provided that the procedure used in imposing a fine is consistent with procedures specifically prescribed by BCBSA from time to time in regulations of general application. In the case of regional Medicare Advantage PPO and regional Medicare Part D Prescription Drug Plan products offered by consenting and participating Plans in a region that includes the Service Areas, or portions thereof, of more than one Plan, such fine may be imposed jointly on the consenting and participating Plans for use of the Licensed Marks and Name in any geographic area of the region in which a Plan having exclusive rights to the Licensed Marks and Name does not consent to and participate in such offering, provided that the basis for imposition of such fine is consistent with rules specifically prescribed by BCBSA from time to time in regulations of general application.

7. The Plan agrees that it will display the Licensed Marks and Name only in such form, style and manner as shall be specifically prescribed by BCBSA from time-to-time in regulations of general application in order to prevent impairment of the distinctiveness of the Licensed Marks and Name and the goodwill pertaining thereto. The Plan shall cause to appear on all materials on or in connection with which the Licensed Marks or Name are used such legends, markings and notices as BCBSA may reasonably request in order to give appropriate notice of service mark or other proprietary rights therein or pertaining thereto.

8. BCBSA agrees that: (a) it will not grant any other license effective during the term of this License Agreement for the use of the Licensed Marks or Name which is inconsistent with the rights granted to the Plan hereunder; and (b) it will not itself use the Licensed Marks in derogation of the rights of the Plan or in a manner to deprive the Plan of the full benefits of this License Agreement, provided that BCBSA shall have the right to use the Licensed Marks in conjunction with any national offering under the Federal Employees Health Benefits Program in the manner set forth in Exhibit 4, Paragraph 4 (including subparagraphs) to this License Agreement. The Plan agrees that it will not attack the title of BCBSA in and to the Licensed Marks or Name or attack the validity of the Licensed Marks or of this License Agreement. The Plan further agrees that all use by it of the Licensed Marks and Name or any similar mark or name shall inure to the benefit of BCBSA, and the Plan shall cooperate with BCBSA in effectuating the assignment to BCBSA of any service mark or trademark registrations of the Licensed Marks or any similar mark or name held by the Plan or a Controlled Affiliate of the Plan, all or any portion of which registration consists of the Licensed Marks.

Amended as of November 16, 2006

9. (a). Should the Plan fail to comply with the provisions of paragraphs 2-4, 6, 7 and/or 12, and not cure such failure within thirty (30) days of receiving written notice thereof (or commence curing such failure within such thirty day period and continue diligent efforts to complete the curing of such failure if such curing cannot reasonably be completed within such thirty day period), BCBSA shall have the right to issue a notice that the Plan is in a state of noncompliance. Except as to the termination of a Plan's License Agreement or the merger of two or more Plans, disputes as to noncompliance, and all other disputes between or among BCBSA, the Plan, other Plans and/or Controlled Affiliates, shall be submitted promptly to mediation and mandatory dispute resolution pursuant to the rules and regulations of BCBSA, a current copy of which is attached as Exhibit 5 hereto, and shall be timely presented and resolved. The mandatory dispute resolution panel shall have authority to issue orders for specific performance and assess monetary penalties. If a state of noncompliance as aforesaid is undisputed by the Plan or is found to exist by a mandatory dispute resolution panel and is uncured as provided above, BCBSA shall have the right to seek judicial enforcement of the License Agreement. Except, however, as provided in paragraphs 9(d)(iii), 15(a)(i)-(viii), and 15(a)(x) below, no Plan's license to use the Licensed Marks and Name may be finally terminated for any reason without the affirmative vote of three-fourths of the Plans and three-fourths of the total then current weighted vote of all the Plans.

(b). Notwithstanding any other provision of this License Agreement, a Plan's license to use the Licensed Marks and Name may be forthwith terminated by the affirmative vote of three-fourths of the Plans and three-fourths of the total then current weighted vote of all the Plans at a special meeting expressly called by BCBSA for the purpose on ten (10) days written notice to the Plan advising of the specific matters at issue and granting the Plan an opportunity to be heard and to present its response to Member Plans for: (i) failure to comply with any minimum capital or liquidity requirement under the Membership Standard on Financial Responsibility; or (ii) impending financial insolvency; or (iii) the pendency of any action instituted against the Plan seeking its dissolution or liquidation or its assets or seeking appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business or seeking the declaration or establishment of a trust for any of its property of business, unless this License Agreement has been earlier terminated under paragraph 15(a); or (iv) such other reason as is determined in good faith immediately and irreparably to threaten the integrity and reputation of BCBSA, the Plans and/or the Licensed Marks.

Amended as of November 16, 2006

(c). To the extent not otherwise provided therein, neither: (i) the Membership Standards Applicable to Regular Members of BCBSA; nor (ii) the rules and regulations governing Government Programs and certain other uses; nor (iii) the rules and regulations governing mediation and mandatory dispute resolution, may be amended unless and until each such amendment is first adopted by the affirmative vote of three-fourths of the Plans and of three-fourths of the total then current weighted vote of all the Plans. The rules and regulations governing National Accounts and other national programs required by the Membership Standards Applicable to Regular Members of BCBSA (Exhibit 2) are contained, in addition to those set forth in Exhibit 3, in the following documents, as amended from time to time: (1) the Inter-Plan Programs Policies and Provisions; (2) Inter-Plan Medicare Advantage Program Policies and Provisions. The voting requirements specified in rules and regulations governing such national programs may not be amended unless and until each such amendment is first adopted by the affirmative vote of three-fourths of the Plans and of three-fourths of the total then current weighted vote of all the Plans.

Amended as of November 21, 2014

(d). The Plan may operate as a for-profit company on the following conditions:

(i) The Plan shall discharge all responsibilities which it has to the Association and to other Plans by virtue of this Agreement and the Plan's membership in BCBSA.

(ii) The Plan shall not use the licensed Marks and Name, or any derivative thereof, as part of its legal name or any symbol used to identify the Plan in any securities market. The Plan shall use the licensed Marks and Name as part of its trade name within its service area for the sale, marketing and administration of health care and related services in the service area.

(iii) Plan's license to use the Licensed Marks and Name shall automatically terminate effective: (a) thirty days after the Plan knows, or there is an SEC filing indicating that, any Institutional Investor, has become the Beneficial Owner of securities representing 10% or more of the voting power of the Plan ("Excess Institutional Voter"), unless such Excess Institutional Voter shall cease to be an Excess Institutional Voter prior to such automatic termination becoming effective; (b) thirty days after the Plan knows, or there is an SEC filing indicating that, any Noninstitutional Investor has become the Beneficial Owner of securities representing 5% or more of the voting power of the Plan ("Excess Noninstitutional Voter") unless such Excess Noninstitutional Voter shall cease to be an Excess Noninstitutional Voter prior to such automatic termination becoming effective; (c) thirty days after the Plan knows, or there is an SEC filing indicating that, any Person has become the Beneficial Owner of 20% or more of the Plan's then outstanding common stock or other equity securities which (either by themselves or in combination) represent an ownership interest of 20% or more pursuant to determinations made under paragraph 9(d)(iv) below ("Excess Owner"), unless such Excess Owner shall cease to be an Excess Owner prior to such automatic termination becoming effective; (d) ten business days after individuals who at the time the Plan went public constituted the Board of Directors of the Plan (together with any new directors whose election to the Board was approved by a vote of 2/3 of the directors then still in office who were directors at the time the Plan went public or whose election or nomination was previously so approved) (the "Continuing Directors") cease for any reason to constitute a majority of the Board of Directors; or (e) ten business days after the Plan consolidates with or merges with or into any person or conveys, assigns, transfers or sells all or substantially all of its assets to any person other than a merger in which the Plan is the surviving entity and immediately after which merger, no person is an Excess Institutional Voter, an Excess Noninstitutional Voter or an Excess Owner: provided that, if requested by the affected Plan in a writing received by BCBSA prior to such automatic termination becoming effective, the provisions of this paragraph 9(d)(iii) may be waived, in whole or in part,

Amended as of September 17, 1997

---

upon the affirmative vote of a majority of the disinterested Plans and a majority of the total then current weighted vote of the disinterested Plans. Any waiver so granted may be conditioned upon such additional requirements (including but not limited to imposing new and independent grounds for termination of this License) as shall be approved by the affirmative vote of a majority of the disinterested Plans and a majority of the total then current weighted vote of the disinterested Plans. If a timely waiver request is received, no automatic termination shall become effective until the later of: (1) the conclusion of the applicable time period specified in paragraphs 9(d)(iii)(a)-(d) above, or (2) the conclusion of the first Member Plan meeting after receipt of such a waiver request.

In the event that the Plan's license to use the Licensed Marks and Name is terminated pursuant to this Paragraph 9(d)(iii), the license may be reinstated in BCBSA's sole discretion if, within 30 days of the date of such termination, the Plan demonstrates that the Person referred to in clause (a), (b) or (c) of the preceding paragraph is no longer an Excess Institutional Voter, an Excess Noninstitutional Voter or an Excess Owner.

(iv) The Plan shall not issue any class or series of security other than (i) shares of common stock having identical terms or options or derivatives of such common stock, (ii) non-voting, non-convertible debt securities or (iii) such other securities as the Plan may approve, provided that BCBSA receives notice at least thirty days prior to the issuance of such securities, including a description of the terms for such securities, and BCBSA shall have the authority to determine how such other securities will be counted in determining whether any Person is an Excess Institutional Voter, Excess Noninstitutional Voter or an Excess Owner.

(v) For purposes of paragraph 9(d)(iii), the following definitions shall apply:

(a) "Affiliate" and "Associate" shall have the respective meanings ascribed to such terms in Rule 12b-2 of the General Rules and Regulations under the Securities Exchange Act of 1934, as amended and in effect on November 17, 1993 (the "Exchange Act").

(b) A Person shall be deemed the "Beneficial Owner" of and shall be deemed to "beneficially own" any securities:

(i) which such Person or any of such Person's Affiliates or Associates beneficially owns, directly or indirectly;

Amended as of September 17, 1997

(ii) which such Person or any of such Person's Affiliates or Associates has (A) the right to acquire (whether such right is exercisable immediately or only after the passage of time) pursuant to any agreement, arrangement or understanding, or upon the exercise of conversion rights, exchange rights, warrants or options, or otherwise; or (B) the right to vote pursuant to any agreement, arrangement or understanding; provided, however, that a Person shall not be deemed the Beneficial Owner of, or to beneficially own, any security if the agreement, arrangement or understanding to vote such security (1) arises solely from a revocable proxy or consent given to such Person in response to a public proxy or consent solicitation made pursuant to, and in accordance with, the applicable rules and regulations promulgated under the Exchange Act and (2) is not also then reportable on Schedule 13D under the Exchange Act (or any comparable or successor report); or

(iii) which are beneficially owned, directly or indirectly, by any other Person (or any Affiliate or Associate thereof) with which such Person (or any of such Person's Affiliates or Associates) has any agreement, arrangement or understanding (other than customary agreements with and between underwriters and selling group members with respect to a bona fide public offering of securities) relating to the acquisition, holding, voting (except to the extent contemplated by the proviso to (b)(ii)(B) above) or disposing of any securities of the Plan.

Notwithstanding anything in this definition of Beneficial Ownership to the contrary, the phrase "then outstanding," when used with reference to a Person's Beneficial Ownership of securities of the Plan, shall mean the number of such securities then issued and outstanding together with the number of such securities not then actually issued and outstanding which such Person would be deemed to own beneficially hereunder.

(c) A Person shall be deemed an “Institutional Investor” if (but only if) such Person (i) is an entity or group identified in the SEC’s Rule 13d-1(b)(1)(ii) as constituted on June 1, 1997, and (ii) every filing made by such Person with the SEC under Regulation 13D-G (or any successor Regulation) with respect to such Person’s Beneficial Ownership of Plan securities shall have contained a certification identical to the one required by item 10 of SEC Schedule 13G as constituted on June 1, 1997.

(d) “Noninstitutional Investor” means any Person who is not an Institutional Investor.

(e) "Person" shall mean any individual, firm, partnership, corporation, trust, association, joint venture or other entity, and shall include any successor (by merger or otherwise) of such entity.

Amended as of September 17, 1997

---

10. This License Agreement shall remain in effect: (a) until terminated as provided herein; or (b) until this and all such other License Agreements are terminated by the affirmative vote of three-fourths of the Plans and three-fourths of the total then current weighted vote of all the Plans; or (c) until termination of aforesaid Ownership Agreement; or (d) until terminated by the Plan upon eighteen (18) months written notice to BCBSA or upon a shorter notice period approved by BCBSA in writing at its sole discretion.

11. Except as otherwise provided in paragraph 15 below or by the affirmative vote of three-fourths of the Plans and three-fourths of the total then current weighted vote of all the Plans, or unless this and all such other License Agreements are simultaneously terminated by force of law, the termination of this License Agreement for any reason whatsoever shall cause the reversion to BCBSA of all rights in and to the Licensed Marks and Name, and the Plan agrees that it will promptly discontinue all use of the Licensed Marks and Name, will not use them thereafter, and will promptly, upon written notice from BCBSA, change its corporate name so as to eliminate the Licensed Name therefrom.

12. The license hereby granted to Plan to use the Licensed Marks and Name is and shall be personal to the Plan so licensed and shall not be assignable by any act of the Plan, directly or indirectly, without the written consent of BCBSA. Said license shall not be assignable by operation of law, nor shall Plan mortgage or part with possession or control of this license or any right hereunder, and the Plan shall have no right to grant any sublicense to use the Licensed Marks and Name.

13. BCBSA shall maintain appropriate service mark registrations of the Licensed Marks and BCBSA shall take such lawful steps and proceedings as may be necessary or proper to prevent use of the Licensed Marks by any person who is not authorized to use the same. Any actions or proceedings undertaken by BCBSA under the provisions of this paragraph shall be at BCBSA's sole cost and expense. BCBSA shall have the sole right to determine whether or not any legal action shall be taken on account of unauthorized use of the Licensed Marks, such right not to be unreasonably exercised. The Plan shall report any unlawful usage of the Licensed Marks to BCBSA in writing and agrees, free of charge, to cooperate fully with BCBSA's program of enforcing and protecting the service mark rights, trade name rights and other rights in the Licensed Marks.

14. The Plan hereby agrees to save, defend, indemnify and hold BCBSA and any other Plan(s) harmless from and against all claims, damages, liabilities and costs of every kind, nature and description which may arise as a result of the activities of the Plan or of any hospital, medical group, clinic or other provider of health services that is owned or controlled directly or indirectly by Plan. BCBSA hereby agrees to save, defend, indemnify and hold the Plan and any other Plan(s) harmless from and against all claims, damages, liabilities And costs of every kind, nature and description which may arise exclusively and directly as a result of the activities of BCBSA.

Amended as of June 21, 2012

---

15. (a). This Agreement shall automatically terminate upon the occurrence of any of the following events: (i) a voluntary petition shall be filed by the Plan or by BCBSA seeking bankruptcy, reorganization, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief, or (ii) an involuntary petition or proceeding shall be filed against the Plan or BCBSA seeking bankruptcy, reorganization, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief and such petition or proceeding is consented to or acquiesced in by the Plan or BCBSA or is not dismissed within sixty (60) days of the date upon which the petition or other document commencing the proceeding is served upon the Plan or BCBSA respectively, or (iii) an order for relief is entered against the Plan or BCBSA in any case under the bankruptcy laws of the United States, or the Plan or BCBSA is adjudged bankrupt or insolvent (as that term is defined in the Uniform Commercial Code as enacted in the state of Illinois) by any court of competent jurisdiction, or (iv) the Plan or BCBSA makes a general assignment of its assets for the benefit of creditors, or (v) any government or any government official, office, agency, branch, or unit assumes control of the Plan or delinquency proceedings (voluntary or involuntary) are instituted, or (vi) an action is brought by the Plan or BCBSA seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business, or (vii) an action is instituted by any governmental entity or officer against the Plan or BCBSA seeking its dissolution or liquidation of its assets or seeking appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business and such action is consented to or acquiesced in by the Plan or BCBSA or is not dismissed within one hundred thirty (130) days of the date upon which the pleading or other document commencing the action is served upon the Plan or BCBSA respectively, provided that if the action is stayed or its prosecution is enjoined, the one hundred thirty (130) day period is tolled for the duration of the stay or injunction, and provided further, that the Association’s Board of Directors may toll or extend the 130 day period at any time prior to its expiration, or (viii) a trustee, interim trustee, receiver or other custodian for any of the Plan's or BCBSA's property or business is appointed, or the Plan or BCBSA is ordered dissolved or liquidated, or (ix) the Plan shall fail to pay its dues and shall not cure such failure within thirty (30) days of receiving written notice thereof, or (x) if, due to regulatory action, the Plan together with any applicable Controlled Affiliate becomes unable to do business using the Names and Marks in any State or portion thereof included in its Service Area, provided that: (i) automatic termination shall not occur prior to the exhaustion by any such Plan of its rights to appeal or challenge such regulatory action; and (ii) in the event the Plan is licensed to do business using the Names and Marks in multiple States or portions of States, the termination of its License Agreement shall be solely limited to the State(s) or portions thereof in which the regulatory action applies. By not appealing or challenging such regulatory action within the time prescribed by law or regulation, and in any event no later than 120 days after such action is taken, a Plan shall be deemed to have exhausted its rights to appeal or challenge, and automatic termination shall proceed.

Notwithstanding any other provision of this Agreement, a declaration or a request for declaration of the existence of a trust over any of the Plan's or BCBSA's property or business shall not in itself be deemed to constitute or seek appointment of a trustee, interim trustee, receiver or other custodian for purposes of subparagraphs 15(a)(vii) and (viii) of this Agreement.

Amended as of March 26, 2015

(b). BCBSA, or the Plans (as provided and in addition to the rights conferred in Paragraph 10(b) above), may terminate this Agreement immediately upon written notice upon the occurrence of either of the following events: (a) the Plan or BCBSA becomes insolvent (as that term is defined in the Uniform Commercial Code enacted in the state of Illinois), or (b) any final judgment against the Plan or BCBSA remains unsatisfied or unbonded of record for a period of sixty (60) days or longer.

(c). If this License Agreement is terminated as to BCBSA for any reason stated in subparagraphs 15(a) and (b) above, the ownership of the Licensed Marks shall revert to each of the Plans as provided in the Ownership Agreement.

(d). Upon termination of this License Agreement or any Controlled Affiliate License Agreement of a Larger Controlled Affiliate, as defined in Exhibit 1 to this License Agreement, the following conditions shall apply, except that, in the event of a partial termination of this Agreement pursuant to Paragraph 15 (a)(x)(ii) of this Agreement, the notices, national account listing, payment and audit right listed below shall be applicable solely with respect to the geographic area for which the Plan's license to use the Licensed Names and Marks is terminated:

(i) The terminated entity shall send a notice through the U.S. mails, with first class postage affixed, to all individual and group customers, providers, brokers and agents of products or services sold, marketed, underwritten or administered by the terminated entity or its Controlled Affiliates under the Licensed Marks and Name. The form and content of the notice shall be specified by BCBSA and shall, at a minimum, notify the recipient of the termination of the license, the consequences thereof, and instructions for obtaining alternate products or services licensed by BCBSA, subject to any conflicting state law and state regulatory requirements. This notice shall be mailed within 15 days after termination or, if termination is pursuant to paragraph 10(d) of this Agreement, within 15 days after the written notice to BCBSA described in paragraph 10(d).

(ii) The terminated entity shall deliver to BCBSA within five days of a request by BCBSA a listing of national accounts in which the terminated entity is involved (in a Control, Participating or Servicing capacity), identifying the national account and the terminated entity's role therein. For those accounts where the terminated entity is the Control Plan, the Plan must also indicate the Participating and Servicing Plans in the national account syndicate.

Amended as of June 16, 2005

(iii) Unless the cause of termination is an event stated in paragraph 15(a) or (b) above respecting BCBSA, the Plan and its Licensed Controlled Affiliates shall be jointly liable for payment to BCBSA of an amount equal to the Re-Establishment Fee (described below) multiplied by the number of Licensed Enrollees of the terminated entity and its Licensed Controlled Affiliates; provided that if any other Plan is permitted by BCBSA to use marks or names licensed by BCBSA in the Service Area established by this Agreement, the Re-Establishment Fee shall be multiplied by a fraction, the numerator of which is the number of Licensed Enrollees of the terminated entity and its Licensed Controlled Affiliates and the denominator of which is the total number of Licensed Enrollees in the Service Area. The Re-Establishment Fee shall be indexed to a base fee of $80. The Re-Establishment Fee through December 31, 2005 shall be $80. The Re-Establishment Fee for calendar years after December 31, 2005 shall be adjusted on January 1 of each calendar year up to and including January 1, 2010 and shall be the base fee multiplied by 100% plus the cumulative percentage increase or decrease in the Plans' gross administrative expense (standard BCBSA definition) per Licensed Enrollee since December 31, 2004. The adjustment shall end on January 1, 2011, at which time the Re-Establishment Fee shall be fixed at the then-current amount and no longer automatically adjusted. For example, if the Plans' gross administrative expense per Licensed Enrollee was $278.60, $285.00 and $290.00 for calendar year end 2004, 2005 and 2006, respectively, the January 1, 2007 Re-Establishment Fee would be $83.27 (100% of the base fee plus $1.84 for calendar year 2005 and $1.43 for calendar year 2006). Licensed Enrollee means each and every person and covered dependent who is enrolled as an individual or member of a group receiving products or services sold, marketed or administered under marks or names licensed by BCBSA as determined at the earlier of (a) the end of the last fiscal year of the terminated entity which ended prior to termination or (b) the fiscal year which ended before any transactions causing the termination began. Notwithstanding the foregoing, the amount payable pursuant to this subparagraph (d)(iii) shall be due only to the extent that, in BCBSA's opinion, it does not cause the net worth of the Plan to fall below 100% of the Health Risk-Based Capital formula or its equivalent under any successor formula, as set forth in the applicable financial responsibility standards established by BCBSA (provided such equivalent is approved for purposes of this sub paragraph by the affirmative vote of three-fourths of the Plans and

Amended as of June 16, 2005

---

three-fourths of the total then current weighted vote of all the Plans), measured as of the date of termination and adjusted for the value of any transactions not made in the ordinary course of business. This payment shall not be due in connection with transactions exclusively by or among Plan or their affiliates, including reorganizations, combinations or mergers, where the BCBSA Board of Directors determines that the license termination does not result in a material diminution in the number of Licensed Enrollees or the extent of their coverage. At least 50% of the Re Establishment Fee shall be awarded to the Plan (or Plans) that receive the new license(s) for the service area(s) at issue;
provided, however, that such award shall not become due or payable until all disputes, if any, regarding the amount of and BCBSA's right to such Re-Establishment Fee have been finally resolved; and provided further that the award shall be based on the final amount actually received by BCBSA. The Board of Directors shall adopt a resolution which it may amend from time to time that shall govern BCBSA's use of its portion of the award. In the event that the terminated entity's license is reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent jurisdiction, BCBSA shall reimburse the Plan (and/or its Licensed Controlled Affiliates, as the case may be) for
payments made under this subparagraph only to the extent that such payments exceed the amounts due to BCBSA pursuant to subparagraph 15(d)(vi) and any costs associated with
reestablishing the Service Area, including any payments made by BCBSA to a Plan or Plans (or their Licensed Controlled Affiliates) for purposes of replacing the terminated entity.

(iv) The terminated entity shall comply with all financial settlement
procedures set forth in BCBSA's License Termination Contingency Plan, as amended from time to time and shall work diligently and in good faith with BCBSA, any Alternative Control Licensee or Replacement Licensee and any existing or potential new account for Blue-branded products and services to minimize the disruption of termination, and honor, to the fullest extent possible, the desire of accounts to continue to receive or obtain Blue-branded products and services through a new Licensee ("Transition"). Such diligence and good faith on the part of the terminated entity shall include, but not be limited to: (a) working cooperatively with BCBSA to protect the Names and Marks from potential harm; (b) cooperating with BCBSA's use of the Names and Marks in the terminated entity's former service area during the termination and Transition; (c) transmitting, upon the request of an

Amended as of June 16, 2005

---

existing Blue account or of BCBSA with consent and on behalf of an existing Blue account, all member and account-data relating to the Federal Employee Program to BCBSA, and all member and account data relating to other programs to an Alternative Control Licensee or Replacement Licensee; (d) working with BCBSA and the Alternative Control or Replacement Licensee with respect to potential new Blue accounts headquartered in the terminated entity's former service area; (e) continuing to service Blue accounts during the Transition; (f) continuing to comply with National Programs, Federal Employee Program and NASCO policies and procedures and all voluntary BCBSA programs, policies and performance standards, such as Away From Home Care, including being responsible for payment of all penalties for non-compliance duly levied in conformity with the License Agreements, Membership Standards, or the Federal Employee Program agreements, that may arise during the Transition; (g) maintaining and providing access to its provider networks, as defined by Federal Employee Program agreements and National Account Program Policies and Provisions, and Inter-Plan Programs Policies and Provisions, and making those networks and discounts available to members and providers who participate in National Programs and the Federal Employee Program during the Transition; (h) maintaining its technical connections and processing capabilities during the Transition; and (i) working diligently to conclude all financial settlements and account reconciliations as negotiated in the termination transition agreement.

(v) Notwithstanding any other provision in this Agreement, BCBSA shall have the right, with the approval of its Board of Directors, to assess additional fines against the terminated entity during the Transition in the event it fails to maintain and provide access to provider networks as defined by Federal Employee Program agreements, National Account Program Policies and Provisions, and Inter-Plan Programs Policies and Provisions, and/or pass on applicable discounts. Such fines shall be in addition to any other assessments, fees or liquidated damages payable herein, or under existing policies and programs and shall be imposed to make whole BCBSA and/or the Plans. Terminated entity shall pay any such fines to BCBSA no later than 30 days after they are approved by the Board of Directors.

(vi) BCBSA shall have the right to examine and audit and/or hire at terminated entity's expense a third-party auditor to examine and audit the books and records of the terminated entity and its Licensed Controlled Affiliates to verify compliance with the terms and requirements this paragraph 15(d).

Amended as of November 16, 2006

(vii) Subsequent to termination of this Agreement, the terminated entity and its affiliates, agents, and employees shall have an ongoing and continuing obligation to protect all BCBSA and Blue Licensee data that was acquired or accessed during the period this
Agreement was in force, including but not limited to all confidential processes, pricing, provider, discount and other strategic and competitively sensitive information ("Blue Information") from disclosure, and shall not, either alone or with another entity,
disclose such Blue Information or use it in any manner to compete
without the express written permission of BCBSA.

(viii) As to a breach of 15 (d) (i), (ii), (iii), (iv), (vi), or (vii) the parties agree that the obligations are immediately enforceable in a court of competent jurisdiction. As to a breach of 15 (d) (i), (ii), (iv), (vi), or (vii) by the Plan, the parties agree there is no adequate remedy at law and BCBSA is entitled to obtain specific performance.

(ix) In the event that the terminated entity's license is reinstated by BCBSA or is deemed to have remained in effect without
interruption by a court of competent jurisdiction, the Plan and its Licensed Controlled Affiliates shall be jointly liable for reimbursing BCBSA the reasonable costs incurred by BCBSA in connection with the termination and the reinstatement or court action, and any associated legal proceedings, including but not limited to: outside legal fees, consulting fees, public relations fees, advertising costs, and costs incurred to develop, lease or establish an interim provider network. Any amount due to BCBSA under this subparagraph may be waived in whole or in part by the BCBSA Board of Directors in its sole discretion.

(e). BCBSA shall be entitled to enjoin the Plan or any related party in a court of competent jurisdiction from entry into any transaction which would result in a termination of this License Agreement unless the License Agreement has been terminated pursuant to paragraph 10 (d) of this Agreement upon the required six (6) month written notice.

(f). BCBSA acknowledges that it is not the owner of assets of the Plan.

Amended as of June 16, 2005

---

16. This Agreement supersedes any and all other agreements between the parties with respect to the subject matter herein, and contains all of the covenants and agreements of the parties as to the licensing of the Licensed Marks and Name. This Agreement may be amended only by the affirmative vote of three-fourths of the Plans and three-fourths of the total then current weighted vote of all the Plans as officially recorded by the BCBSA Corporate Secretary.

17. If any provision or any part of any provision of this Agreement is judicially declared unlawful, each and every other provision, or any part of any provision, shall continue in full force and effect notwithstanding such judicial declaration.

18. No waiver by BCBSA or the Plan of any breach or default in performance on the part of BCBSA or the Plan or any other licensee of any of the terms, covenants or conditions of this Agreement shall constitute a waiver of any subsequent breach or default in performance of said terms, covenants or conditions.

19a. All notices provided for hereunder shall be in writing and shall be sent in duplicate by regular mail to BCBSA or the Plan at the address currently published for each by BCBSA and shall be marked respectively to the attention of the President and, if any, the General Counsel, of BCBSA or the Plan.

19b. Except as provided in paragraphs 9(b), 9(d)(iii), 15(a), and 15(b) above, this Agreement may be terminated for a breach only upon at least 30 days' written notice to the Plan advising of the specific matters at issue and granting the Plan an opportunity to be heard and to present its response to the Member Plans.

19c. For all provisions of this Agreement referring to voting, the term 'Plans' shall mean all entities licensed under the Blue Cross License Agreement and/or the Blue Shield License Agreement, and in all votes of the Plans under this Agreement the Plans shall vote together. For weighted votes of the Plans, the Plan shall have a number of votes equal to the number of weighted votes (if any) that it holds as a Blue Cross Plan plus the number of weighted votes (if any) that it holds as a Blue Shield Plan. For all other votes of the Plans, the Plan shall have one vote. For all questions requiring an affirmative three-fourths weighted vote of the Plans, the requirement shall be deemed satisfied with a lesser weighted vote unless the greater of: (i) 6/52 or more of the Plans (rounded to the nearest whole number, with 0.5 or multiples thereof being rounded to the next higher whole number) fail to cast weighted votes in favor of the question; or (ii) three (3) of the Plans fail to cast weighted votes in favor of the question. Notwithstanding the foregoing provision, if there are thirty-nine (39) Plans, the requirement of an affirmative three-fourths weighted vote shall be deemed satisfied with a lesser weighted vote unless four (4) or more Plans fail to cast weighted votes in favor of the question.

Amended as of June 16, 2006

---

20. Nothing herein contained shall be construed to constitute the parties hereto as partners or joint venturers, or either as the agent of the other, and Plan shall have no right to bind or obligate BCBSA in any way, nor shall it represent that it has any right to do so. BCBSA shall have no liability to third parties with respect to any aspect of the business, activities, operations, products, or services of the Plan.

21. This Agreement shall be governed, construed and interpreted in accordance with the laws of the State of Illinois.

IN WITNESS WHEREOF, the parties have caused this License Agreement to be executed, effective as of the date of last signature written below.

BLUE CROSS AND BLUE SHIELD ASSOCIATION

By _____

Title _____

Date _____

PLAN:

By _____

Title _____

Date _____

EXHIBIT 1

BLUE CROSS
CONTROLLED AFFILIATE LICENSE AGREEMENT
(Includes revisions adopted by Member Plans through their September 18, 2015 meeting)

This Agreement by and among Blue Cross and Blue Shield Association ("BCBSA") and_____ ("Controlled Affiliate"), a Controlled Affiliate of the Blue Cross Plan, known as _____ ("Plan" or "Sponsoring Plan"), which is also a Party signatory hereto.

WHEREAS, BCBSA is the owner of the BLUE CROSS and BLUE CROSS Design service marks;

WHEREAS, Plan and Controlled Affiliate desire that the latter be entitled to use the BLUE CROSS and BLUE CROSS Design service marks (collectively the "Licensed Marks") as service marks and be entitled to use the term BLUE CROSS in a trade name ("Licensed Name");

NOW THEREFORE, in consideration of the foregoing and the mutual agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. GRANT OF LICENSE

Subject to the terms and conditions of this Agreement, BCBSA hereby grants to Controlled Affiliate the right to use the Licensed Marks and Name in connection with, and only in connection with: (i) health care plans and related services, as defined in BCBSA's License Agreement with Plan, and administering the non-health portion of workers' compensation insurance, and (ii) underwriting the indemnity portion of workers' compensation insurance, provided that Controlled Affiliate's total premium revenue comprises less than 15 percent of the Sponsoring Plan's net subscription revenue.

This grant of rights is non-exclusive and is limited to the Service Area served by the Plan. Subject to paragraph 3A(3) of this Agreement, Controlled Affiliate may use the Licensed Marks and Name in its legal name on the following conditions: (i) the legal name must be approved in advance, in writing, by BCBSA; (ii) Controlled Affiliate shall not do business outside the Service Area under any name or mark; and (iii) Controlled Affiliate shall not use the Licensed Marks and Name, or any derivative thereof, as part of any name or symbol used to identify itself in any securities market, unless such Controlled Affiliate is a not-for-profit company which may use the Licensed Marks and Name, or an approved derivative therefor, to identify itself in debt securities markets. Controlled Affiliate may use the Licensed Marks and Name in its Trade Name only with the prior, written, consent of BCBSA.

Amended as of March 26, 2015

2. QUALITY CONTROL

A. Controlled Affiliate agrees to use the Licensed Marks and Name only in connection with the licensed services and further agrees to be bound by the conditions regarding quality control shown in attached Exhibit A as they may be amended by BCBSA from time-to-time.

B. Controlled Affiliate agrees to comply with all applicable federal, state and local laws.

C. Controlled Affiliate agrees that it will provide on an annual basis (or more often if reasonably required by Plan or by BCBSA) a report or reports to Plan and BCBSA demonstrating Controlled Affiliate's compliance with the requirements of this Agreement including but not limited to the quality control provisions of this paragraph and the attached Exhibit A.

D. Controlled Affiliate agrees that Plan and/or BCBSA may, from time-to-time, upon reasonable notice, review and inspect the manner and method of Controlled Affiliate's rendering of service and use of the Licensed Marks and Name.

E. As used herein, a Controlled Affiliate is defined as an entity organized and operated in such a manner, that the Sponsoring Plan has:

(1) The legal authority directly or indirectly through wholly-owned subsidiaries:

(a) to select members of the Controlled Affiliate’s governing body having not less than 50% voting control thereof; and

(b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Sponsoring Plan does not concur; and

(c) to exercise control over the policy and operations of the Controlled Affiliate at least equal to that exercised by persons or entities (jointly or individually) other than the Sponsoring Plan; and

Notwithstanding anything to the contrary in (a) through (c) hereof, the Controlled Affiliate’s establishing or governing documents must also require written approval by the Sponsoring Plan before the Controlled Affiliate can:

(i) change its legal and/or trade names;

(ii) change the geographic area in which it operates;

Amended as of September 19, 2014

(iii) change any of the type(s) of businesses in which it engages;

(iv) create, or become liable for by way of guarantee, any indebtedness, other than indebtedness arising in the ordinary course of business;

(v) sell any assets, except for sales in the ordinary course of business or sales of equipment no longer useful or being replaced;

(vi) make any loans or advances except in the ordinary course of business;

(vii) enter into any arrangement or agreement with any party directly or indirectly affiliated with any of the owners or persons or entities with the authority to select or appoint members or board members of the Controlled Affiliate, other than the Sponsoring Plan or other Plans (excluding owners of stock holdings of under 5% in a publicly traded Controlled Affiliate);

(viii) conduct any business other than under the Licensed Marks and Name;

(ix) take any action that the Sponsoring Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and Name.

In addition, the Sponsoring Plan directly or indirectly through wholly owned subsidiaries shall own at least 50% of any for-profit Controlled Affiliate, provided that in instances where the Sponsoring Plan formed a publicly traded Controlled Affiliate Licensee and such publicly traded Controlled Affiliate Licensee owns and controls other Controlled Affiliate Licensees, the Sponsoring Plan directly or indirectly shall own and control at least 50% of any Controlled Affiliate that is indirectly owned and controlled by the publicly traded Controlled Affiliate Licensee.

Or

(2) the legal authority directly or indirectly through wholly-owned subsidiaries:

(a) to select members of the Controlled Affiliate's governing body having more than 50% voting control thereof and to:

Amended as of March 26, 2015

(b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Sponsoring Plan does not concur; and

(c) to exercise control over the policy and operations of the Controlled Affiliate.

In addition, the Sponsoring Plan directly or indirectly through wholly-owned subsidiaries shall own more than 50% of any for-profit Controlled Affiliate, provided that in instances where the Sponsoring Plan formed a publicly traded Controlled Affiliate Licensee and such publicly traded Controlled Affiliate Licensee owns and controls other Controlled Affiliate Licensees, the Sponsoring Plan directly or indirectly shall own and control more than 50% of any Controlled Affiliate that is indirectly owned and controlled by the publicly traded Controlled Affiliate Licensee.

Or

(3) With respect to a Controlled Affiliate that is 100% controlled by Plans including the Sponsoring Plan and which offers solely Medicaid products and services, the legal authority together with such other Plans:

(a) to select all members of the Controlled Affiliate's governing body; and

(b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate; and

(c) to exercise control over the policy and operations of the Controlled Affiliate.

In addition, the Sponsoring Plan and such other Plans shall own 100% of any for-profit Controlled Affiliate with the Sponsoring Plan and such other Plans each having an ownership interest. Such control and ownership by Plans must be direct or, if indirect, solely through affiliates that are licensed to use marks owned by BCBSA. Further, the Sponsoring Plan and such other Plans shall execute the Addendum to Controlled Affiliate License Agreement attached hereto as Exhibit B-1.

Or

(4) With respect to a Controlled Affiliate that is 100% controlled by a Sponsoring Plan which on a Blue-branded basis offers solely a Basic Medicare Part D Prescription Drug product, the legal authority:

(a) to select all members of the Controlled Affiliate's governing body; and

(b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate; and

(c) to exercise control over the policy and operations of the Controlled Affiliate.

Amended March 17, 2016

In addition, the Sponsoring Plan shall own 100% of any for-profit Controlled Affiliate. Such 100% control and ownership by Sponsoring Plan must be direct or, if indirect, solely through affiliates that are licensed to use marks owned by BCBSA. Further, the Participating Plan as defined in Exhibit B-2 and the Sponsoring Plan shall execute the Addendum to Controlled Affiliate License Agreement attached hereto as Exhibit B-2.

3. FOR-PROFIT, PUBLICLY TRADED LICENSEES

A. The Controlled Affiliate may operate as a for-profit publicly traded company on the following conditions:

(1) The Controlled Affiliate shall discharge all responsibilities which it has to the Association and to other Plans by virtue of this Agreement.

(2) The Controlled Affiliate shall provide 90 days advance written notice to BCBSA prior to the initial filing with the SEC.

(3) The Controlled Affiliate shall not use the Licensed Marks and Name, or any derivative thereof, as part of its legal name or any symbol used to identify the Controlled Affiliate in any securities market. The Controlled Affiliate shall use the Licensed Marks and Name as part of its trade name within its service area for the sale, marketing and administration of health care and related services in the service area.

(4) The Controlled Affiliate's license to use the Licensed Marks and Name shall automatically terminate effective: (a) thirty days after the Controlled Affiliate knows, or there is an SEC filing indicating that, any Institutional Investor, has become the Beneficial Owner of securities representing 10% or more of the voting power of the Controlled Affiliate ("Excess Institutional Voter"), unless such Excess Institutional Voter shall cease to be an Excess Institutional Voter prior to such automatic termination becoming effective; (b) thirty days after the Controlled Affiliate knows, or there is an SEC filing indicating that, any Noninstituional Investor, other than a Plan or Plans or Controlled Affiliate Licensee or Licensees has become the Beneficial Owner of securities representing 5% or more of the voting power of the Controlled Affiliate ("Excess Noninstitutional Voter") unless such Excess Noninstitutional Voter shall cease to be an Excess Noninstitutional Voter prior to such automatic termination becoming effective; (c) thirty days after the Controlled Affiliate knows, or there is an SEC filing indicating that, any Person has become the Beneficial Owner, other than a Plan or Plans or Controlled Affiliate Licensee or Licensees, of 20% or more of the Controlled Affiliate's then outstanding common stock or other equity securities which (either by themselves or in combination) represent an ownership interest of 20% or more pursuant to determinations made under paragraph 3A(4) below ("Excess Owner"), unless such Excess Owner shall cease to be an Excess Owner prior to such automatic termination becoming effective; (d) ten business days after individuals who at the time the Controlled Affiliate went public constituted the Board of Directors of the Controlled Affiliate (together with any new directors whose election to the Board was approved by a vote of 2/3 of the directors then still in office who were directors at the time the Controlled Affiliate went public or whose election or nomination was previously so approved) (the "Continuing Directors") cease for any reason to constitute a majority of the Board of Directors; or (e) ten business days after the Controlled Affiliate consolidates with or merges with or into any person or conveys, assigns, transfers or sells all or substantially all of its assets to any person other than a merger in which the Sponsoring Plan is the surviving entity and immediately after which merger, no person is an Excess Institutional Voter, an Excess Noninstitutional Voter or an Excess Owner: provided that, if requested by the affected Controlled Affiliate in a writing received by BCBSA prior to such automatic termination becoming effective, the provisions of this paragraph 3A(4) may be waived, in whole or in part, upon the affirmative vote of a majority of the disinterested Plans and majority of the total then current weighted vote of the disinterested Plans. Any waiver so granted may be conditioned upon such additional requirements (including but not limited to imposing new and independent grounds for termination of this License) as shall be approved by

Amended as of March 26, 2015

---

the affirmative vote of a majority of the disinterested Plans and a majority of the total then current weighted vote of the disinterested Plans. If a timely waiver request is received, no automatic termination shall become effective until the later of: (1) the conclusion of the applicable time period specified in paragraphs 3A(4) (a)-(d) above, or (2) the conclusion of the first Member Plan meeting after receipt of such a waiver request.

In the event that the Controlled Affiliate's license, or any other license, to use the Licensed Marks and Name is terminated pursuant to Paragraph 3A(4), the license may be reinstated in BCBSA's sole discretion if, within 30 days of the date of such termination, the Controlled Affiliate demonstrates that the Person referred to in clause (a), (b), or (c) of the preceding paragraph is no longer an Excess Institutional Voter, an Excess Noninstitutional Voter or an Excess Owner.

(5) The Controlled Affiliate shall not issue any class or series of security other than (i) shares of common stock having identical terms or options or derivatives of such common stock, (ii) non-voting, non-convertible debt securities or (iii) such other securities as the Controlled Affiliate may approve, provided that BCBSA receives notice at least thirty days prior to the issuance of such securities, including a description of the terms for such securities, and BCBSA shall have the authority to determine how such other securities will be counted in determining whether any Person is an Excess Institutional Voter, Excess Noninstitutional Voter or an Excess Owner.

(6) For purposes of paragraph 3A(4) above, the following definitions shall apply:

(i) "Affiliate" and "Associate" shall have the respective meanings ascribed to such terms in Rule 12b-2 of the General Rules and Regulations under the Securities Exchange Act of 1934, as amended and in effect on November 17, 1993 (the "Exchange Act").

(ii) A Person shall be deemed the "Beneficial Owner" of and shall be deemed to "beneficially own" any securities:

(1) which such Person or any of such Person's Affiliates or Associates beneficially owns, directly or indirectly;

(2) which such Person or any of such Person's Affiliates or Associates has (A) the right to acquire (whether such right is exercisable immediately or only after the passage of time) pursuant to any agreement, arrangement or understanding, or upon the exercise of conversion rights, exchange rights, warrants or options, or otherwise; or (B) the right to vote pursuant to any agreement, arrangement or understanding; provided, however, that a Person shall not be deemed the Beneficial Owner of, or to

Amended as of March 26, 2015

beneficially own, any security if the agreement, arrangement or understanding to vote such security (1) arises solely from a revocable proxy or consent given to such Person in response to a public proxy or consent solicitation made pursuant to, and in accordance with, the applicable rules and regulations promulgated under the Exchange Act and (2) is not also then reportable on Schedule 13D under the Exchange Act (or any comparable or successor report); or

(3) which are beneficially owned, directly or indirectly, by any other Person (or any Affiliate or Associate thereof) with which such Person (or any of such Person's Affiliates or Associates) has any agreement, arrangement or understanding (other than customary agreements with and between underwriters and selling group members with respect to a bona fide public offering of securities) relating to the acquisition, holding, voting (except to the extent contemplated by the proviso to (ii)2(B) above) or disposing of any securities of the Controlled Affiliate.

Notwithstanding anything in this definition of Beneficial Ownership to the contrary, the phrase "then outstanding," when used with reference to a Person's Beneficial Ownership of securities of the Controlled Affiliate, shall mean the number of such securities then issued and outstanding together with the number of such securities not then actually issued and outstanding which such Person would be deemed to own beneficially hereunder.

(iii) A Person shall be deemed an "Institutional Investor" if (but only if) such Person (i) is an entity or group identified in the SEC's Rule 13d-1(b)(1)(ii) as constituted on June 1, 1997, and (ii) every filing made by such Person with the SEC under Regulation 13D-G (or any successor Regulation) with respect to such Person's Beneficial Ownership of Plan securities shall have contained a certification identical to the one required by item 10 of SEC Schedule 13G as constituted on June 1, 1997.

(iv) "Noninstitutional Investor" means any Person who is not an Institutional Investor.

(v) "Person" shall mean any individual, firm, partnership, corporation, trust, association, joint venture or other entity, and shall include any successor (by merger or otherwise) of such entity.

4. SERVICE MARK USE

A. Controlled Affiliate recognizes the importance of a comprehensive national network of independent BCBSA licensees which are committed to strengthening the Licensed Marks and Name. The Controlled Affiliate further recognizes that its actions within its Service Area may affect the value of the Licensed Marks and Name nationwide.

Amended March 26, 2015

B. Controlled Affiliate shall at all times make proper service mark use of the Licensed Marks and Name, including but not limited to use of such symbols or words as BCBSA shall specify to protect the Licensed Marks and Name and shall comply with such rules (generally applicable to Controlled Affiliates licensed to use the Licensed Marks and Name) relative to service mark use, as are issued from time-to-time by BCBSA. Controlled Affiliate recognizes and agrees that all use of the Licensed Marks and Name by Controlled Affiliate shall inure to the benefit of BCBSA.

C. Controlled Affiliate may not directly or indirectly use the Licensed Marks and Name in a manner that transfers or is intended to transfer in the Service Area the goodwill associated therewith to another mark or name, nor may Controlled Affiliate engage in activity that may dilute or tarnish the unique value of the Licensed Marks and Name.

D. If Controlled Affiliate meets the standards of 2E(1) but not 2E(2) above and any of Controlled Affiliate's advertising or promotional material is reasonably determined by BCBSA and/or the Plan to be in contravention of rules and regulations governing the use of the Licensed Marks and Name, Controlled Affiliate shall for ninety (90) days thereafter obtain prior approval from BCBSA of advertising and promotional efforts using the Licensed Marks and Name, approval or disapproval thereof to be forthcoming within five (5) business days of receipt of same by BCBSA or its designee. In all advertising and promotional efforts, Controlled Affiliate shall observe the Service Area limitations applicable to Plan.

E. Notwithstanding any other provision in the Plan's License Agreement with BCBSA or in this Agreement, Controlled Affiliate shall use its best efforts to promote and build the value of the Licensed Marks and Name.

5. SUBLICENSING AND ASSIGNMENT

Controlled Affiliate shall not, directly or indirectly, sublicense, transfer, hypothecate, sell, encumber or mortgage, by operation of law or otherwise, the rights granted hereunder and any such act shall be voidable at the sole option of Plan or BCBSA. This Agreement and all rights and duties hereunder are personal to Controlled Affiliate.

6. INFRINGEMENT

Controlled Affiliate shall promptly notify Plan and Plan shall promptly notify BCBSA of any suspected acts of infringement, unfair competition or passing off that may occur in relation to the Licensed Marks and Name. Controlled Affiliate shall not be entitled to require Plan or BCBSA to take any actions or institute any proceedings to prevent infringement, unfair competition or passing off by third parties. Controlled Affiliate agrees to render to Plan and BCBSA, without charge, all reasonable assistance in connection with any matter pertaining to the protection of the Licensed Marks and Name by BCBSA.

Amended as of March 26, 2015

7. LIABILITY INDEMNIFICATION

Controlled Affiliate and Plan hereby agree to save, defend, indemnify and hold BCBSA harmless from and against all claims, damages, liabilities and costs of every kind, nature and description (except those arising solely as a result of BCBSA's negligence) that may arise as a result of or related to: (i) Controlled Affiliate's rendering of services under the Licensed Marks and Name; or (ii) the activities of any hospital, medical group, clinic or other provider of health services that is owned or controlled directly or indirectly by Plan or Controlled Affiliate.

8. LICENSE TERM

A. Except as otherwise provided herein, the license granted by this Agreement shall remain in effect for a period of one (1) year and shall be automatically extended for additional one (1) year periods unless terminated pursuant to the provisions herein.

B. This Agreement and all of Controlled Affiliate's rights hereunder shall immediately terminate without any further action by any party or entity in the event that: (i) the Plan ceases to be authorized to use the Licensed Marks and Name; or (ii) pursuant to Paragraph 15(a)(x) of the Blue Cross License Agreement the Plan ceases to be authorized to use the Licensed Names and Marks in the geographic area served by the Controlled Affiliate provided, however, that if the Controlled Affiliate is serving more than one State or portions thereof, the termination of this Agreement shall be limited to the State(s) or portions thereof in which the Plan's license to use the Licensed
Marks and Names is terminated. By not appealing or challenging such regulatory action within the time prescribed by law or regulation, and in any event no later than 120 days after such action is taken, a Plan shall be deemed to have exhausted its rights to appeal or challenge, and automatic termination shall proceed.

C. Notwithstanding any other provision of this Agreement, this license to use the Licensed Marks and Name may be forthwith terminated by the Plan or the affirmative vote of the majority of the Board of Directors of BCBSA present and voting at a special meeting expressly called by BCBSA for the purpose on ten (10) days written notice to the Plan advising of the specific matters at issue and granting the Plan an opportunity to be heard and to present its response to the Board for: (1) failure to comply with any applicable minimum capital or liquidity requirement under the quality control standards of this Agreement; or (2) failure to comply with the "Organization and Governance" quality control standard of this Agreement; or (3) impending financial insolvency; or (4) for a Smaller Controlled Affiliate (as defined in Exhibit A), failure to comply with any of the applicable requirements of Standards 2, 3, 4, 5 or 7 of attached Exhibit A; or (5) the pendency of any action instituted against the Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business or seeking the declaration or establishment of a trust for any of its property or business, unless

Amended as of March 26, 2015

this Controlled Affiliate License Agreement has been earlier terminated under paragraph 8(E); or (6) failure by a Controlled Affiliate that meets the standards of 2E(1) but not 2E(2) above to obtain BCBSA's written consent to a change in the identity of any owner, in the extent of ownership, or in the identity of any person or entity with the authority to select or appoint members or board members, provided that as to publicly traded Controlled Affiliates this provision shall apply only if the change affects a person or entity that owns at least 5% of the Controlled Affiliate's stock before or after the change; or (7) such other reason as is determined in good faith immediately and irreparably to threaten the integrity and reputation of BCBSA, the Plans, any other licensee including Controlled Affiliate and/or the Licensed Marks and Name.

D. Except as otherwise provided in Paragraphs 8(B), 8(C) or 8(E) herein, should Controlled Affiliate fail to comply with the provisions of this Agreement and not cure such failure within thirty (30) days of receiving written notice thereof (or commence a cure within such thirty day period and continue diligent efforts to complete the cure if such curing cannot reasonably be completed within such thirty day period) BCBSA or the Plan shall have the right to issue a notice that the Controlled Affiliate is in a state of noncompliance. If a state of noncompliance as aforesaid is undisputed by the Controlled Affiliate or is found to exist by a mandatory dispute resolution panel and is uncured as provided above, BCBSA shall have the right to seek judicial enforcement of the Agreement or to issue a notice of termination thereof. Notwithstanding any other provisions of this Agreement, any disputes as to the termination of this License pursuant to Paragraphs 8(B), 8(C) or 8(E) of this Agreement shall not be subject to mediation and mandatory dispute resolution. All other disputes between BCBSA, the Plan and/or Controlled Affiliate shall be submitted promptly to mediation and mandatory dispute resolution. The mandatory dispute resolution panel shall have authority to issue orders for specific performance and assess monetary penalties. Except, however, as provided in Paragraphs 8(B) and 8(E) of this Agreement, this license to use the Licensed
Marks and Name may not be finally terminated for any reason without the affirmative vote of a majority of the present and voting members of the Board of Directors of BCBSA.

E. This Agreement and all of Controlled Affiliate’s rights hereunder shall immediately terminate without any further action by any party or entity in the event that:

(1) Controlled Affiliate shall no longer comply with item 2(E) above;

(2) Appropriate dues, royalties and other payments for Controlled
Affiliate pursuant to paragraph 10 hereof, which are the royalties for this License Agreement, are more than sixty (60) days in arrears to BCBSA; or

(3) Any of the following events occur: (i) a voluntary petition shall be filed by Controlled Affiliate seeking bankruptcy, reorganization, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief, or (ii) an involuntary petition or proceeding shall be filed against Controlled

Amended as of March 26, 2015

Affiliate seeking bankruptcy, reorganization, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief and such petition or proceeding is consented to or acquiesced in by Controlled Affiliate or is not dismissed within sixty (60) days of the date upon which the petition or other document commencing the proceeding is served upon the Controlled Affiliate, or (iii) an order for relief is entered against Controlled Affiliate in any case under the bankruptcy laws of the United States, or Controlled Affiliate is adjudged bankrupt or insolvent as those terms are defined in the Uniform Commercial Code as enacted in the State of Illinois by any court of competent jurisdiction, or (iv) Controlled Affiliate makes a general assignment of its assets for the benefit of creditors, or (v) any government or any government official, office, agency, branch, or unit assumes control of Controlled Affiliate or delinquency proceedings (voluntary or involuntary) are instituted, or (vi) an action is brought by Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business, or (vii) an action is instituted by any governmental entity or officer against Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business and such action is consented to or acquiesced in by Controlled Affiliate or is not dismissed within one hundred thirty (130) days of the date upon which the pleading or other document commencing the action is served upon the Controlled Affiliate, provided that if the action is stayed or its prosecution is enjoined, the one hundred thirty (130) day period is tolled for the duration of the stay or injunction, and provided further, that the Association's Board of Directors may toll or extend the 130 day period at any time prior to its expiration, or (viii) a trustee, interim trustee, receiver or other custodian for any of Controlled Affiliate's property or business is appointed or the Controlled Affiliate is ordered dissolved or liquidated. Notwithstanding any other provision of this Agreement, a declaration or a request for declaration of the existence of a trust over any of the Controlled Affiliate's property or business shall not in itself be deemed to constitute or seek appointment of a trustee, interim trustee, receiver or other custodian for purposes of subparagraphs 8(E)(3)(vii) and (viii) of this Agreement.

(4) The for-profit, publicly traded Controlled Affiliate is terminated pursuant to Paragraph 3A(4) of this Agreement. In which case, the licenses of any Controlled Affiliates directly or indirectly owned by the terminated for-profit, publicly traded Controlled Affiliate also shall immediately terminate as provided for in paragraph 3A(4) of this Agreement.

F. Upon termination of this Agreement for cause or otherwise, Controlled Affiliate agrees that it shall immediately discontinue all use of the Licensed Marks and Name, including any use in its trade name.

Amended as of March 26, 2015

G. Upon termination of this Agreement, Controlled Affiliate shall immediately notify all of its customers that it is no longer a licensee of BCBSA and, if directed by the Association's Board of Directors, shall provide instruction on how the customer can contact BCBSA or a designated licensee to obtain further information on securing coverage. The notification required by this paragraph shall be in writing and in a form approved by BCBSA. The BCBSA shall have the right to audit the terminated entity's books and records to verify compliance with this paragraph.

H. In the event this Agreement terminates pursuant to 8(B) hereof, or in the event the Controlled Affiliate is a Larger Controlled Affiliate (as defined in Exhibit A), upon termination of this Agreement, the provisions of Paragraph 8.G. shall not apply and the following provisions shall apply, except that, in the event of a partial termination of this Agreement pursuant to Paragraph 8(B)(ii) of this Agreement, the notices, national account listing, payment, and audit right listed below shall be applicable solely with respect to the geographic area for which the Plan's license to use the Licensed Names and Marks is terminated.

(1) The Controlled Affiliate shall send a notice through the U.S. mails, with first class postage affixed, to all individual and group customers, providers, brokers and agents of products or services sold, marketed, underwritten or administered by the Controlled Affiliate under the Licensed Marks and Name. The form and content of the notice shall be specified by BCBSA and shall, at a minimum, notify the recipient of the termination of the license, the consequences thereof, and instructions for obtaining alternate products or services licensed by BCBSA, subject to any conflicting state law and state regulatory requirements. This notice shall be mailed within 15 days after termination.

(2) The Controlled Affiliate shall deliver to BCBSA within five days of a request by BCBSA a listing of national accounts in which the Controlled Affiliate is involved (in a control, participating or servicing capacity), identifying the national account and the Controlled Affiliate's role therein.

(3) Unless the cause of termination is an event respecting BCBSA stated in paragraph 15(a) or (b) of the Plan's license agreement with BCBSA to use the Licensed Marks and Name, the Controlled Affiliate, the Plan, and any other Licensed Controlled Affiliates of the Plan shall be jointly liable for payment to BCBSA of an amount equal to the Re-Establishment Fee (desribed below) multiplied by the number of Licensed Enrollees of the Controlled Affiliate; provided that if any other Plan is permitted by BCBSA to use marks or names licensed by BCBSA in the Service Area established by this Agreement, the Re-Establishment Fee shall be multiplied by a fraction, the numerator of which is the number of Licensed Enrollees of the Controlled Affiliate, the Plan, and any other Licensed Controlled Affiliates and the denominator of which is the total number of Licensed Enrollees in the Service Area.

Amended as of March 26, 2015

The Re-Establishment Fee shall be indexed to a base fee of $80. The Re-Establishment Fee through December 31, 2005 shall be $80. The Re-establishment Fee for calendar years after December 31, 2005 shall be adjusted on January 1 of each calendar year up to and including January 1, 2010 and shall be the base fee multiplied by 100% plus the cumulative percentage increase or decrease in the Plans' gross administrative expense (standard BCBSA definition) per Licensed Enrollee since December 31, 2004. The adjustment shall end on January 1, 2011, at which time the Re-Establishment Fee shall be fixed at the then-current amount and no longer automatically adjusted. For example, if the Plans' gross administrative expense per Licensed Enrollee was $278.60, $285.00 and $290.00 for calendar year end 2004, 2005 and 2006, respectively, the January 1, 2007 Re-Establishment Fee would be $83.27 (100% of base fee plus $1.84 for calendar year 2005 and $1.43 for calendar year 2006). Licensed Enrollee means each and every person and covered dependent who is enrolled as an individual or member of a group receiving products or services sold, marketed or administered under marks or names licensed by BCBSA as determined at the earlier of (i) the end of the last fiscal year of the terminated entity which ended prior to termination or (ii) the fiscal year which ended before any transactions causing the termination began. Notwithstanding the foregoing, the amount payable pursuant to this subparagraph H. (3) shall be due only to the extent that, in BCBSA's opinion, it does not cause the net worth of the Controlled Affiliate, the Plan or any other Licensed Controlled Affiliates of the Plan to fall below 100% of the Health Risk-Based Capital formula, or its equivalent under any successor formula, as set forth in the applicable financial responsibility standards established by BCBSA (provided such equivalent is approved for purposes of this sub paragraph by the affirmative vote of three-fourths of the Plans and three-fourths of the total then current weighted vote of all the Plans); measured as of the date of termination, and adjusted for the value of any transactions not made in the ordinary course of business. This payment shall not be due in connection with transactions exclusively by or among Plans or their affiliates, including reorganizations, combinations or mergers, where the BCBSA Board of Directors determines that the license termination does not result in a material diminution in the number of Licensed Enrollees or the extent of their coverage. At least 50% of the Re-Establishment Fee shall be awarded to the Plan (or Plans) that receive the new license(s) for the service area(s) at issue; provided, however, that such award shall not become due or payable until all disputes, if any, regarding the amount of and BCBSA's right to such Re-Establishment Fee have been finally resolved; and provided further that the award shall be based on the final amount actually received by BCBSA. The Board of Directors shall adopt a resolution which it may amend from time to time that shall govern BCBSA's use of its portion of the award. In the event that the Controlled Affiliate's license is reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent jurisdiction, BCBSA shall reimburse the Controlled Affiliate (and/or the Plan or its other Licensed Controlled Affiliates, as the case may be) for payments made under this subparagraph 8.H.(3) only to the extent that such payments exceed the amounts due to BCBSA pursuant to paragraph 8.M. and any costs associated with reestablishing the Service Area, including payments made by BCBSA to a Plan or Plans (or their Licensed Controlled Affiliates) for purposes of replacing the Controlled Affiliate.

Amended as of March 26, 2015

---

(4) BCBSA shall have the right to examine and audit and/or hire at terminated entity's expense a third party auditor to examine and audit the books and records of the Controlled Affiliate, the Plan, and any other Licensed Controlled Affiliates of the Plan to verify compliance with this paragraph 8.H.

(5) Subsequent to termination of this Agreement, the terminated entity and its affiliates, agents, and employees shall have an ongoing and continuing obligation to protect all BCBSA and Blue Licensee data that was acquired or accessed during the period this Agreement was in force, including but not limited to all confidential processes, pricing, provider, discount and other strategic and competitively sensitive information ("Blue Information") from disclosure, and shall not, either alone or with another entity, disclose such Blue Information or use it in any manner to compete without the express written permission of BCBSA.

(6) As to a breach of 8.H.(1), (2), (3), (4) or (5) the parties agree that the obligations are immediately enforceable in a court of competent jurisdiction. As to a breach of 8.H.(1), (2) or (4) by the Controlled Affiliate, the parties agree there is no adequate remedy at law and BCBSA is entitled to obtain specific performance.

I. This Agreement shall remain in effect until terminated by the Controlled Affiliate or the Plan upon not less than eighteen (18) months written notice to the Association or upon a shorter notice period approved by BCBSA in writing at its sole discretion, or until terminated as otherwise provided herein. The Plan's right to terminate without cause upon such notice is unfettered and may be exercised in the Plan's sole discretion.

J. In the event the Controlled Affiliate is a Smaller Controlled Affiliate (as defined in Exhibit A), the Controlled Affiliate agrees to be jointly liable for the amount described in H.3. and M. hereof upon termination of the BCBSA license agreement of any Larger Controlled Affiliate of the Plan.

K. BCBSA shall be entitled to enjoin the Controlled Affiliate or any related party in a court of competent jurisdiction from entry into any transaction which would result in a termination of this Agreement unless the Plan's license from BCBSA to use the Licensed Marks and Names has been terminated pursuant to 10(d) of the Plan's license agreement upon the required 18 months written notice.

L. BCBSA acknowledges that it is not the owner of assets of the Controlled Affiliate.

M. In the event that the Plan has more than 50 percent voting control of the Controlled Affiliate under Paragraph 2(E)(2) above and is a Larger Controlled Affiliate (as defined in Exhibit A), then the vote called for in Paragraphs 8(C) and 8(D) above shall require the affirmative vote of three-fourths of the Plans and three-fourths of the total then current weighted vote of all the Plans.

Amended as of March 26, 2015

N. In the event this Agreement terminates and is subsequently reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent jurisdiction, the Controlled Affiliate, the Plan, and any other Licensed Controlled Affiliates of the Plan shall be jointly liable for reimbursing BCBSA the reasonable costs incurred by BCBSA in connection with the termination and the reinstatement or court action, and any associated legal proceedings, including but not limited to: outside legal fees, consulting fees, public relations fees, advertising costs, and costs incurred to develop, lease or establish an interim provider network. Any amount due to BCBSA under this subparagraph may be waived in whole or in part by the BCBSA Board of Directors in its sole discretion.

9. DISPUTE RESOLUTION

The parties agree that any disputes between them or between or among either of them and one or more Plans or Controlled Affiliates of Plans that use in any manner the Blue Cross and Blue Cross Marks and Name are subject to the Mediation and Mandatory Dispute Resolution process attached to and made a part of Plan's License from BCBSA to use the Licensed Marks and Name as Exhibit 5 as amended from time-to-time, which documents are incorporated herein by reference as though fully set forth herein.

10. LICENSE FEE

Controlled Affiliate will pay to BCBSA a fee for this License determined pursuant to the formula(s) set forth in Exhibit C.

11. JOINT VENTURE

Nothing contained in the Agreement shall be construed as creating a joint venture, partnership, agency or employment relationship between Plan and Controlled Affiliate or between either and BCBSA.

12. NOTICES AND CORRESPONDENCE

Notices regarding the subject matter of this Agreement or breach or termination thereof shall be in writing and shall be addressed in duplicate to the last known address of each other party, marked respectively to the attention of its President and, if any, its General Counsel.

13. COMPLETE AGREEMENT

This Agreement contains the complete understandings of the parties in relation to the subject matter hereof. This Agreement may only be amended by the affirmative vote of three-fourths of the Plans and three-fourths of the total then current weighted vote of all the Plans as officially recorded by the BCBSA Corporate Secretary.

Amended as of March 26, 2015

14. SEVERABILITY

If any term of this Agreement is held to be unlawful by a court of competent jurisdiction, such findings shall in no way affect the remaining obligations of the parties hereunder and the court may substitute a lawful term or condition for any unlawful term or condition so long as the effect of such substitution is to provide the parties with the benefits of this Agreement.

15. NONWAIVER

No waiver by BCBSA of any breach or default in performance on the part of Controlled Affiliate or any other licensee of any of the terms, covenants or conditions of this Agreement shall constitute a waiver of any subsequent breach or default in performance of said terms, covenants or conditions.

15A. VOTING

For all provisions of this Agreement referring to voting, the term 'Plans' shall mean all entities licensed under the Blue Cross License Agreement and/or the Blue Shield License Agreement, and in all votes of the Plans under this Agreement the Plans shall vote together. For weighted votes of the Plans, the Plan shall have a number of votes equal to the number of weighted votes (if any) that it holds as a Blue Cross Plan plus the number of weighted votes (if any) that it holds as a Blue Shield Plan. For all other votes of the Plans, the Plan shall have one vote. For all questions requiring an affirmative three-fourths weighted vote of the Plans, the requirement shall be deemed satisfied with a lesser weighted vote unless the greater of: (i) 6/52 or more of the Plans (rounded to the nearest whole number, with 0.5 or multiples thereof being rounded to the next higher whole number) fail to cast weighted votes in favor of the question; or (ii) three (3) of the Plans fail to cast weighted votes in favor of the question.

Notwithstanding the foregoing provision, if there are thirty-nine (39) Plans, the requirement of an affirmative three-fourths weighted vote shall be deemed satisfied with a lesser weighted vote unless four (4) or more Plans fail to cast weighted votes in favor of the question.

Amended as of March 26, 2015

THIS PAGE IS INTENTIONALLY BLANK.

16. GOVERNING LAW

This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of Illinois.

17. HEADINGS

The headings inserted in this agreement are for convenience only and shall have no bearing on the interpretation hereof.

IN WITNESS WHEREOF, the parties have caused this License Agreement to be executed and effective as of the date of last signature written below.

Controlled Affiliate:

By: __

Date: __

Plan:

By: __

Date: __

BLUE CROSS AND BLUE SHIELD ASSOCIATION

By: __

Date: __

Amended as of March 26, 2015

EXHIBIT A

CONTROLLED AFFILIATE LICENSE STANDARDS November 2016
PREAMBLE

For purposes of definition:

- A "smaller Controlled Affiliate:" (1) comprises less than fifteen percent (15%) of Sponsoring Plan's and its licensed Controlled Affiliates' total member enrollment (as reported on the BCBSA Quarterly Enrollment Report, excluding rider and freestanding coverage, and treating an entity seeking licensure as licensed);* or (2) underwrites the indemnity portion of workers' compensation insurance and has total premium revenue less than 15 percent of the Sponsoring Plan's net subscription revenue.
- A "larger Controlled Affiliate" comprises fifteen percent (15%) or more of Sponsoring Plan's and its licensed Controlled Affiliates' total member enrollment (as reported on the BCBSA Quarterly Enrollment Report, excluding rider and freestanding coverage, and treating an entity seeking licensure as licensed.)*

Changes in Controlled Affiliate status:

If **any** Controlled Affiliate's status changes regarding: its Plan ownership level, its risk acceptance or direct delivery of medical care, the Controlled Affiliate shall notify BCBSA within thirty (30) days of such occurrence in writing and come into compliance with the applicable standards within six (6) months.

If a smaller Controlled Affiliate's health and workers' compensation administration business reaches or surpasses fifteen percent (15%) of the total member enrollment of the Sponsoring Plan and licensed Controlled Affiliates, the Controlled Affiliate shall:

Amended as of September 19, 2014

EXHIBIT A (continued)

1. Within thirty (30) days, notify BCBSA of this fact in writing, including evidence that the Controlled Affiliate meets the minimum liquidity and capital (BCBSA "Health Risk-Based Capital (HRBC)" as defined by the NAIC and state-established minimum reserve) requirements of the larger Controlled Affiliate Financial Responsibility standard; and

2. Within six (6) months after reaching or surpassing the fifteen percent (15%) threshold, demonstrate compliance with all license requirements for a larger Controlled Affiliate.

If a Controlled Affiliate that underwrites the indemnity portion of workers' compensation insurance receives a change in rating or proposed change in rating, the Controlled Affiliate shall notify BCBSA within 30 days of notification by the external rating agency.

*For purposes of this calculation, The numerator equals:

Applicant Controlled Affiliate's member enrollment, as defined in BCBSA's Quarterly Enrollment Report (excluding rider and freestanding coverage).

The denominator equals:

Numerator PLUS Sponsoring Plan and all other licensed Controlled Affiliates' member enrollment, as reported in BCBSA's Quarterly Enrollment Report (excluding rider and freestanding coverage).

Amended as of September 19, 2002

EXHIBIT A (continued)

STANDARDS FOR LICENSED CONTROLLED AFFILIATES

Each licensed controlled affiliate shall be subject to certain standards as determined below:

1. What percent of the licensed controlled affiliate is controlled by the Sponsoring Plan and other Plans?

More than 50% by Sponsoring Plan	50% by Sponsoring Plan	100% Plan Control but less than 50% Sponsoring Plan Control and it offers solely Medicaid products and services	100% Sponsoring Plan control and on a Blue-branded basis, it only offers a Basic Medicare Part D Prescription Drug Plan product
⇩ Standard 1A, 4	⇩ Standard 1B, 4	⇩ Standard 1C, 4	⇩ Standard 1D, 4

IN ADDITION,

2. Is risk being assumed?

Yes			No	
Controlled Affiliate underwrites any indemnity portion of workers' compensation insurance ⇩ Standards 7A-7E, 11	Controlled Affiliate comprises < 15% of total member enrollment of Sponsoring Plan and its licensed affiliates, and does not underwrite the indemnity portion of workers' compensation insurance ⇩ Standard 2 (Guidelines 1.1,1.2) and Standard 11	Controlled Affiliate comprises ≥ 15% of total member enrollment of Sponsoring Plan and its licensed affiliates, and does not underwrite the indemnity portion of workers' compensation insurance ⇩ Standard 6H	Controlled Affiliate comprises < 15% of total member enrollment of Sponsoring Plan and its licensed affiliates ⇩ Standard 2 (Guidelines 1.1,1.3) and Standard 11	Controlled Affiliate comprises ≥ 15% of total member enrollment of Sponsoring Plan and its licensed affiliates ⇩ Standard 6H

IN ADDITION,

3. Is medical care being directly provided?

Yes	No
⇩ Standard 3A	⇩ Standard 3B

IN ADDITION,

4. If the controlled affiliate has health or workers' compensation administration business, does such business comprise 15% or more of the total member enrollment of Plan and its licensed Controlled Affiliates?

Yes	No		
⇩ Standards 6A-6J	Controlled Affiliate is not a former primary licensee and is not subject to Standard 1(C) ⇩ Standards 5,8,9B,10,11	Controlled Affiliate is a former primary licensee ⇩ Standards 5,8,9A,10,11	Controlled Affiliate is not a former primary licensee and is subject to Standard 1(C) ⇩ Standards 5,8,9B,11

EXHIBIT A (continued)

Standard 1 - Organization and Governance

1A.) The Standard for more than 50% Plan control is:

A Controlled Affiliate shall be organized and operated in such a manner that a Plan authorized to use the Licensed Marks in the Service Area of the Controlled Affiliate pursuant to the separate Primary License Agreement with BCBSA, has the legal authority, directly or indirectly through wholly-owned subsidiaries: 1) to select members of the Controlled Affiliate's governing body having more than 50% voting control thereof; and 2) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Sponsoring Plan does not concur; and 3) to exercise control over the policy and operations of the Controlled Affiliate. In addition, the Sponsoring Plan directly or indirectly through wholly-owned subsidiaries shall own more than 50% of any for-profit Controlled Affiliate.

1B.) The Standard for 50% Plan control is:

A Controlled Affiliate shall be organized and operated in such a manner that a Plan authorized to use the Licensed Marks in the Service Area of the Controlled Affiliate pursuant to the separate Primary License Agreement with BCBSA, has the legal authority, directly or indirectly through wholly-owned subsidiaries:

1) to select members of the Controlled Affiliate's governing body having not less than 50% voting control thereof; and

2) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Sponsoring Plan does not concur; and

3) to exercise control over the policy and operations of the Controlled Affiliate at least equal to that exercised by persons or entities (jointly or individually) other than the Sponsoring Plan.

Amended as of March 17, 2016

EXHIBIT A (continued)

Notwithstanding anything to the contrary in 1) through 3) hereof, the Controlled Affiliate's establishing or governing documents must also require written approval by Sponsoring Plan before the Controlled Affiliate can:

- change the geographic area in which it operates
- change its legal and/or trade names
- change any of the types of businesses in which it engages
- create, or become liable for by way of guarantee, any indebtedness, other than indebtedness arising in the ordinary course of business
- sell any assets, except for sales in the ordinary course of business or sales of equipment no longer useful or being replaced
- make any loans or advances except in the ordinary course of business
- enter into any arrangement or agreement with any party directly or indirectly affiliated with any of the owners or persons or entities with the authority to select or appoint members or board members of the Controlled Affiliate, other than the Sponsoring Plan or other Plans (excluding owners of stock holdings of under 5% in a publicly traded Controlled Affiliate)
- conduct any business other than under the Licensed Marks and Name
- take any action that the Sponsoring Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and Name.

In addition, the Sponsoring Plan directly or indirectly through wholly-owned subsidiaries shall own at least 50% of any for-profit Controlled Affiliate.

Amended September 19, 2014

1C.) The Standard for a Controlled Affiliate that offers solely Medicaid products and service and has 100% Plan control but less than 50% Sponsoring Plan Control:

A Controlled Affiliate shall be organized and operated in such a manner that (i) it offers solely Medicaid products and services; and (ii) a Plan authorized to use the Licensed Marks in the Service Area of the Controlled Affiliate pursuant to the separate Primary License Agreement with BCBSA (the "Sponsoring Plan,) has the legal authority together with Other Plans:

1) to select all members of the Controlled Affiliate's governing body; and

2) to prevent any change in the articles of incorporation, bylaws, or other establishing or governing documents of the Controlled Affiliate; and

3) to exercise control over the policy and operations of the Controlled Affiliate.

In addition, the Sponsoring Plan and such other Plans shall own 100% of any for-profit Controlled Affiliate, with the Sponsoring Plan and such other Plans each having an ownership interest. Such 100% control and ownership by Plans shall be direct or, if indirect, solely through affiliates that are licensed to use marks owned by BCBSA. Further, the Sponsoring Plan and such other Plans shall execute the Addendum to Controlled Affiliate License.

1D.) The Standard for a Controlled Affiliate that on a Blue-branded basis, only offers a Basic Medicare Part D Prescription Drug product and has 100% Plan control is:

A Controlled Affiliate shall be organized and operated in such a manner that (i) it offers solely a Basic Medicare PDP product; and (ii) the Sponsoring Plan has the legal authority:

1) to select all members of the Controlled Affiliate's governing body; and

2) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate; and

3) to exercise control over the policy and operations of the Controlled Affiliate.

In addition, the Sponsoring Plan shall own 100% of any for-profit Controlled Affiliate. Such 100% control and ownership by Sponsoring Plan must be direct or, if indirect, solely through affiliates that are licensed to use marks owned by BCBSA.

Further, the Sponsoring Plan and Participating Plan shall execute the Addendum to Controlled Affiliate License.

Amended March 17, 2016

EXHIBIT A (continued)

Standard 2 - Financial Responsibility

A Controlled Affiliate shall be operated in a manner that provides reasonable financial assurance that it can fulfill all of its contractual obligations to its customers. If a risk-assuming Controlled Affiliate ceases operations for any reason, Blue Cross and/or Blue Cross Plan coverage will be offered to all Controlled Affiliate subscribers without exclusions, limitations or conditions based on health status. If a nonrisk-assuming Controlled Affiliate ceases operations for any reason, Sponsoring Plan will provide for services to its customers. The requirements of the preceding two sentences shall apply to all lines of business unless a line of business is specially exempted from the requirement(s) by the BCBSA Board of Directors.

Standard 3 - State Licensure/Certification

3A.) The Standard for a Controlled Affiliate that employs, owns or contracts on a substantially exclusive basis for medical services is:

A Controlled Affiliate shall maintain unimpaired licensure or certification for its medical care providers to operate under applicable state laws.

3B.) The Standard for a Controlled Affiliate that does not employ, own or contract on a substantially exclusive basis for medical services is:

A Controlled Affiliate shall maintain unimpaired licensure or certification to operate under applicable state laws.

Standard 4 - Certain Disclosures

A Controlled Affiliate shall make adequate disclosure in contracting with third parties and in disseminating public statements of 1) the structure of the Blue Cross and Blue Shield System; and 2) the independent nature of every licensee; and 3) the Controlled Affiliate's financial condition.

Amended as of September 19, 2014

EXHIBIT A (continued)

Standard 5 - Reports and Records for Certain Smaller Controlled Affiliates

For a smaller Controlled Affiliate that does not underwrite the indemnity portion of workers' compensation insurance, the Standard is:

A Controlled Affiliate and/or its Sponsoring licensed Plan shall furnish, on a timely and accurate basis, reports and records relating to these Standards and the License Agreements between BCBSA and Controlled Affiliate.

Standard 6 - Other Standards for Larger Controlled Affiliates Standards 6(A) - (I) that follow apply to larger Controlled

Affiliates. Standard 6(A): Board of Directors

A Controlled Affiliate Governing Board shall act in the interest of its Corporation in providing cost-effective health care services to its customers. A Controlled Affiliate shall maintain a governing Board, which shall control the Controlled Affiliate, composed of a majority of persons other than providers of health care services, who shall be known as public members. A public member shall not be an employee of or have a financial interest in a health care provider, nor be a member of a profession which provides health care services.

Standard 6(B): Responsiveness to Customers

A Controlled Affiliate shall be operated in a manner responsive to customer needs and requirements.

Standard 6(C): Participation in National Programs

A Controlled Affiliate shall effectively and efficiently participate in each national program as from time to time may be adopted by the Member Plans for the purposes of providing portability of membership between the licensees and ease of claims processing for customers receiving benefits outside of the Controlled Affiliate's Service Area.

Amended as of September 19, 2014

EXHIBIT A (continued)

Such programs are applicable to licensees, and include:

1. BlueCard Program;

2. Inter-Plan Teleprocessing System (ITS);

3. National Account Programs;

4. Business Associate Agreement for Blue Cross and Blue Shield Licensees, effective April 14, 2003; and
5. Inter-Plan Medicare Advantage Program. Standard Standard 6(D): Financial Performance Requirements

In addition to requirements under the national programs listed in Standard 6C: Participation in National Programs, a Controlled Affiliate shall take such action as required to ensure its financial performance in programs and contracts of an inter-licensee nature or where BCBSA is a party.

Standard 6(E): Cooperation with Plan Performance Response Process

A Controlled Affiliate shall cooperate with BCBSA's Board of Directors and its Brand Enhancement & Protection Committee in the administration of the Plan Performance Response Process and in addressing Controlled Affiliate performance problems identified thereunder.

Standard 6(F): Independent Financial Rating

A Controlled Affiliate shall obtain a rating of its financial strength from an independent rating agency approved by BCBSA's Board of Directors for such purpose.

Standard 6(G): Local and National Best Efforts

Notwithstanding any other provision in the Plan's License Agreement with BCBSA or in this License Agreement, during each year, a Controlled Affiliate shall use its best efforts to promote and build the value of the Blue Cross Mark.

Amended as of November 21, 2014

EXHIBIT A (continued)

Standard 6(H): Financial Responsibility

A Controlled Affiliate shall be operated in a manner that provides reasonable financial assurance that it can fulfill all of its contractual obligations to its customers.

Standard 6(I): Reports and Records

A Controlled Affiliate shall furnish to BCBSA on a timely and accurate basis reports and records relating to compliance with these Standards and the License Agreements between BCBSA and Controlled Affiliate. Such reports and records are the following:

A) BCBSA Controlled Affiliate Licensure Information Request; and

B) Triennial trade name and service mark usage material, including disclosure material; and

C) Changes in the ownership and governance of the Controlled Affiliate, including changes in its charter, articles of incorporation, or bylaws, changes in a Controlled Affiliate's Board composition, or changes in the identity of the Controlled Affiliate's Principal Officers, and changes in risk acceptance, contract growth, or direct delivery of medical care; and

D) Semi-annual “Health Risk-Based Capital (HRBC) Report” as defined by the NAIC, Annual Certified Audit Report, Insurance Department Examination Report, Annual Statement filed with State Insurance Department (with all attachments), and

Amended as of November 17, 2011

EXHIBIT A (continued)

Standard 6(J): Control by Unlicensed Entities Prohibited

No Controlled Affiliate shall cause or permit an entity other than a Plan or a Licensed Controlled Affiliate thereof to obtain control of the Controlled Affiliate or to acquire a substantial portion of its assets related to licensable services.

Standard 7 - Other Standards for Risk-Assuming Workers' Compensation Controlled Affiliates

Standards 7(A) - (E) that follow apply to Controlled Affiliates that underwrite the indemnity portion of workers' compensation insurance.

Standard 7 (A): Financial Responsibility

A Controlled Affiliate shall be operated in a manner that provides reasonable financial assurance that it can fulfill all of its contractual obligations to its customers.

Standard 7(B): Reports and Records

A Controlled Affiliate shall furnish, on a timely and accurate basis, reports and records relating to compliance with these Standards and the License Agreements between BCBSA and the Controlled Affiliate. Such reports and records are the following:

A. BCBSA Controlled Affiliate Licensure Information Request; and

B. Triennial trade name and service mark usage materials, including disclosure materials; and

C. Annual Certified Audit Report, Annual Statement as filed with the State Insurance Department (with all attachments), Annual NAIC's Risk-Based Capital Worksheets for Property and Casualty Insurers; and

D. Quarterly Estimated Risk-Based Capital for Property and Casualty Insurers, Insurance Department Examination Report; and

Amended as of November 17, 2011

EXHIBIT A (continued)

E. Notification of all changes and proposed changes to independent ratings within 30 days of receipt and submission of a copy of all rating reports; and

F. Changes in the ownership and governance of the Controlled Affiliate including changes in its charter, articles of incorporation, or bylaws, changes in a Controlled Affiliate's Board composition, Plan control, state license status, operating area, the Controlled Affiliate's Principal Officers or direct delivery of medical care.

Standard 7(C): Loss Prevention

A Controlled Affiliate shall apply loss prevention protocol to both new and existing business.

Standard 7(D): Claims Administration

A Controlled Affiliate shall maintain an effective claims administration process that includes all the necessary functions to assure prompt and proper resolution of medical and indemnity claims.

Standard 7(E): Disability and Provider Management

A Controlled Affiliate shall arrange for the provision of appropriate and necessary medical and rehabilitative services to facilitate early intervention by medical professionals and timely and appropriate return to work.

Amended as of November 16, 2000

EXHIBIT A (continued)

Standard 8 - Cooperation with Controlled Affiliate License Performance Response Process Protocol

A Controlled Affiliate and its Sponsoring Plan shall cooperate with BCBSA's Board of Directors and its Brand Enhancement & Protection Committee in the administration of the Controlled Affiliate License Performance Response Process Protocol (ALPRPP) and in addressing Controlled Affiliate
compliance problems identified thereunder.

Standard 9(A) - Participation in National Programs by Smaller Controlled Affiliates that were former Primary Licensees

A smaller controlled affiliate that formerly was a Primary Licensee shall
effectively and efficiently participate in certain national programs from time to time as may be adopted by Member Plans for the purposes of providing ease of claims processing for customers receiving benefits outside of the Controlled Affiliate's service area and be subject to certain relevant financial and reporting requirements.

A. National program requirements include:
    - BlueCard Program;
    - Inter-Plan Teleprocessing System (ITS);
    - National Account Programs.

B. Financial Requirements include:
    - Standard 6(D): Financial Performance Requirements and Standard 6(H): Financial Responsibility; or
    - A financial guarantee covering the Controlled Affiliate's Inter-Plan Programs obligations in a form, and from a guarantor, acceptable to BCBSA.

Amended as of November 21, 2014

EXHIBIT A (continued)

Standard 9(A) - Participation in National Programs by Smaller Controlled Affiliates that were former Primary Licensees

C. Reporting requirements include:

- The Semi-annual Health Risk-Based Capital (HRBC) Report.

Amended as of June 13, 2002

EXHIBIT A (continued)

Standard 9(B) - Participation in National Programs by Smaller Controlled Affiliates

A smaller controlled affiliate shall participate in national programs in accordance with BlueCard and other relevant Policies and Provisions shall effectively and efficiently participate in national programs from time to time as may be adopted by Member Plans for the purposes of providing ease of claims processing for customers receiving benefits outside of the controlled affiliate's service area and be subject to certain relevant financial and reporting requirements.

A. National program requirements include:

- BlueCard Program;
- Inter-Plan Teleprocessing System (ITS);
- National Account Programs.

B. Financial Requirements include:

- Standard 6(D): Financial Performance Requirements and Standard 6(H): Financial Responsibility; or
- A financial guarantee covering the Controlled Affiliate's Inter-Plan Programs obligations in a form, and from a guarantor, acceptable to BCBSA.

Amended as of June 20, 2013

EXHIBIT A (continued)

Standard 10 - Participation in Inter-Plan Medicare Advantage Program

A smaller controlled affiliate for which this standard applies pursuant to the Preamble section of Exhibit A of the Controlled Affiliate License Agreement shall effectively and efficiently participate in certain national programs from time to time as may be adopted by Member Plans for the purposes of providing ease of claims processing for customers receiving benefits outside of the controlled affiliate's service area.

National program requirements include:

A. Inter-Plan Medicare Advantage Program.

Standard 11: Participation in Master Business Associate Agreement by Smaller Controlled Affiliate Licensees

Effective April 14, 2003, all smaller controlled affiliates shall comply with the terms of the Business Associate Agreement for Blue Cross and Blue Shield Licensees to the extent they perform the functions of a business associate or subcontractor to a business associate, as defined by the Business Associate Agreement.

Amended as of September 19, 2014

EXHIBIT B-1

ADDENDUM TO CONTROLLED AFFILIATE LICENSE TO BE EXECUTED BY CONTROLLED AFFILIATES LICENSED UNDER CONTROLLED AFFILIATE LICENSE STANDARD 1C.

ADDENDUM TO CONTROLLED AFFILIATE LICENSE

This Addendum is made to that certain Blue Cross Controlled Affiliate License Agreement executed by and among Blue Cross and Blue Shield Association
("Licensor"), _____ ("Controlled Affiliate Licensee")
and_____ ("Sponsoring Plan")
dated the _____ day of_____ , _____ ("Agreement"). The parties to this Addendum are Licensor, Controlled Affiliate Licensee, Sponsoring Plan, and the undersigned other Plans ('Other Plans"). This Addendum is made and shall be deemed effective as of the date of the Agreement.

WHEREAS, the Sponsoring Plan asserts that it can serve the Medicaid market in its Service Area more efficiently and with less risk through a Medicaid enterprise jointly owned and controlled with other Plans than through a wholly owned and controlled Medicaid enterprise;

WHEREAS, in such circumstance Controlled Affiliate License Standard 1C. permits the licensing of a Controlled Affiliate that is less than 50% owned and controlled by the Sponsoring Plan but which is 100% owned and controlled by Plans including the Sponsoring Plan, subject to certain conditions;

WHEREAS, one such condition is that the Sponsoring Plan and all such other owning and controlling Plans enter into this Addendum;

NOW THEREFORE, for good and valuable consideration, including the promises and covenants set forth herein, the parties agree as follows:

1. The Sponsoring Plan shall participate operationally in Controlled Affiliate's business that is conducted under the Licensed Marks. The parties understand that participation may take many forms, one of which should be providing a network of providers in the Service Area of the Controlled Affiliate for the Medicaid services being offered under the Agreement and being involved in network development and provider relations.

2. Each of the Other Plans agrees that (i) it will cooperate fully with the Sponsoring Plan and BCBSA as needed to enable Sponsoring Plan and

Amended March 17, 2016

Controlled Affiliate Licensee to meet their obligations to Licensor under the Agreement and all associated rules and regulations of Licensor, including the Brand Regulations, (ii) it will not take any action, either individually or jointly with any of the Other Plans, that would cause Sponsoring Plan or Controlled Affiliate Licensee to violate the Agreement, and (iii) it will not fail to take any action, either individually or jointly with any of the Other Plans, where such failure would cause Sponsoring Plan or Controlled Affiliate Licensee to violate the Agreement.

3. Each of the Other Plans acknowledges that it has reviewed the Agreement and understands that Sponsoring Plan has the right to terminate the Agreement without cause upon notice as provided in Paragraph 8 of the Agreement, and that such right is unfettered and may be exercised by Sponsoring Plan in its sole discretion.

WHEREFORE, by signing below the parties agree to be bound to the terms stated herein.

BLUE CROSS BLUE SHIELD ASSOCIATION

By:__

[Controlled Affiliate Licensee]

By:__

[Sponsoring Plan]

By:__

[Other Plan 1]

By:__

[Other Plan 2]

By:__

Amended March 17, 2016

EXHIBIT B-2

ADDENDUM TO CONTROLLED AFFILIATE LICENSE TO BE EXECUTED BY CONTROLLED AFFILIATES LICENSED UNDER CONTROLLED AFFILIATE LICENSE STANDARD 1D.

ADDENDUM TO CONTROLLED AFFILIATE LICENSE

This Addendum is made to that certain Blue Cross Controlled Affiliate License Agreement executed by and among Blue Cross and Blue Shield Association ("Licensor"),_____("Controlled Affiliate Licensee"), _____("Sponsoring Plan") and _____("Participating Plan") dated the _____ day of _____, _____ ("Agreement").

WHEREAS, the Participating Plan is defined as the Plan that holds the Primary License with BCBSA to use the Service Marks in the Service Area where the Controlled Affiliate will use the Service Marks;

WHEREAS, the Participating Plan asserts that it can offer a lower cost Basic Medicare Part D Prescription Drug Plan product more efficiently in the Participating Plan's Service Area through the Controlled Affiliate Licensee;

WHEREAS, the Controlled Affiliate shall only use the Service Marks inside of the Participating Plan(s) Service Area subject to each Participating Plan signing a separate Addendum;

WHEREAS, in such circumstance Controlled Affiliate License Standard 1D permits the licensing of a Controlled Affiliate that is 100% owned and controlled by a Sponsoring Plan, subject to certain conditions;

WHEREAS, one such condition is that the Sponsoring Plan, Controlled Affiliate and the Participating Plan enter into this Addendum;

NOW THEREFORE, for good and valuable consideration, including the promises and covenants set forth herein, the parties agree as follows:

1. The Participating Plan shall participate in Controlled Affiliate's business that is conducted under the Licensed Marks. The parties understand that the Participating Plan shall conduct sales support and marketing of the Controlled Affiliate's Basic Medicare Part D Prescription Drug Plan product offered in the Participating Plan's Service Area. Any other form of participation shall require BCBSA's written approval.
2. Participating Plan agrees that (i) it will cooperate fully with the Sponsoring Plan and BCBSA as needed to enable Sponsoring Plan and Controlled Affiliate Licensee to meet their obligations to Licensor under the Agreement and all associated rules and regulations of Licensor, including the Brand Regulations, (ii) it will not take any

action that would cause Sponsoring Plan or Controlled Affiliate Licensee to violate the Agreement, and (iii) it will not fail to take any action, either individually or jointly with the Sponsoring Plan or Controlled Affiliate Licensee, where such failure would cause Sponsoring Plan or Controlled Affiliate Licensee to violate the Agreement.

3. The Controlled Affiliate Licensee shall only use the Licensed Marks authorized by the Participating Plan in connection with the Basic Medicare Part D Prescription Drug Plan product offered in the Participating Plan's Service Area.

4. The Sponsoring Plan and Controlled Affiliate acknowledge that it has reviewed the Agreement and understands that Participating Plan has the right to terminate this Agreement: (i) immediately upon the expiration or termination of the Plan Participation Agreement by and between Participating Plan and Controlled Affiliate upon written notice to the Sponsoring Plan, Controlled Affiliate Licensee and Licensor, or (ii) without cause upon 18 months written notice to the Sponsoring Plan, Controlled Affiliate Licensee and Licensor, and that such right is unfettered and may be exercised by Participating Plan in its sole discretion. In the event that Participating Plan and Controlled Affiliate fail to execute the Plan Participation Agreement by _____(Date), Participating Plan may terminate this Agreement immediately upon notice to Sponsoring Plan, Controlled Affiliate Licensee and Licensor.

5. This Agreement and all of Controlled Affiliate Licensee's rights hereunder shall immediately terminate without any further action by any party or entity in the event that the Sponsoring Plan or Participating Plan ceases to be authorized to use the Licensed Marks and Name.

WHEREFORE, by signing below the parties agree to be bound to the terms stated herein.

BLUE CROSS BLUE SHIELD ASSOCIATION

By:__

[Controlled Affiliate Licensee]

By:__

[Sponsoring Plan]

By:__

[Participating Plan]

By:__

Amended March 17, 2016

EXHIBIT C
ROYALTY FORMULA FOR SECTION 9 OF THE CONTROLLED AFFILIATE LICENSE AGREEMENT

Controlled Affiliate will pay BCBSA a fee for this license in accordance with the following formula:

FOR RISK PRODUCTS:

For Controlled Affiliates not underwriting the indemnity portion of workers' compensation insurance:

An amount equal to its pro rata share of Sponsoring Plan's dues payable to BCBSA computed with the addition of the Controlled Affiliate's members using the Marks on health care plans and related services as reported on the Quarterly Enrollment Report with BCBSA. The payment by Sponsoring Plan of its dues to BCBSA, including that portion described in this paragraph, will satisfy the requirement of this paragraph, and no separate payment will be necessary.

For Controlled Affiliates underwriting the indemnity portion of workers' compensation insurance:

An amount equal to 0.35 percent of the gross revenue per annum of Controlled Affiliate arising from products using the marks; plus, an annual fee of $5,000 per license for a Controlled Affiliate subject to Standard 7.

Amended as of September 19, 2014

EXHIBIT C (continued)

FOR NONRISK PRODUCTS:

For third-party administrative business, an amount equal to its pro rata share of Sponsoring Plan's dues payable to BCBSA computed with the addition of the Controlled Affiliate's members using the Marks on health care plans and related services as reported on the Quarterly Enrollment Report with BCBSA. The payment by Sponsoring Plan of its dues to BCBSA, including that portion described in this paragraph, will satisfy the requirement of this paragraph, and no separate payment will be necessary.

For non-third party administrative business (e.g., case management, provider networks, etc.), an amount equal to 0.24 percent of the gross revenue per annum of Controlled Affiliate arising from products using the marks; plus:

1) An annual fee of $5,000 per license for a Controlled Affiliate subject to Standard 6 D.

2) An annual fee of $2,000 per license for all other Controlled Affiliates.

The foregoing shall be reduced by one-half where both a BLUE CROSS® and BLUE SHIELD® License are issued to the same Controlled Affiliate. In the event that any license period is greater or less than one (1) year, any amounts due shall be prorated. Royalties under this formula will be calculated, billed and paid in arrears.

Amended as of September 19, 2014

EXHIBIT 1A

CONTROLLED AFFILIATE LICENSE AGREEMENT APPLICABLE TO LIFE INSURANCE COMPANIES
(Includes revisions adopted by Member Plans through their November 18, 2016 meeting)

This agreement by and among Blue Cross and Blue Shield Association ("BCBSA")_____ ("Controlled Affiliate"), a Controlled Affiliate of the Blue Cross Plan(s), known as _____ ("Plan").

WHEREAS, BCBSA is the owner of the BLUE CROSS and BLUE CROSS Design service marks;

WHEREAS, the Plan and the Controlled Affiliate desire that the latter be entitled to use the BLUE CROSS and BLUE CROSS Design service marks (collectively the "Licensed Marks") as service marks and be entitled to use the term BLUE CROSS in a trade name ("Licensed Name");

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. GRANT OF LICENSE

Subject to the terms and conditions of this Agreement, BCBSA hereby grants to the Controlled Affiliate the exclusive right to use the licensed Marks and Names in connection with and only in connection with those life insurance and related services authorized by applicable state law, other than health care plans and related services (as defined in the Plan's License Agreements with BCBSA) which services are not separately licensed to Controlled Affiliate by BCBSA, in the Service Area served by the Plan, except that BCBSA reserves the right to use the Licensed Marks and Name in said Service Area, and except to the extent that said Service Area may overlap the area or areas served by one or more other licensed Blue Cross Plans as of the date of this License as to which overlapping areas the rights hereby granted are non-exclusive as to such other Plan or Plans and their respective Licensed Controlled Affiliates only. Controlled Affiliate cannot use the Licensed Marks or Name outside the Service Area or in its legal or trade name; provided, however, that if and only for so long as Controlled Affiliate also holds a Blue Cross Controlled Affiliate License Agreement applicable to health care plans and related services, Controlled Affiliate may use the Licensed Marks and Name in its legal and trade name according to the terms of such license agreement.

Amended as of June 12, 2003

2. QUALITY CONTROL

A. Controlled Affiliate agrees to use the Licensed Marks and Name only in relation to the sale, marketing and rendering of authorized products and further agrees to be bound by the conditions regarding quality control shown in Exhibit A as it may be amended by BCBSA from time-to-time.

B. Controlled Affiliate agrees that Plan and/or BCBSA may, from time-to-time, upon reasonable notice, review and inspect the manner and method of Controlled Affiliate's rendering of service and use of the Licensed Marks and Name.

C. Controlled Affiliate agrees that it will provide on an annual basis (or more often if reasonably required by Plan or by BCBSA) a report to Plan and BCBSA demonstrating Controlled Affiliate's compliance with the requirements of this Agreement including but not limited to the quality control provisions of Exhibit A.

D. As used herein, a Controlled Affiliate is defined as an entity organized and operated in such a manner that it is subject to the bona fide control of a Plan or Plans. Absent written approval by BCBSA of an alternative method of control, bona fide control shall mean the legal authority, directly or indirectly through wholly-owned subsidiaries: (a) to select members of the Controlled Affiliate's governing body having not less than 51% voting control thereof; (b) to exercise operational control with respect to the governance thereof; and (c) to prevent any change in its articles of incorporation, bylaws or other governing documents deemed inappropriate. In addition, a Plan or Plans shall own at least 51% of any for-profit Controlled Affiliate. If the Controlled Affiliate is a mutual company, the Plan or its designee(s) shall have and maintain, in lieu of the requirements of items (a) and (c) above, proxies representing 51% of the votes at any meeting of the policyholders and shall demonstrate that there is no reason to believe this such proxies shall be revoked by sufficient policyholders to reduce such percentage below 51%.

3. SERVICE MARK USE

Controlled Affiliate shall at all times make proper service mark use of the Licensed Marks, including but not limited to use of such symbols or words as BCBSA shall specify to protect the Licensed Marks, and shall comply with such rules (applicable to all Controlled Affiliates licensed to use the Marks) relative to service mark use, as are issued from time-to-time by BCBSA. If there is any public reference to the affiliation between the Plan and the Controlled Affiliate, all of the Controlled Affiliate's licensed services in the Service Area of the Plan shall be rendered under the Licensed Marks. Controlled Affiliate recognizes and agrees that all use of the Licensed Marks by Controlled Affiliate shall inure to the benefit of BCBSA.

4. SUBLICENSING AND ASSIGNMENT

Controlled Affiliate shall not sublicense, transfer, hypothecate, sell, encumber or mortgage, by operation of law or otherwise, the rights granted hereunder and any such act shall be voidable at the option of Plan or BCBSA. This Agreement and all rights and duties hereunder are personal to Controlled Affiliate.

5. INFRINGEMENTS

Controlled Affiliate shall promptly notify Plan and BCBSA of any suspected acts of infringement, unfair competition or passing off which may occur in relation to the Licensed Marks. Controlled Affiliate shall not be entitled to require Plan or BCBSA to take any actions or institute any proceedings to prevent infringement, unfair competition or passing off by third parties. Controlled Affiliate agrees to render to Plan and BCBSA, free of charge, all reasonable assistance in connection with any matter pertaining to the protection of the Licensed Marks by BCBSA.

6. LIABILITY INDEMNIFICATION

Controlled Affiliate hereby agrees to save, defend, indemnify and hold Plan and BCBSA harmless from and against all claims, damages, liabilities and costs of every kind, nature and description which may arise as a result of Controlled Affiliate's rendering of health care services under the Licensed Marks.

7. LICENSE TERM

The license granted by this Agreement shall remain in effect for a period of one (1) year and shall be automatically extended for additional one (1) year periods upon evidence satisfactory to the Plan and BCBSA that Controlled Affiliate meets the then applicable quality control standards, unless one of the parties hereto notifies the other party of the termination hereof at least sixty (60) days prior to expiration of any license period.

This Agreement may be terminated by the Plan or by BCBSA for cause at any time provided that Controlled Affiliate has been given a reasonable opportunity to cure and shall not effect such a cure within thirty (30) days of receiving written notice of the intent to terminate (or commence a cure within such thirty day period and continue diligent efforts to complete the cure if such curing cannot reasonably be completed within such thirty day period). By way of example and not for purposes of limitation, Controlled Affiliate's failure to abide by the quality control provisions of Paragraph 2, above, shall be considered a proper ground for cancellation of this Agreement.

This Agreement and all of Controlled Affiliate's rights hereunder shall immediately terminate without any further action by any party or entity in the event that:

A. Controlled Affiliate shall no longer comply with Standard No. 1 (Organization and Governance) of Exhibit A or, following an opportunity to cure, with the remaining quality control provisions of Exhibit A, as it may be amended from time-to-time; or

B. Plan ceases to be authorized to use the Licensed Marks; or

C. Appropriate dues for Controlled Affiliate pursuant to item 8 hereof, which are the royalties for this License Agreement are more than sixty (60) days in arrears to BCBSA.

Upon termination of this Agreement for cause or otherwise, Controlled Affiliate agrees that it shall immediately discontinue all use of the Licensed Marks including any use in its trade name.

In the event of any disagreement between Plan and BCBSA as to whether grounds exist for termination or as to any other term or condition hereof, the decision of BCBSA shall control, subject to provisions for mediation or mandatory dispute resolution in effect between the parties.

Upon termination of this Agreement, Licensed Controlled Affiliate shall immediately notify all of its customers that it is no longer a licensee of the Blue Cross and Blue Shield Association and provide instruction on how the customer can contact the Blue Cross and Blue Shield Association or a designated licensee to obtain further information on securing coverage. The written notification required by this paragraph shall be in writing and in a form approved by the Association. The Association shall have the right to audit the terminated entity's books and records to verify compliance with this paragraph.

8. DUES

Controlled Affiliate will pay to BCBSA a fee for this license in accordance with the following formula:

- An annual fee of five thousand dollars ($5,000) per license, plus
- .05% of gross revenue per year from branded group products, plus
- .5% of gross revenue per year from branded individual products plus
- .14% of gross revenue per year from branded individual annuity products.

The foregoing percentages shall be reduced by one-half where both a BLUE CROSS® and BLUE SHIELD® license are issued to the same entity. In the event that any License period is greater or less than one (1) year, any amounts due shall be prorated. Royalties under this formula will be calculated, billed and paid in arrears.

Plan will promptly and timely transmit to BCBSA all dues owed by Controlled Affiliate as determined by the above formula and if Plan shall fail to do so, Controlled Affiliate shall pay such dues directly.

Amended as of November 20, 1997

9. JOINT VENTURE

Nothing contained in this Agreement shall be construed as creating a joint venture, partnership, agency or employment relationship between Plan and Controlled Affiliate or between either and BCBSA.

9A. VOTING

For all provisions of this Agreement referring to voting, the term 'Plans' shall mean all entities licensed under the Blue Cross License Agreement and/or the Blue Shield License Agreement, and in all votes of the Plans under this Agreement the Plans shall vote together. For weighted votes of the Plans, the Plan shall have a number of votes equal to the number of weighted votes (if any) that it holds as a Blue Cross Plan plus the number of weighted votes (if any) that it holds as a Blue Shield Plan. For all other votes of the Plans, the Plan shall have one vote. For all questions requiring an affirmative three-fourths weighted vote of the Plans, the requirement shall be deemed satisfied with a lesser weighted vote unless the greater of: (i) 6/52 or more of the Plans (rounded to the nearest whole number, with 0.5 or multiples thereof being rounded to the next higher whole number) fail to cast weighted votes in favor of the question; or (ii) three (3) of the Plans fail to cast weighted votes in favor of the question. Notwithstanding the foregoing provision, if there are thirty-nine (39) Plans, the requirement of an affirmative three-fourths weighted vote shall be deemed satisfied with a lesser weighted vote unless four (4) or more Plans fail to cast weighted votes in favor of the question.

10. NOTICES AND CORRESPONDENCE

Notices regarding the subject matter of this Agreement or breach or termination thereof shall be in writing and shall be addressed in duplicate to the last known address of each other party, marked respectively to the attention of its President and, if any, its General Counsel.

Amended as of June 16, 2005

11. COMPLETE AGREEMENT

This Agreement contains the complete understandings of the parties in relation to the subject matter hereof. This Agreement may only be amended by a writing executed by all parties.

12. SEVERABILITY

If any term of this Agreement is held to be unlawful by a court of competent jurisdiction, such finding shall in no way effect the remaining obligations of the parties hereunder and the court may substitute a lawful term or condition for any unlawful term or condition so long as the effect of such substitution is to provide the parties with the benefits of this Agreement.

13. NONWAIVER

No waiver by BCBSA of any breach or default in performance on the part of the Controlled Affiliate or any other licensee of any of the terms, covenants or conditions of this Agreement shall constitute a waiver of any subsequent breach or default in performance of said terms, covenants or conditions.

14. GOVERNING LAW

This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of Illinois.

IN WITNESS WHEREOF, the parties have caused this License Agreement to be executed, effective as of the date of last signature written below.

BLUE CROSS AND BLUE SHIELD ASSOCIATION

By: __

Date: __

Controlled Affiliate:

By: __

Date: __

Plan:

By: __

Date: __

EXHIBIT A
CONTROLLED AFFILIATE LICENSE STANDARDS
LIFE INSURANCE COMPANIES
Page 1 of 2

PREAMBLE

The standards for licensing Life Insurance Companies (Life and Health Insurance companies, as defined by state statute) are established by BCBSA and are subject to change from time-to-time upon the affirmative vote of three-fourths (3/4) of the Plans and three-fourths (3/4) of the total weighted vote of all Plans. Each Licensed Plan is required to use a standard controlled affiliate license form provided by BCBSA and to cooperate fully in assuring that the licensed Life Insurance Company maintains compliance with the license standards.

An organization meeting the following standards shall be eligible for a license to use the Licensed Marks within the service area of its sponsoring Licensed Plan to the extent and the manner authorized under the Controlled Affiliate License applicable to Life Insurance Companies and the principal license to the Plan.

Standard 1 - Organization and Governance

The LIC shall be organized and operated in such a manner that it is controlled by a licensed Plan or Plans which have, directly or indirectly: 1) not less than 51% of the voting control of the LIC; and 2) the legal ability to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the LIC with which it does not concur; and 3) operational control of the LIC.

If the LIC is a mutual company, the Plan or its designee(s) shall have and maintain, in lieu of the requirements of items 1 and 2 above, proxies representing at least 51% of the votes at any policyholder meeting and shall demonstrate that there is no reason to believe such proxies shall be revoked by sufficient policyholders to reduce such percentage below 51%.

Standard 2 - State Licensure

The LIC must maintain unimpaired licensure or certificate of authority to operate under applicable state laws as a life and health insurance company in each state in which the LIC does business.

EXHIBIT A
CONTROLLED AFFILIATE LICENSE STANDARDS
LIFE INSURANCE COMPANIES
Page 2 of 2

Standard 3 - Records and Examination

The LIC and its sponsoring licensed Plan(s) shall maintain and furnish, on a timely and accurate basis, such records and reports regarding the LIC as may be required in order to establish compliance with the license agreement. The LIC and its sponsoring licensed Plan(s) shall permit BCBSA to examine the affairs of the LIC and shall agree that BCBSA's board may submit a written report to the chief executive officer(s) and the board(s) of directors of the sponsoring Plan(s).

Standard 4 - Mediation

The LIC and its sponsoring Plan(s) shall agree to use the then-current BCBSA mediation and mandatory dispute resolution processes, in lieu of a legal action between or among another licensed controlled affiliate, a licensed Plan or BCBSA.

Standard 5 - Financial Responsibility

The LIC shall maintain adequate financial resources to protect its customers and meet its business obligations.

Standard 6 - Cooperation with Affiliate License Performance Response Process Protocol

The LIC and its Sponsoring Plan(s) shall cooperate with BCBSA’s Board of Directors and its Brand Enhancement & Protection Committee in the administration of the Affiliate License Performance Response Process Protocol (ALPRPP) and in addressing LIC compliance problems identified thereunder.

Exhibit 1A1

CONTROLLED AFFILIATE
TRADEMARK LICENSE AGREEMENT
FOR LIFE AND DISABILTY INSURANCE PRODUCTS

This Agreement by and among Blue Cross and Blue Shield Association ("BCBSA") and_____ , ("Life and Disability Controlled Affiliate") which is a company offering life and disability insurance products owned and controlled by , , _____ (individually, "Sponsoring Plan" and when referred to collectively, "Sponsoring Plans").

Whereas, BCBSA is the owner of the BLUE CROSS and BLUE SHIELD word and design service marks and any derivatives thereof ("Licensed Marks");

Whereas, each Sponsoring Plan is licensed separately by BCBSA to use one or more of the Licensed Marks in a particular Service Area;

Whereas, the Sponsoring Plans and the Life and Disability Controlled Affiliate desire that the latter be entitled to use the appropriate Licensed Marks in connection with life and disability insurance products in some or all of such Sponsoring Plans' Service Areas and in the Service Areas of other Regular Member Plans, as defined in the BCBSA By-laws, ("Blue Plans") consistent with the terms of this Agreement.

NOW, THEREFORE, in consideration of the foregoing and the mutual agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. GRANT OF LICENSE

A. Subject to the terms and conditions of this Agreement, BCBSA hereby grants to the Life and Disability Controlled Affiliate the limited right to use the Licensed Marks in connection with and only in connection with the following life and disability insurance products authorized by state law: (1) Group: Term Life, Long Term Disability, Whole Life, Benefit Life, Universal Life; (2) Individual: Term Life, Whole Life, Dependent Life, Spouse Life; (3) Other: Disability Income, Short Term Disability, Long Term Disability, Income Replacement; and (4) such other life and disability products approved by BCBSA in writing ("Licensed Products") in the Service Areas served by the Sponsoring Plans or in the Service Area or Areas of one or more other licensed Blue Plans, provided that such Blue Plans have consented to such use as authorized by this Agreement. Life and Disability Controlled Affiliate may not use the Licensed Marks in its legal or trade name.

B. Notwithstanding that the license granted to Life and Disability Controlled Affiliate is a license to use all of the Licensed Marks, Life and Disability Controlled Affiliate may only use those of the Licensed Marks in

the Service Area of a Sponsoring Plan or other consenting Blue Plan as described below that such Plan is authorized to use as a Blue Plan pursuant to its separate license agreements with BCBSA.

C. Life and Disability Controlled Affiliate may use the Licensed Marks in the Service Areas of Sponsoring Plans or in the Service Area of a Blue Plan that is not a signatory to this Agreement only after such Sponsoring Plan(s) or non-signatory Blue Plan consents to such use by executing a written consent in substantially the same form as the Consent Agreement attached as Exhibit B.

D. The following provisions apply with respect to Consent Agreements once such agreements have been fully and properly executed:

(1) All sales, marketing and advertising materials developed by and proposed for use by Life and Disability Controlled Affiliate in the Service Area of Sponsoring Plan or consenting Blue Plan (hereinafter, such consenting Sponsoring Plan or consenting Blue Plan collectively referred to "Consenting Plan(s)") must clearly identify the Consenting Plan (for example, a statement on such materials that reads "This product is offered with the cooperation of Blue Cross and/or Blue Shield of [Geography]");

(2) To the extent the Consenting Plan has separate divisions or other Affiliates that use the Licensed Marks in distinct geographic areas within its Service Area, consent obtained under this Agreement may be limited to one or more of such specific geographic areas as specified by the Consenting Plan in its signed Consent Agreement. For purposes of this entire Agreement, all references to the Service Area of a Sponsoring Plan, Blue Plan or Consenting Plan may include the entire Service Area or a distinct geographic area within such Service Area as specified in this Section 1 D (2);

(3) Where BCBSA has licensed two or more Blue Plans to use the same Licensed Marks in the same Service Area, in addition to the requirements set forth in Section D (1) above, the sales, marketing and advertising materials referenced in such section above must be communicated to the Consenting Plan's existing and prospective accounts through or with the approval of such Consenting Plan, and the personnel of such Consenting Plan must actively participate in all sales and marketing activities conducted by Life and Disability Controlled Affiliate in the same Service Area, including participating in meetings (whether in-person or via telephone, video or internet conference) with both existing and prospective accounts of the Consenting Plan;

(4) Life and Disability Controlled Affiliate shall be entitled to use in a Service Area only those Licensed Marks that the Consenting Plan has been granted by BCBSA the license to use under its Blue Plan license

(5) agreements (for example, if a Consenting Plan is licensed to use only the Blue Cross Marks in its Service Area, the materials used by Life and Disability Controlled Affiliate in that Service Area may only contain or reference the Blue Cross Marks and not the Blue Shield Marks).

(6) If a Consent Agreement is terminated, Life and Disability Controlled Affiliate shall, unless BCBSA and the Consenting Plan agree in their sole discretion to a phase out in writing, immediately (i) cease all use of the Licensed Marks, including in connection with any and all sales and marketing of the Licensed Products in the Service Area where consent has been terminated, and (ii) notify its customers that it is no longer a licensee and provide instruction on how the customer can contact BCBSA or a designated licensee to obtain further information on securing coverage. The notification required by this paragraph shall be in writing and in form approved by BCBSA.

2. QUALITY CONTROL

A. Life and Disability Controlled Affiliate agrees to use the Licensed Marks only in relation to the sale, marketing and administration of the Licensed Products and further agrees to be bound by the conditions regarding quality control shown in Exhibit A and the Guidelines to Administer the Standards for Trademark License Agreement for Life and Disability Insurance Products attached thereto.

B. Life and Disability Controlled Affiliate agrees that BCBSA may, from time-to-time, upon reasonable notice, review and inspect the manner and method of Life and Disability Controlled Affiliate's rendering of service and use of the Licensed Marks.

C. Life and Disability Controlled Affiliate agrees that it will provide on an annual basis (or more often if reasonably required by BCBSA) a report to BCBSA demonstrating Life and Disability Controlled Affiliate's compliance with the requirements of this Agreement including but not limited to the quality control provisions of Exhibit A.

D. As used herein, a Life and Disability Controlled Affiliate is defined as: An entity organized and operated in such a manner that it is 100% owned and controlled by Sponsoring Plans. Absent written approval by BCBSA of an alternative method of control, control shall mean the legal authority, directly or indirectly through wholly-owned subsidiaries: (a) to select members of the Life and Disability Controlled Affiliate's governing body having not less than 100% voting control thereof; (b) to exercise operational control with respect to the governance thereof; and (c) to prevent any change in its articles of incorporation, bylaws or other governing documents deemed inappropriate. In addition, a Sponsoring Plan or Plans shall own at least 100% of any for profit Life and Disability Controlled Affiliate.

3. SERVICE MARK USE

Life and Disability Controlled Affiliate shall at all times make proper service mark use of the Licensed Marks and shall ensure all uses of the Licensed Marks comply with the BCBSA Brand Regulations, as amended by BCBSA from time to time. Life and Disability Controlled Affiliate recognizes and agrees that all use of the Licensed Marks by Life and Disability Controlled Affiliate shall inure to the benefit of BCBSA.

4. SUBLICENSING AND ASSIGNMENT

The license hereby granted to Life and Disability Controlled Affiliate to use the Licensed Marks is and shall be personal to Life and Disability Controlled Affiliate and shall not be assignable by any act of the Life and Disability Controlled Affiliate, directly or indirectly, without the written consent of BCBSA. Said license shall not be assignable by operation of law, nor shall Life and Disability Controlled Affiliate mortgage or part with possession or control of this license or any right hereunder, and the Life and Disability Controlled Affiliate shall have no right to grant any sublicense to use the Licensed Marks.

5. INFRINGEMENTS

Life and Disability Controlled Affiliate shall promptly notify BCBSA of any suspected acts of infringement, unfair competition or passing off which may occur in relation to the Licensed Marks. Life and Disability Controlled Affiliate shall not be entitled to require BCBSA to take any actions or institute any proceedings to prevent infringement, unfair competition or passing off by third parties. Life and Disability Controlled Affiliate agrees to render to BCBSA, free of charge, all reasonable assistance in connection with any matter pertaining to the protection of the Licensed Marks by BCBSA. BCBSA shall have sole control of the defense and resolution of any claim of infringement brought or threatened by others.

6. LIABILITY INDEMNIFICATION

Life and Disability Controlled Affiliate hereby agrees to save, defend, indemnify and hold BCBSA harmless from and against all claims, damages, liabilities and costs of every kind, nature and description which may arise as a result of Life and Disability Controlled Affiliate's conduct.

7. LICENSE TERM

A. The license granted by this Agreement shall remain in effect for a period of one (1) year and shall be automatically extended for additional one (1) year periods, unless either BCBSA or Life and Disability Controlled Affiliate notifies the other party in writing of the termination hereof at least sixty (60) days prior to expiration of any license period.

B. This Agreement may be terminated by BCBSA for cause at any time provided that Life and Disability Controlled Affiliate has been given a reasonable opportunity to cure and shall not effect such a cure within thirty (30) days of receiving written notice of the intent to terminate (or commence a cure within such thirty day period and continue diligent efforts to complete the cure if such curing cannot reasonably be completed within such thirty day period). By way of example and not for purposes of limitation, Life and Disability Controlled Affiliate's failure to abide by the conditions regarding use of the Licensed Marks set forth in Section 1 of this Agreement or the quality control provisions of Section 2 (other than with respect to Section 2 D which is subject to immediate termination as stated in Section 7 C (1) below) shall be considered proper grounds for termination of this Agreement.

C. This Agreement and all of Life and Disability Controlled Affiliate's rights hereunder shall immediately terminate without any further action by any party or entity in the event that:

(1) Life and Disability Controlled Affiliate shall no longer comply with Section 2 D (or Standard No. 1 (Organization and Governance) of Exhibit A); or

(2) Any Sponsoring Plan ceases to be authorized to use the Licensed Marks; or

(3) Appropriate fees for Life and Disability Controlled Affiliate pursuant to Section 8 of this Agreement are more than sixty (60) days in arrears to BCBSA.

Upon termination of this Agreement for cause or otherwise, Life and Disability Controlled Affiliate agrees that it shall immediately discontinue all use of the Licensed Marks.

In the event of any disagreement between Life and Disability Controlled Affiliate and BCBSA as to whether grounds exist for termination or as to any other term or condition hereof, the decision of BCBSA shall control, subject to provisions for mediation or mandatory dispute resolution in effect between the parties.

Upon termination of this Agreement, Licensed Life and Disability Controlled Affiliate shall immediately notify all of its customers that it is no longer a licensee of BCBSA and provide instruction on how the customer can contact BCBSA or a designated licensee to obtain further information on securing coverage. The notification required by this paragraph shall be in writing and in a form approved by BCBSA. BCBSA shall have the right to audit the terminated entity's books and records to verify compliance with this paragraph.

8. ROYALTIES

Life and Disability Controlled Affiliate will pay to BCBSA a fee for this license in accordance with the following formula:

- An annual fee of five thousand dollars ($5,000) per license, plus
- .05% of gross revenue per year from group products sold under the Licensed Marks, plus
- .5% of gross revenue per year from individual products sold under the Licensed Marks

In the event that any license period is greater or less than one (1) year, any amounts due shall be prorated. Royalties under this formula will be calculated, billed and paid in arrears.

Life and Disability Controlled Affiliate will promptly and timely transmit to BCBSA all fees owed by Life and Disability Controlled Affiliate as determined by the above formula.

9. JOINT VENTURE

Nothing contained in this Agreement shall be construed as creating a joint venture, partnership, agency or employment relationship between any Sponsoring Plan and Life and Disability Controlled Affiliate or between among them and/or BCBSA.

10. VOTING

For all provisions of this Agreement referring to voting, the term 'Plans' shall mean all entities licensed under the Blue Cross License Agreement and/or the Blue Shield License Agreement, and in all votes of the Plans under this Agreement the Plans shall vote together. For weighted votes of the Plans, the Plan shall have a number of votes equal to the number of weighted votes (if any) that it holds as a Blue Cross Plan plus the number of weighted votes (if any) that it holds as a Blue Shield Plan. For all other votes of the Plans, the Plan shall have one vote. For all questions requiring an affirmative three-fourths weighted vote of the Plans, the requirement shall be deemed satisfied with a lesser weighted vote unless the greater of: (i) 6/52 or more of the Plans (rounded to the nearest whole number, with 0.5 or multiples thereof being rounded to the next higher whole number) fail to cast weighted votes in favor of the question; or (ii) three (3) of the Plans fail to cast weighted votes in favor of the question. Notwithstanding the foregoing provision, if there are thirty-nine (39) Plans, the requirement of an affirmative three-fourths weighted vote shall be deemed satisfied with a lesser weighted vote unless four (4) or more Plans fail to cast weighted votes in favor of the question.

11. NOTICES AND CORRESPONDENCE

Notices regarding the subject matter of this Agreement or breach or termination thereof shall be in writing and shall be addressed in duplicate to the last known address of each other party, marked respectively to the attention of its President and, if any, its General Counsel.

12. COMPLETE AGREEMENT

This Agreement contains the complete understandings of the parties in relation to the subject matter hereof. This Agreement may only be amended by: (a) a writing signed by all parties; or (b) a writing approved by the affirmative vote of three-fourths of the Blue Plans and three-fourths of the total then current weighted vote of all the Blue Plans as officially recorded by the BCBSA Corporate Secretary. Upon such adoption by the Blue Plans, this Agreement and all other Trademark License Agreements for Life and Disability Insurance Products then in effect shall simultaneously be amended.

13. SEVERABILITY

If any term of this Agreement is held to be unlawful by a court of competent jurisdiction, such finding shall in no way affect the remaining obligations of the parties hereunder and the court may substitute a lawful term or condition for any unlawful term or condition so long as the effect of such substitution is to provide the parties with the benefits of this Agreement.

14. NONWAIVER

No waiver by BCBSA of any breach or default in performance on the part of the Life and Disability Controlled Affiliate or any other licensee of any of the terms, covenants or conditions of this Agreement shall constitute a waiver of any subsequent breach or default in performance of said terms, covenants or conditions.

15. GOVERNING LAW

This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of Illinois.

IN WITNESS WHEREOF, the parties have caused this License Agreement to be executed, effective as of the date of last signature written below.

BLUE CROSS AND BLUE SHIELD ASSOCIATION

By: __

Date: __

Life and Disability Controlled Affiliate:

By: __

Date: __

Sponsoring Plan:

By: __

Date: __

Name: _____

Sponsoring Plan:

By: __

Date: __

Name: _____

[Add other Sponsoring Plans as necessary]

EXHIBIT A

LICENSE STANDARDS APPLICABLE TO TRADEMARK LICENSE AGREEMENT FOR LIFE AND DISABILITY INSURANCE PRODUCTS Page 1 of 2

Standard 1 - Organization and Governance

Any Life and Disability Controlled Affiliate licensed under the Trademark License Agreement for Life and Disability Insurance Products ("licensee") shall be organized and operated in such a manner that it is an entity organized and operated in such a manner that it is 100% owned and controlled by Sponsoring Plans. Absent written approval by BCBSA of an alternative method of control, control shall mean the legal authority, directly or indirectly through wholly-owned subsidiaries: (a) to select members of the Life and Disability Controlled Affiliate's governing body having not less than 100% voting control thereof; (b) to exercise operational control with respect to the governance thereof; and (c) to prevent any change in its articles of incorporation, bylaws or other governing documents deemed inappropriate. In addition, a Sponsoring Plan or Plans shall own at least 100% of any for profit Life and Disability Controlled Affiliate.

Standard 2 - State Licensure

The licensee must maintain unimpaired licensure or certificate of authority to operate under applicable state laws as a life company in each state in which the licensee does business.

Standard 3 - Records and Examination

The licensee shall maintain and furnish, on a timely and accurate basis, such records and reports regarding the licensee as may be required in order to establish compliance with the Agreement. The licensee shall permit BCBSA to examine the affairs of the licensee and shall agree that BCBSA's board may submit a written report to the chief executive officer(s) and the board(s) of directors of the Sponsoring Plan(s).

Standard 4 - Mediation

The licensee, its Sponsoring Plan(s) and all consenting Blue Plans shall agree to use the then-current BCBSA mediation and mandatory dispute resolution processes, in lieu of a legal action between or among another licensed Life and Disability Controlled Affiliate, a Sponsoring Plan and or consenting Blue Plan or BCBSA.

EXHIBIT A

LICENSE STANDARDS APPLICABLE TO TRADEMARK LICENSE AGREEMENT FOR LIFE AND DISABILITY INSURANCE PRODUCTS Page 2 of 2

Standard 5 - Financial Responsibility

The licensee shall maintain adequate financial resources to protect its customers and meet its business obligations.

Standard 6 - Cooperation with BCBSA Governance

The licensee shall cooperate with BCBSA's Board of Directors and its Brand Enhancement & Protection Committee in the administration of and in addressing licensee compliance problems that may be identified in connection with the operation or administration of the Trademark License Agreement for Life and Disability Insurance Products.

EXHIBIT B

CONSENT AGREEMENT

This Consent Agreement is made and entered into by and among the undersigned Blue Plan, and_____ ("Life and Disability Controlled Affiliate"), and the Blue Cross and Blue Shield Association ("BCBSA") and shall be deemed effective on_____ ("Effective Date").

Whereas, BCBSA owns the Blue Cross and Blue Shield word and design service marks and any derivative mark thereof (the "Brands");

Whereas, the undersigned Blue Plan is licensed to use one or more of the Brands within a specific geographic area ("Service Area");

Whereas Life and Disability Controlled Affiliate is licensed by BCBSA to use one or more of the Brands to offer life and disability insurance products ("Products") as defined and authorized in the Trademark License Agreement for Life and Disability Insurance Products ("Life and Disability License Agreement");

Whereas neither the Blue Plan nor its affiliates offer the Products under any of the Brands in such Blue Plan's Service Area or portion thereof where Blue Plan has consented to sale of the Products by Life and Disability Controlled Affiliate; and

Whereas BCBSA and the undersigned Blue Plan desire to consent to Life and Disability Controlled Affiliate's use of the Brands in Blue Plan's Service Area consistent with the terms of the Life and Disability License Agreement and this Consent Agreement.

Now, therefore, in consideration of the obligations and conditions stated in this Agreement, Blue Plan, Life and Disability Controlled Affiliate and BCBSA agree as follows:

1. Life and Disability Controlled Affiliate may market, sell, administer and underwrite the Products in Blue Plan's Service Area under the Brands licensed to Blue Plan in such Service Area subject to the terms of this Consent Agreement, the Life and Disability License Agreement and Blue Plan's license agreement(s) with BCBSA. Life and Disability Controlled Affiliate's rights under the Brands to offer the Products under the Brands are limited to offering the Products only under the Brand(s) licensed to the consenting Blue Plan.

2. Life and Disability Controlled Affiliate shall work with the undersigned Blue Plan to develop a written sales and marketing agreement that identifies the relationship between it and Blue Plan for the sales, marketing and customer service for the Products. The term of the sales and marketing agreement shall be the same as the term of this Consent Agreement.

3. All sales, marketing and advertising materials developed by and proposed for use by Life and Disability Controlled Affiliate in a consenting Blue Plan's Service Area must clearly identify the consenting Blue Plan (for example, a statement on such materials that reads "This product is offered with the cooperation of Blue Cross and/or Blue Shield of [Geography]");

4. Life and Disability Controlled Affiliate may use the Brands to sell the Products in the following Service Area or portion thereof as designated by Blue Plan:

   _____

5. If two or more Blue Plans to use the same Licensed Marks in the same Service Area, Life and Disability Controlled Affiliate shall work with the consenting Blue Plan in the following manner: (a) the sales, marketing and advertising materials must be communicated to the consenting Blue Plan's existing and prospective accounts through or with the approval of such Blue Plan, and (b) the personnel of such Blue Plan must actively participate in all sales and marketing activities conducted by Life and Disability Controlled Affiliate in the same Service Area, including participating in meetings (whether in-person or via telephone, video or internet conference) with both existing and prospective accounts of the consenting Blue Plan;

6. Life and Disability Controlled Affiliate shall be entitled to use in a Service Area only those Licensed Marks that the consenting Blue Plan has been granted by BCBSA the license to use under its license agreement (for example, if a consenting Blue Plan is licensed to use only the Blue Cross Marks in its Service Area, the materials used by Life and Disability Controlled Affiliate in that Service Area may only contain or reference the Blue Cross Marks and not the Blue Shield Marks).

7. If this Consent Agreement is terminated, Life and Disability Controlled Affiliate shall, unless each BCBSA and the Blue Plan agree in their sole discretion to a phase out in writing, immediately (i) cease all use of the Licensed Marks, including in connection with any and all sales and marketing of the Licensed Products in the Service Area where consent has been terminated, and (ii) notify its customers that it is no longer a licensee of BCBSA and provide instruction on how the customer can contact BCBSA or a designated licensee to obtain further information on securing coverage. The notification required by this paragraph shall be in writing and in form approved by BCBSA.

8. The term of this Consent Agreement shall be one year from the Effective Date. Unless either Blue Plan or Life and Disability Controlled Affiliate provides the other party with written notice of its desire not to renew this Consent Agreement at least 60 days prior to expiration of the term or any extended term or unless terminated as provided in Paragraph 9 below, this Consent Agreement shall automatically renew for subsequent one year periods.

9. This Consent Agreement may be terminated as follows:

   A. Upon mutual written consent of Life and Disability Controlled Affiliate and Blue Plan;

   B. By Blue Plan or Life and Disability Controlled Affiliate upon 60 days advance written notice to the non-terminating party and BCBSA; or

   C. By Blue Plan immediately if Life and Disability Controlled Affiliate does not comply with this Consent Agreement or the sales protocol agreement.

10. This Consent Agreement shall automatically terminate if Blue Plan's primary licensee agreement terminates for any reason or if the Life and Disability License Agreement terminates for any reason.

Agreed and Accepted by:

[Blue Plan]:

By: __
Title: __

BLUE CROSS AND BLUE SHIELD ASSOCIATION:

By: __
Title: __

LIFE AND DISABILITY CONTROLLED AFFILIATE:

By: __
Title: __

Exhibit 1B

BLUE CROSS
CONTROLLED AFFILIATE LICENSE AGREEMENT
APPLICABLE TO REGIONAL MEDICARE ADVANTAGE PPO PRODUCTS
(Adopted by Member Plans at their November 18, 2016 meeting)

This Agreement by and among Blue Cross and Blue Shield Association ("BCBSA") and_____ ("Controlled Affiliate"), a Controlled Affiliate of the Blue Cross Plan(s), known as_____ ("Controlling Plans"), each of which is also a Party signatory hereto.

WHEREAS, BCBSA is the owner of the BLUE CROSS and BLUE CROSS Design service marks;

WHEREAS, under the Medicare Modernization Act, companies may apply to and be awarded a contract by the Centers for Medicare and Medicaid Services ("CMS") to offer Medicare Advantage PPO products in geographic regions designated by CMS (hereafter "regional MAPPO products").

WHEREAS, some of the CMS-designated regions include the Service Areas, or portions thereof, of more than one Plan.

WHEREAS, the Controlling Plans and Controlled Affiliate desire that the latter be entitled to use the BLUE CROSS and BLUE CROSS Design service marks (collectively the "Licensed Marks") as service marks and be entitled to use the term BLUE CROSS in a trade name ("Licensed Name") to offer regional MAPPO products in a region that includes the Service Areas, or portions thereof, of more than one Controlling Plan;

NOW THEREFORE, in consideration of the foregoing and the mutual agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. GRANT OF LICENSE

Subject to the terms and conditions of this Agreement, BCBSA hereby grants to Controlled Affiliate the right to use the Licensed Marks and Name in connection with, and only in connection with the sale, marketing and administration of regional MAPPO products and related services.

This grant of rights is non-exclusive and is limited to the following states: _____ (the "Region"). Controlled Affiliate may use the Licensed

Marks and Name in its legal name on the following conditions: (i) the legal name must be approved in advance, in writing, by BCBSA; (ii) Controlled Affiliate shall not do business outside the Region under any name or mark except business conducted in the Service Area of a Controlling Plan provided that Controlled Affiliate is separately licensed by BCBSA to use the Licensed Marks and Name in connection with health care plans and related services in the Service Area of such Controlling Plan; and (iii) Controlled Affiliate shall not use the Licensed Marks and Name, or any derivative thereof, as part of any name or symbol used to identify itself in any securities market. Controlled Affiliate may use the Licensed Marks and Name in its Trade Name only with the prior, written, consent of BCBSA.

2. QUALITY CONTROL

A. Controlled Affiliate agrees to use the Licensed Marks and Name only in connection with the licensed services and further agrees to be bound by the conditions regarding quality control shown in attached Exhibit A as they may be amended by BCBSA from time-to-time.

B. Controlled Affiliate agrees to comply with all applicable federal, state and local laws.

C. Controlled Affiliate agrees that it will provide on an annual basis (or more often if reasonably required by the Controlling Plans or by BCBSA) a report or reports to the Controlling Plans and BCBSA demonstrating Controlled Affiliate's compliance with the requirements of this Agreement including but not limited to the quality control provisions of this paragraph and the attached Exhibit A.

D. Controlled Affiliate agrees that the Controlling Plans and/or BCBSA may, from time-to-time, upon reasonable notice, review and inspect the manner and method of Controlled Affiliate's rendering of service and use of the Licensed Marks and Name.

E. As used herein, a Controlled Affiliate is defined as an entity organized and operated in such a manner, that it meets the following requirements:

(1) Controlled Affiliate is owned or controlled by two or more Controlling Plans;

(2) Each Controlling Plan is authorized pursuant to a separate Blue Cross License Agreement to use the Licensed Marks in a geographic area in the Region and every geographic area in the Region is so licensed to at least one of the Controlling Plans; and

(3) The Controlling Plans must have the legal authority directly or indirectly through wholly-owned subsidiaries:

(a) to select members of the Controlled Affiliate's governing body having not less than 100% voting control thereof;

(b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Controlling Plans do not concur;

(c) to exercise control over the policy and operations of the Controlled Affiliate; and

Notwithstanding anything to the contrary in (a) through (c) hereof, the Controlled Affiliate's establishing or governing documents must also require written approval by each of the Controlling Plans before the Controlled Affiliate can:

(i) change its legal and/or trade names;

(ii) change the geographic area in which it operates (except such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iii) change any of the type(s) of businesses in which it engages (except such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iv) take any action that any Controlling Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and Name.

In addition, the Controlling Plans directly or indirectly through wholly owned subsidiaries shall own 100% of any for-profit Controlled Affiliate.

3. SERVICE MARK USE

A. Controlled Affiliate recognizes the importance of a comprehensive national network of independent BCBSA licensees which are committed to strengthening the Licensed Marks and Name. The Controlled Affiliate further recognizes that its actions within the Region may affect the value of the Licensed Marks and Name nationwide.

B. Controlled Affiliate shall at all times make proper service mark use of the Licensed Marks and Name, including but not limited to use of such symbols or words as BCBSA shall specify to protect the Licensed Marks and Name and shall comply with such rules (generally applicable to Controlled Affiliates licensed to use the Licensed Marks and Name) relative to service mark use, as are issued from time-to-time by BCBSA. Controlled Affiliate recognizes and agrees that all use of the Licensed Marks and Name by Controlled Affiliate shall inure to the benefit of BCBSA.

C. Controlled Affiliate may not directly or indirectly use the Licensed Marks and Name in a manner that transfers or is intended to transfer in the Region the goodwill associated therewith to another mark or name, nor may Controlled Affiliate engage in activity that may dilute or tarnish the unique value of the Licensed Marks and Name.

D. Controlled Affiliate shall use its best efforts to promote and build the value of the Licensed Marks and Name in connection with the sale, marketing and administration of regional MAPPO products and related services.

4. SUBLICENSING AND ASSIGNMENT

Controlled Affiliate shall not, directly or indirectly, sublicense, transfer, hypothecate, sell, encumber or mortgage, by operation of law or otherwise, the rights granted hereunder and any such act shall be voidable at the sole option of any Controlling Plan or BCBSA. This Agreement and all rights and duties hereunder are personal to Controlled Affiliate.

5. INFRINGEMENT

Controlled Affiliate shall promptly notify the Controlling Plans and the Controlling Plans shall promptly notify BCBSA of any suspected acts of infringement, unfair competition or passing off that may occur in relation to the Licensed Marks and Name. Controlled Affiliate shall not be entitled to require the Controlling Plans or BCBSA to take any actions or institute any proceedings to prevent infringement, unfair competition or passing off by third parties. Controlled Affiliate agrees to render to the Controlling Plans and BCBSA, without charge, all reasonable assistance in connection with any matter pertaining to the protection of the Licensed Marks and Name by BCBSA.

6. LIABILITY INDEMNIFICATION

Controlled Affiliate and the Controlling Plans hereby agree to save, defend, indemnify and hold BCBSA harmless from and against all claims, damages, liabilities and costs of every kind, nature and description (except those arising solely as a result of BCBSA's negligence) that may arise as a result of or related to Controlled Affiliate's rendering of services under the Licensed Marks and Name.

7. LICENSE TERM

A. Except as otherwise provided herein, the license granted by this Agreement shall remain in effect for a period of one (1) year and shall be automatically extended for additional one (1) year periods unless terminated pursuant to the provisions herein.

B. This Agreement and all of Controlled Affiliate's rights hereunder shall immediately terminate without any further action by any party or entity in the event that: (i) any one of the Controlling Plans ceases to be authorized to use the Licensed Marks and Name; or (ii) pursuant to Paragraph 15(a)(x) of the Blue Cross License Agreement any one of the Controlling Plans ceases to be authorized to use the Licensed Names and Marks in the Region.

C. Notwithstanding any other provision of this Agreement, this license to use the Licensed Marks and Name may be forthwith terminated by the Controlling Plans or the affirmative vote of the majority of the Board of Directors of BCBSA present and voting at a special meeting expressly called by BCBSA for the purpose on ten (10) days written notice to the Controlling Plans advising of the specific matters at issue and granting the Controlling Plans an opportunity to be heard and to present their response to the Board for: (1) failure to comply with any applicable minimum capital or liquidity requirement under the quality control standards of this

Agreement; or (2) failure to comply with the "Organization and Governance" quality control standard of this Agreement; or (3) impending financial insolvency; or (4) failure to comply with any of the applicable requirements of Standards 2, 3, 4, or 5 of attached Exhibit A; or (5) the pendency of any action instituted against the Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business or seeking the declaration or establishment of a trust for any of its property or business, unless this Controlled Affiliate License Agreement has been earlier terminated under paragraph 7(E); or (6) such other reason as is determined in good faith immediately and irreparably to threaten the integrity and reputation of BCBSA, the Plans (including the Controlling Plans), any other licensee including Controlled Affiliate and/or the Licensed Marks and Name.

D. Except as otherwise provided in Paragraphs 7(B), 7(C) or 7(E) herein, should Controlled Affiliate fail to comply with the provisions of this Agreement and not cure such failure within thirty (30) days of receiving written notice thereof (or commence a cure within such thirty day period and continue diligent efforts to complete the cure if such curing cannot reasonably be completed within such thirty day period) BCBSA or the Controlling Plans shall have the right to issue a notice that the Controlled Affiliate is in a state of noncompliance. If a state of noncompliance as aforesaid is undisputed by the Controlled Affiliate or is found to exist by a mandatory dispute resolution panel and is uncured as provided above, BCBSA shall have the right to seek judicial enforcement of the Agreement or to issue a notice of termination thereof. Notwithstanding any other provisions of this Agreement, any disputes as to the termination of this License pursuant to Paragraphs 7(B), 7(C) or 7(E) of this Agreement shall not be subject to mediation and mandatory dispute resolution. All other disputes between or among BCBSA, any of the Controlling Plans and/or Controlled Affiliate shall be submitted promptly to mediation and mandatory dispute resolution. The mandatory dispute resolution panel shall have authority to issue orders for specific performance and assess monetary penalties. Except, however, as provided in Paragraphs 7(B) and 7(E) of this Agreement, this license to use the Licensed Marks and Name may not be finally terminated for any reason without the affirmative vote of a majority of the present and voting members of the Board of Directors of BCBSA.

E. This Agreement and all of Controlled Affiliate's rights hereunder shall immediately terminate without any further action by any party or entity in the event that:

(1) Controlled Affiliate shall no longer comply with item 2(E) above;

(2) Appropriate dues, royalties and other payments for Controlled Affiliate pursuant to paragraph 9 hereof, which are the royalties for this License Agreement, are more than sixty (60) days in arrears to BCBSA; or

(3) Any of the following events occur: (i) a voluntary petition shall be filed by Controlled Affiliate seeking bankruptcy, reorganization, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief, or (ii) an involuntary petition or proceeding shall be filed against Controlled Affiliate seeking bankruptcy, reorganization, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief and such petition or proceeding is consented to or acquiesced in by Controlled Affiliate or is not dismissed within sixty (60) days of the date upon which the petition or other document commencing the proceeding is served upon the Controlled Affiliate, or (iii) an order for relief is entered against Controlled Affiliate in any case under the bankruptcy laws of the United States, or Controlled Affiliate is adjudged bankrupt or insolvent as those terms are defined in the Uniform Commercial Code as enacted in the State of Illinois by any court of competent jurisdiction, or (iv) Controlled Affiliate makes a general assignment of its assets for the benefit of creditors, or (v) any government or any government official, office, agency, branch, or unit assumes control of Controlled Affiliate or delinquency proceedings (voluntary or involuntary) are instituted, or (vi) an action is brought by Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business, or (vii) an action is instituted by any governmental entity or officer against Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business and such action is consented to or acquiesced in by Controlled Affiliate or is not dismissed within one hundred thirty (130) days of the date upon which the pleading or other document commencing the action is served upon the Controlled Affiliate, provided that if the action is stayed or its prosecution is enjoined, the one hundred thirty (130) day period is tolled for the duration of the stay or injunction, and provided further, that the Association's Board of Directors may toll or extend the 130 day period at any time prior to its expiration, or (viii) a trustee, interim trustee, receiver or other custodian for any of Controlled Affiliate's property or business is appointed or the Controlled Affiliate is ordered dissolved or liquidated. Notwithstanding any other provision of this Agreement, a declaration or a request for declaration of the existence of a trust over any of the Controlled Affiliate's property or business shall not in itself be deemed to constitute or seek appointment of a trustee, interim trustee, receiver or other custodian for purposes of subparagraphs 7(E)(3)(vii) and (viii) of this Agreement.

F. Upon termination of this Agreement for cause or otherwise, Controlled Affiliate agrees that it shall immediately discontinue all use of the Licensed Marks and Name, including any use in its trade name, except to the extent that it continues to be authorized to use the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan.

G. Upon termination of this Agreement, Controlled Affiliate shall immediately notify all of its customers to whom it provides products or services under the Licensed Marks pursuant to this Agreement that it is no longer a licensee of BCBSA and, if directed by the Association's Board of Directors, shall provide instruction on how the customer can contact BCBSA or a designated licensee to obtain further information on securing coverage. The notification required by this paragraph shall be in writing and in a form approved by BCBSA. The BCBSA shall have the right to audit the terminated entity's books and records to verify compliance with this paragraph.

H. In the event this Agreement terminates pursuant to 7(B) hereof, upon termination of this Agreement the provisions of Paragraph 7(G) shall not apply and the following provisions shall apply, except that, in the event that Controlled Affiliate is separately licensed by BCBSA to use the Licensed Marks in the Service Area of a Controlling Plan and termination of this Agreement is due to a partial termination of such Controlling Plan's license pursuant to Paragraph 15(a)(x)(ii) of the Blue Cross License Agreement, the notices, national account listing, payment, and audit right listed below shall be applicable solely with respect to the Region and the geographic area for which the Controlling Plan's license to use the Licensed Names and Marks is terminated:

(1) The Controlled Affiliate shall send a notice through the U.S. mails, with first class postage affixed, to all individual and group customers, providers, brokers and agents of products or services sold, marketed, underwritten or administered by the Controlled Affiliate under the Licensed Marks and Name. The form and content of the notice shall be specified by BCBSA and shall, at a minimum, notify the recipient of the termination of the license, the consequences thereof, and instructions for obtaining alternate products or services licensed by BCBSA. This notice shall be mailed within 15 days after termination.

(2) The Controlled Affiliate shall deliver to BCBSA within five days of a request by BCBSA a listing of national accounts in which the Controlled Affiliate is involved (in a control, participating or servicing capacity), identifying the national account and the Controlled Affiliate's role therein.

(3) Unless the cause of termination is an event respecting BCBSA stated in paragraph 15(a) or (b) of the Plan's license agreement with BCBSA to use the Licensed Marks and Name, the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans shall be jointly liable for payment to BCBSA of an amount equal to $25 multiplied by the number of Licensed Enrollees of the Controlled Affiliate; provided that if any Plan other than a Controlling Plan is permitted by BCBSA to use marks or names licensed by BCBSA in a geographic area in the Region, the payment for Licensed Enrollees in such geographic area shall be multiplied by a fraction, the numerator of which is the number of Licensed Enrollees of the Controlled Affiliate, the Controlling Plans, and

any other Licensed Controlled Affiliates of the Controlling Plans in such geographic area and the denominator of which is the total number of Licensed Enrollees in such geographic area. Licensed Enrollee means each and every person and covered dependent who is enrolled as an individual or member of a group receiving products or services sold, marketed or administered under marks or names licensed by BCBSA as determined at the earlier of (i) the end of the last fiscal year of the terminated entity which ended prior to termination or (ii) the fiscal year which ended before any transactions causing the termination began. Notwithstanding the foregoing, the amount payable pursuant to this subparagraph H. (3) shall be due only to the extent that, in BCBSA's opinion, it does not cause the net worth of the Controlled Affiliate, the Controlling Plans or any other Licensed Controlled Affiliates of the Controlling Plans to fall below 100% of the Health Risk-Based Capital formula, or its equivalent under any successor formula, as set forth in the applicable financial responsibility standards established by BCBSA (provided such equivalent is approved for purposes of this subparagraph by the affirmative vote of three-fourths of the Plans and three-fourths of the total then current weighted vote of all the Plans); measured as of the date of termination, and adjusted for the value of any transactions not made in the ordinary course of business. This payment shall not be due in connection with transactions exclusively by or among Plans (including the Controlling Plans) or their affiliates, including reorganizations, combinations or mergers, where the BCBSA Board of Directors determines that the license termination does not result in a material diminution in the number of Licensed Enrollees or the extent of their coverage. In the event that the Controlled Affiliate's license is reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent jurisdiction, BCBSA shall reimburse the Controlled Affiliate (and/or the Controlling Plans or their other Licensed Controlled Affiliates, as the case may be) for payments made under this subparagraph 7.H.(3) only to the extent that such payments exceed the amounts due to BCBSA pursuant to paragraph 7.K. and any costs associated with reestablishing the terminated Controlling Plan's Service Area or the Region, including any payments made by BCBSA to a Plan or Plans (including the other Controlling Plans), or their Licensed Controlled Affiliates, for purposes of replacing the Controlled Affiliate.

(4) BCBSA shall have the right to audit the books and records of the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans to verify compliance with this paragraph 7.H.

(5) As to a breach of 7.H.(1), (2), (3) or (4), the parties agree that the obligations are immediately enforceable in a court of competent jurisdiction. As to a breach of 7.H.(1), (2) or (4) by the Controlled Affiliate, the parties agree there is no adequate remedy at law and BCBSA is entitled to obtain specific performance.

I. BCBSA shall be entitled to enjoin the Controlled Affiliate or any related party in a court of competent jurisdiction from entry into any transaction which would result in a termination of this Agreement unless a Controlling Plan's license from BCBSA to use the Licensed Marks and Names has been terminated pursuant to 10(d) of such Controlling Plan's license agreement upon the required 6 month written notice.

J. BCBSA acknowledges that it is not the owner of assets of the Controlled Affiliate.

K. In the event this Agreement terminates and is subsequently reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent jurisdiction, the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans shall be jointly liable for reimbursing BCBSA the reasonable costs incurred by BCBSA in connection with the termination and the reinstatement or court action, and any associated legal proceedings, including but not limited to: outside legal fees, consulting fees, public relations fees, advertising costs, and costs incurred to develop, lease or establish an interim provider network. Any amount due to BCBSA under this subparagraph may be waived in whole or in part by the BCBSA Board of Directors in its sole discretion.

8. DISPUTE RESOLUTION

The parties agree that any disputes between or among them or between or among any of them and one or more Plans or Controlled Affiliates of Plans that use in any manner the Blue Cross and Blue Cross Marks and Name are subject to the Mediation and Mandatory Dispute Resolution process attached to and made a part of each Controlling Plan's License from BCBSA to use the Licensed Marks and Name as Exhibit 5 as amended from time-to-time, which documents are incorporated herein by reference as though fully set forth herein.

9. LICENSE FEE

Controlled Affiliate will pay to BCBSA a fee for this License determined pursuant to the formula(s) set forth in Exhibit B.

10. JOINT VENTURE

Nothing contained in this Agreement shall be construed as creating a joint venture, partnership, agency or employment relationship between the Controlling Plans and Controlled Affiliate or between either and BCBSA.

11. NOTICES AND CORRESPONDENCE

Notices regarding the subject matter of this Agreement or breach or termination thereof shall be in writing and shall be addressed in duplicate to the last

known address of each other party, marked respectively to the attention of its President and, if any, its General Counsel.

12. COMPLETE AGREEMENT

This Agreement contains the complete understandings of the parties in relation to the subject matter hereof. This Agreement may only be amended by the affirmative vote of three-fourths of the Plans and three-fourths of the total then current weighted vote of all the Plans as officially recorded by the BCBSA Corporate Secretary.

13. SEVERABILITY

If any term of this Agreement is held to be unlawful by a court of competent jurisdiction, such findings shall in no way affect the remaining obligations of the parties hereunder and the court may substitute a lawful term or condition for any unlawful term or condition so long as the effect of such substitution is to provide the parties with the benefits of this Agreement.

14. NONWAIVER

No waiver by BCBSA of any breach or default in performance on the part of Controlled Affiliate or any other licensee of any of the terms, covenants or conditions of this Agreement shall constitute a waiver of any subsequent breach or default in performance of said terms, covenants or conditions.

14A. VOTING

For all provisions of this Agreement referring to voting, the term 'Plans' shall mean all entities licensed under the Blue Cross License Agreement and/or the Blue Shield License Agreement, and in all votes of the Plans under this Agreement the Plans shall vote together. For weighted votes of the Plans, the Plan shall have a number of votes equal to the number of weighted votes (if any) that it holds as a Blue Cross Plan plus the number of weighted votes (if any) that it holds as a Blue Shield Plan. For all other votes of the Plans, the Plan shall have one vote. For all questions requiring an affirmative three-fourths weighted vote of the Plans, the requirement shall be deemed satisfied with a lesser weighted vote unless the greater of: (i) 6/52 or more of the Plans (rounded to the nearest whole number, with 0.5 or multiples thereof being rounded to the next higher whole number) fail to cast weighted votes in favor of the question; or (ii) three (3) of the Plans fail to cast weighted votes in favor of the question. Notwithstanding the foregoing provision, if there are thirty-nine (39) Plans, the requirement of an affirmative three-fourths weighted vote shall be deemed satisfied with a lesser weighted vote unless four (4) or more Plans fail to cast weighted votes in favor of the question.

15. GOVERNING LAW

This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of Illinois.

16. HEADINGS

The headings inserted in this agreement are for convenience only and shall have no bearing on the interpretation hereof.

IN WITNESS WHEREOF, the parties have caused this License Agreement to be executed and effective as of the date of last signature written below.

Controlled Affiliate:

By: __

Date: __

Controlling Plan:

By: __

Date: __

Controlling Plan:

By: __

Date: __

BLUE CROSS AND BLUE SHIELD ASSOCIATION

By: __

Date: __

EXHIBIT A

CONTROLLED AFFILIATE LICENSE STANDARDS APPLICABLE TO REGIONAL MEDICARE ADVANTAGE PPO PRODUCTS

November 2016

PREAMBLE

The standards for licensing Controlled Affiliates for Medicare Advantage PPO Products are established by BCBSA and are subject to change from time-to-time upon the affirmative vote of three-fourths (3/4) of the Plans and three-fourths (3/4) of the total weighted vote. Each Controlling Plan is required to use a standard Controlled Affiliate license form provided by BCBSA and to cooperate fully in assuring that the licensed Controlled Affiliate maintains compliance with the license standards.

Standard 1 - Organization and Governance

A Controlled Affiliate is defined as an entity organized and operated in such a manner, that it meets the following requirements:

(1) Controlled Affiliate is owned or controlled by two or more Controlling Plans;

(2) Each Controlling Plan is authorized pursuant to a separate Blue Cross License Agreement to use the Licensed Marks in a geographic area in the Region and every geographic area in the Region is so licensed to at least one of the Controlling Plans; and

(3) The Controlling Plans must have the legal authority directly or indirectly through wholly-owned subsidiaries:

(a) to select members of the Controlled Affiliate's governing body having not less than 100% voting control thereof;

(b) prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Controlling Plans do not concur;

(c) exercise control over the policy and operations of the Controlled Affiliate; and

EXHIBIT A (continued)

Notwithstanding anything to the contrary in (a) through (c) hereof, the Controlled Affiliate's establishing or governing documents must also require written approval by each of the Controlling Plans before the Controlled Affiliate can:

(i) change its legal and/or trade names;

(ii) change the geographic area in which it operates (except such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iii) change any of the type(s) of businesses in which it engages (except such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iv) take any action that any Controlling Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and Name.

In addition, the Controlling Plans directly or indirectly through wholly owned subsidiaries shall own 100% of any for-profit Controlled Affiliate.

Standard 2 - Financial Responsibility

A Controlled Affiliate shall be operated in a manner that provides reasonable financial assurance that it can fulfill all of its contractual obligations to its customers.

Standard 3 - State Licensure/Certification

A Controlled Affiliate shall maintain appropriate and unimpaired licensure and certifications.

EXHIBIT A (continued)

Standard 4 - Certain Disclosures

A Controlled Affiliate shall make adequate disclosure in contracting with third parties and in disseminating public statements of:

a. the structure of the Blue Cross and Blue Shield System; and
b. the independent nature of every licensee.

Standard 5 - Reports and Records for Controlled Affiliates

A Controlled Affiliate and/or its Controlling Plans shall furnish, on a timely and accurate basis, reports and records relating to these Standards and the License Agreements between BCBSA and Controlled Affiliate.

Standard 6 - Best Efforts

During each year, a Controlled Affiliate shall use its best efforts to promote and build the value of the Blue Cross Marks.

Standard 7 - Participation in Certain National Programs

A Controlled Affiliate shall effectively and efficiently participate in certain national programs from time to time as may be adopted by Member Plans for the purposes of providing ease of claims processing for customers receiving benefits outside of the Controlled Affiliate's service area.

National program requirements include:

a. Inter-Plan Teleprocessing System (ITS); and

b. Inter-Plan Medicare Advantage Program.

Standard 8 - Participation in Master Business Associate Agreement

Controlled Affiliates shall comply with the terms of the Business Associate Agreement for Blue Cross and Blue Shield Licensees to the extent they perform the functions of a business associate or subcontractor to a business associate, as defined by the Business Associate Agreement.

Amended as of November 15, 2007

EXHIBIT B

**ROYALTY FORMULA FOR SECTION 9 OF THE
CONTROLLED AFFILIATE LICENSE AGREEMENTS
APPLICABLE TO REGIONAL MEDICARE ADVANTAGE PPO PRODUCTS**

Controlled Affiliate will pay BCBSA a fee for this license in accordance with the following formula:

An amount equal to its pro rata share of each Controlling Plan dues payable to BCBSA computed with the addition of the Controlled Affiliate's members using the Marks on regional MAPPO products and related services as reported on the Quarterly Enrollment Report with BCBSA. The payment by each Controlling Plan of its dues to BCBSA, including that portion described in this paragraph, will satisfy the requirement of this paragraph, and no separate payment will be necessary.

Amended as of June 14, 2007

Exhibit 1C

BLUE CROSS
CONTROLLED AFFILIATE LICENSE AGREEMENT
APPLICABLE TO REGIONAL MEDICARE PART D PRESCRIPTION DRUG PLAN PRODUCTS
(Adopted by Member Plans at their November 18, 2016 meeting)

This Agreement by and among Blue Cross and Blue Shield Association ("BCBSA") and_____ ("Controlled Affiliate"), a Controlled Affiliate of the Blue Cross Plan(s), known as_____ ("Controlling Plans"), each of which is also a Party signatory hereto.

WHEREAS, BCBSA is the owner of the BLUE CROSS and BLUE CROSS Design service marks;

WHEREAS, under the Medicare Modernization Act, companies may apply to and be awarded a contract by the Centers for Medicare and Medicaid Services ("CMS") to offer Medicare Part D Prescription Drug Plan products in geographic regions designated by CMS (hereafter "regional PDP products)."

WHEREAS, some of the CMS-designated regions include the Service Areas, or portions thereof, of more than one Plan.

WHEREAS, the Controlling Plans and Controlled Affiliate desire that the latter be entitled to use the BLUE CROSS and BLUE CROSS Design service marks (collectively the "Licensed Marks") as service marks and be entitled to use the term BLUE CROSS in a trade name ("Licensed Name") to offer regional PDP products in a region that includes the Service Areas, or portions thereof, of more than one Controlling Plan;

NOW THEREFORE, in consideration of the foregoing and the mutual agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. GRANT OF LICENSE

Subject to the terms and conditions of this Agreement, BCBSA hereby grants to Controlled Affiliate the right to use the Licensed Marks and Name in connection with, and only in connection with the sale, marketing and administration of regional PDP products and related services.

This grant of rights is non-exclusive and is limited to the following states: _____ (the "Region"). Controlled Affiliate may use the Licensed

Marks and Name in its legal name on the following conditions: (i) the legal name must be approved in advance, in writing, by BCBSA; (ii) Controlled Affiliate shall not do business outside the Region under any name or mark except business conducted in the Service Area of a Controlling Plan provided that Controlled Affiliate is separately licensed by BCBSA to use the Licensed Marks and Name in connection with health care plans and related services in the Service Area of such Controlling Plan; and (iii) Controlled Affiliate shall not use the Licensed Marks and Name, or any derivative thereof, as part of any name or symbol used to identify itself in any securities market. Controlled Affiliate may use the Licensed Marks and Name in its Trade Name only with the prior, written, consent of BCBSA.

2. QUALITY CONTROL

A. Controlled Affiliate agrees to use the Licensed Marks and Name only in connection with the licensed services and further agrees to be bound by the conditions regarding quality control shown in attached Exhibit A as they may be amended by BCBSA from time-to-time.

B. Controlled Affiliate agrees to comply with all applicable federal, state and local laws.

C. Controlled Affiliate agrees that it will provide on an annual basis (or more often if reasonably required by the Controlling Plans or by BCBSA) a report or reports to the Controlling Plans and BCBSA demonstrating Controlled Affiliate's compliance with the requirements of this Agreement including but not limited to the quality control provisions of this paragraph and the attached Exhibit A.

D. Controlled Affiliate agrees that the Controlling Plans and/or BCBSA may, from time-to-time, upon reasonable notice, review and inspect the manner and method of Controlled Affiliate's rendering of service and use of the Licensed Marks and Name.

E. As used herein, a Controlled Affiliate is defined as an entity organized and operated in such a manner, that it meets the following requirements:

(1) Controlled Affiliate is owned or controlled by two or more Controlling Plans;

(2) Each Controlling Plan is authorized pursuant to a separate Blue Cross License Agreement to use the Licensed Marks in a geographic area in the Region and every geographic area in the Region is so licensed to at least one of the Controlling Plans; and

(3) The Controlling Plans must have the legal authority directly or indirectly

through wholly-owned subsidiaries:

(a) to select members of the Controlled Affiliate's governing Body having not less than 100% voting control thereof;

(b) to prevent any change in the articles of incorporation,

bylaws or other establishing or governing documents of the Controlled Affiliate with which the Controlling Plans do not concur;

(c) to exercise control over the policy and operations of the Controlled Affiliate; and

Notwithstanding anything to the contrary in (a) through (c) hereof, the Controlled Affiliate's establishing or governing documents must also require written approval by each of the Controlling Plans before the Controlled Affiliate can:

(i) change its legal and/or trade names;

(ii) change the geographic area in which it operates

(except such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iii) change any of the type(s) of businesses in which it engages (except such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iv) take any action that any Controlling Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and Name.

In addition, the Controlling Plans directly or indirectly through wholly-owned subsidiaries shall own 100% of any for-profit Controlled Affiliate.

3. SERVICE MARK USE

A. Controlled Affiliate recognizes the importance of a comprehensive

national network of independent BCBSA licensees which are committed to strengthening the Licensed Marks and Name. The Controlled Affiliate further recognizes that its actions within the Region may affect the value of the Licensed Marks and Name nationwide.

B. Controlled Affiliate shall at all times make proper service mark use of the Licensed Marks and Name, including but not limited to use of such symbols or words as BCBSA shall specify to protect the Licensed Marks and Name and shall comply with such rules (generally applicable to Controlled Affiliates licensed to use the Licensed Marks and Name) relative to service mark use, as are issued from time-to-time by BCBSA. Controlled Affiliate recognizes and agrees that all use of the Licensed Marks and Name by Controlled Affiliate shall inure to the benefit of BCBSA.

C. Controlled Affiliate may not directly or indirectly use the Licensed Marks and Name in a manner that transfers or is intended to transfer in the Region the goodwill associated therewith to another mark or name, nor may Controlled Affiliate engage in activity that may dilute or tarnish the unique value of the Licensed Marks and Name.

D. Controlled Affiliate shall use its best efforts to promote and build the value of the Licensed Marks and Name in connection with the sale, marketing and administration of regional PDP products and related services.

4. SUBLICENSING AND ASSIGNMENT

Controlled Affiliate shall not, directly or indirectly, sublicense, transfer, hypothecate, sell, encumber or mortgage, by operation of law or otherwise, the rights granted hereunder and any such act shall be voidable at the sole option of any Controlling Plan or BCBSA. This Agreement and all rights and duties hereunder are personal to Controlled Affiliate.

5. INFRINGEMENT

Controlled Affiliate shall promptly notify the Controlling Plans and the Controlling Plans shall promptly notify BCBSA of any suspected acts of infringement, unfair competition or passing off that may occur in relation to the Licensed Marks and Name. Controlled Affiliate shall not be entitled to require the Controlling Plans or BCBSA to take any actions or institute any proceedings to prevent infringement, unfair competition or passing off by third parties. Controlled Affiliate agrees to render to the Controlling Plans and BCBSA, without charge, all reasonable assistance in connection with any matter pertaining to the protection of the Licensed Marks and Name by BCBSA.

6. LIABILITY INDEMNIFICATION

Controlled Affiliate and the Controlling Plans hereby agree to save, defend, indemnify and hold BCBSA harmless from and against all claims, damages,
liabilities and costs of every kind, nature and description (except those arising solely

as a result of BCBSA's negligence) that may arise as a result of or related to Controlled Affiliate's rendering of services under the Licensed Marks and Name.

7. LICENSE TERM

A. Except as otherwise provided herein, the license granted by this Agreement shall remain in effect for a period of one (1) year and shall be automatically extended for additional one (1) year periods unless terminated pursuant to the provisions herein.

B. This Agreement and all of Controlled Affiliate's rights hereunder shall immediately terminate without any further action by any party or entity in the event that: (i) any one of the Controlling Plans ceases to be authorized to use the Licensed Marks and Name; or (ii) pursuant to Paragraph 15(a)(x) of the Blue Cross License Agreement any one of the Controlling Plans ceases to be authorized to use the Licensed Names and Marks in the Region.

C. Notwithstanding any other provision of this Agreement, this license to use the Licensed Marks and Name may be forthwith terminated by the Controlling Plans or the affirmative vote of the majority of the Board of Directors of BCBSA present and voting at a special meeting expressly called by BCBSA for the purpose on ten (10) days written notice to the Controlling Plans advising of the specific matters at issue and granting the Controlling Plans an opportunity to be heard and to present their response to the Board for: (1) failure to comply with any applicable minimum capital or liquidity requirement under the quality control standards of this Agreement; or (2) failure to comply with the "Organization and Governance" quality control standard of this Agreement; or (3) impending financial insolvency; or (4) failure to comply with any of the applicable requirements of Standards 2, 3, 4, or 5 of attached Exhibit A; or (5) the pendency of any action instituted against the Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business or seeking the declaration or establishment of a trust for any of its property or business, unless this Controlled Affiliate License Agreement has been earlier terminated under paragraph 7(E); or (6) such other reason as is determined in good faith immediately and irreparably to threaten the integrity and reputation of BCBSA, the Plans (including the Controlling Plans), any other licensee including Controlled Affiliate and/or the Licensed Marks and Name.

D. Except as otherwise provided in Paragraphs 7(B), 7(C) or 7(E) herein, should Controlled Affiliate fail to comply with the provisions of this Agreement and not cure such failure within thirty (30) days of receiving written notice thereof (or commence a cure within such thirty day period and continue diligent efforts to complete the cure if such curing cannot reasonably be completed within such thirty day period) BCBSA or the Controlling Plans shall have the right to issue a notice that

the Controlled Affiliate is in a state of noncompliance. If a state of noncompliance as aforesaid is undisputed by the Controlled Affiliate or is found to exist by a mandatory dispute resolution panel and is uncured as provided above, BCBSA shall have the right to seek judicial enforcement of the Agreement or to issue a notice of termination thereof. Notwithstanding any other provisions of this Agreement, any disputes as to the termination of this License pursuant to Paragraphs 7(B), 7(C) or 7(E) of this Agreement shall not be subject to mediation and mandatory dispute resolution. All other disputes between or among BCBSA, any of the Controlling Plans and/or Controlled Affiliate shall be submitted promptly to mediation and mandatory dispute resolution. The mandatory dispute resolution panel shall have authority to issue orders for specific performance and assess monetary penalties. Except, however, as provided in Paragraphs 7(B) and 7(E) of this Agreement, this license to use the Licensed Marks and Name may not be finally terminated for any reason without the affirmative vote of a majority of the present and voting members of the Board of Directors of BCBSA.

E. This Agreement and all of Controlled Affiliate's rights hereunder shall immediately terminate without any further action by any party or entity in the event that:

(1) Controlled Affiliate shall no longer comply with item 2(E) above;

(2) Appropriate dues, royalties and other payments for Controlled Affiliate pursuant to paragraph 9 hereof, which are the royalties for this License Agreement, are more than sixty (60) days in arrears to BCBSA; or

(3) Any of the following events occur: (i) a voluntary petition shall be filed by Controlled Affiliate seeking bankruptcy, reorganization, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief, or (ii) an involuntary petition or proceeding shall be filed against Controlled Affiliate seeking bankruptcy, reorganization, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief and such petition or proceeding is consented to or acquiesced in by Controlled Affiliate or is not dismissed within sixty (60) days of the date upon which the petition or other document commencing the proceeding is served upon the Controlled Affiliate, or (iii) an order for relief is entered against Controlled Affiliate in any case under the bankruptcy laws of the United States, or Controlled Affiliate is adjudged bankrupt or insolvent as those terms are defined in the Uniform Commercial Code as enacted in the State of Illinois by any court of competent jurisdiction, or (iv) Controlled Affiliate makes a general assignment of its assets for the benefit of creditors, or (v) any government or any government official, office, agency, branch, or unit assumes control of Controlled Affiliate or delinquency proceedings (voluntary or involuntary) are instituted, or (vi) an action is brought by Controlled Affiliate seeking its

dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business, or (vii) an action is instituted by any governmental entity or officer against Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business and such action is consented to or acquiesced in by Controlled Affiliate or is not dismissed within one hundred thirty (130) days of the date upon which the pleading or other document commencing the action is served upon the Controlled Affiliate, provided that if the action is stayed or its prosecution is enjoined, the one hundred thirty (130) day period is tolled for the duration of the stay or injunction, and provided further, that the Association's Board of Directors may toll or extend the 130 day period at any time prior to its expiration, or (viii) a trustee, interim trustee, receiver or other custodian for any of Controlled Affiliate's property or business is appointed or the Controlled Affiliate is ordered dissolved or liquidated. Notwithstanding any other provision of this Agreement, a declaration or a request for declaration of the existence of a trust over any of the Controlled Affiliate's property or business shall not in itself be deemed to constitute or seek appointment of a trustee, interim trustee, receiver or other custodian for purposes of subparagraphs 7(E)(3)(vii) and (viii) of this Agreement.

F. Upon termination of this Agreement for cause or otherwise, Controlled Affiliate agrees that it shall immediately discontinue all use of the Licensed Marks and Name, including any use in its trade name, except to the extent that it continues to be authorized to use the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan.

G. Upon termination of this Agreement, Controlled Affiliate shall immediately notify all of its customers to whom it provides products or services under the Licensed Marks pursuant to this Agreement that it is no longer a licensee of BCBSA and, if directed by the Association's Board of Directors, shall provide instruction on how the customer can contact BCBSA or a designated licensee to obtain further information on securing coverage. The notification required by this paragraph shall be in writing and in a form approved by BCBSA. The BCBSA shall have the right to audit the terminated entity's books and records to verify compliance with this paragraph.

H. In the event this Agreement terminates pursuant to 7(B) hereof, upon termination of this Agreement the provisions of Paragraph 7(G) shall not apply and the following provisions shall apply, except that, in the event that Controlled Affiliate is separately licensed by BCBSA to use the Licensed Marks in the Service Area of a Controlling Plan and termination of this Agreement is due to a partial termination of such Controlling Plan's license pursuant to Paragraph 15(a)(x)(ii) of the Blue Cross

License Agreement, the notices, national account listing, payment, and audit right listed below shall be applicable solely with respect to the Region and the geographic area for which the Controlling Plan's license to use the Licensed Names and Marks is terminated:

(1) The Controlled Affiliate shall send a notice through the U.S. mails, with first class postage affixed, to all individual and group customers, providers, brokers and agents of products or services sold, marketed, underwritten or administered by the Controlled Affiliate under the Licensed Marks and Name. The form and content of the notice shall be specified by BCBSA and shall, at a minimum, notify the recipient of the termination of the license, the consequences thereof, and instructions for obtaining alternate products or services licensed by BCBSA. This notice shall be mailed within 15 days after termination.

(2) The Controlled Affiliate shall deliver to BCBSA within five days of a request by BCBSA a listing of national accounts in which the Controlled Affiliate is involved (in a control, participating or servicing capacity), identifying the national account and the Controlled Affiliate's role therein.

(3) Unless the cause of termination is an event respecting BCBSA stated in paragraph 15(a) or (b) of the Plan's license agreement with BCBSA to use the Licensed Marks and Name, the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans shall be jointly liable for payment to BCBSA of an amount equal to $25 multiplied by the number of Licensed Enrollees of the Controlled Affiliate; provided that if any Plan other than a Controlling Plan is permitted by BCBSA to use marks or names licensed by BCBSA in a geographic area in the Region, the payment for Licensed Enrollees in such geographic area shall be multiplied by a fraction, the numerator of which is the number of Licensed Enrollees of the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans in such geographic area and the denominator of which is the total number of Licensed Enrollees in such geographic area. Licensed Enrollee means each and every person and covered dependent who is enrolled as an individual or member of a group receiving products or services sold, marketed or administered under marks or names licensed by BCBSA as determined at the earlier of (i) the end of the last fiscal year of the terminated entity which ended prior to termination or (ii) the fiscal year which ended before any transactions causing the termination began. Notwithstanding the foregoing, the amount payable pursuant to this subparagraph H. (3) shall be due only to the extent that, in BCBSA's opinion, it does not cause the net worth of the Controlled Affiliate, the Controlling Plans or any other Licensed Controlled Affiliates of the Controlling Plans to fall below 100% of the Health Risk-Based Capital formula, or its equivalent under any successor formula, as set forth in the applicable financial responsibility standards established by BCBSA (provided such equivalent is approved for purposes of this subparagraph by the affirmative vote of three-fourths

of the Plans and three-fourths of the total then current weighted vote of all the Plans); measured as of the date of termination, and adjusted for the value of any transactions not made in the ordinary course of business. This payment shall not be due in connection with transactions exclusively by or among Plans (including the Controlling Plans) or their affiliates, including reorganizations, combinations or mergers, where the BCBSA Board of Directors determines that the license termination does not result in a material diminution in the number of Licensed Enrollees or the extent of their coverage. In the event that the Controlled Affiliate's license is reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent jurisdiction, BCBSA shall reimburse the Controlled Affiliate (and/or the Controlling Plans or their other Licensed Controlled Affiliates, as the case may be) for payments made under this subparagraph 7.H.(3) only to the extent that such payments exceed the amounts due to BCBSA pursuant to paragraph 7.K. and any costs associated with reestablishing the terminated Controlling Plan's Service Area or the Region, including any payments made by BCBSA to a Plan or Plans (including the other Controlling Plans), or their Licensed Controlled Affiliates, for purposes of replacing the Controlled Affiliate.

(4) BCBSA shall have the right to audit the books and records of the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans to verify compliance with this paragraph 7.H.

(5) As to a breach of 7.H.(1), (2), (3) or (4), the parties agree that the obligations are immediately enforceable in a court of competent jurisdiction. As to a breach of 7.H.(1), (2) or (4) by the Controlled Affiliate, the parties agree there is no adequate remedy at law and BCBSA is entitled to obtain specific performance.

I. BCBSA shall be entitled to enjoin the Controlled Affiliate or any related party in a court of competent jurisdiction from entry into any transaction which would result in a termination of this Agreement unless a Controlling Plan's license from BCBSA to use the Licensed Marks and Names has been terminated pursuant to 10(d) of such Controlling Plan's license agreement upon the required 6 month written notice.

J. BCBSA acknowledges that it is not the owner of assets of the Controlled Affiliate.

K. In the event this Agreement terminates and is subsequently reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent jurisdiction, the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans shall be jointly liable for reimbursing BCBSA the reasonable costs incurred by BCBSA in connection with the

termination and the reinstatement or court action, and any associated legal proceedings, including but not limited to: outside legal fees, consulting fees, public relations fees, advertising costs, and costs incurred to develop, lease or establish an interim provider network. Any amount due to BCBSA under this subparagraph may be waived in whole or in part by the BCBSA Board of Directors in its sole discretion.

8. DISPUTE RESOLUTION

The parties agree that any disputes between or among them or between or among any of them and one or more Plans or Controlled Affiliates of Plans that use in any manner the Blue Cross and Blue Cross Marks and Name are subject to the Mediation and Mandatory Dispute Resolution process attached to and made a part of each Controlling Plan's License from BCBSA to use the Licensed Marks and Name as Exhibit 5 as amended from time-to-time, which documents are incorporated herein by reference as though fully set forth herein.

9. LICENSE FEE

Controlled Affiliate will pay to BCBSA a fee for this License determined pursuant to the formula(s) set forth in Exhibit B.

10. JOINT VENTURE

Nothing contained in this Agreement shall be construed as creating a joint venture, partnership, agency or employment relationship between the Controlling Plans and Controlled Affiliate or between either and BCBSA.

11. NOTICES AND CORRESPONDENCE

Notices regarding the subject matter of this Agreement or breach or termination thereof shall be in writing and shall be addressed in duplicate to the last known address of each other party, marked respectively to the attention of its President and, if any, its General Counsel.

12. COMPLETE AGREEMENT

This Agreement contains the complete understandings of the parties in relation to the subject matter hereof. This Agreement may only be amended by the affirmative vote of three-fourths of the Plans and three-fourths of the total then current weighted vote of all the Plans as officially recorded by the BCBSA Corporate Secretary.

13. SEVERABILITY

If any term of this Agreement is held to be unlawful by a court of competent jurisdiction, such findings shall in no way affect the remaining obligations of the parties hereunder and the court may substitute a lawful term or condition for any unlawful term or condition so long as the effect of such substitution is to provide the parties with the benefits of this Agreement.

14. NONWAIVER

No waiver by BCBSA of any breach or default in performance on the part of Controlled Affiliate or any other licensee of any of the terms, covenants or conditions of this Agreement shall constitute a waiver of any subsequent breach or default in performance of said terms, covenants or conditions.

14A. VOTING

For all provisions of this Agreement referring to voting, the term 'Plans' shall mean all entities licensed under the Blue Cross License Agreement and/or the Blue Shield License Agreement, and in all votes of the Plans under this Agreement the Plans shall vote together. For weighted votes of the Plans, the Plan shall have a number of votes equal to the number of weighted votes (if any) that it holds as a Blue Cross Plan plus the number of weighted votes (if any) that it holds as a Blue Shield Plan. For all other votes of the Plans, the Plan shall have one vote. For all questions requiring an affirmative three-fourths weighted vote of the Plans, the requirement shall be deemed satisfied with a lesser weighted vote unless the greater of: (i) 6/52 or more of the Plans (rounded to the nearest whole number, with 0.5 or multiples thereof being rounded to the next higher whole number) fail to cast weighted votes in favor of the question; or (ii) three (3) of the Plans fail to cast weighted votes in favor of the question. Notwithstanding the foregoing provision, if there are thirty-nine (39) Plans, the requirement of an affirmative three-fourths weighted vote shall be deemed satisfied with a lesser weighted vote unless four (4) or more Plans fail to cast weighted votes in favor of the question.

15. GOVERNING LAW

This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of Illinois.

16. HEADINGS

The headings inserted in this agreement are for convenience only and shall have no bearing on the interpretation hereof.

IN WITNESS WHEREOF, the parties have caused this License Agreement to be executed and effective as of the date of last signature written below.

Controlled Affiliate:

By: __

Date: __

Controlling Plan:

By:

Date: __

Controlling Plan:

By: __

Date: __

BLUE CROSS AND BLUE SHIELD ASSOCIATION

By: __

Date: __

EXHIBIT A

CONTROLLED AFFILIATE LICENSE STANDARDS APPLICABLE TO REGIONAL MEDICARE PART D PRESCRIPTION DRUG PLAN PRODUCTS June 2016

PREAMBLE

The standards for licensing Controlled Affiliates for Medicare Part D Prescription Drug Plan Products are established by BCBSA and are subject to change from time-to-time upon the affirmative vote of three-fourths (3/4) of the Plans and three-fourths (3/4) of the total weighted vote. Each Controlling Plan is required to use a standard Controlled Affiliate license form provided by BCBSA and to cooperate fully in assuring that the licensed Controlled Affiliate maintains compliance with the license standards.

Standard 1 - Organization and Governance

A Controlled Affiliate is defined as an entity organized and operated in such a manner, that it meets the following requirements:

(1) Controlled Affiliate is owned or controlled by two or more Controlling Plans;

(2) Each Controlling Plan is authorized pursuant to a separate Blue Cross License Agreement to use the Licensed Marks in a geographic area in the Region and every geographic area in the Region is so licensed to at least one of the Controlling Plans; and

(3) The Controlling Plans must have the legal authority directly or indirectly through wholly-owned subsidiaries:

(a) to select members of the Controlled Affiliate's governing body having not less than 100% voting control thereof;

(b) prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Controlling Plans do not concur;

(c) exercise control over the policy and operations of the Controlled Affiliate; and

EXHIBIT A (continued)

Notwithstanding anything to the contrary in (a) through (c) hereof, the Controlled Affiliate's establishing or governing documents must also require written approval by each of the Controlling Plans before the Controlled Affiliate can:

(i) change its legal and/or trade names;

(ii) change the geographic area in which it operates (except such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iii) change any of the type(s) of businesses in which it engages (except such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iv) take any action that any Controlling Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and Name.

In addition, the Controlling Plans directly or indirectly through wholly-owned subsidiaries shall own 100% of any for-profit Controlled Affiliate.

Standard 2 - Financial Responsibility

A Controlled Affiliate shall be operated in a manner that provides reasonable financial assurance that it can fulfill all of its contractual obligations to its customers.

Standard 3 - State Licensure/Certification

A Controlled Affiliate shall maintain appropriate and unimpaired licensure and certifications.

EXHIBIT A (continued)

Standard 4 - Certain Disclosures

A Controlled Affiliate shall make adequate disclosure in contracting with third parties and in disseminating public statements of:

a. the structure of the Blue Cross and Blue Shield System; and
b. the independent nature of every licensee.

Standard 5 - Reports and Records for Controlled Affiliates

A Controlled Affiliate and/or its Controlling Plans shall furnish, on a timely and accurate basis, reports and records relating to these Standards and the License Agreements between BCBSA and Controlled Affiliate.

Standard 6 - Best Efforts

During each year, a Controlled Affiliate shall use its best efforts to promote and build the value of the Blue Cross Marks.

Standard 7 - Participation in Master Business Associate Agreement

Controlled Affiliates shall comply with the terms of the Business Associate Agreement for Blue Cross and Blue Shield Licensees to the extent they perform the functions of a business associate or subcontractor to a business associate, as defined by the Business Associate Agreement.

EXHIBIT B

**ROYALTY FORMULA FOR SECTION 9 OF THE
CONTROLLED AFFILIATE LICENSE AGREEMENTS
APPLICABLE TO REGIONAL MEDICARE PART D PRESCRIPTION DRUG PLAN PRODUCTS**

Controlled Affiliate will pay BCBSA a fee for this license in accordance with the following formula:

An amount equal to its pro rata share of each Controlling Plan dues payable to BCBSA computed with the addition of the Controlled Affiliate's members using the Marks on regional PDP products and related services as reported on the Quarterly Enrollment Report with BCBSA. The payment by each Controlling Plan of its dues to BCBSA, including that portion described in this paragraph, will satisfy the requirement of this paragraph, and no separate payment will be necessary.

Amended as of June 14, 2007

EXHIBIT 2

Membership Standards Page 1 of 5

Preamble

The Membership Standards apply to all organizations seeking to become or to continue as Regular Members of the Blue Cross and Blue Shield Association. Any organization seeking to become a Regular Member must be found to be in substantial compliance with all Membership Standards at the time membership is granted and the organization must be found to be in substantial compliance with all Membership Standards for a period of two (2) years preceding the date of its application. If Membership is sought by an entity which controls or is controlled by one or more Plans, such compliance shall be determined on the basis of compliance by such Plan or Plans.

The Regular Member Plans shall have authority to interpret these Standards.

A Regular Member Plan that operates as a "Shell Holding Company" is defined as an entity that assumes no underwriting risk and has less than 1% of the consolidated enterprise assets (excludes investments in subsidiaries) and less than 5% of the consolidated enterprise net general and administrative expenses.

A Regular Member Plan that operates as a "Hybrid Holding Company" is defined as an entity that assumes no underwriting risk and has either more than 1% of the consolidated enterprise assets (excludes investments in subsidiaries) or more than 5% of the consolidated enterprise net general and administrative expenses.

Standard 1: A Plan shall maintain a governing Board, which shall control the Plan and ensure that the Plan follows appropriate practices of corporate governance. A Plan's Board shall not be controlled by any special interest group, shall make an annual determination that a majority of its directors are independent, and shall act in the best interest of its Corporation and its customers. The Board shall be composed of a majority of persons other than providers of health care services, who shall be known as public members. A public member shall not be an employee of or have a financial interest in a health care provider, nor be a member of a profession which provides health care services.

Amended as of March 15, 2007

EXHIBIT 2

Membership Standards Page 2 of 5

Standard 2: A Plan shall furnish to the Association on a timely and accurate basis reports and records relating to compliance with these Standards and the License Agreements between the Association and the Plans. Such reports and records are the following:

A. BCBSA Membership Information Request;

B. Triennial trade name and service mark usage material, including disclosure material under Standard 7;

C. Changes in the governance of the Plan, including changes in a Plan's Charter, Articles of Incorporation, or Bylaws, changes in a Plan's Board composition, or changes in the identity of the Plan's Principal Officers;

D. Quarterly Financial Report, Semi-annual "Health Risk-Based Capital (HRBC) Report" as defined by the NAIC, Annual Budget, Annual Certified Audit Report, Insurance Department Examination Report, Annual Statement filed with State Insurance Department (with all attachments), Plan, Subsidiary and Affiliate Report; and

- Plans that are a Shell Holding Company as defined in the Preamble hereto are required to furnish only a calendar year-end "Health Risk-Based Capital (HRBC) Report" as defined by the NAIC.

Amended as of November 17, 2011

EXHIBIT 2

Membership Standards Page 3 of 5

E. Quarterly Enrollment Report, Quarterly Member Touchpoint Measures Index (MTM) through 12/31/2011, and Semi-annual MTM Index starting 1/1/2012 and thereafter.

- For purposes of MTM reporting only, a Plan shall file a separate MTM report for each Geographic Market.

Standard 3: A Plan shall be operated in a manner that provides reasonable financial assurance that it can fulfill its contractual obligations to its customers.

Standard 4: A Plan shall be operated in a manner responsive to customer needs and requirements.

Standard 5: A Plan shall effectively and efficiently participate in each national program as from time to time may be adopted by the Member Plans for the purposes of providing portability of membership between the Plans and ease of claims processing for customers receiving benefits outside of the Plan's Service Area.

Such programs are applicable to Blue Cross and Blue Shield Plans, and include:

A. Inter-Plan Teleprocessing System (ITS);
B. BlueCard Program;
C. National Account Programs;
D. Business Associate Agreement for Blue Cross and Blue Shield Licensees, effective April 14, 2003; and
E. Inter-Plan Medicare Advantage Program.

Amended as of November 21, 2014

EXHIBIT 2

Membership Standards Page 4 of 5

Standard 6: In addition to requirements under the national programs listed in Standard 5: Participation in National Programs, a Plan shall take such action as required to ensure its financial performance in programs and contracts of an inter-Plan nature or where the Association is a party.

Standard 7: A Plan shall make adequate disclosure in contracting with third parties and in disseminating public statements of (i) the structure of the Blue Cross and Blue Shield System, (ii) the independent nature of every Plan, and (iii) the Plan's financial condition.

Standard 8: A Plan shall cooperate with the Association's Board of Directors and its Brand Enhancement & Protection Committee in the administration of the Plan Performance Response Process and in addressing Plan performance problems identified thereunder.

Standard 9: A Plan shall obtain a rating of its financial strength from an independent rating agency approved by the Association's Board of Directors for such purpose.

Standard 10: Notwithstanding any other provision in this License Agreement, during each year, a Plan and its Controlled Affiliate(s) engaged in providing licensable services (excluding Life Insurance and Charitable Foundation Services) shall use their best efforts to promote and build the value of the Blue Cross Marks.

Standard 11: Neither a Plan nor any Larger Controlled Affiliate shall cause or permit an entity other than a Plan or a Licensed Controlled Affiliate thereof to obtain control of the Plan or Larger Controlled Affiliate or to acquire a substantial portion of its assets related to licensable services.

Amended as of June 16, 2005

EXHIBIT 2

Membership Standards Page 5 of 5

Standard 12: No provider network, or portion thereof, shall be rented or otherwise made available to a National Competitor if the Licensed Marks or Names are used in any way with such network.

A provider network may be rented or otherwise made available, provided there is no use of the Licensed Marks or Names with respect to the network being rented.

Standard 13: Each Plan shall operate in a manner to reasonably: 1) protect the security and confidentiality of Personally Identifiable Information (PII) and Protected Health Information (PHI); 2) protect the Brands from reputational damage; and 3) cooperate with BCBSA and other Plans if a data security incident or data breach occurs.

Amended as of June 18, 2015

EXHIBIT 3

**GUIDELINES WITH RESPECT TO USE OF
LICENSED NAME AND MARKS IN CONNECTION WITH NATIONAL ACCOUNTS**

Page 1 of 3

1. The strength of the Blue Cross/Blue Cross National Accounts mechanism, and the continued provision of cost effective, quality health care benefits to National Accounts, are predicated on locally managed provider networks coordinated on a national scale in a manner consistent with effective service to National Account customers and consistent with the preservation of the integrity of the Blue Cross/Blue Shield system and the Licensed Marks. These guidelines shall be interpreted in keeping with such ends.

2. A National Account is an entity with employee and/or retiree locations in more than one Plan's Service Area. Unless otherwise agreed, a National Account is deemed located in the Service Area in which the corporate headquarters of the National Account is located. A local plant, office or division headquarters of an entity may be deemed a separate National Account when that local plant, office or division headquarters 1) has employee locations in more than one Service Area, and 2) has independent health benefit decision-making authority for the employees working at such local plant, office or division headquarters and for employees working at other locations outside the Service Area. In such a case, the local plant, office or division headquarters is a National Account that is deemed located in the Service Area in which such local plant, office or division headquarters is located. The Control Plan of a National Account is the Plan in whose Service Area the National Account is located. A participating ("Par") Plan is a Plan in whose Service Area the National Account has employee and/or retiree locations, but in which the National Account is not located. In the event that a National Account parent company consolidates health benefit-decision making for itself and its wholly-owned subsidiary companies, the parent company and the subsidiary companies shall be considered one National Account. The Control Plan for such a National Account shall be the Plan in whose Service Area the parent company headquarters is located.

3. The National Account Guidelines enunciated herein below shall be applicable only with respect to the business of new National Accounts acquired after January 1, 1991.

4. Control Plans shall utilize National Account identification cards complying with then currently effective BCBSA graphic standards in connection with all National Accounts business to facilitate administration thereof, to minimize subscriber and provider confusion, and to reflect a commitment to cooperation among Plans.

Amended as of June 12, 2003

EXHIBIT 3 Page 2 of 3

5. Disputes among Plans and/or BCBSA as to the interpretation or implementation of these Guidelines or as to other National Accounts issues shall be submitted to mediation and mandatory dispute resolution as provided in the License Agreement. For two years from the effective date of the License Agreement, however, such disputes shall be subject to mediation only, with the results of such mediation to be collected and reported in order to establish more definitive operating parameters for National Accounts business and to serve as ground rules for future binding dispute resolution.

6. The Control Plan may use the BlueCard Program (as defined by IPPC) to deliver benefits to employees and non-Medicare eligible retirees in a Participating Plan's service area if an alternative arrangement with the Participating Plan cannot be negotiated. The Participating Plan's minimum servicing requirement for those employees and non-Medicare retirees in its service area is to deliver benefits using the BlueCard Program. Account delivery is subject to the policies, provisions and procedures of the BlueCard Program.

7. For provider payments in a Participating Plan's area (on non-BlueCard claims), payment to the provider may be made by the Participating Plan or the Control Plan at the Participating Plan's option. If the Participating Plan elects to pay the provider, it may not withhold payment of a claim verified by the Control Plan or its designated processor, and payment must be in conformity with service criteria established by the Board of Directors of BCBSA (or an authorized committee thereof) to assure prompt payment, good service and minimum confusion with providers and subscribers. The Control Plan, at the Participating Plan's request, will also assure that measures are taken to protect the confidentiality of the data pertaining to provider reimbursement levels and profiles.

Amended as of June 14, 1996

EXHIBIT 3 Page 3 of 3

8. The Control Plan, in its financial agreements with a National Account, is expected to reasonably reflect the aggregate amount of differentials passed along to the Control Plan by all Participating Plans in a National Account.

9. Other than in contracting with health care providers or soliciting such contracts in areas contiguous to a Plan's Service Area in order to serve its subscribers or those of its licensed Controlled Affiliate residing or working in its Service Area, a Control Plan may not use the Licensed Marks and/or Name, as a tag line or otherwise, to negotiate directly with providers outside its Service Area.

Amended as of March 13, 2003

EXHIBIT 4

GOVERNMENT PROGRAMS AND CERTAIN OTHER USES

Page 1 of 14

1. A Plan and its licensed Controlled Affiliate may use the Licensed Marks and Name in bidding on and executing a contract to serve a Government Program, and in thereafter communicating with the Government concerning the Program. With respect, however, to such contracts entered into after the 1st day of January, 1991, the Licensed Marks and Name will not be used in communications or transactions with beneficiaries or providers in the Government Program located outside a Plan's Service Area, unless the Plan can demonstrate to the satisfaction of BCBSA's governing body that such a restriction on use of the Licensed Marks and Name will jeopardize its ability to procure the contract for the Government Program. As to both existing and future contracts for Government Programs, Plans will discontinue use of the Licensed Marks and Name as to beneficiaries and Providers outside their Service Area as expeditiously as circumstances reasonably permit. Effective January 1, 1995, except as provided in the first sentence above, all use by a Plan of the Licensed Marks and Name in Government Programs outside of the Plan's Service Area shall be discontinued. Incidental communications outside a Plan's Service Area with resident or former resident beneficiaries of the Plan, and other categories of necessary incidental communications approved by BCBSA, are not prohibited. For purposes of this Paragraph 1, the term "Government Programs" shall mean Medicare Part A, Medicare Part B and other non-risk government programs.

2. In connection with activity otherwise in furtherance of the License Agreement, a Plan and its Controlled Affiliates that are licensed to use the Licensed Marks and Name in its Service Area pursuant to the Controlled Affiliate License Agreements authorized in clauses a) through c) of Paragraph 2 of the Plan's License Agreement with BCBSA may use the Licensed Marks and Name outside the Plan's Service Area in the following circumstances which are deemed legitimate and necessary and not likely to cause consumer confusion:

2.1 Common Business Communications

a. sending letterhead, envelopes, and similar items solely for administrative purposes (e.g., not for purposes of marketing, advertising, promoting, selling or soliciting the sale of health care plans and related services);

b. distributing business cards other than in marketing and selling;

c. advertising in publications or electronic media solely to persons for employment;

Amended as of June 19, 2014

2.2 Marketing Spillover

a. advertising in print, electronic or other media which serve, as a substantial market, the Service Area of the Plan or licensed Controlled Affiliate, provided that no Plan or Controlled Affiliate may advertise outside its Service Area on the national broadcast and cable networks and that advertisements in national print media are limited to the smallest regional edition encompassing the Service Area;

b. advertising by direct mail where the addressee's zip code plus 4 includes, at least in part, the Plan's Service Area or that of a licensed Controlled Affiliate;

2.3 Provider Contracting

a. contracting with health care providers or soliciting such contracts in areas contiguous to the Plan's Service Area in order to serve its subscribers or those of such licensed Controlled Affiliates residing or working in its service area;

b. issuing a small sign containing the legal name or trade name of the Plan or such licensed Controlled Affiliates for display by a provider to identify the latter as a participating provider of the Plan or Controlled Affiliate;

c. negotiating rates with a health care provider for services to a specific member, provided that all of the following conditions are met:

(1) the health care provider does not have a contract, applicable to the services rendered or to be rendered, with the Licensee (or any of the Licensees in the case of overlapping Service Areas) in whose Service Area the health care provider is located; and

(2) the Plan or Controlled Affiliate reasonably determines that the member did/does not have a reasonable opportunity to access a participating provider whose contract applies to the services rendered or to be rendered; and

(3) at least one of the following circumstances exists:

Amended as of June 19, 2014

EXHIBIT 4

(i) the member received emergency services and the Plan or Controlled Affiliate knows or reasonably anticipates that the charges on the claim will meet or exceed $5,000; or

(ii) a provider, in consultation pre- or post- treatment with the Plan or Controlled Affiliate, makes/made a treatment recommendation or referral to a non-par provider or to a par provider whose contract does not apply to the services to be rendered; or

(iii) the member inadvertently accessed a non-par provider or non-contracted services in the course of receiving services from a par provider (e.g., the member sees a non-par consulting specialist in a participating hospital); and

(4) the Licensee (and in the case of overlapping Service Areas, all of the Licensees) in whose Service Area the health care provider is located consent(s) in advance.

d. contracting with a pharmacy management organization ("Pharmacy Intermediary") to gain access to a national or regional pharmacy network to provide self-administered prescription drugs to deliver a pharmacy benefit for all of the Plan's or licensed Controlled Affiliate's members nationwide, provided, however, that the Pharmacy Intermediary may not use the Licensed Marks or Name in contracting with the pharmacy providers in such network;

Amended as of June 19, 2014

EXHIBIT 4
Page 4 of 14

e. contracting with the corporate owner of a national or regional retail pharmacy chain to gain access to the pharmacies in the chain to provide self-administered prescription drugs to deliver a pharmacy benefit for all of the Plan's or licensed Controlled Affiliate's members nationwide, provided that (1) the Plan and the Controlled Affiliate may not contract directly with pharmacists or pharmacy stores outside the Plan's Service Area, and (2) neither the Plan's or the Controlled Affiliate's name nor the Licensed Marks or Name may be posted or otherwise displayed at or by any pharmacy store outside the Plan's Service Area;

f. contracting with a dental management organization ("Dental Intermediary") to gain access to a national or regional dental network to deliver a routine dental benefit for all of the Plan's or licensed Controlled Affiliate's members nationwide, provided, however, that the Dental Intermediary may not use the Licensed Marks or Name in contracting with the dental providers in such network;

g. contracting with a vision management organization ("Vision Intermediary") to gain access to a national or regional vision network to deliver a routine vision benefit for all of the Plan's or licensed Controlled Affiliate's members nationwide, provided, however, that the Vision Intermediary may not use the Licensed Marks or Name in contracting with the vision providers in such network;

h. contracting with an independent clinical laboratory for analysis and clinical assessment of specimens that are collected within the Plan's Service Area;

i. contracting with a durable medical equipment or home medical equipment company for durable medical equipment and supplies and home medical equipment and supplies that are shipped to a location within the Plan's Service Area;

j. contracting with a specialty pharmaceutical company for non-routine biological therapeutics that are ordered by a health care professional located within the Plan's Service Area;

---

k. contracting with a company that operates provider sites in the Plan's Service Area, provided that the contract is solely for
services rendered at a site (e.g., hospital, mobile van) that is within the Plan's Service Area;

l. contracting with a company that makes health care professionals available in the Plan's Service Area (e.g., traveling home health nurse), provided that the contract is solely for services rendered by health care professionals who are located within the Plan's Service Area.

2.4 Services to National Accounts

a. in conjunction with contracting with a National Account as Control
Licensee or Alternate Control Licensee (as those terms are defined in the Inter-Plan Programs Policies and Provisions ("IP Policies")) to offer Blue-branded Health Coverage to the National Account, offering Blue-branded Health and Wellness Programs to all members of the National Account, including members who have not enrolled in the Blue-branded Health Coverage ("non-Blue Health Coverage members"), provided that:

(i) the Plan and/or licensed Controlled Affiliate has no contact or interaction with providers outside of the Plan's Service Area, except as specifically provided in the IP Policies and in 2.4 (b); and

(ii) if in accordance with IP Policies another Licensee is soliciting or servicing under the Brands a local plant, office or division of the account that is outside of the Plan's Service Area, the Plan and/or licensed Controlled Affiliate may not offer Blue-branded Health and Wellness Programs to any employees working at such local plant, office or division without the consent of such other Licensee; and

(iii) if the Plan and/or licensed Controlled Affiliate provides an information card to the non-Blue Health Coverage members, the card may not display the Symbols in the masthead, must contain a prominent disclosure conveying that it is not a health insurance card, and otherwise must be designed so that it is dissimilar to a Blue member identification card.

Amended as of March 26, 2015

For purposes of this subparagraph a, the following definitions apply:

"Health and Wellness Program" shall mean a program that includes at least one of the following elements or a related element:

– Health Risk Assessment and/or Preventive Screenings
– Exercise and Fitness Programs
– Health and Wellness Events (e.g., attendance at a health fair, a 5K walk)
– Nutrition and Weight Management
– Health Education (e.g., smoking cessation classes)
– Prenatal and Parenting Education
– Disease or Chronic Condition Management

The above listing is intended to represent examples of the types of programs that may be offered, and other programs, including those offered through different media such as the internet or telephonically, may also be deemed Health and Wellness programs.

"Health Coverage" shall mean providing or administering medical, surgical, hospital, major medical, or catastrophic coverage, or any HMO, PPO, POS or other managed care plan for the foregoing services.

2.4 Services to National Accounts (continued)

b. as part of a Health and Wellness Program that is otherwise compliant with Brand Regulation 4.11.4(a), contracting with a health and wellness organization to gain access to providers to deliver a discrete health and wellness event ("Event") held at a National Account's worksite outside of the Licensee's Service Area, provided that:

(i) the services delivered at the Event are limited to fingerstick screenings for cholesterol and glucose, seasonal flu immunizations, blood pressure measurements, body mass index measurements, and other routine screenings, immunizations and measurements; and

(ii) neither such services nor their costs are applied as claims against any benefit plan; and

(iii) the Event is presented during one or more limited periods during a benefit year and is available to all employees at the worksite.

Amended as of June 19, 2014

c. in conjunction with contracting with a National Account as Control Licensee or Alternate Control Licensee to offer Blue-branded Health Coverage to the National Account, performing the Eligibility and Enrollment functions of HR administration for all benefit plans offered by the National Account to its members, including benefit plans that are not underwritten or administered by the Plan, provided that:

(i) in performing such functions, the Plan and/or licensed Controlled Affiliate does not use the Brands in any communications with health care providers outside of the Plan's Service Area, and otherwise limits its use of the Brands outside of the Service Area to communications with the account's members, the other benefit plan providers with which the account has contracted and other reasonably necessary communications to perform such functions; and

(ii) if in accordance with IP Policies another Licensee is soliciting or servicing under the Brands a local plant, office or division of the account that is outside of the Plan's Service Area, the Plan and/or licensed Controlled Affiliate may not perform Eligibility and Enrollment functions for employees working at such local plant, office or division without the consent of such other Licensee;

For purposes of this subparagraph b, the following definitions apply: "Health Coverage" has the meaning set forth in subparagraph 2.4.a.

Amended as of March 26, 2015

EXHIBIT 4 Page 8 of 14

"Eligibility" means services that manage the account's eligibility data and determine or process determinations relating to eligibility for benefit plans offered by the account to its employees, including such services as:

- monitoring and auditing data to ensure that only entitled individuals are enrolled in each such benefit plan;
- review of eligibility documentation (e.g. marriage licenses, birth certificates, student status verification letters, employment records);
- identification of key member segments such as over-age dependents, part-time employees, employees reaching certain milestones (e.g. Medicare-eligible, retirees);
- termination of coverage for those individuals found to be ineligible for coverage under a benefit plan, and, if applicable, generation of a COBRA event; and
- management of "hour-banking" for union environments in which union members can bank hours to remain eligible for benefits.

"Enrollment" means services that enroll eligible individuals and their spouses/dependents or terminate or change their enrollment in the account's benefit plans on an ongoing basis and during open enrollment periods, including such services as:

- the coordination of each step in open enrollment process from project planning and system set-up to the generation of confirmation statements;
- ongoing enrollment support for new hires and changes due to life events and work status adjustments;
- evidence of insurability (EOI) administration for life and disability coverage;
- transmission of eligibility/enrollment information to the account's benefit plan providers;
- review and reconciliation of error reports received from the account's benefit plan providers; and
- transmission of information to the account's payroll system (e.g., benefit deductions, employee demographic data).

Amended as of November 18, 2010

EXHIBIT 4 Page 9 of 14

2.5 Knowledge Sharing

a. submitting scholarly articles authored or co-authored by the Plan or Controlled Affiliate or its respective employees for publication in peer-reviewed journals;

b. permitting an internal representative of the Licensee (e.g., officer, employee) to speak or present at a conference or symposium outside of the Licensee's Service Area regarding either (i) healthcare financing, administration, delivery or policy, or (ii) topics within the representative's functional discipline or expertise at the Licensee, for which the event sponsor will issue communications to promote, administer, and/or recap the event that will identify the Licensee's representative as a participant. The communications outside of the Licensee's Service Area that mention the Licensee's representative shall be limited to materials and digital media provided to attendees, on-site signage, advertising in relevant trade publications, direct mail and email to attendees and prospective attendees, and the sponsor's website. Participation in any conference or symposium outside of the Licensee's Service Area may not be for the purpose of marketing or selling products or services.

If the Licensee's representative wishes to use the Brands in any manner, including use in his/her title, when participating as a speaker or presenter outside of the Licensee's Service Area about a topic that is not related to healthcare financing, administration, delivery, or policy, or to topics within the representative's functional discipline or expertise at the Licensee, the Licensee must notify BCBSA and receive prior approval from BCBSA before participating;

Amended as of March 26, 2015

EXHIBIT 4

Page 10 of 14

2.6 Other Uses

a. entering into a license agreement between and among BCBSA, the Plan and a debit card issuer located outside the Plan's Service Area, and entering into a corresponding operating agreement or agreements, in order to offer a debit card bearing the Licensed Marks and Name to eligible persons as defined by the aforementioned license agreement;

b. appearing in communications issued by an independent third party to recognize outstanding performance of the Plan or Controlled Affiliate or a member of the Plan's or Controlled Affiliate's senior management as part of an established program of the third party for which the Plan has provided information to be considered for the recognition, provided that such use complies with regulations of general application specifically prescribed by BCBSA from time to time;

c. to identify itself as being a joint sponsor of an event, program or activity along with other Plans or such Plans' licensed Controlled Affiliates, provided that such use complies with regulations of general application specifically prescribed by BCBSA from time to time;

d. hosting meetings or events (collectively, "events") in Washington, D.C. related to policy and business issues in the Licensee's Service Area, or hosting events in conjunction with the assemblies or conventions of national political parties. Such events may not involve marketing or selling products or services. Use of the Brands outside the Licensee's Service Area in connection with such events shall be limited to materials and digital media provided to attendees and prospective attendees and onsite signage. For any such events in Washington, D.C. that are open to attendees other than government officials or their staffs, or are briefings open to all Congressional staff, or are otherwise likely to receive media coverage, the Licensee is required to provide advance notice to BCBSA. For events hosted outside of Washington, D.C. in conjunction with the assemblies or conventions of national political parties, the Licensee is required to provide advance notice to BCBSA and to the local Plan;

Amended as of March 26, 2015

---

e. permitting an affiliate that is not licensed to use the Licensed Marks to identify its corporate relationship with the Plan, provided that such use complies with regulations of general application specifically prescribed by BCBSA from time to time.

3. In connection with activity otherwise in furtherance of the License Agreement, a Controlled Affiliate that is licensed to use the Licensed Marks and Name pursuant to a Controlled Affiliate License Agreement authorized in clauses d) or e) of Paragraph 2 of the Plan's License Agreement with BCBSA may use the Licensed Marks and Name outside the Region (as that term is defined in such respective Controlled Affiliate License Agreements) in the following circumstances which are deemed legitimate and necessary and not likely to cause consumer confusion:

a. sending letterhead, envelopes, and similar items solely for administrative purposes (e.g., not for purposes of marketing, advertising, promoting, selling or soliciting the sale of health care plans and related services);

b. distributing business cards other than in marketing and selling;

c. contracting with health care providers or soliciting such contracts in areas contiguous to the Region in order to serve its subscribers residing in the Region, provided that the Controlled Affiliate may not use the names of any of its Controlling Plans in connection with such contracting unless the provider is located in a geographic area that is also contiguous to such Controlling Plan's Service Area;

d. issuing a small sign containing the legal name or trade name of the Controlled Affiliate for display by a provider to identify the latter as a participating provider of the Controlled Affiliate, provided that the Controlled Affiliate may not use the names of any of its Controlling Plans on such signs unless the provider is located in a geographic area that is also contiguous to such Controlling Plan's Service Area;

e. advertising in publications or electronic media solely to persons for employment;

Amended as of June 19, 2014

EXHIBIT 4
Page 12 of 14

f. advertising in print, electronic or other media which serve, as a substantial market, the Region, provided that the Controlled Affiliate may not advertise outside its Region on the national broadcast and cable networks and that advertisements in national print media are limited to the smallest regional edition encompassing the Region, and provided further that any such advertising by the Controlled Affiliate may not reference the name of any of its Controlling Plans unless the respective Controlling Plan is authorized under paragraph 2 of this Exhibit 4 to advertise in such media;

g. advertising by direct mail where the addressee's zip code plus 4 includes, at least in part, the Region, provided that such advertising by the Controlled Affiliate may not reference the name of any of its Controlling Plans unless the respective Controlling Plan is authorized under paragraph 2 of this Exhibit 4 to send direct mail to such zip code plus 4.

h. [Intentionally left blank, pending review by the Inter-Plan Programs Committee of the applicability of the case management rule to such Controlled Affiliates.]

i. contracting with a pharmacy management organization ("Pharmacy Intermediary") to gain access to a national or regional pharmacy network to provide self-administered prescription drugs to deliver a pharmacy benefit for the Controlled Affiliate's regional Medicare Advantage PPO or regional Medicare Part D Prescription Drug members enrolled under the Licensed Marks pursuant to such respective Controlled Affiliate License Agreements, provided, however, that the Pharmacy Intermediary may not use the Licensed Marks or Name in contracting with the pharmacy providers in such network;

j. contracting with the corporate owner of a national or regional retail pharmacy chain to gain access to the pharmacies in the chain to provide self-administered prescription drugs to deliver a pharmacy benefit to the Controlled Affiliate's regional Medicare Advantage PPO or regional Medicare Part D Prescription Drug members enrolled under the Licensed Marks pursuant to such respective

EXHIBIT 4

Controlled Affiliate License Agreements, provided that (1) the Controlled Affiliate may not contract directly with pharmacists or pharmacy stores outside the Region, and (2) neither the Controlled Affiliate's name nor the Licensed Marks or Name may be posted or otherwise displayed at or by any pharmacy store outside the Region;

k. contracting with a dental management organization ("Dental Intermediary") to gain access to a national or regional dental network to deliver a routine dental benefit for the Controlled Affiliate's regional Medicare Advantage PPO members enrolled under the Licensed Marks pursuant to such Controlled Affiliate License Agreement, provided, however, that the Dental Intermediary may not use the Licensed Marks or Name in contracting with the dental providers in such network;

l. contracting with a vision management organization ("Vision Intermediary") to gain access to a national or regional vision network to deliver a routine vision benefit for the Controlled Affiliate's regional Medicare Advantage members enrolled under the Licensed Marks pursuant to such Controlled Affiliate License Agreement, provided, however, that the Vision Intermediary may not use the Licensed Marks or Name in contracting with the vision providers in such network;

m. contracting with an independent clinical laboratory for analysis and clinical assessment of specimens that are collected within the Controlled Affiliate's Region;

n. contracting with a durable medical equipment or home medical equipment company for durable medical equipment and supplies and home medical equipment and supplies that are shipped to a location within the Controlled Affiliate's Region;

o. contracting with a specialty pharmaceutical company for non-routine biological therapeutics that are ordered by a health care professional located within the Region;

p. contracting with a company that operates provider sites in the Region, provided that the contract is solely for services rendered at a site (e.g., hospital, mobile van) that is within the Region;

q. contracting with a company that makes health care professionals

available in the Region (e.g., traveling home health nurse), provided that the contract is solely for services rendered by health

care professionals who are located within the Region.

4. BCBSA shall retain the right to use the Licensed Marks in conjunction with the Federal Employee Program and with any other national offering made to federal employees pursuant to the Federal Employees Health Benefits Program (FEHBP), including the right to license such use to its vendors, but only in the following manner.

   a. the Licensed Marks may only be used by BCBSA with the term "Federal Employee Program", "Federal", "FEP", or similar language identifying the program as a benefit program for federal employees;

   b. the Licensed Marks may not be used by BCBSA with the name(s) of a specific Plan or Plans and;

   c. any use by BCBSA in conjunction with a new national FEHBP program proposed after the enactment of this amendment will require the approval of the BCBSA Board of Directors.

5. Where required by applicable state or local law or regulation, a Plan or its licensed Controlled Affiliate may submit documents that contain the Brands to, and file forms that contain the Brands with, state or local regulators in a state not included in its Service Area, provided that it gives reasonable advance notice to the local Plan of its intent to submit such documents or file such forms. Notwithstanding, in no event may a Plan or its licensed Controlled Affiliate use the Brands to register, or to obtain or maintain a license, a certificate of authority, or an equivalent document authorizing it to act as a risk-bearing entity or third party administrator in a state not included in its Service Area. If the local Plan advises BCBSA that it believes its License Agreement has been or would be violated by any submission or filing, BCBSA shall determine whether such submission or filing is required by state or local law or regulation and violates the License Agreement, subject to the Plan's or licensed Controlled Affiliate's rights to obtain an independent review of such determination under Paragraph 9(a) and Exhibit 5 of its License Agreement or Paragraph 8 of the Controlled Affiliate License. For purposes of this paragraph, "local Plan" is defined as each Plan whose Service Area includes all or part of the state in which the foregoing applicable state or local law or regulation has been enacted.

Amended as of March 26, 2015

EXHIBIT 5 Page 1 of 23

MEDIATION AND MANDATORY DISPUTE RESOLUTION (MMDR) RULES

The Blue Cross and Blue Shield Plans ("Plans") and the Blue Cross Blue Shield Association ("BCBSA") recognize and acknowledge that the Blue Cross and Blue Shield system is a unique nonprofit and for-profit system offering cost effective health care financing and services. The Plans and BCBSA desire to utilize Mediation and Mandatory Dispute Resolution ("MMDR") to avoid expensive and time-consuming litigation that may otherwise occur in the federal and state judicial systems. Even MMDR should be viewed, however, as methods of last resort, all other procedures for dispute resolution having failed. Except as otherwise provided in the License Agreements, the Plans, their Controlled Affiliates and BCBSA agree to submit all disputes to MMDR pursuant to these Rules and in lieu of litigation.

1. Initiation of Proceedings

A. Pre-MMDR Efforts

Before filing a Complaint to invoke the MMDR process, the CEO of a complaining party, or his/her designated representative, shall undertake good faith efforts with the other side(s) to try to resolve any dispute.

B. Complaint

To commence a proceeding, the complaining party (or parties) shall provide by certified mail, return receipt requested, a written Complaint to the BCBSA Corporate Secretary (which shall also constitute service on BCBSA if it is a respondent) and to any Plan(s) and/or Controlled Affiliate(s) named therein. The Complaint shall contain:

i. identification of the complaining party (or parties) requesting the proceeding;

ii. identification of the respondent(s);

iii. identification of any other persons or entities who are interested in a resolution of the dispute;

iv. a full statement describing the nature of the dispute;

v. identification of all of the issues that are being submitted for resolution;

Amended as of November 21, 1996

vi. the remedy sought;

vii. a statement as to whether the complaining party (or parties) elect(s) first to pursue Mediation;

viii. any request, if applicable, that the matter be handled on an expedited basis and the reasons therefor; and

ix. a statement signed by the CEO of the complaining party affirming that the CEO has undertaken efforts, or has directed efforts to be undertaken, to resolve the dispute before resorting to the MMDR process.

The complaining party (or parties) shall file and serve with the Complaint copies of all documents which the party (or parties) intend(s) to offer at the Arbitration Hearing and a statement identifying the witnesses the party (or parties) intend(s) to present at the Hearing, along with a summary of each witness' expected testimony.

C. Answer

Within twenty (20) days after receipt of the Complaint, each respondent shall serve on BCBSA and on the complaining party (or parties);

i. a full Answer to the aforesaid Complaint;

ii. a statement of any Counterclaims against the complaining party (or parties), providing with respect thereto the information specified in Paragraph 1.B., above;

iii. a statement as to whether the respondent elects to first pursue Mediation; and

iv. any request, if applicable, that the matter be handled on an expedited basis and the reasons therefor.

The respondent(s) shall file and serve with the Answer or by the date of the Initial Conference set forth in Paragraph 3.C., below, copies of all documents which the respondent(s) intend(s) to offer at the Arbitration Hearing and a statement identifying the witnesses the party (or parties) intend(s) to present at the Hearing, along with a summary of each witness' expected testimony.

Amended as of September 20, 2007

D. Reply To Counterclaim

Within ten (10) days after receipt of any Counterclaim, the complaining party (or parties) shall serve on BCBSA and on the responding party (or parties), a Reply to the Counterclaim. Such Reply must provide the same information required by Paragraph 1.C., above.

2. Mediation

To facilitate the mediation of disputes between or among BCBSA, the Plans and/or their Controlled Affiliates, the BCBSA Board has provided for Mediation under these Rules. Mediation may be pursued in lieu of or in an effort to obviate the Mandatory Dispute Resolution process, and all parties are strongly urged, but not required, to exhaust the mediation procedure provided for herein. In the event any party refuses to proceed with Mediation, the parties shall proceed immediately to Mandatory Dispute Resolution, as provided in Section 3.

A. Selection of Mediators

If all parties agree to pursue Mediation, they shall promptly attempt to agree upon: (i) the number of mediators desired, not to exceed three mediators; and (ii) the selection of experienced mediator(s) from an independent entity to mediate all disputes set forth in the Complaint and Answer (and Counterclaim and Reply, if any). In the event the parties are unable to agree upon the selection or number of mediators, both within five (5) days of the service of the Answer or Reply to Counterclaim, whichever is later, the BCBSA Corporate Secretary shall immediately refer the matter to a nationally recognized professional ADR organization (such as CPR or JAMS) for mediation by a single mediator to be selected by the ADR organization.

B. Binding Decision

Before the Mediation Hearing described below, the BCBSA Corporate Secretary shall contact the parties to determine whether they wish to be bound by any recommendation of the selected mediator(s) for resolution of the disputes. If all wish to be bound, the Corporate Secretary will send appropriate documentation to them for their signatures before the Mediation Hearing begins.

Amended as of September 20, 2007

C. Mediation Procedure

The Mediator(s) shall apply the mediation procedures and processes provided for herein (not the rules of the ADR organization with which they are affiliated) and shall promptly advise the parties of a scheduled Mediation Hearing date. Unless a party requests an expedited procedure, or unless all parties to the proceeding agree to one or more extensions of time, the Mediation Hearing set forth below shall be completed within forty (40) days of BCBSA's receipt of the Complaint. The selected mediator(s), unless the parties otherwise agree, shall adhere to the following procedure:

i. Each party must be represented by its CEO or other representative who has been delegated full authority to resolve the dispute. However, parties may send additional representatives as they see fit.

ii. Each party will be given one-half hour to present its case, beginning with the complaining party (or parties), followed by the other party or parties. The parties are free to structure their presentations as they see fit, using oral statements or direct examination of witnesses. However, neither cross-examination nor questioning of opposing representatives will be permitted. At the close of each presentation, the selected mediator(s) will be given an opportunity to ask questions of the presenters and witnesses. All parties must be present throughout the Mediation Hearing. The selected mediator(s) may extend the time allowed for each party's presentation at the Mediation Hearing. The selected mediator(s) may meet in executive session, outside the presence of the parties, or may meet with the parties separately, to discuss the controversy.

iii. After the close of the presentations, the parties will attempt to negotiate a settlement of the dispute. If the parties desire, the selected mediator(s), or any one or more of the selected mediators, will sit in on the negotiations.

Amended as of September 20, 2007

iv. After the close of the presentations, the selected mediator(s) may meet privately to agree upon a recommendation for resolution of the dispute which would be submitted to the parties for their consideration and approval. If the parties have previously agreed to be bound by the results of this procedure, this recommendation shall be binding upon the parties.

v. The purpose of the Mediation Hearing is to assist the parties to settle their grievances short of mandatory dispute resolution. As a result, the Mediation Hearing has been designed to be as informal as possible. Rules of evidence shall not apply. There will be no transcript of the proceedings, and no party may make a tape recording of the Mediation Hearing.

vi. In order to facilitate a free and open discussion, the Mediation proceeding shall remain confidential. A "Stipulation to Confidentiality" which prohibits future use of settlement offers, all position papers or other statements furnished to the selected mediator(s), and decisions or recommendations in any Mediation proceeding shall be executed by each party.

vii. Upon request of the selected mediator(s), or one of the parties, BCBSA staff may also submit documentation at any time during the proceedings.

D. Notice of Termination of Mediation

If the Mediation cannot be completed within the prescribed or agreed time period due to the lack of cooperation of any party, as determined by the selected mediator(s), or if the Mediation does not result in a final resolution of all disputes at the Mediation Hearing or within ten (10) days after the Mediation Hearing, any party or any one of the selected mediators shall so notify the BCBSA Corporate Secretary, who shall promptly issue a Notice of Termination of Mediation to all parties, to the selected mediator(s), and to the MDR Administrator. Such notice shall serve to bring the Mediation to an end and to initiate Mandatory Dispute Resolution. Upon agreement of all parties and the mediator(s), the Mediation process may continue at the same time the MDR process is invoked. In such case, the Notice of Termination of Mediation described above serves to initiate the MDR proceeding, but does not terminate mediation proceedings, which may proceed simultaneous with the MDR proceeding.

Amended as of September 20, 2007

3. Mandatory Dispute Resolution (MDR)

If any party elects not to first pursue Mediation, or if a Notice of Termination of Mediation is issued as set forth in Paragraph 2.D., above, then the unresolved disputes set forth in any Complaint and Answer (and Counterclaim and Reply, if any) shall be subject to mandatory binding arbitration (herein referred to as "MDR").

A. MDR Administrator

The Administrator for purposes of Mandatory Arbitration shall be an independent nationally recognized entity such as CPR or JAMS, specializing in alternative dispute resolution. In the event the parties pursued Mediation with CPR, JAMS or a similar organization, that organization also shall serve as the MDR Administrator, unless all parties notify the BCBSA Corporate Secretary in writing within two (2) days of receiving the Notice of Termination of Mediation that they wish to pursue MDR with another nationally recognized organization serving as MDR Administrator.

In the event the parties (i) did not pursue Mediation, (ii) pursued mediation with a Mediator not affiliated with an ADR organization that offers a panel of arbitrators, or (iii) all parties that pursued Mediation notified the BCBSA Corporate Secretary that they wish to have an MDR Administrator that is different from the organization with which their mediator was affiliated, they shall promptly attempt to agree on a nationally recognized ADR entity that supplies a panel of arbitrators. If they reach such agreement within five (5) days of the Notice of Termination of Mediation or receipt of the Answer or Reply to Counterclaim (whichever is later), the parties shall promptly inform the BCBSA Corporate Secretary of their agreed upon ADR organization. In the event the parties are unable to reach agreement on an MDR Administrator within that timeframe, the BCBSA Corporate Secretary shall immediately refer the matter to CPR, JAMS or a similar organization for MDR.

Any person who served as a Mediator shall not serve as an arbitrator for the same or similar dispute for purposes of MDR.

B. Rules for MDR

The rules controlling all aspects of MDR shall be exclusively those provided for herein. The rules promulgated or otherwise used by the MDR Administrator organization shall not apply.

Amended as of September 20, 2007

C. Initial Conference

Within seven (7) days after a Notice of Termination has issued or the matter has otherwise been referred to an MDR Administrator, or within five (5) days after the time for filing and serving the Answer or Reply to any Counterclaim (whichever is later) if the parties elect first not to mediate, the parties shall confer with the Administrator to discuss selecting a dispute resolution panel ("the Panel"). This conference (the "Initial Conference") may be by telephone. The parties are encouraged to agree to the composition of the Panel and to present that agreement to the Administrator at the Initial Conference. If the parties do not agree on the composition of the Panel by the time of the Initial Conference, or by any extension thereof agreed to by all parties and the Administrator, then the Panel Selection Process set forth in subparagraph D, below, shall be followed.

D. Panel Selection Process

The Administrator shall designate, prior to the Initial Conference, at least seven potential arbitrators. Each party shall be permitted to strike any designee for cause and the Administrator shall determine the sufficiency thereof in its sole discretion. The Administrator will designate a replacement for any designee so stricken. Each party shall then be permitted one peremptory strike from the list of designees. The Administrator shall set the dates for exercising all strikes, which shall be set to encourage the prompt selection of arbitrators.

After the parties exercise any designee strikes for cause and their peremptory strike against any designee of their choice, the parties shall each rank the remaining panel members in order of preference and provide the Administrator, without serving on any other party, their ranked list. The Administrator shall not disclose any party's ranked list to members of the panel or to other parties.

From the remaining designees, and after considering opportunities to maximize, so far as possible, the collectively stated arbitrator preferences provided by the parties on their ranked lists, the Administrator shall select a three member Panel. The Panel Selection Process shall be completed no later than ten (10) days after the Initial Conference.

Each Arbitrator shall be compensated at his or her normal hourly rate or, in the absence of an established rate, at a reasonable hourly rate to be promptly fixed by the Administrator for all time spent in connection with the proceedings and shall be reimbursed for any travel and other reasonable expenses.

Amended as of September 20, 2007

E. Duties Of The Arbitrators

The Panel shall promptly designate a Presiding Arbitrator for the purposes reflected below, but shall retain the power to review and modify any ruling or other action of said Presiding Arbitrator. Each Arbitrator shall be an independent Arbitrator, shall be governed by the Code of Ethics for Arbitrators in Commercial Disputes and shall at or prior to the commencement of any Arbitration Hearing take an oath to that effect. Each Arbitrator shall promptly disclose in writing to the Panel and to the parties any circumstances, whenever arising, that might cause doubt as to such Arbitrator's compliance, or ability to comply, with said Code of Ethics, and, absent resignation by such Arbitrator, the remaining Arbitrators shall determine in their sole discretion whether the circumstances so disclosed constitute grounds for disqualification and for replacement. With respect to such circumstances arising or coming to the attention of a party after an Arbitrator's selection, a party may likewise request the Arbitrator's resignation or a determination as to disqualification by the remaining Arbitrators. With respect to a sole Arbitrator, the determination as to disqualification shall be made by the Administrator.

There shall be no ex parte communication between the parties or their counsel and any member of the Panel.

F. Panel's Jurisdiction And Authority

The Panel's jurisdiction and authority shall extend to all disputes between or among the Plans, their Controlled Affiliates, and/or BCBSA, except for those disputes excepted from these MMDR procedures as set forth in the License Agreements.

With the exception of punitive or treble damages, the Panel shall have full authority to award the relief it deems appropriate to resolve the parties' disputes, including monetary awards and injunctions, mandatory or prohibitory. The Panel has no authority to award punitive or treble damages except that the Panel may allocate or assess responsibility for punitive or treble damages assessed by another tribunal. Subject to the above limitations, the Panel may, by way of example, but not of limitation:

Amended as of September 20, 2007

i. interpret or construe the meaning of any terms, phrase or provision in any license between BCBSA and a Plan or a Controlled Affiliate relating to the use of the BLUE CROSS® or BLUE SHIELD® service marks.

ii. determine whether BCBSA, a Plan or a Controlled Affiliate has violated the terms or conditions of any license between the BCBSA and a Plan or a Controlled Affiliate relating to the use of the BLUE CROSS® or BLUE SHIELD® service marks.

iii. decide challenges as to its own jurisdiction.

iv. issue such orders for interim relief as it deems appropriate pending Hearing and Award in any Arbitration.

It is understood that the Panel is expected to resolve issues based on governing principles of law, preserving to the maximum extent legally possible the continued integrity of the Licensed Marks and the BLUE CROSS/BLUE SHIELD system. The Panel shall apply federal law to all issues which, if asserted in the United States District Court, would give rise to federal question jurisdiction, 28 U.S.C. § 1331. The Panel shall apply Illinois law to all issues involving interpretation, performance or construction of any License Agreement or Controlled Affiliate License Agreement unless the agreement otherwise provides. As to other issues, the Panel shall choose the applicable law based on conflicts of law principles of the State of Illinois.

G. Administrative Conference

Within five (5) days of the Panel being selected, the Presiding Arbitrator shall confer with the parties and the other members of the Panel and shall schedule, in writing, a conference in which the parties and the Panel shall participate (the "Administrative Conference"). The Administrative Conference shall take place no later than fifteen (15) days after the Panel is selected. At the Administrative Conference the parties and the Panel shall discuss the scheduling of the Arbitration Hearing and any other matter appropriate to be considered, including but not limited to: any written discovery in the form of requests for production of documents or requests to admit facts; the identity of any witness whose deposition a party may desire and a showing of exceptional good cause for the taking of any such deposition; the desirability of bifurcation or other separation of the issues; the need for and the type of record of conferences and hearings, including the need for transcripts; the need for expert witnesses and

how expert testimony should be presented; the appropriateness of motions to dismiss and/or for full or partial summary judgment; consideration of stipulations; the desirability of presenting any direct testimony in writing; and the necessity for any on-site inspection by the Panel. If the parties agree, the Administrative Conference may be by telephone.

H. Discovery

i. ***Requests for Production of Documents***: All requests for the production of documents must be served no later than five (5) days after the date of the Initial Conference. Within twenty (20) days after receipt of a request for production of documents, a party shall (a) serve responses and objections to the request, (b) produce all responsive, non-privileged documents to the requesting party, and (c) to the extent any responsive documents are withheld on the grounds of attorney-client privilege or work product, produce a log identifying such documents in the manner specified in Fed. R. Civ. P. 26(b)(5). If, after reviewing a privilege log, the requesting party believes attorney-client privilege or work product protection was improperly claimed by the producing party with respect to any document, the requesting party may ask the Presiding Arbitrator to conduct an in-camera inspection of the same. With respect to documentary and other discovery produced in any MDR proceeding by BCBSA, the fact that a party's CEO or other senior officers may serve on the BCBSA Board of Directors, BCBSA Board Committees or other BCBSA work groups, task forces and the like, shall not be a basis for defeating an otherwise valid claim of attorney-client privilege or work product protection over such documentary or other discovery materials by BCBSA.

ii. ***Requests for Admissions***: Requests for Admissions may be served up to twenty-one (21) days prior to the discovery cut-off set by the Presiding Arbitrator. A party served with Requests For Admissions must respond within twenty (20) days of receipt of said request. The good faith use of and response to Requests for Admissions is encouraged, and the Panel shall have full discretion, with reference to the Federal Rules of Civil Procedure, in awarding appropriate sanctions with respect to abuse of the procedure.

Amended as of September 20, 2007

---

iii. Depositions*:* As a general rule, the parties will not be permitted to take party or non-party deposition testimony for discovery purposes. The Presiding Arbitrator, in his or her sole discretion, shall have the authority to permit a party to take such deposition testimony upon a showing of exceptional good cause. The parties will be permitted to take de bene esse deposition[1] testimony to the fullest extent permitted by law of any witness who cannot be compelled to testify at the Arbitration Hearing. No deposition, for discovery purposes or otherwise, shall exceed three (3) hours, excluding objections and colloquy of counsel. Depositions may be recorded in any manner recognized by the Federal Rules of Civil Procedure and the parties shall specify in each notice of deposition or request for permission to take deposition testimony the manner in which such deposition shall be recorded.

iv. Expert witness(es): If a party intends to present the testimony of an expert witness during the oral hearing, it shall provide all other parties with a written statement setting forth the information required to be provided by Fed. R. Civ. P. 26(a)(2) (B) ten (10) days prior to the discovery cut-off set by the Presiding Arbitrator. If a party intends to present the testimony of a rebuttal expert witness during the Arbitration Hearing, it shall provide all other parties with a written statement setting forth the information required to be provided by Fed. R. Civ. P. 26(a)(2)(B) within twenty (20) days after the date on which the written statement of the expert witness whose testimony is to be rebutted was produced.

v. Discovery cut-off*:* The Presiding Arbitrator shall determine the date on which the discovery period will end, but the discovery period shall not exceed thirty (30) days from the date of the Administrative Conference without the agreement of all parties.

Amended as of September 20, 2007

---

[1]As used in these Rules, "de bene esse deposition" means a deposition that is not taken for discovery purposes, but is taken for the purpose of reading part or all of the deposition transcript into the record at the Arbitration Hearing, to the extent permitted by the Panel, because the witness cannot be compelled to testify at the Arbitration Hearing or has exercised a right provided under these Rules to provide deposition testimony in lieu of testimony at the Arbitration Hearing.

vi. Additional discovery: Any additional discovery will be at the discretion of the Presiding Arbitrator.

vii. Discovery Disputes*:* Any discovery disputes shall be raised by motion to the Presiding Arbitrator, who is authorized to resolve all such disputes, and whose resolution will be binding on the parties unless modified by the Arbitration Panel. Prior to raising any discovery dispute with the Presiding Arbitrator, the parties shall meet and confer, telephonically or in person, in an attempt to resolve or narrow the dispute. If a party refuses to comply with a decision resolving a discovery dispute, the Panel, in keeping with Fed. R. Civ. P. 37, may refuse to allow that party to support or oppose designated claims or defenses, prohibit that party from introducing designated matters into evidence or, in extreme cases, decide an issue submitted for resolution adversely to that party.

viii. ***Extensions****:* The time for responding to discovery requests may be extended by the Presiding Arbitrator for good and sufficient cause shown. Any request for such an extension shall be made in writing.

I. Panel Suggested Settlement/Mediation

At any point during the proceedings, the Panel at the request of any party or on its own initiative, may suggest that the parties explore settlement and that they do so at or before the conclusion of the Arbitration Hearing, and the Panel shall give such assistance in settlement negotiations as the parties may request and the Panel may deem appropriate. Alternatively, the Panel may direct the parties to endeavor to mediate their disputes as provided above, or to explore a mini-trial proceeding, or to have an independent party render a neutral evaluation of the parties' respective positions. The Panel shall enter such sanctions as it deems appropriate with respect to any party failing to pursue in good faith such Mediation or other alternate dispute resolution methods.

Amended as of September 20, 2007

J. Subpoenas on Third Parties

Pursuant to, and consistent with, the Federal Arbitration Act, 9 U.S.C. § 9 *et seq*., and subject to Paragraph 3.G(iii) above, a party may request the issuance of a subpoena on any third party, including but not limited to any third party Blue Plan or any officer, employee or director of a third party Blue Plan, to compel deposition testimony or the production of documents, and, if good and sufficient cause is shown, the Panel shall issue such a subpoena.

K. Arbitration Hearing

An Arbitration Hearing will be held within thirty (30) days after the Administrative Conference if no discovery is taken, or within thirty (30) days after the close of discovery, unless all parties and the Panel agree to extend the Arbitration Hearing date, or unless the parties agree in writing to waive the Arbitration Hearing. The parties may mutually agree on the location of the Arbitration Hearing. If the parties fail to agree, the Arbitration Hearing shall be held in Chicago, Illinois, or at such other location determined by the Presiding Arbitrator to be most convenient to the participants. The Panel will determine the date(s) and time(s) of the Arbitration Hearing(s) after consultation with all parties and shall provide reasonable notice thereof to all parties or their representatives.

L. Arbitration Hearing Memoranda

Twenty (20) days prior to the Arbitration Hearing, each party shall submit to the other party (or parties) and to the Panel an Arbitration Hearing Memorandum which sets forth the applicable law and any argument as to any relevant issue. The Arbitration Hearing Memorandum will supplement, and not repeat, the allegations, information and documents contained in or with the Complaint, Answer, Counterclaim and Reply, if any. Ten (10) days prior to the Arbitration Hearing, each party shall submit to each other party a list of all expert and fact witnesses (but not including rebuttal fact witness) that such party intends to have testify at the Arbitration Hearing and a brief summary of the testimony each such witness is expected to give. In addition, no later than five (5) days prior to the Arbitration, each party may submit to each other party and to the Panel a Response Arbitration Hearing Memorandum which sets forth any response to another party's Arbitration Hearing Memorandum.

Amended as of September 20, 2007

M. Notice For Testimony

Ten (10) days prior to the Arbitration Hearing, any party may serve a Notice on any other party (or parties) requesting the attendance at the Arbitration Hearing of any officer, employee or director of the other party (or parties) for the purpose of providing noncumulative testimony. If a party fails to produce one of its officers, employees or directors whose noncumulative testimony during the Arbitration Hearing is reasonably requested by an adverse party, the Panel may refuse to allow that party to support or oppose designated claims or defenses, prohibit that party from introducing designated matters into evidence or, in extreme cases, decide an issue submitted for mandatory dispute resolution adversely to that party; provided, however, that a party may refuse to produce a director to testify if, within two (2) days of receiving a notice requesting the attendance of such director at the Arbitration Hearing, the party agrees to make the director available for a de bene esse deposition at a mutually convenient time at any location within fifty (50) miles of the director's primary residence chosen by the party requesting the director's testimony. This Rule may not be used for the purpose of burdening or harassing any party, and the Presiding Arbitrator may impose such orders as are appropriate so as to prevent or remedy any such burden or harassment.

Pursuant to, and consistent with, the Federal Arbitration Act, 9 U.S.C. § 9 *et seq.*, twenty (20) days or more prior to the Arbitration Hearing, a party may request the issuance of a subpoena on any third party, including but not limited to any third party Blue Plan, BCBSA or any officer, employee or director of a third party Blue Plan or BCBSA for the purpose of providing noncummulative testimony at the Arbitration Hearing, and, if good and sufficient cause is shown, the Panel shall issue such a subpoena; provided however, that a director of a third party Blue Plan or BCBSA may refuse to testify if, within two (2) days of receiving a subpoena requesting the attendance of such director at the Arbitration Hearing, the director agrees to make him/herself available for a de bene esse deposition at a mutually convenient time at any location within fifty (50) miles of the director's primary residence chosen by the party requesting the director's testimony. Each Blue Plan agrees to waive, on its own behalf and on behalf of its directors and officers, any objection it otherwise might have to any such subpoena based on service, venue or extraterritoriality.

Amended as of September 20, 2007

EXHIBIT 5

Page 15 of 23

N. Arbitration Hearing Procedures

i. ***Attendance at Arbitration Hearing***: Any person having a direct interest in the proceeding is entitled to attend the Arbitration Hearing. The Presiding Arbitrator shall otherwise have the power to require the exclusion of any witness, other than a party or other essential person, during the testimony of any other witness. It shall be discretionary with the Presiding Arbitrator to determine the propriety of the attendance of any other person.

ii. ***Confidentiality***: The Panel and all parties shall maintain the privacy of the Arbitration Proceeding. The parties and the Panel shall treat the Arbitration Hearing and any discovery or other proceedings or events related thereto, including any award resulting therefrom, as confidential except as otherwise necessary in connection with a judicial challenge to or enforcement of an award or unless otherwise required by law.

iii. ***Stenographic Record***: Any party, or if the parties do not object, the Panel, may request that a stenographic or other record be made of any Arbitration Hearing or portion thereof. The costs of the recording and/or of preparing the transcript shall be borne by the requesting party and by any party who receives a copy thereof. If the Panel requests a recording and/or a transcript, the costs thereof shall be borne equally by the parties.

iv. ***Oaths***: The Panel may require witnesses to testify under oath or affirmation administered by any duly qualified person and, if requested by any party, shall do so.

v. ***Order of Arbitration Hearing***: An Arbitration Hearing shall be opened by the recording of the date, time, and place of the Arbitration Hearing, and the presence of the Panel, the parties, and their representatives, if any. The Panel may, at the beginning of the Arbitration Hearing, ask for statements clarifying the issues involved.

Amended as of September 20, 2007

EXHIBIT 5

Unless otherwise agreed, the complaining party (or parties) shall then present evidence to support their claim(s). The respondent(s) shall then present evidence supporting their defenses and Counterclaims, if any. The complaining party (or parties) shall then present evidence supporting defenses to the Counterclaims, if any, and rebuttal.

Witnesses for each party shall submit to questions by adverse parties and/or the Panel.

The Panel has the discretion to vary these procedures, but shall afford a full and equal opportunity to all parties for the presentation of any material and relevant evidence.

vi. ***Evidence***: The parties may offer such evidence as is relevant and material to the dispute and shall produce such evidence as the Panel may deem necessary to an understanding and resolution of the dispute. Unless good cause is shown, as determined by the Panel or agreed to by all other parties, no party shall be permitted to offer evidence at the Arbitration Hearing which was not disclosed prior to the Arbitration Hearing by that party. The Panel may receive and consider the

evidence of witnesses by affidavit upon such terms as the Panel deems appropriate.

The Panel shall be the judge of the relevance and materiality of the evidence offered, and conformity to legal rules of evidence, other than enforcement of the attorney-client privilege and the work product protection, shall not be necessary. The Federal Rules of Evidence shall be considered by the Panel in conducting the Arbitration Hearing but those rules shall not be controlling. All evidence shall be taken in the presence of the Panel and all of the parties, except where any party is in default or has waived the right to be present.

Settlement offers by any party in connection with Mediation or MDR proceedings, decisions or recommendations of the selected mediators, and a party's position papers or statements furnished to the selected mediators shall not be admissible evidence or considered by the Panel without the consent of all parties.

vii. ***Closing of Arbitration Hearing***: The Presiding Arbitrator shall specifically inquire of all parties whether they have any further proofs to offer or witnesses to be heard. Upon receiving negative replies or if he or she is satisfied that the record is complete, the Presiding Arbitrator shall declare the Arbitration Hearing closed with an appropriate notation made on the record. Subject to being reopened as provided below, the time within which the Panel is required to make the award shall commence to run, in the absence of contrary agreement by the parties, upon the closing of the Arbitration Hearing.

With respect to complex disputes, the Panel may, in its sole discretion, defer the closing of the Arbitration Hearing for a period of up to thirty (30) days after the presentation of proofs in order to permit the parties to submit post-hearing briefs and argument, as the Panel deems appropriate, prior to making an award.

For good cause, the Arbitration Hearing may be reopened for up to thirty (30) days on the Panel's initiative, or upon application of a party, at any time before the award is made

O. Awards

An Award must be in writing and shall be made promptly by the Panel and, unless otherwise agreed by the parties or specified by law, no later than thirty (30) days from the date of closing the Arbitration Hearing. If all parties so request, the Award shall contain findings of fact and conclusions of law. The Award, and all other rulings and determinations by the Panel, may be by a majority vote.

Parties shall accept as legal delivery of the Award the placing of the Award or a true copy thereof in the mail addressed to a party or its representative at its last known address or personal service of the Award on a party or its representative.

Awards are binding only on the parties to the Arbitration and are not binding on any non-parties to the Arbitration and may not be used or cited as precedent in any other proceeding.

Amended as of September 20, 2007

After the expiration of twenty (20) days from initial delivery, the Award (with corrections, if any) shall be final and binding on the parties, and the parties shall undertake to carry out the Award without delay.

Proceedings to confirm, modify or vacate an Award shall be conducted in conformity with and controlled by the Federal Arbitration Act. 9 U.S.C. § 1, *et seq*.

P. Return of Documents

Within sixty (60) days after the Award and the conclusion of any judicial proceedings with respect thereto, each party and the Panel shall return any documents produced by any other party, including all copies thereof. If a party receives a discovery request in any other proceeding which would require it to produce any documents produced to it by any other party in a proceeding hereunder, it shall not produce such documents without first notifying the producing party and giving said party reasonable time to respond, if appropriate, to the discovery request.

4. Miscellaneous

A. Expedited Procedures

Any party to a Mediation may direct a request for an expedited Mediation Hearing to the Chairman of the Mediation Committee, to the selected Mediators, and to all other parties at any time. The Chairman of the Mediation Committee, or at his or her direction, the then selected Mediators, shall grant any request which is supported by good and sufficient reasons. If such a request is granted, the Mediation shall be completed within as short a period as practicable, as determined by the Chairman of the Mediation Committee or, at his or her direction, the then selected Mediators.

Any party to an Arbitration may direct a request for expedited proceedings to the Administrator, to the Panel, and to all other parties at any time. The Administrator, or the Presiding Arbitrator if the Panel has been selected, shall grant any such request which is supported by good and sufficient reasons. If such a request is granted, the Arbitration shall be completed within as short a time as practicable, as determined by the Administrator and/or the Presiding Arbitrator.

Amended as of September 20, 2007

B. Temporary or Preliminary Injunctive Relief

Any party may seek temporary or preliminary injunctive relief with the filing of a Complaint or at any time thereafter. If such relief is sought prior to the time that an Arbitration Panel has been selected, then the Administrator shall select a single Arbitrator who is a lawyer who has no interest in the subject matter of the dispute, and no connection to any of the parties, to hear and determine the request for temporary or preliminary injunction. If such relief is sought after the time that an Arbitration Panel has been selected, then the Arbitration Panel will hear and determine the request. The request for temporary or preliminary injunctive relief will be determined with reference to the temporary or preliminary injunction standards set forth in Fed. R. Civ. P. 65.

C. Defaults and Proceedings in the Absence of a Party

Whenever a party fails to comply with the MDR Rules in a manner deemed material by the Panel, the Panel shall fix a reasonable time for compliance and, if the party does not comply within said period, the Panel may enter an Order of default or afford such other relief as it deems appropriate. Arbitration may proceed in the event of a default or in the absence of any party who, after due notice, fails to be present or fails to obtain an extension. An Award shall not be made solely on the default or absence of a party, but the Panel shall require the party who is present to submit such evidence as the Panel may require for the making of findings, determinations, conclusions, and Awards.

D. Notice

Each party shall be deemed to have consented that any papers, notices, or process necessary or proper for the initiation or continuation of a proceeding under these rules or for any court action in connection therewith may be served on a party by mail addressed to the party or its representative at its last known address or by personal service, in or outside the state where the MDR proceeding is to be held.

The Corporate Secretary and the parties may also use facsimile transmission, telex, telegram, or other written forms of electronic communication to give the notices required by these rules.

E. Expenses

The expenses of witnesses shall be paid by the party causing or requesting the appearance of such witnesses. All expenses of the MDR proceeding, including compensation, required travel and other reasonable expenses of the Panel, and the cost of any proof produced at the direct request of the Panel, shall be borne equally by the parties and shall be paid periodically on a timely basis, unless they agree otherwise or unless the Panel in the Award assesses such expenses, or any part thereof against any party (or parties). In exceptional cases, the Panel may award reasonable attorneys' fees as an item of expense, and the Panel shall promptly determine the amount of such fees based on affidavits or such other proofs as the Panel deems sufficient.

F. Disqualification or Disability of A Panel Member

In the event that any Arbitrator of a Panel with more than one Arbitrator should become disqualified, resign, die, or refuse or be unable to perform or discharge his or her duties after the commencement of MDR but prior to the rendition of an Award, and the parties are unable to agree upon a replacement, the remaining Panel member(s):

i. shall designate a replacement, subject to the right of any party to challenge such replacement for cause.

ii. shall decide the extent to which previously held hearings shall be repeated.

If the remaining Panel members consider the proceedings to have progressed to a stage as to make replacement impracticable, the parties may agree, as an alternative to the recommencement of the Mandatory Dispute Resolution process, to resolution of the dispute by the remaining Panel members.

In the event that a single Arbitrator should become disqualified, resign, die, or refuse or be unable to perform or discharge his or her duties after the commencement of MDR but prior to the rendition of an Award, and the parties are unable to agree upon a replacement, the Administrator shall appoint a successor, subject to the right of any party to challenge such successor for cause, and the successor shall decide the extent to which previously held proceedings shall be repeated.

G. Extensions of Time

Subject to the provisions of Paragraph 3.H.(viii.), any time limit set forth in these Rules may be extended upon agreement of the parties and approval of: (1) the Mediator if the proceeding is then in Mediation; (2) the Administrator if the proceeding is in Arbitration, but no Arbitration Panel has been selected; or (3) the Arbitration Panel, if the proceeding is in Arbitration and the Arbitration Panel has been selected.

H. Intervention

The Plans, their Controlled Affiliates, and BCBSA, to the extent subject to MMDR pursuant to their License Agreements, shall have the right to move to intervene in any pending Arbitration. A written motion for intervention shall be made to: (1) the Administrator, if the proceeding is in Arbitration, but no Arbitration Panel has been selected; or (2) the Arbitration Panel, if the proceeding is in Arbitration and the Arbitration Panel has been selected. The written motion for intervention shall be delivered to the BCBSA Corporate Secretary (which shall also constitute service on the BCBSA if it is a respondent) and to any Plan(s) and/or Controlled Affiliate(s) which are parties to the proceeding. Any party to the proceeding can submit written objections to the motion to intervene. The motion for intervention shall be granted upon good cause shown. Intervention also may be allowed by stipulation of the parties to the Arbitration proceeding. Intervention shall be allowed upon such terms as the Arbitration Panel decides.

I. BCBSA Assistance in Resolution of Disputes

The resources and personnel of the BCBSA may be requested by any member Plan at any time to try to resolve disputes with another Plan.

J. Neutral Evaluation

The parties can voluntarily agree at any time to have an independent party render a neutral evaluation of the parties' respective positions.

Amended as of September 20, 2007

EXHIBIT 5

Page 22 of 23

K. Recovery of Attorney Fees and Expenses

i. Motions to Compel

Nothwithstanding any other provisions of these Rules, any Party subject to the License Agreements (for purposes of this Section K and all of its subsections only hereinafter referred to collectively and individually as a "Party") that initiates a court action or administrative proceeding solely to compel adherence to these Rules shall not be determined to have violated these Rules by initiating such action or proceeding.

ii Recovery of Fees, Expenses and Costs

The Arbitration Panel may, in its sole discretion, award a Party its reasonable attorneys' fees, expenses and costs associated with a filing to compel adherence to these Rules and/or reasonable attorneys' fees, expenses and costs incurred in responding to an action filed in violation of these Rules; provided, however, that neither fees, expenses, nor costs shall be awarded by the Arbitration Panel if the Party from which the award is sought can demonstrate to the Arbitration panel, in its sole discretion, that it did not violate these Rules or that it had reasonable grounds for believing that its action did not violate these Rules.

iii Requests for Reimbursement

For purposes of this Section K, any Party may request reimbursement of fees, expenses and/or costs by submitting said request in writing to the Arbitration Panel at any time before an award is delivered pursuant Paragraph to 3.O above with a copy to the Party from which reimbursement is sought, explaining why it is entitled to such reimbursement. The Party from which reimbursement is sought shall have twenty (20) days to submit a response to such request to the Arbitration Panel with a copy to the Party seeking reimbursement.

Amended as of September 20, 2007

L. Calculation of Time and Deadlines

In computing any period of time prescribed or allowed under these rules, the day of the act or event from which the designated period of time begins to run shall not be included. The last day of the period so computed shall be included, unless it is a Saturday, a Sunday, or a legal holiday, in which event the period runs until the end of the next day which is not one of the aforementioned days. When the period of time prescribed is less than six (6) days, intermediate Saturdays, Sundays and legal holidays shall be excluded in the computation. As used in this rule, "legal holiday" includes New Year's Day, Martin Luther King, Jr. Day, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, Christmas Day and any other day appointed as a holiday by the President or the Congress of the United States.

Amended as of September 20, 2007

Exhibit 10.11

BLUE SHIELD LICENSE AGREEMENT
(Includes revisions, if any, adopted by Member Plans through their November 18, 2016 meeting)

This agreement by and between Blue Cross and Blue Shield Association ("BCBSA") and The Blue Shield Plan, known as_____ (the "Plan").

Preamble

WHEREAS, the Plan and/or its predecessor(s) in interest (collectively the "Plan") had the right to use the BLUE SHIELD and BLUE SHIELD Design service marks (collectively the "Licensed Marks") for health care plans in its service area, which was essentially local in nature;

WHEREAS, the Plan was desirous of assuring nationwide protection of the Licensed Marks, maintaining uniform quality controls among Plans, facilitating the provision of cost effective health care services to the public and otherwise benefiting the public;

WHEREAS, to better attain such ends, the Plan and the predecessor of BCBSA e1ecuted the Agreement(s) Relating to the Collective Service Mark "Blue Shield"; and

WHEREAS, BCBSA and the Plan desire to supercede said Agreement(s) to reflect their current practices and to assure the continued integrity of the Licensed Marks and of the BLUE SHIELD system;

9 7 W, THERE27 RE, in consideration of the foregoing and the mutual agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as followsx

Agreement

N BCBSA hereby grants to the Plan, upon the terms and conditions of this License Agreement (FAgreement: or FPrimary License Agreement: , the right to use BLUE SHOELD in its trade and/or corporate name (the "Licensed 9 ame"), and the right to use the Licensed Marks, in the sale, marketing and administration of health care plans and related services in the Service Area set forth and defined in paragraph " below. As used herein, health care plans and related services shall include acting as a nonprofit health care plan, a for"profit health care plan, or mutual health insurer operating on a not"for"profit or for"profit basis, under state law; financing access to health care services; when working with a bank that holds the relevant license to use the Licensed 9 ame and Marks, offeringx(i) ta1"favored savings accounts for medical e1penses and means for accessing such accounts, such as debit cards or checks, that are provided solely to support access to such ta1"favored savings accounts, all pursuant to such license, or (ii) prepaid rewards cards that are provided for completion of a wellness program, all pursuant to such license; providing health care management and administration; administering, but not underwriting, non"health portions of Worker5s Compensation insurance; delivering health care services, e1cept hospital services (as defined in the - uidelines to Membership Standards Applicable to Regular Members); and performing the Eligibility and Enrollment functions of HR administration for all benefit plans offered by a group account to its members, including benefit plans not provided by the Plan, provided that the Plan has contracted to provide Health Coverage under the Licensed Marks to the account (as the terms FHealth Coverage,: FEligibility: and FEnrollment: are defined in E1hibit ' , Paragraph Gt.).

G The Plan may use the Licensed Marks and 9 ame in connection with the offering ofxi) health care plans and related services in the Service Area through Controlled Affiliates, provided that each such Controlled Affiliate is separately licensed to use the Licensed Marks and 9 ame under the terms and conditions contained in the Agreement attached as E1hibit Nhereto (the "Controlled Affiliate License Agreement"); and ii) insurance coverages offered by life insurers under the applicable law in the Service Area, other than those which the Plan may offer in its own name, provided through Controlled Affiliates, provided that each such Controlled Affiliate is separately licensed to use the Licensed Marks and 9 ame under the terms and conditions contained in the Agreement attached as E1hibit NA hereto (the "Controlled Affiliate License Agreement Applicable to Life 0nsurance Companies") or the Agreement attached as E1hibit NANhereto (the FControlled Affiliate Trademark License Agreement for Life and Disability 0nsurance Products:) and further provided that the offering of such services does not and will not dilute or tarnish the unique value of the Licensed Marks and 9 ame; and iii) administration and underwriting of Workers5Compensation 0nsurance Controlled Affiliates, provided that each such Controlled Affiliate is separately licensed to use the Licensed Marks and 9 ame under the terms and conditions contained in the Agreement attached as E1hibit Nhereto (the FControlled Affiliate License.:); and iv) regional Medicare Advantage PP7 Products in cooperation with one or more other Plans through 4ointly"held Controlled Affiliates, provided that each such Controlled Affiliate is separately licensed to use the Licensed Marks and 9 ame under the terms and conditions contained in the Agreement attached as E1hibit NB hereto (the FControlled Affiliate License Agreement Applicable to Regional Medicare Advantage PP7 Products:); and v) regional Medicare Part D Prescription Drug Plan products in cooperation with one or more other Plans through 4ointly"held Controlled Affiliates, provided that each such Controlled Affiliate is separately licensed to use the Licensed Marks and 9 ame under the terms and conditions contained in the Agreement attached as E1hibit NC hereto (the FControlled Affiliate License Agreement Applicable to Regional Medicare Part D Prescription Drug Plan Products:). As used herein, a Controlled Affiliate is defined as an entity organiIed and operated in such a manner that it is sub4ect to the bona fide control of a Plan or Plans and, if the entity meets the standards of Paragraph Ga.B but not Paragraph Ga.A, the entity, its owners, and persons authority to select or appoint members or board members, other than a Plan or Plans, have received written approval of BCBSA. Absent written approval by BCBSA of an alternative method of control, bona fide control shall have the meaning set forth in

Paragraphs Ga. and Gb.

Ga. With respect to the Controlled Affiliate Licenses authoriIed in clauses

i)through iii) of Paragraph G; bona fide control shall mean that a Plan (the FSponsoring Plan:) authoriIed to use the Licensed Marks in the Service Area of the Controlled Affiliate pursuant to this Primary License Agreement with BCBSA must havex

A. The legal authority, directly or indirectly through wholly"owned subsidiariesx(a) to select members of the Controlled Affiliatejs governing body having more than "z' voting control thereof; (b) to e1ercise control over the policy and operations of the Controlled Affiliate; (c) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Sponsoring Plan do not concur. Gn addition, the Sponsoring Plan directly or indirectly through wholly"owned subsidiaries shall own more than "z' of any for"profit Controlled Affiliate, provided that in instances where the Sponsoring Plan formed a publicly traded Controlled Affiliate Licensee and such publicly traded Controlled Affiliate Licensee owns and controls other Controlled Affiliate Licensees, the Sponsoring Plan directly or indirectly shall own and control more than "z' of any Controlled Affiliate that is indirectly owned and controlled by the publicly traded Controlled Affiliate Licensee; or

B. The legal authority directly or indirectly through wholly"owned subsidiaries (a) to select members of the Controlled Affiliatejs governing body having not less than "z' voting control thereof; (b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Sponsoring Plan do not concur; (c) to e1ercise control over the policy and operations of the Controlled Affiliate at least equal to that e1ercised by persons or entities (4bintly or individually) other than the Sponsoring Plan. 9 otwithstanding anything to the contrary in (a) through (c) hereof, the Controlled Affiliate5s establishing or governing documents must also require written approval by the Sponsoring Plan before the Controlled Affiliate canx

N Change its legal and/or trade name;

G Change the geographic area in which it operates;

0. Change any of the types of businesses in which it engages;

'. Create, or become liable for by way of guarantee, any indebtedness, other than indebtedness arising in the ordinary course of business;

". Sell any assets, e1cept for sales in the ordinary course of business or sales of equipment no longer useful or being replaced;

% Make any loans or advances e1cept in the ordinary course of business;

Amended as of March 26, 2015

3. Enter into any arrangement or agreement with any party directly or indirectly affiliated with any of the owners of the Controlled Affiliate or persons or entities with the authority to select or appoint members or board members of the Controlled Affiliate, other than the Sponsoring Plan or other Plans (e1cluding owners of stock holdings of under "' in a publicly traded Controlled Affiliate);

6. Conduct any business other than under the Licensed Marks and 9 ame;

8. Take any action that the Sponsoring Plan or BCBSA reasonably believes will adversely affect the Licensed Marks or 9 ames.

0n addition, the Sponsoring Plan directly or indirectly through wholly owned subsidiaries shall own at least "z' of any for" profit Controlled Affiliate, provided that in instances where the Sponsoring Plan formed a publicly traded Controlled Affiliate Licensee and such publicly traded Controlled Affiliate Licensee owns and controls other Controlled Affiliate Licensees, the Sponsoring Plan directly or indirectly shall own and control at least "z' of any Controlled Affiliate that is indirectly owned and controlled by the publicly traded Controlled Affiliate Licensee; or

C. With respect to a Controlled Affiliate that is Nzz' controlled by Plans including the Sponsoring Plan and which offers solely Medicaid products and services, the legal authority together with such other Plans (a) to select all members of the Controlled Affiliate5s governing body; (b) to prevent any change in the articles of incorporation, bylaws, or other establishing or governing documents of the Controlled Affiliate; (c) to e1ercise control over the policy and operations of the Controlled Affiliate. 0n addition, the Sponsoring Plan and such other Plans shall own Nzz' of any for"profit Controlled Affiliate, with the Sponsoring Plan and such other Plans each having an ownership interest. Such Nzz' control and ownership by Plans shall be direct or, if indirect, solely through affiliates that are licensed to use marks owned by BCBSA. 2urther, the Sponsoring Plan and such other Plans shall e1ecute the FAddendum to Controlled Affiliate License: attached as E1hibit B"Nto E1hibit N attached hereto; or

D. With respect to a Controlled Affiliate that is Nzz' controlled by a Sponsoring Plan which on a Blue"branded basis, offers solely a Basic Medicare Part D Prescription Drug product, the legal authority (a) to select all members of the Controlled Affiliate5s governing body; (b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate; (c) to e1ercise control over the policy and operations of the Controlled Affiliate. 0n addition, the Sponsoring Plan shall own Nzz' of

Amended as of March 17, 2016

any for’profit Controlled Affiliate. Such Nzz' control and ownership by the Plan shall be direct or, if indirect, solely through affiliates that are licensed to use marks owned by BCBSA. 2urther, the Sponsoring Plan and Participating Plan as defined on the Controlled Affiliate License Agreement shall e1ecute the FAddendum to Controlled Affiliate License: attached as E1hibit B”Gto E1hibit Nattached hereto.

Gb. With respect to the Controlled Affiliate License Agreements authoriIed in clauses iv) and v) of Paragraph G; bona fide control shall mean that the Controlled Affiliate is organiIed and operated in such a manner that it meets the following requirementsx

A. The Controlled Affiliate is owned or controlled by two or more Plans authoriIed to use the Licensed Marks pursuant to this License

Amended as of March 26, 2015

Agreement with BCBSA (for purposes of this subparagraph A. through subparagraph C., the FControlling Plans:); and

B. Each Controlling Plan is authoriIed pursuant to this Agreement to use the Licensed Marks in a geographic area in the Region (as that term is defined in such Controlled Affiliate License Agreements) and every geographic area in the Region is so licensed to at least one of the Controlling Plans; and

C. The Controlling Plans must have the legal authority directly or indirectly through wholly"owned subsidiaries (a) to select members of the Controlled Affiliate5s governing body having not less than Nzz' voting control thereof; (b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Controlling Plans do not concur; and (c) to e1ercise control over the policy and operations of the Controlled Affiliate. 9 otwithstanding anything to the contrary in (a) through (c) of this subparagraph E., the Controlled Affiliate5s establishing or governing documents must also require written approval by each of the Controlling Plans before the Controlled Affiliate canx

N Change its legal and/or trade names;

G Change the geographic area in which it operates (e1cept such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

Amended as of March 26, 2015

---

0. Change any of the type(s) of businesses in which it engages (e1cept such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

’ . Take any action that any Controlling Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and 9 ame.

0n addition, the Controlling Plans directly or indirectly through wholly” owned subsidiaries shall own Nzz' of any for”profit Controlled Affiliate.

---

0. With respect to a Controlled Affiliate that is not licensed to use the Licensed Marks and 9 ame, the Plan may, in communications that contain the Licensed Marks or 9 ame, indicate its corporate relationship to the Affiliate and permit such Affiliate to indicate its corporate relationship to the Plan, solely in the circumstances, style and manner specified by BCBSA from time'to'time in regulations of general application consistent with the avoidance of confusion or mistake or the dilution or tarnishment of the Licensed Marks and 9 ame. 9 o rights are hereby created in any Controlled Affiliate to use the Licensed Marks or 9 ame in its own name or otherwise.

'. The Plan recogniIes the importance of a comprehensive national network of independent BCBSA licensees which are committed to strengthening the Licensed Marks and 9 ame. The Plan further recogniIes that its actions within its Service Area may affect the value of the Licensed Marks and 9 ame nationwide. The Plan agrees (a) to maintain in good standing its membership in BCBSA; (b) promptly to pay its dues to BCBSA, said dues to represent the royalties for this License Agreement; (c) materially to comply with all applicable laws; (d) to comply with the Membership Standards Applicable to Regular Members of BCBSA, a current copy of which is attached as E1hibit Ghereto; and (e) reasonably to permit BCBSA, upon a written, good faith request and during reasonable business hours, to inspect the Planjs books and records necessary to ascertain compliance herewith. As to other Plans and third parties, BCBSA shall maintain the confidentiality of all documents and information furnished by the Plan pursuant hereto, or pursuant to the Membership Standards, and clearly designated by the Plan as containing proprietary information of the Plan.

". The rights hereby granted are e1clusive to the Plan within the geographical area(s) served by the Plan on June 0z, N83G and/or as to which the Plan has been granted a subsequent license, which is hereby defined as the "Service Area," e1cept that BCBSA reserves the right to use the Licensed Marks in said Service Area, and e1cept to the e1tent that said Service Area may overlap areas served by one or more other licensed Blue Shield Plans as of said date or subsequent license, as to which overlapping areas the rights hereby granted are none1clusive as to such other Plan or Plans only.

Amended as of June 19, 2014

% E1cept as e1pressly provided by BCBSA with respect to 9 ational Accounts, - overnment Programs and certain other necessary and collateral uses, the current rules and regulations governing which are attached as E1hibit 0 and E1hibit ' hereto, and are contained in other documents referenced herein, or as e1pressly provided herein, the Plan may not use the Licensed Marks and 9 ame outside the Service Area or in connection with other goods and services, nor may the Plan use the Licensed Marks or 9 ame in a manner which is intended to transfer in the Service Area the goodwill associated therewith to another mark or name. 9 othing herein shall be construed to prevent the Plan from engaging in lawful activity anywhere under other marks and names not confusingly similar to the Licensed Marks and 9 ame, provided that engaging in such activity does and will not dilute or tarnish the unique value of the Licensed Marks and 9 ame. 0n addition to any and all remedies available hereunder, BCBSA may impose monetary fines on the Plan for the Plan5s use of the Licensed Marks and 9 ames outside the Service Area, and provided that the procedure used in imposing a fine is consistent with procedures specifically prescribed by BCBSA from time to time in regulations of general application. 0n the case of regional Medicare Advantage PP7 and regional Medicare Part D Prescription Drug Plan products offered by consenting and participating Plans in a region that includes the Service Areas, or portions thereof, of more than one Plan, such fine may be imposed 4bintly on the consenting and participating Plans for use of the Licensed Marks and 9 ame in any geographic area of the region in which a Plan having e1clusive rights to the Licensed Marks and 9 ame does not consent to and participate in such offering, provided that the basis for imposition of such fine is consistent with rules specifically prescribed by BCBSA from time to time in regulations of general application.

3. The Plan agrees that it will display the Licensed Marks and 9 ame only in such form, style and manner as shall be specifically prescribed by BCBSA from time"to"time in regulations of general application in order to prevent impairment of the distinctiveness of the Licensed Marks and 9 ame and the goodwill pertaining thereto. The Plan shall cause to appear on all materials on or in connection with which the Licensed Marks or 9 ame are used such legends, markings and notices as BCBSA may reasonably request in order to give appropriate notice of service mark or other proprietary rights therein or pertaining thereto.

6. BCBSA agrees thatx(a) it will not grant any other license effective during the term of this License Agreement for the use of the Licensed Marks or 9 ame which is inconsistent with the rights granted to the Plan hereunder; and (b) it will not itself use the Licensed Marks in derogation of the rights of the Plan or in a manner to deprive the Plan of the full benefits of this License Agreement, provided that BCBSA shall have the right to use the Licensed Marks in con4unction with any national offering under the 2ederal Employees Health Benefits Program in the manner set forth in E1hibit ', Paragraph ' (including subparagraphs) to this License Agreement. The Plan agrees that it will not attack the title of BCBSA in and to the Licensed Marks or 9 ame or attack the validity of the Licensed Marks or of this License Agreement. The Plan further agrees that all use by it of the Licensed Marks and 9 ame or any similar mark or name shall inure to the benefit of BCBSA, and the Plan shall cooperate with BCBSA in effectuating the assignment to BCBSA of any service mark or trademark registrations of the Licensed Marks or any similar mark or name held by the Plan or a Controlled Affiliate of the Plan, all or any portion of which registration consists of the Licensed Marks.

Amended as of November 16, 2006

8. (a). Should the Plan fail to comply with the provisions of paragraphs G" , % 3 and/or NG; and not cure such failure within thirty (0z) days of receiving written notice thereof (or commence curing such failure within such thirty day period and continue diligent efforts to complete the curing of such failure if such curing cannot reasonably be completed within such thirty day period), BCBSA shall have the right to issue a notice that the Plan is in a state of noncompliance. E1cept as to the termination of a Planjs License Agreement or the merger of two or more Plans, disputes as to noncompliance, and all other disputes between or among BCBSA, the Plan, other Plans and/or Controlled Affiliates, shall be submitted promptly to mediation and mandatory dispute resolution pursuant to the rules and regulations of BCBSA, a current copy of which is attached as E1hibit " hereto, and shall be timely presented and resolved. The mandatory dispute resolution panel shall have authority to issue orders for specific performance and assess monetary penalties. G" a state of noncompliance as aforesaid is undisputed by the Plan or is found to e1ist by a mandatory dispute resolution panel and is uncured as provided above, BCBSA shall have the right to seek 4udicial enforcement of the License Agreement. E1cept, however, as provided in paragraphs 8(d)(iii), N"(a)(i)"(viii), and N"(a)(1) below, no Planjs license to use the Licensed Marks and 9 ame may be finally terminated for any reason without the affirmative vote of three" fourths of the Plans and three"fourths of the total then current weighted vote of all the Plans.

(b). 9 otwithstanding any other provision of this License Agreement, a Planjs license to use the Licensed Marks and 9 ame may be forthwith terminated by the affirmative vote of three"fourths of the Plans and three"fourths of the total then current weighted vote of all the Plans at a special meeting e1pressly called by BCBSA for the purpose on ten (Nz) days written notice to the Plan advising of the specific matters at issue and granting the Plan an opportunity to be heard and to present its response to Member Plans forx(i) failure to comply with any minimum capital or liquidity requirement under the Membership Standard on 2inancial Responsibility; or (ii) impending financial insolvency; or (iii) the pendency of any action instituted against the Plan seeking its dissolution or liquidation or its assets or seeking appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business or seeking the declaration or establishment of a trust for any of its property of business, unless this License Agreement has been earlier terminated under paragraph N"(a); or (iv) such other reason as is determined in good faith immediately and irreparably to threaten the integrity and reputation of BCBSA, the Plans and/or the Licensed Marks.

Amended as of March 16, 2006

(c). To the e1tent not otherwise provided therein, neitherx(i) the Membership Standards Applicable to Regular Members of BCBSA; nor (ii) the rules and regulations governing - overnment Programs and certain other uses; nor (iii) the rules and regulations governing mediation and mandatory dispute resolution, may be amended unless and until each such amendment is first adopted by the affirmative vote of three"fourths of the Plans and of three"fourths of the total then current weighted vote of all the Plans. The rules and regulations governing 9 ational Accounts and other national programs required by the Membership Standards Applicable to Regular Members of BCBSA (E1hibit G) are contained, in addition to those set forth in E1hibit 0, in the following documents, as amended from time to timex(N) the 0ter"Plan Programs Policies and Provisions; (G) 0ter"Plan Medicare Advantage Program Policies and Provisions. The voting requirements specified in rules and regulations governing such national programs may not be amended unless and until each such amendment is first adopted by the affirmative vote of three"fourths of the Plans and of three"fourths of the total then current weighted vote of all the Plans.

(d). The Plan may operate as a for"profit company on the following conditionsx

(i) The Plan shall discharge all responsibilities which it has to the Association and to other Plans by virtue of this Agreement and the Planjs membership in BCBSA.

(ii) The Plan shall not use the licensed Marks and 9 ame, or any derivative thereof, as part of its legal name or any symbol used to identify the Plan in any securities market. The Plan shall use the Licensed Marks and 9 ame as part of its trade name within its service area for the sale, marketing and administration of health care and related services in the service area.

(iii) The Planjs license to use the Licensed Marks and 9 ame shall automatically terminate effectivex(a) thirty days after the Plan knows, or there is an SEC filing indicating that, any 0nstitutional 0nvestor, has become the Beneficial 7 wner of securities representing Nz' or more of the voting power of the Plan (FE1cess 0nstitutional Voter:), unless such E1cess 0nstitutional Voter shall cease to be an E1cess 0nstitutional Voter prior to such automatic termination becoming effective; (b) thirty days after the Plan knows, or there is an SEC filing indicating that, any 9 oninstitutional 0nvestor has become the Beneficial 7 wner of securities representing "' or more of the voting power of the Plan (FE1cess 9 oninstitutional Voter:) unless such E1cess 9 oninstitutional Voter shall cease to be an E1cess 9 oninstitutional Voter prior to such automatic termination becoming effective; (c) thirty days after the Plan knows, or there is an SEC filing indicating that, any Person has become the Beneficial 7 wner of Gz' or more of the Plan5s then outstanding common stock or other equity securities which (either by themselves or in combination) represent an ownership interest of Gz' or more pursuant to determinations made under paragraph 8(d)(iv) below (FE1cess 7 wner:), unless such E1cess 7 wner shall cease to be an E1cess 7 wner prior to such automatic termination becoming effective; (d) ten business days after individuals who at the time the Plan went public constituted the Board of Directors of the Plan (together with any new directors whose election to the Board was approved by a vote of G/0 of the directors then still in office who were directors at the time the Plan went public or whose election or nomination was previously so approved) (the "Continuing Directors") cease for any reason to constitute a ma4ority of the Board of Directors; or (e) ten business days after the Plan consolidates with or merges with or into any person or conveys, assigns, transfers or sells all or substantially all of its assets to any person other than a merger in which the Plan is the surviving entity and immediately after which merger, no person is an E1cess 0nstitutional Voter, an E1cess 9 oninstitutional Voter or an E1cess 7 wnerxprovided that, if requested by the affected Plan in a writing received by BCBSA prior to such automatic termination

Amended as of September 17, 1997

---

becoming effective, the provisions of this paragraph 8(d)(iii) may be waived, in whole or in part, upon the affirmative vote of a ma4ority of the disinterested Plans and a ma4ority of the total then current weighted vote of the disinterested Plans. Any waiver so granted may be conditioned upon such additional requirements (including but not limited to imposing new and independent grounds for termination of this License) as shall be approved by the affirmative vote of a ma4ority of the disinterested Plans and a ma4ority of the total then current weighted vote of the disinterested Plans. If a timely waiver request is received, no automatic termination shall become effective until the later of(N) the conclusion of the applicable time period specified in paragraphs 8(d)(iii)(a)"(d) above, or (G) the conclusion of the first Member Plan meeting after receipt of such a waiver request.

In the event that the Planjs license to use the Licensed Marks and 9 ame is terminated pursuant to this Paragraph 8(d)(iii), the license may be reinstated in BCBSA5s sole discretion if, within 0z days of the date of such termination, the Plan demonstrates that the Person referred to in clause (a), (b) or (c) of the preceding paragraph is no longer an E1cess 0nstitutional Voter, an E1cess 9 oninstitutional Voter or an E1cess 7 wner.

(iv) The Plan shall not issue any class or series of security other than (i) shares of common stock having identical terms or options or derivatives of such common stock, (ii) non"voting, non"convertible debt securities or (iii) such other securities as the Plan may approve, provided that BCBSA receives notice at least thirty days prior to the issuance of such securities, including a description of the terms for such securities, and BCBSA shall have the authority to determine how such other securities will be counted in determining whether any Person is an E1cess 0nstitutional Voter, E1cess 9 oninstitutional Voter or an E1cess 7 wner.

(v) 2or purposes of paragraph 8(d)(iii), the following definitions shall applyx

(a) "Affiliate" and "Associate" shall have the respective meanings ascribed to such terms in Rule NGb"Gof the - eneral Rules and Regulations under the Securities E1change Act of N80', as amended and in effect on 9 ovember N3, N880 (the "E1change Act").

(b) A Person shall be deemed the "Beneficial 7 wner" of and shall be deemed to "beneficially own" any securitiesx

Amended as of September 17, 1997

(i) which such Person or any of such

Personjs Affiliates or Associates beneficially owns, directly or indirectly;

(ii) which such Person or any of such Personjs Affiliates or Associates has (A) the right to acquire (whether such right is e1ercisable immediately or only after the passage of time) pursuant to any agreement, arrangement or understanding, or upon the e1ercise of conversion rights, e1change rights, warrants or options, or otherwise; or (B) the right to vote pursuant to any agreement, arrangement or understanding; provided, however, that a Person shall not be deemed the Beneficial 7 wner of, or to beneficially own, any security if the agreement, arrangement or understanding to vote such security (N) arises solely from a revocable pro1y or consent given to such Person in response to a public pro1y or consent solicitation made pursuant to, and in accordance with, the applicable rules and regulations promulgated under the E1change Act and (G) is not also then reportable on Schedule N0D under the E1change Act (or any comparable or successor report); or

(iii) which are beneficially owned, directly or indirectly, by any other Person (or any Affiliate or Associate thereof) with which such Person (or any of such Personjs Affiliates or Associates) has any agreement, arrangement or understanding (other than customary agreements with and between underwriters and selling group members with respect to a bona fide public offering of securities) relating to the acquisition, holding, voting (e1cept to the e1tent contemplated by the proviso to (b)(ii)(B) above) or disposing of any securities of the Plan.

9 otwithstanding anything in this definition of Beneficial 7 wnership to the contrary, the phrase "then outstanding," when used with reference to a Personjs Beneficial 7 wnership of securities of the Plan, shall mean the number of such securities then issued and outstanding together with the number of such securities not then actually issued and outstanding which such Person would be deemed to own beneficially hereunder.

(c) A Person shall be deemed an F0nstitutional 0nvestor: if (but only if) such Person (i) is an entity or group identified in the SEC5s Rule N0d'N(b)(N)(ii) as constituted on June N, N883, and (ii) every filing made by such Person with the SEC under Regulation N0D'- (or any successor Regulation) with respect to such Person5s Beneficial 7 wnership of Plan securities shall have contained a certification identical to the one required by item Nz of SEC Schedule N0- as constituted on June N, N883.

(d) F9 oninstitutional 0nvestor: means any Person who is not an 0nstitutional 0nvestor.

(e) Person" shall mean any individual, firm, partnership, corporation, trust, association, 4oint venture or other entity, and shall include any successor (by merger or otherwise) of such entity.

(The ne1t page is page %)

Amended as of September 17, 1997

Nz. This License Agreement shall remain in effectx(a) until terminated as provided herein; or (b) until this and all such other License Agreements are terminated by the affirmative vote of three"fourths of the Plans and three"fourths of the total then current weighted vote of all the Plans; (c) until terminated by the Plan upon eighteen (N6) months written notice to BCBSA or upon a shorter notice period approved by BCBSA in writing at its sole discretion.

NN E1cept as otherwise provided in paragraph N' below or by the affirmative vote of three"fourths of the Plans and three"fourths of the total then current weighted vote of all the Plans, or unless this and all such other License Agreements are simultaneously terminated by force of law, the termination of this License Agreement for any reason whatsoever shall cause the reversion to BCBSA of all rights in and to the Licensed Marks and 9 ame, and the Plan agrees that it will promptly discontinue all use of the Licensed Marks and 9 ame, will not use them thereafter, and will promptly, upon written notice from BCBSA, change its corporate name so as to eliminate the Licensed 9 ame therefrom.

NG The license hereby granted to Plan to use the Licensed Marks and 9 ame is and shall be personal to the Plan so licensed and shall not be assignable by any act of the Plan, directly or indirectly, without the written consent of BCBSA. Said license shall not be assignable by operation of law, nor shall Plan mortgage or part with possession or control of this license or any right hereunder, and the Plan shall have no right to grant any sublicense to use the Licensed Marks and 9 ame.

N0. BCBSA shall maintain appropriate service mark registrations of the Licensed Marks and BCBSA shall take such lawful steps and proceedings as may be necessary or proper to prevent use of the Licensed Marks by any person who is not authoriIed to use the same. Any actions or proceedings undertaken by BCBSA under the provisions of this paragraph shall be at BCBSAjs sole cost and e1pense. BCBSA shall have the sole right to determine whether or not any legal action shall be taken on account of unauthoriIed use of the Licensed Marks, such right not to be unreasonably e1ercised. The Plan shall report any unlawful usage of the Licensed Marks to BCBSA in writing and agrees, free of charge, to cooperate fully with BCBSAjs program of enforcing and protecting the service mark rights, trade name rights and other rights in the Licensed Marks.

N' . The Plan hereby agrees to save, defend, indemnify and hold BCBSA And any other Plan(s) harmless from and against all claims, damages, liabilities and Costs of every kind, nature and description which may arise as a result of the activitie of the Plan or of any hospital, medical group, clinic or other provider of health services that is owned or controlled directly or indirectly by Plan. BCBSA hereby agrees tosave, defend, indemnify and hold the Plan and any other Plan(s) harmless from and against all claims, damages, liabilities and costs of every kind, nature and description which may arise e1clusively and directly as a result of the activities of BCBSA.

Amended as of June 21, 2012

N‘. (a). This Agreement shall automatically terminate upon the occurrence of any of the following eventsx(i) a voluntary petition shall be filed by the Plan or by BCBSA seeking bankruptcy, reorganiI ation, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief, or (ii) an involuntary petition or proceeding shall be filed against the Plan or BCBSA seeking bankruptcy, reorganiI ation, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief and such petition or proceeding is consented to or acquiesced in by the Plan or BCBSA or is not dismissed within si1ty (%z) days of the date upon which the petition or other document commencing the proceeding is served upon the Plan or BCBSA respectively, or (iii) an order for relief is entered against the Plan or BCBSA in any case under the bankruptcy laws of the United States, or the Plan or BCBSA is ad4udged bankrupt or insolvent (as that term is defined in the Uniform Commercial Code as enacted in the state of 0linois) by any court of competent 4urisdiction, or (iv) the Plan or BCBSA makes a general assignment of its assets for the benefit of creditors, or (v) any government or any government official, office, agency, branch, or unit assumes control of the Plan or delinquency proceedings (voluntary or involuntary) are instituted, or (vi) an action is brought by the Plan or BCBSA seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business, or (vii) an action is instituted by any governmental entity or officer against the Plan or BCBSA seeking its dissolution or liquidation of its assets or seeking appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business and such action is consented to or acquiesced in by the Plan or BCBSA or is not dismissed within one hundred thirty (N0z) days of the date upon which the pleading or other document commencing the action is served upon the Plan or BCBSA respectively, provided that if the action is stayed or its prosecution is en4oined, the one hundred thirty (N0z) day period is tolled for the duration of the stay or in4unction, and provided further, that the Association5s Board of Directors may toll or e1tend the N0z day period at any time prior to its e1piration, or (viii) a trustee, interim trustee, receiver or other custodian for any of the Planjs or BCBSAjs property or business is appointed, or the Plan or BCBSA is ordered dissolved or liquidated, or (i1) the Plan shall fail to pay its dues and shall not cure such failure within thirty (0z) days of receiving written notice thereof, or (1) if, due to regulatory action, the Plan together with any applicable Controlled Affiliate becomes unable to do business using the 9 ames and Marks in any State or portion thereof included in its Service Area, provided thatx(i) automatic termination shall not occur prior to the e1haustion by any such Plan of its rights to appeal or challenge such regulatory action; and (ii) in the event the Plan is licensed to do business using the 9 ames and Marks in multiple States or portions of States, the termination of its License Agreement shall be solely limited to the State(s) or portions thereof in which the regulatory action applies. By not appealing or challenging such regulatory action within the time prescribed by law or regulation, and in any event no later than NGz days after such action is taken, a Plan shall be deemed to have e1hausted its rights to appeal or challenge, and automatic termination shall proceed.

9 otwithstanding any other provision of this Agreement, a declaration or a request for declaration of the e1istence of a trust over any of the Plan5s or BCBSA5s property or business shall not in itself be deemed to constitute or seek appointment of a trustee, interim trustee, receiver or other custodian for purposes of subparagraphs N‘(a)(vii) and (viii) of this Agreement.

Amended as of September 14, 2004

(b). BCBSA, or the Plans (as provided and in addition to the rights conferred in Paragraph N‘(b) above), may terminate this Agreement immediately upon written notice upon the occurrence of either of the following eventsx(a) the Plan or BCBSA becomes insolvent (as that term is defined in the Uniform Commercial Code enacted in the state of Illinois), or (b) any final judgment against the Plan or BCBSA remains unsatisfied or unbonded of record for a period of sixty (60) days or longer.

(c). If this License Agreement is terminated as to BCBSA for any reason stated in subparagraphs N‘(a) and (b) above, the ownership of the Licensed Marks shall revert to each of the Plans.

(d). Upon termination of this License Agreement or any Controlled Affiliate License Agreement of a Larger Controlled Affiliate, as defined in Exhibit Nto this License Agreement, the following conditions shall apply, except that, in the event of a partial termination of this Agreement pursuant to Paragraph N‘ (a)(1)(ii) of this Agreement, the notices, national account listing, payment and audit right listed below shall be applicable solely with respect to the geographic area for which the Plan’s license to use the Licensed Names and Marks is terminatedx

(i) The terminated entity shall send a notice through the U.S. mails, with first class postage affixed, to all individual and group customers, providers, brokers and agents of products or services sold, marketed, underwritten or administered by the terminated entity or its Controlled Affiliates under the Licensed Marks and Name. The form and content of the notice shall be specified by BCBSA and shall, at a minimum, notify the recipient of the termination of the license, the consequences thereof, and instructions for obtaining alternate products or services licensed by BCBSA, subject to any conflicting state law and state regulatory requirements. This notice shall be mailed within N‘ days after termination or, if termination is pursuant to paragraph N‘(d) of this Agreement, within N‘ days after the written notice to BCBSA described in paragraph N‘(d).

(ii) The terminated entity shall deliver to BCBSA within five days of a request by BCBSA a listing of national accounts in which the terminated entity is involved (in a Control, Participating or Servicing capacity), identifying the national account and the terminated entity’s role therein. For those accounts where the terminated entity is the Control Plan, the Plan must also indicate the Participating and Servicing Plans in the national account syndicate.

Amended as of June 16, 2005

(iii) Unless the cause of termination is an event stated in paragraph N‘(a) or (b) above respecting BCBSA, the Plan and its Licensed Controlled Affiliates shall be 4bintly liable for payment to BCBSA of an amount equal to the Re’Establishment 2ee (described below) multiplied by the number of Licensed Enrollees of the terminated entity and its Licensed Controlled Affiliates; provided that if any other Plan is permitted by BCBSA to use marks or names licensed by BCBSA in the Service Area established by this Agreement, the Re’Establishment 2ee shall be multiplied by a fraction, the numerator of which is the number of Licensed Enrollees of the terminated entity and its Licensed Controlled Affiliates and the denominator of which is the total number of Licensed Enrollees in the Service Area. The Re’Establishment 2ee shall be inde1ed to a base fee of $6z. The Re’Establishment 2ee through December 0N, Gzz“ shall be $6z. The Re’Establishment 2ee for calendar years after December 0N, Gzz“ shall be ad4usted on January Nof each calendar year up to and including January N, GzNz and shall be the base fee multiplied by Nzz' plus the cumulative percentage increase or decrease in the Plans5 gross administrative e1pense (standard BCBSA definition) per Licensed Enrollee since December 0N, Gzz’ . The ad4ustment shall end on January N, GzNN, at which time the Re’Establishment 2ee shall be fi1ed at the then”current amount and no longer automatically ad4usted. 2or e1ample, if the Plans5 gross administrative e1pense per Licensed Enrollee was $G36.%z, $G6“.zz and $G8z.zz for calendar year end Gzz’ , Gzz“ and Gzz%, respectively, the January N, Gzz3 Re’Establishment 2ee would be $60.G3 (Nzz' of the base fee plus $N6’ for calendar year Gzz“ and $N’ 0 for calendar year Gzz%). Licensed Enrollee means each and every person and covered dependent who is enrolled as an individual or member of a group receiving products or services sold, marketed or administered under marks or names licensed by BCBSA as determined at the earlier of (a) the end of the last fiscal year of the terminated entity which ended prior to termination or (b) the fiscal year which ended before any transactions causing the termination began. 9 otwithstanding the foregoing, the amount payable pursuant to this subparagraph (d)(iii) shall be due only

Amended as of June 16, 2005

---

to the e1tent that, in BCBSAjs opinion, it does not cause the net worth of the Plan to fall below Nzz' of the Health Risk"Based Capital formula or its equivalent under any successor formula, as set forth in the applicable financial responsibility standards established by BCBSA (provided such equivalent is approved for purposes of this sub paragraph by the affirmative vote of three"fourths of the Plans and three"fourths of the total then current weighted vote of all the Plans), measured as of the date of termination and ad4usted for the value of any transactions not made in the ordinary course of business. This payment shall not be due in connection with transactions e1clusively by or among Plan or their affiliates, including reorganiIations, combinations or mergers, where the BCBSA Board of Directors determines that the license termination does not result in a material diminution in the number of Licensed Enrollees or the e1tent of their coverage. At least "z' of the Re"Establishment 2ee shall be awarded to the Plan (or Plans) that receive the new license(s) for the service area(s) at issue; provided, however, that such award shall not become due or payable until all disputes, if any, regarding the amount of and BCBSA5s right to such Re"Establishment 2ee have been finally resolved; and provided further that the award shall be based on the final amount actually received by BCBSA. The Board of Directors shall adopt a resolution which it may amend from time to time that shall govern BCBSA5s use of its portion of the award. 0n the event that the terminated entity5s license is reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent 4urisdiction, BCBSA shall reimburse the Plan (and/or its Licensed Controlled Affiliates, as the case may be) for payments made under this subparagraph only to the e1tent that such payments e1ceed the amounts due to BCBSA pursuant to subparagraph N"(d)(vi) and any costs associated with reestablishing the Service Area, including any payments made by BCBSA to a Plan or Plans (or their Licensed Controlled Affiliates) for purposes of replacing the terminated entity.

(iv) The terminated entity shall comply with all financial settlement procedures set forth in BCBSA5s License Termination Contingency Plan, as amended from time to time and shall work diligently and in good faith with

Amended as of June 16, 2005

BCBSA, any Alternative Control Licensee or Replacement Licensee and any e1isting or potential new account for Blue"branded products and services to minimiI e the disruption of termination, and honor, to the fullest e1tent possible, the desire of accounts to continue to receive or obtain Blue"branded products and services through a new Licensee (FTransition:). Such diligence and good faith on the part of the terminated entity shall include, but not be limited tox(a) working cooperatively with BCBSA to protect the 9 ames and Marks from potential harm; (b) cooperating with BCBSA5s use of the 9 ames and Marks in the terminated entity5s former service area during the termination and Transition; (c) transmitting, upon the request of an e1isting Blue account or of BCBSA with consent and on behalf of an e1isting Blue account, all member and account"data relating to the 2ederal Employee Program to BCBSA, and all member and account data relating to other programs to an Alternative Control Licensee or Replacement Licensee; (d) working with BCBSA and the Alternative Control or Replacement Licensee with respect to potential new Blue accounts headquartered in the terminated entity5s former service area; (e) continuing to service Blue accounts during the Transition; (f) continuing to comply with 9 ational Programs, 2ederal Employee Program and 9 ASC7 policies and procedures and all voluntary BCBSA programs, policies and performance standards, such as Away 2rom Home Care, including being responsible for payment of all penalties for non" compliance duly levied in conformity with the License Agreements, Membership Standards, or the 2ederal Employee Program agreements, that may arise during the Transition; (g) maintaining and providing access to its provider networks, as defined by 2ederal Employee Program agreements and 9 ational Account Program Policies and Provisions, and O1ter"Plan Programs Policies and Provisions, and making those networks and discounts available to members and providers who participate in 9 ational Programs and the 2ederal Employee Program during the Transition; (h) maintaining its technical connections and processing capabilities during the Transition; and (i) working diligently to conclude all financial settlements and account reconciliations as negotiated in the termination transition agreement.

Amended as of November 16, 2006

(v) 9 otwithstanding any other provision in this Agreement,
BCBSA shall have the right, with the approval of its Board of Directors, to assess additional fines against the terminated entity during the Transition in the event it fails to maintain and provide access to provider networks as defined by 2ederal Employee Program agreements, 9 ational Account Program Policies and Provisions, and 0ther Plans Programs Policies and Provisions, and/or pass on applicable discounts. Such fines shall be in addition to any other assessments, fees or liquidated damages payable herein, or under e1isting policies and programs and shall be imposed to make whole BCBSA and/or the Plans. Terminated entity shall pay any such fines to BCBSA no later than 0z days after they are approved by the Board of Directors.

(vi) BCBSA shall have the right to e1amine and audit and/or hire at terminated entity5s e1pense a third"party auditor to e1amine and audit the books and records of the terminated entity and its Licensed Controlled Affiliates to verify compliance with the terms and requirements of this paragraph N‘(d).

(vii) Subsequent to termination of this Agreement, the terminated entity and its affiliates, agents, and employees shall have an ongoing and continuing obligation to protect all BCBSA and Blue Licensee data that was acquired or accessed during the period this Agreement was in force, including but not limited to all confidential processes, pricing, provider, discount and other strategic and competitively sensitive information (FBlue 0nformation:) from disclosure, and shall not, either alone or with another entity, disclose such Blue 0nformation or use it in any manner to compete without the e1press written permission of BCBSA.

(viii) As to a breach of N‘ (d) (i), (ii), (iii), (iv), (vi), or (vii) the parties agree that the obligations are immediately enforceable in a court of competent 4urisdiction. As to a breach of N‘ (d) (i), (ii), (iv), (vi), or (vii) by the Plan, the parties agree there is no adequate remedy at law and BCBSA is entitled to obtain specific performance.

Amended as of November 16, 2006

(i1) On the event that the terminated entity's license is reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent jurisdiction, the Plan and its Licensed Controlled Affiliates shall be jointly liable for reimbursing BCBSA the reasonable costs incurred by BCBSA in connection with the termination and the reinstatement or court action, and any associated legal proceedings, including but not limited toxoutside legal fees, consulting fees, public relations fees, advertising costs, and costs incurred to develop, lease or establish an interim provider network. Any amount due to BCBSA under this subparagraph may be waived in whole or in part by the BCBSA Board of Directors in its sole discretion.

(e). BCBSA shall be entitled to enjoin the Plan or any related party in a court of competent jurisdiction from entry into any transaction which would result in a termination of this License Agreement unless the License Agreement has been terminated pursuant to paragraph IV. (d) of this Agreement upon the required six (6) month written notice.

(f). BCBSA acknowledges that it is not the owner of assets of the Plan.

Amended as of June 16, 2006

N%. This Agreement supersedes any and all other agreements between the parties with respect to the sub4ect matter herein, and contains all of the covenants and agreements of the parties as to the licensing of the Licensed Marks and 9 ame. This Agreement may be amended only by the affirmative vote of three"fourths of the Plans and three"fourths of the total then current weighted vote of all the Plans as officially recorded by the BCBSA Corporate Secretary.

N3. If any provision or any part of any provision of this Agreement is 4udicially declared unlawful, each and every other provision, or any part of any provision, shall continue in full force and effect notwithstanding such 4udicial declaration.

N6. 9 o waiver by BCBSA or the Plan of any breach or default in performance on the part of BCBSA or the Plan or any other licensee of any of the terms, covenants or conditions of this Agreement shall constitute a waiver of any subsequent breach or default in performance of said terms, covenants or conditions.

N8a. All notices provided for hereunder shall be in writing and shall be sent in duplicate by regular mail to BCBSA or the Plan at the address currently published for each by BCBSA and shall be marked respectively to the attention of the President and, if any, the - eneral Counsel, of BCBSA or the Plan.

№b E1cept as provided in paragraphs 8(b), 8(d)(iii), №‘(a), and №‘(b) above, this Agreement may be terminated for a breach only upon at least 0z days5 written notice to the Plan advising of the specific matters at issue and granting the Plan an opportunity to be heard and to present its response to the Member Plans.

№c 2or all provisions of this Agreement referring to voting, the term ‘Plans5 shall mean all entities licensed under the Blue Cross License Agreement and/or the Blue Shield License Agreement, and in all votes of the Plans under this Agreement the Plans shall vote together. 2or weighted votes of the Plans, the Plan shall have a number of votes equal to the number of weighted votes (if any) that it holds as a Blue Cross Plan plus the number of weighted votes (if any) that it holds as a Blue Shield Plan. 2or all other votes of the Plans, the Plan shall have one vote. 2or all questions requiring an affirmative three”fourths weighted vote of the Plans, the requirement shall be deemed satisfied with a lesser weighted vote unless the greater ofx(i) %“Gor more of the Plans (rounded to the nearest whole number, with z.“ or multiples thereof being rounded to the ne1t higher whole number) fail to cast weighted votes in favor of the question; or (ii) three (0) of the Plans fail to cast weighted votes in favor of the question. 9 otwithstanding the foregoing provision, if there are thirty”nine (08) Plans, the requirement of an affirmative three” fourths weighted vote shall be deemed satisfied with a lesser weighted vote unless four (’) or more Plans fail to cast weighted votes in favor of the question.

Amended as of June 16, 2006

Gz. 9 othing herein contained shall be construed to constitute the parties hereto as partners or 4oint venturers, or either as the agent of the other, and Plan shall have no right to bind or obligate BCBSA in any way, nor shall it represent that it has any right to do so. BCBSA shall have no liability to third parties with respect to any aspect of the business, activities, operations, products, or services of the Plan.

GN This Agreement shall be governed, construed and interpreted in accordance with the laws of the State of Olinois.

O9 WCT9 ESS WHERE7 2, the parties have caused this License Agreement to be e1ecuted, effective as of the date of last signature written below.

BLUE CROSS AND BLUE SHIELD ASSOCIATION

By _____

Title _____

Date _____

Plan:

By_____

Title_____

Date_____

EXHIBIT 1

BLUE SHIELD
CONTROLLED AFFILIATE LICENSE AGREEMENT
(Includes revisions adopted by Member Plans through their June 16, 2016 meeting)

This Agreement by and among Blue Cross and Blue Shield Association ("BCBSA") and_____ (FControlled Affiliate"), a Controlled Affiliate of the Blue Shield Plan, known as_____ ("Plan" or FSponsoring Plan:), which is also a Party signatory hereto.

WHEREAS, BCBSA is the owner of the BLUE SHOELD and BLUE SHOELD Design service marks;

WHEREAS, Plan and Controlled Affiliate desire that the latter be entitled to use the BLUE SHOELD and BLUE SHOELD Design service marks (collectively the "Licensed Marks") as service marks and be entitled to use the term BLUE SHOELD in a trade name ("Licensed 9 ame");

9 7 W THERE27 RE, in consideration of the foregoing and the mutual agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as followsx

1. GRANT OF LICENSE

Sub4ect to the terms and conditions of this Agreement, BCBSA hereby grants to Controlled Affiliate the right to use the Licensed Marks and 9 ame in connection with, and only in connection withx(i) health care plans and related services, as defined in BCBSAjs License Agreement with Plan, and administering the non"health portion of workers5 compensation insurance, and (ii) underwriting the indemnity portion of workers5 compensation insurance, provided that Controlled Affiliate5s total premium revenue comprises less than N‘ percent of the Sponsoring Plan5s net subscription revenue.

This grant of rights is non"e1clusive and is limited to the Service Area served by the Plan. Sub4ect to Paragraph 0A(0) of this Agreement, Controlled Affiliate may use the Licensed Marks and 9 ame in its legal name on the following conditionsx(i) the legal name must be approved in advance, in writing, by BCBSA; (ii) Controlled Affiliate shall not do business outside the Service Area under any name or mark; and (iii) Controlled Affiliate shall not use the Licensed Marks and 9 ame, or any derivative thereof, as part of any name or symbol used to identify itself in any securities market, unless such Controlled Affiliate is a not"for"profit company which may use the Licensed Marks and 9 ame, or an approved derivative therefor, to identify itself in debt securities markets. Controlled Affiliate may use the Licensed Marks and 9 ame in its Trade 9 ame only with the prior, written, consent of BCBSA.

Amended as of March 26, 2015

2. QUALITY CONTROL

A. Controlled Affiliate agrees to use the Licensed Marks and 9 ame only in connection with the licensed services and further agrees to be bound by the conditions regarding quality control shown in attached E1hibit A as they may be amended by BCBSA from time"to"time.

B. Controlled Affiliate agrees to comply with all applicable federal, state and local laws.

C. Controlled Affiliate agrees that it will provide on an annual basis (or more often if reasonably required by Plan or by BCBSA) a report or reports to Plan and BCBSA demonstrating Controlled Affiliatejs compliance with the requirements of this Agreement including but not limited to the quality control provisions of this paragraph and the attached E1hibit A.

D. Controlled Affiliate agrees that Plan and/or BCBSA may, from time"to"time, upon reasonable notice, review and inspect the manner and method of Controlled Affiliatejs rendering of service and use of the Licensed Marks and 9 ame.

E. As used herein, a Controlled Affiliate is defined as an entity organiIed and operated in such a manner, that the Sponsoring Plan hasx

(N) The legal authority directly or indirectly through wholly"owned subsidiariesx

(a) to select members of the Controlled Affiliate5s governing body having not less than "z' voting control thereof; and

(b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Sponsoring Plan does not concur; and

(c) to e1ercise control over the policy and operations of the Controlled Affiliate at least equal to that e1ercised by persons or entities (4bintly or individually) other than the Sponsoring Plan; and

9 otwithstanding anything to the contrary in (a) through (c) hereof, the Controlled Affiliate5s establishing or governing documents must also require written approval by the Sponsoring Plan before the Controlled Affiliate canx

(i) change its legal and/or trade names;

(ii) change the geographic area in which it operates;

(iii) change any of the type(s) of businesses in which it engages;

Amended as of September 19, 2014

(iv) create, or become liable for by way of guarantee, any indebtedness, other than indebtedness arising in the ordinary course of business;

(v) sell any assets, e1cept for sales in the ordinary course of business or sales of equipment no longer useful or being replaced;

(vi) make any loans or advances e1cept in the ordinary course of business;

(vii) enter into any arrangement or agreement with any party directly or indirectly affiliated with any of the owners or persons or entities with the authority to select or appoint members or board members of the Controlled Affiliate, other than the Sponsoring Plan or other Plans (e1cluding owners of stock holdings of under "' in a publicly traded Controlled Affiliate);

(viii) conduct any business other than under the Licensed Marks and 9 ame;

(i1) take any action that Sponsoring Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and 9 ame.

0n addition, the Sponsoring Plan directly or indirectly through wholly owned subsidiaries shall own at least "z' of any for"profit Controlled Affiliate, provided that in instances where the Sponsoring Plan formed a publicly traded Controlled Affiliate Licensee and such publicly traded Controlled Affiliate Licensee owns and controls other Controlled Affiliate Licensees, the Sponsoring Plan directly or indirectly shall own and control at least "z' of any Controlled Affiliate that is indirectly owned and controlled by the publicly traded Controlled Affiliate Licensee.

7 r

(G) The legal authority directly or indirectly through wholly"owned subsidiaries;

(a) to select members of the Controlled Affiliate5s governing body having more than "z' voting control thereof and tox

(b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Sponsoring Plan do not concur; and

c) to e1ercise control over the policy and operations of the Controlled Affiliate.

Amended as of March 26, 2015

In addition, the Sponsoring Plan directly or indirectly through wholly-owned subsidiaries shall own more than "z' of any for-profit Controlled Affiliate, provided that in instances where the Sponsoring Plan formed a publicly traded Controlled Affiliate Licensee and such publicly traded Controlled Affiliate Licensee owns and controls other Controlled Affiliate Licensees, the Sponsoring Plan directly or indirectly shall own and control more than "z' of any Controlled Affiliate that is indirectly owned and controlled by the publicly traded Controlled Affiliate Licensee.

7 r

(0) With respect to a Controlled Affiliate that is Nzz' controlled by Plans including the Sponsoring Plan and which offers solely Medicaid products and services, the legal authority together with such other Plansx

(a) to select all members of the Controlled Affiliate5s governing body; and

(b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate; and

(c) to e1ercise control over the policy and operations of the Controlled Affiliate.

In addition, the Sponsoring Plan and such other Plans shall own Nzz' of any for-profit Controlled Affiliate, with the Sponsoring Plan and such other Plans each having an ownership interest. Such control and ownership by Plans must be direct or, if indirect, solely through affiliates that are licensed to use marks owned by BCBSA. 2urther, the Sponsoring Plan and such other Plans shall e1ecute the Addendum to Controlled Affiliate License Agreement attached hereto as E1hibit B"N

7 r

(') With respect to a Controlled Affiliate that is Nzz' controlled by a Sponsoring Plan which on a Blue-branded basis offers solely a Basic Medicare Part D Prescription Drug product, the legal authorityx

(a) to select all members of the Controlled Affiliate5s governing body; and

(b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate; and

(c) to e1ercise control over the policy and operations of the Controlled Affiliate.

In addition, the Sponsoring Plan shall own Nzz' of any for-profit Controlled Affiliate. Such Nzz' control and ownership by Sponsoring Plan must be direct or, if indirect, solely through affiliates that are licensed to use marks owned by BCBSA, 2urther, the Participating Plan as defined in E1hibit B"Gand the Sponsoring Plan shall e1ecute the Addendum to Controlled Affiliate License Agreement attached hereto as E1hibit B"G

Amended March 17, 2016

3. FOR-PROFIT, PUBLICLY TRADED LICENSEES

A. The Controlled Affiliate may operate as a for"profit publicly traded company on the following conditionsx

(N) The Controlled Affiliate shall discharge all responsibilities which it has to the Association and to other Plans by virtue of this Agreement.

(G) The Controlled Affiliate shall provide 8z days advance written notice to BCBSA prior to the initial filing with the SEC.

(0) The Controlled Affiliate shall not use the Licensed Marks and 9 ame, or any derivative thereof, as part of its legal name or any symbol used to identify the Controlled Affiliate in any securities market. The Controlled Affiliate shall use the Licensed Marks and 9 ame as part of its trade name within its service area for the sale, marketing and administration of health care and related services in the service area.

Amended as of March 26, 2015

(’) The Controlled Affiliate5s license to use the Licensed Marks and 9 ame
shall automatically terminate effectivex(a) thirty days after the Controlled Affiliate knows, or there is an SEC filing indicating that, any 0nstitutional 0nvestor, has become the Beneficial 7 wner of securities representing N2' or more of the voting power of the Controlled Affiliate (FE1cess 0nstitutional Voter:), unless such E1cess 0nstitutional Voter shall cease to be an E1cess 0nstitutional Voter prior to such automatic termination becoming effective; (b) thirty days after the Controlled Affiliate knows, or there is an SEC filing indicating that, any 9 oninstitutional 0nvestor, other than a Plan or Plans or Controlled Affiliate licensee or licensees has become the Beneficial 7 wner of securities representing “' or more of the voting power of the Controlled Affiliate (FE1cess 9 oninstitutional Voter:) unless such E1cess 9 oninstitutional Voter shall cease to be an E1cess 9 oninstitutional Voter prior to such automatic termination becoming effective; (c) thirty days after the Controlled Affiliate knows, or there is an SEC filing indicating that, any Person has become the Beneficial 7 wner, other than a Plan or Plans or Controlled Affiliate licensee or licensees, of G2' or more of the Controlled Affiliate5s then outstanding common stock or other equity securities which (either by themselves or in combination) represent an ownership interest of G2' or more pursuant to determinations made under Paragraph 0A(’) below (FE1cess 7 wner:), unless such E1cess 7 wner shall cease to be an E1cess 7 wner prior to such automatic termination becoming effective; (d) ten business days after individuals who at the time the Controlled Affiliate went public constituted the Board of Directors of the Controlled Affiliate (together with any new directors whose election to the Board was approved by a vote of G70 of the directors then still in office who were directors at the time the Controlled Affiliate went public or whose election or nomination was previously so approved) (the FContinuing Directors:) cease for any reason to constitute a ma4ority of the Board of Directors; or (e) ten business days after the Controlled Affiliate consolidates with or merges with or into any person or conveys, assigns, transfers or sells all or substantially all of its assets to any person other than a merger in which the Sponsoring Plan is the surviving entity and immediately after which merger, no person is an E1cess 0nstitutional Voter, an E1cess 9 oninstitutional Voter or an E1cess 7 wnerxprovided that, if requested by the affected Controlled Affiliate in a writing received by BCBSA prior to such automatic termination becoming effective, the provision of this paragraph 0A(’) may be waived, in whole or in part, upon the affirmative vote of a ma4ority of the disinterested Plans and a ma4ority of the total then current weighted vote of the disinterested Plans. Any waiver so granted may be conditioned upon such additional requirements (including but not limited to imposing new and independent grounds for termination of this License) as shall be approved by the affirmative vote of a ma4ority of the disinterested Plans and a ma4ority of the total then current weighted vote of the disinterested Plans. G0f a timely waiver request is received, no automatic termination shall become effective until the later ofx(N) the conclusion of the applicable time period specified in paragraphs 0A(’)(a)”(d) above, or (G) the conclusion of the first Member Plan meeting after receipt of such a waiver request.

Amended as of March 26, 2015

0n the event that the Controlled Affiliate5s license, or any other license, to use the Licensed Marks and 9 ame is terminated pursuant to Paragraph 0A('), the license may be reinstated in BCBSA5s sole discretion if, within 0z days of the date of such termination, the Controlled Affiliate demonstrates that the Person referred to in clause (a), (b) or (c) of the preceding paragraph is no longer an E1cess 0nstitutional Voter, an E1cess 9 oninstitutional Voter or an E1cess 7 wner.

(") The Controlled Affiliate shall not issue any class or series of security other than (i) shares of common stock having identical terms or options or derivatives of such common stock, (ii) non"voting, non"convertible debt securities, or (iii) such other securities as the Controlled Affiliate may approve, provided that BCBSA receives notice at least thirty days prior to the issuance of such securities, including a description of the terms for such securities, and BCBSA shall have the authority to determine how such other securities will be counted in determining whether any Person is an E1cess 0nstitutional Voter, E1cess 9 oninstitutional Voter or an E1cess 7 wner.

(%) 2or purposes of paragraph 0(A) above, the following definitions shall applyx

(i) FAffiliate: and FAssociate: shall have the respective meanings ascribed to such terms in Rule NGb"Gof the - eneral Rules and Regulations under the Securities E1change Act of N80', as amended and in effect on 9 ovember N3, N880 (the FE1change Act:).

(ii) A Person shall be deemed the FBeneficial 7 wner: of and shall be deemed to Fbeneficially own: any securitiesx

(N) which such Person or any of such Person5s Affiliates or Associates beneficially owns, directly or indirectly;

(G) which such Person or any of such Person5s Affiliates or Associates has (A) the right to acquire (whether such right is e1ercisable immediately or only after the passage of time) pursuant to any agreement, arrangement or understanding, or upon the e1ercise of conversion rights, e1change rights, warrants or options, or otherwise; or (B) the right to vote pursuant to any agreement, arrangement or understanding; provided, however, that a Person shall not be deemed the Beneficial 7 wner of, or to beneficially own, any security if the agreement, arrangement or understanding to vote such security (N) arises solely from a revocable pro1y or consent given to such Person in response to a public pro1y or consent solicitation made pursuant to, and in accordance with, the applicable rules and regulations promulgated under the E1change Act and (G) is not also then reportable on Schedule N0D under the E1change Act (or any comparable or successor report); or

Amended as of March 26, 2015

(0) which are beneficially owned, directly or indirectly, by any other Person (or any Affiliate or Associate thereof) with which such Person (or any of such Person5s Affiliates or Associates) has any agreement, arrangement or understanding (other than customary agreements with and between underwriters and selling group members with respect to a bona fide public offering of securities) relating to the acquisition, holding, voting (e1cept to the e1tent contemplated by the proviso to (ii)C(B) above) or disposing of any securities of the Controlled Affiliate.

9 otwithstanding anything in this definition of Beneficial 7 wnership to the contrary, the phrase Fthen outstanding: , when used with reference to a Person5s Beneficial 7 wnership of securities of the Controlled Affiliate, shall mean the number of such securities then issued and outstanding together with the number of such securities not then actually issued and outstanding which such Person would be deemed to own beneficially hereunder.

(iii) A Person shall be deemed an F0nstitutional 0nvestor: if (but only if) such Person (i) is an entity or group identified in the SEC5s Rule N0d”N(b)(N)(ii) as constituted on June N, N883, and (ii) every filing made by such Person with the SEC under Regulation N0D”- (or any successor Regulation) with respect to such Person5s Beneficial 7 wnership of Plan securities shall have contained a certification identical to the one required by item Nof SEC Schedule N0- as constituted on June N, N883.

(iv) F9 oninstitutional 0nvestor: means any Person who is not an 0nstitutional 0nvestor.

(v) FPerson: shall mean any individual, firm, partnership, corporation, trust, association, 4oint venture or other entity, and shall include any successor (by merger or otherwise) of such entity.

4. <u>SERVICE MARK USE</u>

A. Controlled Affiliate recogniIes the importance of a comprehensive national network of independent BCBSA licensees which are committed to strengthening the Licensed Marks and 9 ame. The Controlled Affiliate further recogniIes that its actions within its Service Area may affect the value of the Licensed Marks and 9 ame nationwide.

B. Controlled Affiliate shall at all times make proper service mark use of the Licensed Marks and 9 ame, including but not limited to use of such symbols or words as BCBSA shall specify to protect the Licensed Marks and 9 ame and shall comply with such rules (generally applicable to Controlled Affiliates licensed to use the Licensed

Amended as of March 26, 2015

Marks and 9 ame) relative to service mark use, as are issued from time"to"time by BCBSA. Controlled Affiliate recogniIes and agrees that all use of the Licensed Marks and 9 ame by Controlled Affiliate shall inure to the benefit of BCBSA.

C. Controlled Affiliate may not directly or indirectly use the Licensed Marks and 9 ame in a manner that transfers or is intended to transfer in the Service Area the goodwill associated therewith to another mark or name, nor may Controlled Affiliate engage in activity that may dilute or tarnish the unique value of the Licensed Marks and 9 ame.

D. Of Controlled Affiliate meets the standards of Œ(N) but not Œ(G) above and any of Controlled Affiliatejs advertising or promotional material is reasonably determined by BCBSA and/or the Plan to be in contravention of rules and regulations governing the use of the Licensed Marks and 9 ame, Controlled Affiliate shall for ninety (8z) days thereafter obtain prior approval from BCBSA of advertising and promotional efforts using the Licensed Marks and 9 ame, approval or disapproval thereof to be forthcoming within five (") business days of receipt of same by BCBSA or its designee. On all advertising and promotional efforts, Controlled Affiliate shall observe the Service Area limitations applicable to Plan.

E. 9 otwithstanding any other provision in the Plan5s License Agreement with BCBSA or in this Agreement, Controlled Affiliate shall use its best efforts to promote and build the value of the Licensed Marks and 9 ame.

5. SUBLICENSING AND ASSIGNMENT

Controlled Affiliate shall not, directly or indirectly, sublicense, transfer, hypothecate, sell, encumber or mortgage, by operation of law or otherwise, the rights granted hereunder and any such act shall be voidable at the sole option of Plan or BCBSA. This Agreement and all rights and duties hereunder are personal to Controlled Affiliate.

6. INFRINGEMENT

Controlled Affiliate shall promptly notify Plan and Plan shall promptly notify BCBSA of any suspected acts of infringement, unfair competition or passing off that may occur in relation to the Licensed Marks and 9 ame. Controlled Affiliate shall not be entitled to require Plan or BCBSA to take any actions or institute any proceedings to prevent infringement, unfair competition or passing off by third parties. Controlled Affiliate agrees to render to Plan and BCBSA, without charge, all reasonable assistance in connection with any matter pertaining to the protection of the Licensed Marks and 9 ame by BCBSA.

Amended as of September 19, 2014

7. LIABILITY INDEMNIFICATION

Controlled Affiliate and Plan hereby agree to save, defend, indemnify and hold BCBSA harmless from and against all claims, damages, liabilities and costs of every kind, nature and description (e1cept those arising solely as a result of BCBSAjs negligence) that may arise as a result of or related tox(i) Controlled Affiliatejs rendering of services under the Licensed Marks and 9 ame; or (ii) the activities of any hospital, medical group, clinic or other provider of health services that is owned or controlled directly or indirectly by Plan or Controlled Affiliate.

8. LICENSE TERM

A. E1cept as otherwise provided herein, the license granted by this Agreement shall remain in effect for a period of one (N) year and shall be automatically e1tended for additional one (N) year periods unless terminated pursuant to the provisions herein.

B. This Agreement and all of Controlled Affiliatejs rights hereunder shall immediately terminate without any further action by any party or entity in the event thatx(i) the Plan ceases to be authoriIed to use the Licensed Marks and 9 ame; or (ii) pursuant to Paragraph N‘(a)(1) of the Blue Cross License Agreement the Plan ceases to be authoriIed to use the Licensed 9 ames and Marks in the geographic area served by the Controlled Affiliate provided, however, that if the Controlled Affiliate is serving more than one State or portions thereof, the termination of this Agreement shall be limited to the State(s) or portions thereof in which the Plan5s license to use the Licensed Marks and 9 ames is terminated. By not appealing or challenging such regulatory action within the time prescribed by law or regulation, and in any event no later than NCz days after such action is taken, a Plan shall be deemed to have e1hausted its rights to appeal or challenge, and automatic termination shall proceed.

C. 9 otwithstanding any other provision of this Agreement, this license to use the Licensed Marks and 9 ame may be forthwith terminated by the Plan or the
affirmative vote of the ma4ority of the Board of Directors of BCBSA present and voting at a special meeting e1pressly called by BCBSA for the purpose on ten (Nz) days written notice to the Plan advising of the specific matters at issue and granting the Plan an opportunity to be heard and to present its response to the Board forx(N) failure to comply with any applicable minimum capital or liquidity requirement under the quality control standards of this Agreement; or (G) failure to comply with the "7 rganiIation and - overnance" quality control standard of this Agreement; or (0) impending financial insolvency; or (’) for a Smaller Controlled Affiliate (as defined in E1hibit A), failure to comply with any of the applicable requirements of Standards G; 0, ’ , “ or 3 of attached E1hibit A; or (“) the pendency of any action instituted against the Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business or seeking the declaration or establishment of a trust for any of its property or business, unless this Controlled Affiliate License Agreement has been earlier terminated under paragraph

Amended as of March 26, 2015

6(E); or (%) failure by a Controlled Affiliate that meets the standards of GE(N) but not GE(G) above to obtain BCBSAjs written consent to a change in the identity of any owner, in the e1tent of ownership, or in the identity of any person or entity with the authority to select or appoint members or board members, provided that as to publicly traded Controlled Affiliates this provision shall apply only if the change affects a person or entity that owns at least "' of the Controlled Affiliatejs stock before or after the change; or (3) such other reason as is determined in good faith immediately and irreparably to threaten the integrity and reputation of BCBSA, the Plans, any other licensee including Controlled Affiliate and/or the Licensed Marks and 9 ame.

D. E1cept as otherwise provided in Paragraphs 6(B), 6(C) or 6(E) herein, should Controlled Affiliate fail to comply with the provisions of this Agreement and not cure such failure within thirty (0z) days of receiving written notice thereof (or commence a cure within such thirty day period and continue diligent efforts to complete the cure if such curing cannot reasonably be completed within such thirty day period) BCBSA or the Plan shall have the right to issue a notice that the Controlled Affiliate is in a state of noncompliance. Of a state of noncompliance as aforesaid is undisputed by the Controlled Affiliate or is found to e1ist by a mandatory dispute resolution panel and is uncured as provided above, BCBSA shall have the right to seek 4udicial enforcement of the Agreement or to issue a notice of termination thereof. 9 otwithstanding any other provisions of this Agreement, any disputes as to the termination of this License pursuant to Paragraphs 6(B), 6(C) or 6(E) of this Agreement shall not be sub4ect to mediation and mandatory dispute resolution. All other disputes between BCBSA, the Plan and/or Controlled Affiliate shall be submitted promptly to mediation and mandatory dispute resolution. The mandatory dispute resolution panel shall have authority to issue orders for specific performance and assess monetary penalties. E1cept, however, as provided in Paragraphs 6(B) and 6(E) of this Agreement, this license to use the Licensed Marks and 9 ame may not be finally terminated for any reason without the affirmative vote of a ma4ority of the present and voting members of the Board of Directors of BCBSA.

E. This Agreement and all of Controlled Affiliatejs rights hereunder shall immediately terminate without any further action by any party or entity in the event thatx

(N) Controlled Affiliate shall no longer comply with item G(E) above;

(G) Appropriate dues, royalties and other payments for Controlled Affiliate pursuant to paragraph Nz hereof, which are the royalties for this License Agreement, are more than si1ty (%z) days in arrears to BCBSA; or

(0) Any of the following events occurx(i) a voluntary petition shall be filed by Controlled Affiliate seeking bankruptcy, reorganiIation, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief, or (ii) an involuntary petition or proceeding shall be filed against Controlled Affiliate seeking bankruptcy, reorganiIation, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief and such petition or proceeding is consented to or acquiesced in by Controlled Affiliate or is not dismissed within si1ty (%z) days of

Amended as of March 26, 2015

the date upon which the petition or other document commencing the proceeding is served upon the Controlled Affiliate, or (iii) an order for relief is entered against Controlled Affiliate in any case under the bankruptcy laws of the United States, or Controlled Affiliate is ad4udged bankrupt or insolvent as those terms are defined in the Uniform Commercial Code as enacted in the State of 0llinois by any court of competent 4urisdiction, or (iv) Controlled Affiliate makes a general assignment of its assets for the benefit of creditors, or (v) any government or any government official, office, agency, branch, or unit assumes control of Controlled Affiliate or delinquency proceedings (voluntary or involuntary) are instituted, or (vi) an action is brought by Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business, or (vii) an action is instituted by any governmental entity or officer against Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business and such action is consented to or acquiesced in by Controlled Affiliate or is not dismissed within one hundred thirty (N0z) days of the date upon which the pleading or other document commencing the action is served upon the Controlled Affiliate, provided that if the action is stayed or its prosecution is en4oined, the one hundred thirty (N0z) day period is tolled for the duration of the stay or in4unction, and provided further, that the Association5s Board of Directors may toll or e1tend the N0z day period at any time prior to its e1piration, or (viii) a trustee, interim trustee, receiver or other custodian for any of Controlled Affiliatejs property or business is appointed or the Controlled Affiliate is ordered dissolved or liquidated. 9 otwithstanding any other provision of this Agreement, a declaration or a request for declaration of the e1istence of a trust over any of the Controlled Affiliate5s property or business shall not in itself be deemed to constitute or seek appointment of a trustee, interim trustee, receiver or other custodian for purposes of subparagraphs 6(E)(0)(vii) and (viii) of this Agreement.

(’) The for”profit, publicly traded Controlled Affiliate is terminated pursuant to Paragraph 0A(’) of this Agreement. 0n which case, the licenses of any controlled Affiliates directly or indirectly owned by the terminated for profit, publicly traded Controlled Affiliate also shall immediately terminate as provided for in paragraph 0A(’) of this Agreement

2. Upon termination of this Agreement for cause or otherwise, Controlled Affiliate agrees that it shall immediately discontinue all use of the Licensed Marks and 9 ame, including any use in its trade name.

- . Upon termination of this Agreement, Controlled Affiliate shall immediately notify all of its customers that it is no longer a licensee of BCBSA and, if directed by the Association5s Board of Directors, shall provide instruction on how the customer can contact BCBSA or a designated licensee to obtain further information on securing coverage. The notification required by this paragraph shall be in writing and in a form approved by BCBSA. The BCBSA shall have the right to audit the terminated entityjs books and records to verify compliance with this paragraph.

Amended as of March 26, 2015

H. On the event this Agreement terminates pursuant to 6(b) hereof, or in the event the Controlled Affiliate is a Larger Controlled Affiliate (as defined in E1hibit A), upon termination of this Agreement, the provisions of Paragraph 6.- . shall not apply and the following provisions shall apply, e1cept that, in the event of a partial termination of this Agreement pursuant to Paragraph 6(B)(ii) of this Agreement, the notices, national account listing, payment, and audit right listed below shall be applicable solely with respect to the geographic area for which the Plan5s license to use the Licensed 9 ames and Marks is terminatedx

(N) The Controlled Affiliate shall send a notice through the U.S. mails, with first class postage affi1ed, to all individual and group customers, providers, brokers and agents of products or services sold, marketed, underwritten or administered by the Controlled Affiliate under the Licensed Marks and 9 ame. The form and content of the notice shall be specified by BCBSA and shall, at a minimum, notify the recipient of the termination of the license, the consequences thereof, and instructions for obtaining alternate products or services licensed by BCBSA, sub4ect to any conflicting state law and state regulatory requirements. This notice shall be mailed within N‘ days after termination.

(G) The Controlled Affiliate shall deliver to BCBSA within five days of a request by BCBSA a listing of national accounts in which the Controlled Affiliate is involved (in a control, participating or servicing capacity), identifying the national account and the Controlled Affiliate5s role therein.

(0) Unless the cause of termination is an event respecting BCBSA stated in paragraph N‘(a) or (b) of the Plan5s license agreement with BCBSA to use the Licensed Marks and 9 ame, the Controlled Affiliate, the Plan, and any other Licensed Controlled Affiliates of the Plan shall be 4ointly liable for payment to BCBSA of an amount equal to the Re”Establishment 2ee (described below) multiplied by the number of Licensed Enrollees of the Controlled Affiliate; provided that if any other Plan is permitted by BCBSA to use marks or names licensed by BCBSA in the Service Area established by this Agreement, the Re” Establishment 2ee shall be multiplied by a fraction, the numerator of which is the number of Licensed Enrollees of the Controlled Affiliate, the Plan, and any other Licensed Controlled Affiliates and the denominator of which is the total number of Licensed Enrollees in the Service Area.

The Re”Establishment 2ee shall be inde1ed to a base fee of $6z. The Re”Establishment 2ee through December 0N, Gzz“ shall be $6z. The Re”Establishment 2ee for calendar years after December 0N, Gzz“ shall be ad4usted on January No of each calendar year up to and including January N, GzNz and shall be the base fee multiplied by Nzz' plus the cumulative percentage increase or decrease in the Plans5 gross administrative e1pense (standard BCBSA definition) per Licensed Enrollee since December 0N, Gzz’ . The ad4ustment shall end on January N, GzNN, at which time the Re”Establishment 2ee shall be fi1ed at the then”current amount and no longer automatically ad4usted. 2or e1ample, if the Plans5 gross administrative e1pense per Licensed Enrollee was $G36.%z, $G6“.zz and $G8z.zz for calendar year end Gzz’ , Gzz“ and Gzz%, respectively, the January N, Gzz3 Re”Establishment 2ee would be $60.G3 (Nzz' of base fee plus $N6’ for calendar

Amended as of March 26, 2015

year Gzz“ and $N’ 0 for calendar year Gzz%. Licensed Enrollee means each and every person and covered dependent who is enrolled as an individual or member of a group receiving products or services sold, marketed or administered under marks or names licensed by BCBSA as determined at the earlier of (i) the end of the last fiscal year of the terminated entity which ended prior to termination or (ii) the fiscal year which ended before any transactions causing the termination began. 9 otwithstanding the foregoing, the amount payable pursuant to this subparagraph H. (0) shall be due only to the e1tent that, in BCBSA5s opinion, it does not cause the net worth of the Controlled Affiliate, the Plan or any other Licensed Controlled Affiliates of the Plan to fall below N›zz' of the Health Risk’Based Capital formula, or its equivalent under any successor formula, as set forth in the applicable financial responsibility standards established by BCBSA (provided such equivalent is approved for purposes of this sub paragraph by the affirmative vote of three” fourths of the Plans and three”fourths of the total then current weighted vote of all the Plans); measured as of the date of termination, and ad4usted for the value of any transactions not made in the ordinary course of business. This payment shall not be due in connection with transactions e1clusively by or among Plans or their affiliates, including reorganiIations, combinations or mergers, where the BCBSA Board of Directors determines that the license termination does not result in a material diminution in the number of Licensed Enrollees or the e1tent of their coverage. At least “z' of the Re’Establishment 2ee shall be awarded to the Plan (or Plans) that receive the new license(s) for the service area(s) at issue; provided, however, that such award shall not become due or payable until all disputes, if any, regarding the amount of and BCBSA5s right to such Re’Establishment 2ee have been finally resolved; and provided further that the award shall be based on the final amount actually received by BCBSA. The Board of Directors shall adopt a resolution which it may amend from time to time that shall govern BCBSA5s use of its portion of the award. 0n the event that the Controlled Affiliate5s license is reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent 4urisdiction, BCBSA shall reimburse the Controlled Affiliate (and/or the Plan or its other Licensed Controlled Affiliates, as the case may be) for payments made under this subparagraph 6.H.(0) only to the e1tent that such payments e1ceed the amounts due to BCBSA pursuant to paragraph 6.M. and any cost associated with reestablishing the Service Area, including any payments made by BCBSA to a Plan or Plans (or their Licensed Controlled Affiliates) for purposes of replacing the Controlled Affiliate.

(’) BCBSA shall have the right to e1amine and audit and/or hire at terminated entity5s e1pense a third party auditor to e1amine and audit the books and records of the Controlled Affiliate, the Plan, and any other Licensed Controlled Affiliates of the Plan to verify compliance with this paragraph 6.H.

(“) Subsequent to termination of this Agreement, the terminated entity and its affiliates, agents, and employees shall have an ongoing and continuing obligation to protect all BCBSA and Blue Licensee data that was acquired or accessed during the period this Agreement was in force, including but not limited to all confidential processes, pricing, provider, discount and other strategic and competitively sensitive information (FBlue 0nformation:) from disclosure, and shall not, either alone or with another entity, disclose such Blue 0nformation or use it in any manner to compete without the e1press written permission of BCBSA.

Amended as of March 26, 2015

(%) As to a breach of 6.H.(N), (G), (0), (') or (") the parties agree that the obligations are immediately enforceable in a court of competent 4urisdiction. As to a breach of 6.H.(N), (G) or (') by the Controlled Affiliate, the parties agree there is no adequate remedy at law and BCBSA is entitled to obtain specific performance.

O This Agreement shall remain in effect until terminated by the Controlled Affiliate or the Plan upon not less than eighteen (N6) months written notice to the Association or upon a shorter notice period approved by BCBSA in writing at its sole discretion, or until terminated as otherwise provided herein. The Plan5s right to terminate without cause upon such notice is unfettered and may be e1ercised in the Plan5s sole discretion.

J. On the event the Controlled Affiliate is a Smaller Controlled Affiliate (as defined in E1hibit A), the Controlled Affiliate agrees to be 4ointly liable for the amount described in H.0.and M. hereof upon termination of the BCBSA license agreement of any Larger Controlled Affiliate of the Plan.

K. BCBSA shall be entitled to en4oin the Controlled Affiliate or any related party in a court of competent 4urisdiction from entry into any transaction which would result in a termination of this Agreement unless the Plan5s license from BCBSA to use the Licensed Marks and 9 ames has been terminated pursuant to Nz(d) of the Plan5s license agreement upon the required N6 months written notice.

L. BCBSA acknowledges that it is not the owner of assets of the Controlled Affiliate.

M. On the event that the Plan has more than "z percent voting control of the Controlled Affiliate under Paragraph C(E)(G) above and is a Larger Controlled Affiliate (as defined in E1hibit A), then the vote called for in Paragraphs 6(C) and 6(D) above shall require the affirmative vote of three"fourths of the Plans and three"fourths of the total then current weighted vote of all the Plans.

9 . On the event this Agreement terminates and is subsequently reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent 4urisdiction, the Controlled Affiliate, the Plan, and any other Licensed Controlled Affiliates of the Plan shall be 4ointly liable for reimbursing BCBSA the reasonable costs incurred by BCBSA in connection with the termination and the reinstatement or court action, and any associated legal proceedings, including but not limited toxoutside legal fees, consulting fees, public relations fees, advertising costs, and costs incurred to develop, lease or establish an interim provider network. Any amount due to BCBSA under this subparagraph may be waived in whole or in part by the BCBSA Board of Directors in its sole discretion.

Amended as of March 26, 2015

9. DISPUTE RESOLUTION

The parties agree that any disputes between them or between or among either of them and one or more Plans or Controlled Affiliates of Plans that use in any manner the Blue Shield and Blue Shield Marks and 9 ame are sub4ect to the Mediation and Mandatory Dispute Resolution process attached to and made a part of Planjs License from BCBSA to use the Licensed Marks and 9 ame as E1hibit " as amended from time"to"time, which documents are incorporated herein by reference as though fully set forth herein.

10. LICENSE FEE

Controlled Affiliate will pay to BCBSA a fee for this License determined pursuant to the formula(s) set forth in E1hibit C.

11. JOINT VENTURE

9 othing contained in the Agreement shall be construed as creating a 4oint venture, partnership, agency or employment relationship between Plan and Controlled Affiliate or between either and BCBSA.

12. NOTICES AND CORRESPONDENCE

9 otices regarding the sub4ect matter of this Agreement or breach or termination thereof shall be in writing and shall be addressed in duplicate to the last known address of each other party, marked respectively to the attention of its President and, if any, its - eneral Counsel.

13. COMPLETE AGREEMENT

This Agreement contains the complete understandings of the parties in relation to the sub4ect matter hereof. This Agreement may only be amended by the affirmative vote of three"fourths of the Plans and three"fourths of the total then current weighted vote of all the Plans as officially recorded by the BCBSA Corporate Secretary.

14. SEVERABILITY

O f any term of this Agreement is held to be unlawful by a court of competent 4urisdiction, such findings shall in no way affect the remaining obligations of the parties hereunder and the court may substitute a lawful term or condition for any unlawful term or condition so long as the effect of such substitution is to provide the parties with the benefits of this Agreement.

Amended as March 26, 2015

15. NONWAIVER

9 o waiver by BCBSA of any breach or default in performance on the part of Controlled Affiliate or any other licensee of any of the terms, covenants or conditions of this Agreement shall constitute a waiver of any subsequent breach or default in performance of said terms, covenants or conditions.

15A. VOTING

2or all provisions of this Agreement referring to voting, the term 'Plans5shall mean all entities licensed under the Blue Cross License Agreement and/or the Blue Shield License Agreement, and in all votes of the Plans under this Agreement the Plans shall vote together. 2or weighted votes of the Plans, the Plan shall have a number of votes equal to the number of weighted votes (if any) that it holds as a Blue Cross Plan plus the number of weighted votes (if any) that it holds as a Blue Shield Plan. 2or all other votes of the Plans, the Plan shall have one vote. 2or all questions requiring an affirmative three"fourths weighted vote of the Plans, the requirement shall be deemed satisfied with a lesser weighted vote unless the greater ofx(i) %"Gor more of the Plans (rounded to the nearest whole number, with z." or multiples thereof being rounded to the ne1t higher whole number) fail to cast weighted votes in favor of the question; or (ii) three (0) of the Plans fail to cast weighted votes in favor of the question. 9 otwithstanding the foregoing provision, if there are thirty"hine (08) Plans, the requirement of an affirmative three"fourths weighted vote shall be deemed satisfied with a lesser weighted vote unless four (') or more Plans fail to cast weighted votes in favor of the question.

Amended as of March 26, 2015

THIS PAGE IS INTENTIONALLY BLANK.

16. GOVERNING LAW

This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of Illinois.

17. HEADINGS

The headings inserted in this agreement are for convenience only and shall have no bearing on the interpretation hereof.

IN WITNESS WHEREOF, the parties have caused this License Agreement to be executed and effective as of the date of last signature written below.

Controlled Affiliate:

By:_____

Date:_____

Plan:

By:_____

Date:_____

BLUE CROSS AND BLUE SHIELD ASSOCIATION

By:_____

Date:_____

Amended as of March 26, 2015

EXHIBIT A

CONTROLLED AFFILIATE LICENSE STANDARDS November 2016
PREAMBLE

2or purposes of definitionx

- A "smaller Controlled Affiliatex" (N) comprises less than fifteen percent (N‘') of Sponsoring Planjs and its licensed Controlled Affiliatesj total member enrollment (as reported on the BCBSA Quarterly Enrollment Report, e1cluding rider and freestanding coverage, and treating an entity seeking licensure as licensed);* or (G) underwrites the indemnity portion of workers5compensation insurance and has total premium revenue less than N‘ percent of the Sponsoring Plan5s net subscription revenue.

- A "larger Controlled Affiliate" comprises fifteen percent (N‘') or more of Sponsoring Planjs and its licensed Controlled Affiliatesj total member enrollment (as reported on the BCBSA Quarterly Enrollment Report, e1cluding rider and freestanding coverage, and treating an entity seeking licensure as licensed.)*

Changes in Controlled Affiliate statusx

O**f any** Controlled Affiliatejs status changes regardingxits Plan ownership level, its risk acceptance or direct delivery of medical care, the Controlled Affiliate shall notify BCBSA within thirty (0z) days of such occurrence in writing and come into compliance with the applicable standards within si1 (%) months.

O**f** a smaller Controlled Affiliate5s health and workers5compensation administration business reaches or surpasses fifteen percent (N‘') of the total member enrollment of the Sponsoring Plan and licensed Controlled Affiliates, the Controlled Affiliate shallx

Amended as of September 19, 2014

EXHIBIT A (continued)

N Within thirty (0z) days, notify BCBSA of this fact in writing, including evidence that the Controlled Affiliate meets the minimum liquidity and capital (BCBSA FHealth Risk"Based Capital (HRBC): as defined by the 9 AQC and state"established minimum reserve) requirements of the larger Controlled Affiliate 2inancial Responsibility standard; and

G Within si1 (%) months after reaching or surpassing the fifteen percent (N") threshold, demonstrate compliance with all license requirements for a larger Controlled Affiliate.

Of a Controlled Affiliate that underwrites the indemnity portion of workers5compensation insurance receives a change in rating or proposed change in rating, the Controlled Affiliate shall notify BCBSA within 0z days of notification by the e1ternal rating agency.

*2or purposes of this calculation, The numerator equalsx

Applicant Controlled Affiliatejs member enrollment, as defined in BCBSAjs Quarterly Enrollment Report (e1cluding rider and freestanding coverage).

The denominator equalsx

9 umerator PLUS Sponsoring Plan and all other licensed Controlled Affiliatesj member enrollment, as reported in BCBSAjs Quarterly Enrollment Report (e1cluding rider and freestanding coverage).

Amended as of September 19, 2014

STANDARDS FOR LICENSED CONTROLLED AFFILIATES

Each licensed controlled affiliate shall be subject to certain standards as determined below:

1. What percent of the licensed controlled affiliate is controlled by the Sponsoring Plan and other Plans?

More than 50% by Sponsoring Plan	50% by Sponsoring Plan	100% Plan Control but less than 50% Sponsoring Plan Control and it offers solely Medicaid products and services	100% Sponsoring Plan control and on a Blue-branded basis, it only offers Basic Medicare Part D Prescription Drug Plan product
⇩ Standard 1A, 4	⇩ Standard 1B, 4	⇩ Standard 1C, 4	⇩ Standard 1D, 4

IN ADDITION,

2. Is risk being assumed?

Yes			No	
Controlled Affiliate underwrites any indemnity portion of workers' compensation insurance ⇩ Standards 7A-7E, 11	Controlled Affiliate comprises < 15% of total member enrollment of Sponsoring Plan and its licensed affiliates, and does not underwrite the indemnity portion of workers' compensation insurance ⇩ Standard 2 (Guidelines 1.1,1.2) and Standard 11	Controlled Affiliate comprises ≥ 15% of total member enrollment of Sponsoring Plan and its licensed affiliates, and does not underwrite the indemnity portion of workers' compensation insurance ⇩ Standard 6H	Controlled Affiliate comprises < 15% of total member enrollment of Sponsoring Plan and its licensed affiliates ⇩ Standard 2 (Guidelines 1.1,1.3) and Standard 11	Controlled Affiliate comprises ≥ 15% of total member enrollment of Sponsoring Plan and its licensed affiliates ⇩ Standard 6H

IN ADDITION,

3. Is medical care being directly provided?

Yes	No
⇩ Standard 3A	⇩ Standard 3B

IN ADDITION,

4. If the controlled affiliate has health or workers' compensation administration business, does such business comprise 15% or more of the total member enrollment of Plan and its licensed Controlled Affiliates?

Yes	No		
⇩ Standards 6A-6J	Controlled Affiliate is not a former primary licensee and is not subject to Standard 1(C) ⇩ Standards 5,8,9B,10,11	Controlled Affiliate is a former primary licensee ⇩ Standards 5,8,9A,10,11	Controlled Affiliate is not a former primary licensee and is subject to Standard 1(C) ⇩ Standards 5,8,9B,11

EXHIBIT A (continued)

Standard 1 - Organization and Governance

NA.)The Standard for more than "z' Plan control isx

A Controlled Affiliate shall be organiIed and operated in such a manner that a Plan authoriIed to use the Licensed Marks in the Service Area of the Controlled Affiliate pursuant to the separate Primary License Agreement with BCBSA, Sponsoring Plan:), has the legal authority, directly or indirectly through wholly"owned subsidiariesxN) to select members of the Controlled Affiliate5s governing body having more than "z' voting control thereof; and G) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Sponsoring Plan do not concur; and 0) to e1ercise control over the policy and operations of the Controlled Affiliate. G)n addition, the Sponsoring Plan directly or indirectly through wholly"owned subsidiaries shall own more than "z' of any for"profit Controlled Affiliate.

NB.)The Standard for "z' Plan control isx

A Controlled Affiliate shall be organiIed and operated in such a manner that a Plan authoriIed to use the Licensed Marks in the Service Area of the Controlled Affiliate pursuant to the separate Primary License Agreement with BCBSA, has the legal authority, directly or indirectly through wholly"owned subsidiariesx

N) to select members of the Controlled Affiliate5s governing body having not less than "z' voting control thereof; and

G) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Sponsoring Plan do not concur; and

0) to e1ercise control over the policy and operations of the Controlled Affiliate at least equal to that e1ercised by persons or entities (4bintly or individually) other than the Sponsoring Plan.

Amended September 19, 2014

EXHIBIT A (continued)

9 otwithstanding anything to the contrary in N) through 0) hereof, the Controlled Affiliate5s establishing or governing documents must also require written approval by the Sponsoring Plan before the Controlled Affiliate canx

- change the geographic area in which it operates
- change its legal and/or trade names
- change any of the types of businesses in which it engages
- create, or become liable for by way of guarantee, any indebtedness, other than indebtedness arising in the ordinary course of business
- sell any assets, e1cept for sales in the ordinary course of business or sales of equipment no longer useful or being replaced
- make any loans or advances e1cept in the ordinary course of business
- enter into any arrangement or agreement with any party directly or indirectly affiliated with any of the owners or persons or entities with the authority to select or appoint members or board members of the Controlled Affiliate, other than the Sponsoring Plan or other Plans (e1cluding owners of stock holdings of under "' in a publicly traded Controlled Affiliate)
- conduct any business other than under the Licensed Marks and 9 ame
- take any action that the Sponsoring Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and 9 ame.

0n addition, the Sponsoring Plan directly or indirectly through wholly"owned subsidiaries shall own at least "z' of any for"profit Controlled Affiliate.

NC.) The Standard for a Controlled Affiliate that offers solely Medicaid products and service and hasNzz' Plan control but less than "z' Sponsoring Plan Controlx

A Controlled Affiliate shall be organiIed and operated in such a manner that (i) it offers solely Medicaid products and services; and (ii) a Plan authoriIed to use the Licensed Marks in the Service Area of the Controlled Affiliate pursuant to the separate Primary License Agreement with BCBSA (the FSponsoring Plan,) has the legal authority together with 7 ther Plansx

Amended September 19, 2014

N) to select all members of the Controlled Affiliate5s governing body; and

G) to prevent any change in the articles of incorporation, bylaws, or other establishing or governing documents of the Controlled Affiliate; and

0) to e1ercise control over the policy and operations of the Controlled Affiliate.

On addition, the Sponsoring Plan and such other Plans shall own Nzz' of any for"profit Controlled Affiliate, with the Sponsoring Plan and such other Plans each having an ownership interest. Such Nzz' control and ownership by Plans shall be direct or, if indirect, solely through affiliates that are licensed to use marks owned by BCBSA. 2urther, the Sponsoring Plan and such other Plans shall e1ecute the Addendum to Controlled Affiliate License.

ND). The Standard for a Controlled Affiliate that on a Blue"branded basis, only offers a Basic Medicare Part D Prescription Drug product and has Nzz' Plan control isx

A Controlled Affiliate shall be organiIed and operated in such a manner that (i) on a Blue"branded basis, it only offers a Basic Medicare Part D Prescription Drug product; and (ii) the Sponsoring Plan has the legal authorityx

N) to select all members of the Controlled Affiliate5s governing body; and

G) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate; and

0) to e1ercise control over the policy and operations of the Controlled Affiliate.

On addition, the Sponsoring Plan shall own Nzz' of any for"profit Controlled Affiliate. Such Nzz' control and ownership by Sponsoring Plan must be direct or, if indirect, solely through affiliates that are licensed to use marks owned by BCBSA.

2urther, the Sponsoring Plan and Participating Plan shall e1ecute the Addendum to Controlled Affiliate License.

Amended March 17, 2016

EXHIBIT A (continued)

Standard 2 - Financial Responsibility

A Controlled Affiliate shall be operated in a manner that provides reasonable financial assurance that it can fulfill all of its contractual obligations to its customers. Of a risk"assuming Controlled Affiliate ceases operations for any reason, Blue Cross and/or Blue Cross Plan coverage will be offered to all Controlled Affiliate subscribers without e1clusions, limitations or conditions based on health status. Of a nonrisk"assuming Controlled Affiliate ceases operations for any reason, Sponsoring Plan will provide for services to its customers. The requirements of the preceding two sentences shall apply to all lines of business unless a line of business is specially e1empted from the requirement(s) by the BCBSA Board of Directors.

Standard 3 - State Licensure/Certification

0A.) The Standard for a Controlled Affiliate that employs, owns or contracts on a substantially e1clusive basis for medical services isx

A Controlled Affiliate shall maintain unimpaired licensure or certification for its medical care providers to operate under applicable state laws.

0B.) The Standard for a Controlled Affiliate that does not employ, own or contract on a substantially e1clusive basis for medical services isx

A Controlled Affiliate shall maintain unimpaired licensure or certification to operate under applicable state laws.

Standard 4 - Certain Disclosures

A Controlled Affiliate shall make adequate disclosure in contracting with third parties and in disseminating public statements of N) the structure of the Blue Cross and Blue Shield System; and G) the independent nature of every licensee; and 0) the Controlled Affiliatejs financial condition.

Amended as of September 19, 2014

EXHIBIT A (continued)

Standard 5 - Reports and Records for Certain Smaller Controlled Affiliates

2or a smaller Controlled Affiliate that does not underwrite the indemnity portion of workers5compensation insurance, the Standard isx

A Controlled Affiliate and/or its Sponsoring licensed Plan shall furnish, on a timely and accurate basis, reports and records relating to these Standards and the License Agreements between BCBSA and Controlled Affiliate.

Standard 6 - Other Standards for Larger Controlled Affiliates Standards %(A) "(Q that follow apply to larger Controlled

Affiliates. Standard %(A)xBoard of Directors

A Controlled Affiliate - overning Board shall act in the interest of its Corporation in providing cost"effective health care services to its customers. A Controlled Affiliate shall maintain a governing Board, which shall control the Controlled Affiliate, composed of a ma4ority of persons other than providers of health care services, who shall be known as public members. A public member shall not be an employee of or have a financial interest in a health care provider, nor be a member of a profession which provides health care services.

Standard %(B)xResponsiveness to Customers

A Controlled Affiliate shall be operated in a manner responsive to customer needs and requirements.

Standard %(C)xParticipation in 9 ational Programs

A Controlled Affiliate shall effectively and efficiently participate in each national program as from time to time may be adopted by the Member Plans for the purposes of providing portability of membership between the licensees and ease of claims processing for customers receiving benefits outside of the Controlled Affiliatejs Service Area.

Amended as of September 19, 2014

EXHIBIT A (continued)

Such programs are applicable to licensees, and includex

N BlueCard Program;

G Inter'Plan Teleprocessing System (ITS);

0. 9 ational Account Programs;

'. Business Associate Agreement for Blue Cross and Blue Shield Licensees, effective April N, Gzz0; and
". Inter'Plan Medicare Advantage Program.

Standard %(D)x2inancial Performance Requirements

In addition to requirements under the national programs listed in Standard %(CxParticipation in 9 ational Programs, a Controlled Affiliate shall take such action as required to ensure its financial performance in programs and contracts of an inter'licensee nature or where BCBSA is a party.

Standard %(E)xCooperation with Plan Performance Response Process

A Controlled Affiliate shall cooperate with BCBSAjs Board of Directors and its Brand Enhancement & Protection Committee in the administration of the Plan Performance Response Process and in addressing Controlled Affiliate performance problems identified thereunder.

Standard %(2)xIndependent 2inancial Rating

A Controlled Affiliate shall obtain a rating of its financial strength from an independent rating agency approved by BCBSAjs Board of Directors for such purpose.

Standard %(-)xLocal and 9 ational Best Efforts

9 otwithstanding any other provision in the Plan5s License Agreement with BCBSA or in this License Agreement, during each year, a Controlled Affiliate shall use its best efforts to promote and build the value of the Blue Shield Mark.

Standard %(H)x2inancial Responsibility

A Controlled Affiliate shall be operated in a manner that provides reasonable financial assurance that it can fulfill all of its contractual obligations to its customers.

Amended as of November 21, 2014

EXHIBIT A (continued)

Standard %(Ox Reports and Records

A Controlled Affiliate shall furnish to BCBSA on a timely and accurate basis reports and records relating to compliance with these Standards and the License Agreements between BCBSA and Controlled Affiliate. Such reports and records are the followingx

A) BCBSA Controlled Affiliate Licensure Information Request; and

B) Triennial trade name and service mark usage material, including disclosure material; and

C) Changes in the ownership and governance of the Controlled Affiliate, including changes in its charter, articles of incorporation, or bylaws, changes in a Controlled Affiliatejs Board composition, or changes in the identity of the Controlled Affiliatejs Principal 7 fficers, and changes in risk acceptance, contract growth, or direct delivery of medical care; and

D) Semi"annual FHealth Risk"Based Capital (HRBC) Report: as defined by the 9 ACC, Annual Certified Audit Report, Insurance Department E1amination Report, Annual Statement filed with State Insurance Department (with all attachments), and

Amended as of November 17, 2011

EXHIBIT A (continued)

Standard %(J)xControl by Unlicensed Entities Prohibited

9 o Controlled Affiliate shall cause or permit an entity other than a Plan or a Licensed Controlled Affiliate thereof to obtain control of the Controlled Affiliate or to acquire a substantial portion of its assets related to licensable services.

Standard 7 - Other Standards for Risk-Assuming Workers' Compensation Controlled Affiliates

Standards 3(A) "(E) that follow apply to Controlled Affiliates that underwrite the indemnity portion of workers5 compensation insurance.

Standard 3 (A)x2inancial Responsibility

A Controlled Affiliate shall be operated in a manner that provides reasonable financial assurance that it can fulfill all of its contractual obligations to its customers.

Standard 3(B)xReports and Records

A Controlled Affiliate shall furnish, on a timely and accurate basis, reports and records relating to compliance with these Standards and the License Agreements between BCBSA and the Controlled Affiliate. Such reports and records are the followingx

A. BCBSA Controlled Affiliate Licensure 0nformation Request; and

B. Triennial trade name and service mark usage materials, including disclosure materials; and

C. Annual Certified Audit Report, Annual Statement as filed with the State 0nsurance Department (with all attachments), Annual 9 AC0C5s Risk"Based Capital Worksheets for Property and Casualty 0nsurers; and

D. Quarterly Estimated Risk"Based Capital for Property and Casualty 0nsurers, 0nsurance Department E1amination Report; and

Amended as of November 17, 2011

EXHIBIT A (continued)

E. 9 otification of all changes and proposed changes to independent ratings within 0z days of receipt and submission of a copy of all rating reports; and

2. Changes in the ownership and governance of the Controlled Affiliate including changes in its charter, articles of incorporation, or bylaws, changes in a Controlled Affiliate5s Board composition, Plan control, state license status, operating area, the Controlled Affiliate5s Principal 7 fficers or direct delivery of medical care.

Standard 3(C)xLoss Prevention

A Controlled Affiliate shall apply loss prevention protocol to both new and e1isting business.

Standard 3(D)xClaims Administration

A Controlled Affiliate shall maintain an effective claims administration process that includes all the necessary functions to assure prompt and proper resolution of medical and indemnity claims.

Standard 3(E)xDisability and Provider Management

A Controlled Affiliate shall arrange for the provision of appropriate and necessary medical and rehabilitative services to facilitate early intervention by medical professionals and timely and appropriate return to work.

Amended as of November 16, 2000

EXHIBIT A (continued)

Standard 8 - Cooperation with Controlled Affiliate License Performance Response Process Protocol

A Controlled Affiliate and its Sponsoring Plan shall cooperate with BCBSA's Board of Directors and its Brand Enhancement & Protection Committee in the administration of the Controlled Affiliate License Performance Response Process Protocol (ALPRPP) and in addressing Controlled Affiliate
compliance problems identified thereunder.

Standard 9(A) - Participation in National Programs by Smaller Controlled Affiliates that were former Primary Licensees

A smaller controlled affiliate that formerly was a Primary Licensee shall
effectively and efficiently participate in certain national programs from time to time as may be adopted by Member Plans for the purposes of providing ease of claims processing for customers receiving benefits outside of the Controlled Affiliate's service area and be subject to certain relevant financial and reporting requirements.

A. National program requirements include:

- BlueCard Program;
- Inter-Plan Teleprocessing System (ITS);
- National Account Programs.

B. Financial Requirements include:

- Standard 9(D) Financial Performance Requirements and Standard 9(H) Financial Responsibility; or
- A financial guarantee covering the Controlled Affiliate's Inter-Plan Programs obligations in a form, and from a guarantor, acceptable to BCBSA.

Amended as of November 21, 2014

EXHIBIT A (continued)

Standard 9(A) - Participation in National Programs by Smaller Controlled Affiliates that were former Primary Licensees

C. Reporting requirements includex

- The Semi”annual Health Risk”Based Capital (HRBC) Report.

Amended as of June 13, 2002

Exhibit A (continued)

Standard 9(B) - Participation in National Programs by Smaller Controlled Affiliates

A smaller controlled affiliate shall participate in national programs in accordance with BlueCard and other relevant Policies and Provisions shall effectively and efficiently participate in national programs from time to time as may be adopted by Member Plans for the purposes of providing ease of claims processing for customers receiving benefits outside of the controlled affiliate5s service area and be sub4ect to certain relevant financial and reporting requirements.

A. 9ational program requirements includex

- BlueCard Program;
- 0ter'Plan Teleprocessing System (0TS);
- 9ational Account Programs.

B. 2inancial Requirements includex

- Standard %(D)x2inancial Performance Requirements and Standard %(H)x2inancial Responsibility; or
- A financial guarantee covering the Controlled Affiliate5s 0ter'Plan Programs obligations in a form, and from a guarantor, acceptable to BCBSA.

Amended as of June 20, 2013

EXHIBIT A (continued)

Standard 10 - Participation in Inter-Plan Medicare Advantage Program

A smaller controlled affiliate for which this standard applies pursuant to the Preamble section of E1hibit A of the Controlled Affiliate License Agreement shall effectively and efficiently participate in certain national programs from time to time as may be adopted by Member Plans for the purposes of providing ease of claims processing for customers receiving benefits outside of the controlled affiliate5s service area.

9 ational program requirements includex

A. 0nter'Plan Medicare Advantage Program.

Standard 11: Participation in Master Business Associate Agreement by Smaller Controlled Affiliate Licensees

Effective April N', Gzz0, all smaller controlled affiliates shall comply with the terms of the Business Associate Agreement for Blue Cross and Blue Shield Licensees to the e1tent they perform the functions of a business associate or subcontractor to a business associate, as defined by the Business Associate Agreement.

Amended as of September 19, 2014

EXHIBIT B-1

ADDE9 DUM T7 C7 9 TR7 LLED A22QLOATE LQCE9 SE T7 BE E[ECUTED BY C7 9 TR7 LLED A22QLOATES LQCE9 SED U9 DER C7 9 TR7 LLED A22QLOATE LQCE9 SE STA9 DARD NC.

ADDENDUM TO CONTROLLED AFFILIATE LICENSE

This Addendum is made to that certain Blue Shield Controlled Affiliate License Agreement e1ecuted by and among Blue Cross and Blue Shield Association

(FLicensor:), _____ (FControlled Affiliate Licensee:)

and_____ (FSponsoring Plan:)

dated the _____ day of_____ , _____ (FAgreement:). The parties to this Addendum are Licensor, Controlled Affiliate Licensee, Sponsoring Plan, and the undersigned other Plans (‘7 ther Plans:). This Addendum is made and shall be deemed effective as of the date of the Agreement.

WHEREAS, the Sponsoring Plan asserts that it can serve the Medicaid market in its Service Area more efficiently and with less risk through a Medicaid enterprise 4bintly owned and controlled with other Plans than through a wholly owned and controlled Medicaid enterprise;

WHEREAS, in such circumstance Controlled Affiliate License Standard NC. permits the licensing of a Controlled Affiliate that is less than “z' owned and controlled by the Sponsoring Plan but which is Nzz' owned and controlled by Plans including the Sponsoring Plan, sub4ect to certain conditions;

WHEREAS, one such condition is that the Sponsoring Plan and all such other owning and controlling Plans enter into this Addendum.;

9 7 W THERE27 RE, for good and valuable consideration, including the promises and covenants set forth herein, the parties agree as followsx

N The Sponsoring Plan shall participate operationally in Controlled Affiliate5s business that is conducted under the Licensed Marks. The parties understand that participation may take many forms, one of which should be providing a network of providers in the Service Area of the Controlled Affiliate for the Medicaid services being offered under the Agreement and being involved in network development and provider relations.

G Each of the 7 ther Plans agrees that (i) it will cooperate fully with the Sponsoring Plan and BCBSA as needed to enable Sponsoring Plan and Controlled Affiliate Licensee to meet their obligations to Licensor under the Agreement and all associated rules and regulations of Licensor, including the Brand Regulations, (ii) it will not take any action, either individually or

Amended March 17, 2016

0. 4bintly with any of the 7 ther Plans, that would cause Sponsoring Plan or Controlled Affiliate Licensee to violate the Agreement, and (iii) it will not fail to take any action, either individually or 4bintly with any of the 7 ther Plans, where such failure would cause Sponsoring Plan or Controlled Affiliate Licensee to violate the Agreement.

’ . Each of the 7 ther Plans acknowledges that it has reviewed the Agreement and understands that Sponsoring Plan has the right to terminate the Agreement without cause upon notice as provided in Paragraph 3 of the Agreement, and that such right is unfettered and may be e1ercised by Sponsoring Plan in its sole discretion.

WHERE27 RE, by signing below the parties agree to be bound to the terms stated herein.

BLUE CR7 SS BLUE SHCELD ASS7 CCATC7 9

Byx_____

]Controlled Affiliate Licensee®

Byx_____

]Sponsoring Plan®

Byx_____

]7 ther Plan N®

Byx_____

]7 ther Plan G®

Byx_____

Amended as of September 19, 2014

EXHIBIT B-2

ADDENDUM TO CONTROLLED AFFILIATE LICENSE TO BE EXECUTED BY CONTROLLED AFFILIATES LICENSED UNDER CONTROLLED AFFILIATE LICENSE STANDARD 1D.

ADDENDUM TO CONTROLLED AFFILIATE LICENSE

This Addendum is made to that certain Blue Shield Controlled Affiliate License Agreement e1ecuted by and among Blue Cross and Blue Shield Association (FLicensor:),_____(FControlled Affiliate Licensee:), _____(FSponsoring Plan:) and _____ (FParticipating Plan:) dated the _____ day of _____, _____ (FAgreement:).

WHEREAS, the Participating Plan is defined as the Plan that holds the Primary License with BCBSA to use the Service Marks in the Service Area where the Controlled Affiliate will use the Service Marks;

WHEREAS, the Participating Plan asserts that it can offer a lower cost Basic Medicare Part D Prescription Drug Plan product more efficiently in the Participating Plan5s Service Area through the Controlled Affiliate Licensee;

WHEREAS, the Controlled Affiliate shall only use the Service Marks inside of the Participating Plan(s) Service Area sub4ect to each Participating Plan signing a separate Addendum;

WHEREAS, in such circumstance Controlled Affiliate License Standard ND permits the licensing of a Controlled Affiliate that is Nzz' owned and controlled by a Sponsoring Plan, sub4ect to certain conditions;

WHEREAS, one such condition is that the Sponsoring Plan, Controlled Affiliate and the Participating Plan enter into this Addendum;

9 7 W THERE27 RE, for good and valuable consideration, including the promises and covenants set forth herein, the parties agree as followsx

N The Participating Plan shall participate in Controlled Affiliate5s business that is conducted under the Licensed Marks. The parties understand that the Participating Plan shall conduct sales support and marketing of the Controlled Affiliate5s Basic Medicare Part D Prescription Drug Plan product offered in the Participating Plan5s Service Area. Any other form of participation shall require BCBSA5s written approval.

G Participating Plan agrees that (i) it will cooperate fully with the Sponsoring Plan and BCBSA as needed to enable Sponsoring Plan and

Controlled Affiliate Licensee to meet their obligations to Licensor under the Agreement and all associated rules and regulations of Licensor, including the Brand Regulations, (ii) it will not take any action that would cause Sponsoring Plan or Controlled Affiliate Licensee to violate the Agreement, and (iii) it will not fail to take any action, either individually or 4bintly with the Sponsoring Plan or Controlled Affiliate Licensee, where such failure would cause Sponsoring Plan or Controlled Affiliate Licensee to violate the Agreement.

0. The Controlled Affiliate Licensee shall only use the Licensed Marks authoriIed by the Participating Plan in connection with the Basic Medicare Part D Prescription Drug Plan product offered in the Participating Plan5s Service Area.

’. The Sponsoring Plan and Controlled Affiliate acknowledge that it has reviewed the Agreement and understands that Participating Plan has the right to terminate this Agreementx(i) immediately upon the e1piration or termination of the Plan Participation Agreement by and between Participating Plan and Controlled Affiliate upon written notice to the Sponsoring Plan, Controlled Affiliate Licensee and Licensor, or (ii) without cause upon N6 months written notice to the Sponsoring Plan, Controlled Affiliate Licensee and Licensor, and that such right is unfettered and may be e1ercised by Participating Plan in its sole discretion. 0n the event that Participating Plan and Controlled Affiliate fail to e1ecute the Plan Participation Agreement by_____(Date), Participating Plan may terminate this Agreement immediately upon notice to Sponsoring Plan, Controlled Affiliate Licensee and Licensor.

“. This Agreement and all of Controlled Affiliate Licenseejs rights hereunder shall immediately terminate without any further action by any party or entity in the event that the Sponsoring Plan or Participating Plan ceases to be authoriIed to use the Licensed Marks and 9 ame.

WHERE27 RE, by signing below the parties agree to be bound to the terms stated herein.

BLUE CR7 SS BLUE SH0ELD ASS7 CO\TO7 9

Byx_____

]Controlled Affiliate Licensee®

Byx_____

]Sponsoring Plan®

Byx_____

]Participating Plan®

Byx_____

Amended March 17, 2016

EXHIBIT C
R7 YALTY 27 RMULA 27 R SECTO7 9 8 7 2 THE C7 9 TR7 LLED A22O1OATE LOCE9 SE A- REEME9 T

Controlled Affiliate will pay BCBSA a fee for this license in accordance with the following formulax

FOR RISK PRODUCTS:

2or Controlled Affiliates not underwriting the indemnity portion of workers5compensation insurancex

An amount equal to its pro rata share of Sponsoring Planjs dues payable to BCBSA computed with the addition of the Controlled Affiliatejs members using the Marks on health care plans and related services as reported on the Quarterly Enrollment Report with BCBSA. The payment by Sponsoring Plan of its dues to BCBSA, including that portion described in this paragraph, will satisfy the requirement of this paragraph, and no separate payment will be necessary.

2or Controlled Affiliates underwriting the indemnity portion of workers5compensation insurancex

An amount equal to z.0“ percent of the gross revenue per annum of Controlled Affiliate arising from products using the marks; plus, an annual fee of $“,zzz per license for a Controlled Affiliate sub4ect to Standard 3.

Amended as of September, 19, 2014

EXHIBIT C (continued)

FOR NONRISK PRODUCTS:

2or third"party administrative business, an amount equal to its pro rata share of Sponsoring Plan5s dues payable to BCBSA computed with the addition of the Controlled Affiliate5s members using the Marks on health care plans and related services as reported on the Quarterly Enrollment Report with BCBSA. The payment by Sponsoring Plan of its dues to BCBSA, including that portion described in this paragraph, will satisfy the requirement of this paragraph, and no separate payment will be necessary.

2or non"third party administrative business (e.g., case management, provider networks, etc.), an amount equal to z.G7 percent of the gross revenue per annum of Controlled Affiliate arising from products using the marks; plusx

N) An annual fee of $",zzz per license for a Controlled Affiliate sub4ect to Standard %D.

G) An annual fee of $G,zzz per license for all other Controlled Affiliates.

The foregoing shall be reduced by one"half where both a BLUE CR7 SSX and BLUE SHOELDX License are issued to the same Controlled Affiliate. G0 the event that any license period is greater or less than one (N) year, any amounts due shall be prorated. Royalties under this formula will be calculated, billed and paid in arrears.

Amended as of September 19, 2014

E[HOBCT NA

CONTROLLED AFFILIATE LICENSE AGREEMENT APPLICABLE TO LIFE INSURANCE COMPANIES

(Includes revisions adopted by Member Plans through their November 18, 2016 meeting)

This agreement by and among Blue Cross and Blue Shield Association ("BCBSA")_____ ("Controlled Affiliate"), a Controlled Affiliate of the Blue Shield Plan(s), known as _____ ("Plan").

WHEREAS, BCBSA is the owner of the BLUE SHOELD and BLUE SHOELD Design service marks;

WHEREAS, the Plan and the Controlled Affiliate desire that the latter be entitled to use the BLUE SHOELD and BLUE SHOELD Design service marks (collectively the "Licensed Marks") as service marks and be entitled to use the term BLUE SHOELD in a trade name ("Licensed 9 ame");

9 7 W, THERE27 RE, in consideration of the foregoing and the mutual agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as followsx

1. GRANT OF LICENSE

Sub4ect to the terms and conditions of this Agreement, BCBSA hereby grants to the Controlled Affiliate the e1clusive right to use the licensed Marks and 9 ames in connection with and only in connection with those life insurance and related services authoriIed by applicable state law, other than health care plans and related services (as defined in the Planjs License Agreements with BCBSA) which services are not separately licensed to Controlled Affiliate by BCBSA, in the Service Area served by the Plan, e1cept that BCBSA reserves the right to use the Licensed Marks and 9 ame in said Service Area, and e1cept to the e1tent that said Service Area may overlap the area or areas served by one or more other licensed Blue Shield Plans as of the date of this License as to which overlapping areas the rights hereby granted are non"e1clusive as to such other Plan or Plans and their respective Licensed Controlled Affiliates only. Controlled Affiliate cannot use the Licensed Marks or 9 ame outside the Service Area or in its legal or trade name; provided, however, that if and only for so long as Controlled Affiliate also holds a Blue Shield Affiliate License Agreement applicable to health care plans and related services, Controlled Affiliate may use the Licensed Marks and 9 ame in its legal and trade name according to the terms of such license agreement.

Amended as of June 12, 2003

2. QUALITY CONTROL

A. Controlled Affiliate agrees to use the Licensed Marks and 9 ame only in relation to the sale, marketing and rendering of authoriI ed products and further agrees to be bound by the conditions regarding quality control shown in E1hibit A as it may be amended by BCBSA from time"to"time.

B. Controlled Affiliate agrees that Plan and/or BCBSA may, from time"to"time, upon reasonable notice, review and inspect the manner and method of Controlled Affiliatejs rendering of service and use of the Licensed Marks and 9 ame.

C. Controlled Affiliate agrees that it will provide on an annual basis (or more often if reasonably required by Plan or by BCBSA) a report to Plan and BCBSA demonstrating Controlled Affiliatejs compliance with the requirements of this Agreement including but not limited to the quality control provisions of E1hibit A.

D. As used herein, a Controlled Affiliate is defined as an entity organiI ed and operated in such a manner that it is sub4ect to the bona fide control of a Plan or Plans. Absent written approval by BCBSA of an alternative method of control, bona fide control shall mean the legal authority, directly or indirectly through wholly"owned subsidiariesx(a) to select members of the Controlled Affiliatejs governing body having not less than "N voting control thereof; (b) to e1ercise operational control with respect to the governance thereof; and (c) to prevent any change in its articles of incorporation, bylaws or other governing documents deemed inappropriate. On addition, a Plan or Plans shall own at least "N of any for"profit Controlled Affiliate. If the Controlled Affiliate is a mutual company, the Plan or its designee(s) shall have and maintain, in lieu of the requirements of items (a) and (c) above, pro1ies representing "N of the votes at any meeting of the policyholders and shall demonstrate that there is no reason to believe this such pro1ies shall be revoked by sufficient policyholders to reduce such percentage below "N .

3. SERVICE MARK USE

Controlled Affiliate shall at all times make proper service mark use of the Licensed Marks, including but not limited to use of such symbols or words as BCBSA shall specify to protect the Licensed Marks, and shall comply with such rules (applicable to all Controlled Affiliates licensed to use the Marks) relative to service mark use, as are issued from time"to"time by BCBSA. If there is any public reference to the affiliation between the Plan and the Controlled Affiliate, all of the Controlled Affiliatejs licensed services in the Service Area of the Plan shall be rendered under the Licensed Marks. Controlled Affiliate recogniI es and agrees that all use of the Licensed Marks by Controlled Affiliate shall inure to the benefit of BCBSA.

4. SUBLICENSING AND ASSIGNMENT

Controlled Affiliate shall not sublicense, transfer, hypothecate, sell, encumber or mortgage, by operation of law or otherwise, the rights granted hereunder and any such act shall be voidable at the option of Plan or BCBSA. This Agreement and all rights and duties hereunder are personal to Controlled Affiliate.

5. INFRINGEMENTS

Controlled Affiliate shall promptly notify Plan and BCBSA of any suspected acts of infringement, unfair competition or passing off which may occur in relation to the Licensed Marks. Controlled Affiliate shall not be entitled to require Plan or BCBSA to take any actions or institute any proceedings to prevent infringement, unfair competition or passing off by third parties. Controlled Affiliate agrees to render to Plan and BCBSA, free of charge, all reasonable assistance in connection with any matter pertaining to the protection of the Licensed Marks by BCBSA.

6. LIABILITY INDEMNIFICATION

Controlled Affiliate hereby agrees to save, defend, indemnify and hold Plan and BCBSA harmless from and against all claims, damages, liabilities and costs of every kind, nature and description which may arise as a result of Controlled Affiliatejs rendering of health care services under the Licensed Marks.

7. LICENSE TERM

The license granted by this Agreement shall remain in effect for a period of one (N) year and shall be automatically e1tended for additional one (N) year periods upon evidence satisfactory to the Plan and BCBSA that Controlled Affiliate meets the then applicable quality control standards, unless one of the parties hereto notifies the other party of the termination hereof at least si1ty (%z) days prior to e1piration of any license period.

This Agreement may be terminated by the Plan or by BCBSA for cause at any time provided that Controlled Affiliate has been given a reasonable opportunity to cure and shall not effect such a cure within thirty (0z) days of receiving written notice of the intent to terminate (or commence a cure within such thirty day period and continue diligent efforts to complete the cure if such curing cannot reasonably be completed within such thirty day period). By way of e1ample and not for purposes of limitation, Controlled Affiliatejs failure to abide by the quality control provisions of Paragraph G; above, shall be considered a proper ground for cancellation of this Agreement.

This Agreement and all of Controlled Affiliate5s rights hereunder shall immediately terminate without any further action by any party or entity in the event thatx

A. Controlled Affiliate shall no longer comply with Standard 9 o. N(7 rganiIation and - overnance) of E1hibit A or, following an opportunity to cure, with the remaining quality control provisions of E1hibit A, as it may be amended from time"to"time; or

B. Plan ceases to be authoriIed to use the Licensed Marks; or

C. Appropriate dues for Controlled Affiliate pursuant to item 6 hereof, which are the royalties for this License Agreement are more than si1ty (%z) days in arrears to BCBSA.

Upon termination of this Agreement for cause or otherwise, Controlled Affiliate agrees that it shall immediately discontinue all use of the Licensed Marks including any use in its trade name.

On the event of any disagreement between Plan and BCBSA as to whether grounds e1ist for termination or as to any other term or condition hereof, the decision of BCBSA shall control, sub4ect to provisions for mediation or mandatory dispute resolution in effect between the parties.

Upon termination of this Agreement, Licensed Controlled Affiliate shall immediately notify all of its customers that it is no longer a licensee of the Blue Cross and Blue Shield Association and provide instruction on how the customer can contact the Blue Cross and Blue Shield Association or a designated licensee to obtain further information on securing coverage. The written notification required by this paragraph shall be in writing and in a form approved by the Association. The Association shall have the right to audit the terminated entityjs books and records to verify compliance with this paragraph.

8. DUES

Controlled Affiliate will pay to BCBSA a fee for this license in accordance with the following formulax

- An annual fee of five thousand dollars ($",zzz) per license, plus
- .z"' of gross revenue per year from branded group products, plus
- ."' of gross revenue per year from branded individual products plus
- .N' of gross revenue per year from branded individual annuity products.

The foregoing percentages shall be reduced by one-half where both a BLUE CR7 SSX and BLUE SHIELDX license are issued to the same entity. In the event that any License period is greater or less than one (1) year, any amounts due shall be prorated. Royalties under this formula will be calculated, billed and paid in arrears.

Plan will promptly and timely transmit to BCBSA all dues owed by Controlled Affiliate as determined by the above formula and if Plan shall fail to do so, Controlled Affiliate shall pay such dues directly.

9. JOINT VENTURE

Nothing contained in this Agreement shall be construed as creating a joint venture, partnership, agency or employment relationship between Plan and Controlled Affiliate or between either and BCBSA.

9A. VOTING

For all provisions of this Agreement referring to voting, the term 'Plans' shall mean all entities licensed under the Blue Cross License Agreement and/or the Blue Shield License Agreement, and in all votes of the Plans under this Agreement the Plans shall vote together. For weighted votes of the Plans, the Plan shall have a number of votes equal to the number of weighted votes (if any) that it holds as a Blue Cross Plan plus the number of weighted votes (if any) that it holds as a Blue Shield Plan. For all other votes of the Plans, the Plan shall have one vote. For all questions requiring an affirmative three-fourths weighted vote of the Plans, the requirement shall be deemed satisfied with a lesser weighted vote unless the greater of (i) 5% or more of the Plans (rounded to the nearest whole number, with .5 or multiples thereof being rounded to the next higher whole number) fail to cast weighted votes in favor of the question; or (ii) three (3) of the Plans fail to cast weighted votes in favor of the question. Notwithstanding the foregoing provision, if there are thirty-nine (39) Plans, the requirement of an affirmative three-fourths weighted vote shall be deemed satisfied with a lesser weighted vote unless four (4) or more Plans fail to cast weighted votes in favor of the question.

10. NOTICES AND CORRESPONDENCE

Notices regarding the subject matter of this Agreement or breach or termination thereof shall be in writing and shall be addressed in duplicate to the last known address of each other party, marked respectively to the attention of its President and, if any, its General Counsel.

Amended as of November 20, 1997

11. COMPLETE AGREEMENT

This Agreement contains the complete understandings of the parties in relation to the subject matter hereof. This Agreement may only be amended by a writing executed by all parties.

12. SEVERABILITY

If any term of this Agreement is held to be unlawful by a court of competent jurisdiction, such finding shall in no way effect the remaining obligations of the parties hereunder and the court may substitute a lawful term or condition for any unlawful term or condition so long as the effect of such substitution is to provide the parties with the benefits of this Agreement.

13. NONWAIVER

No waiver by BCBSA of any breach or default in performance on the part of the Controlled Affiliate or any other licensee of any of the terms, covenants or conditions of this Agreement shall constitute a waiver of any subsequent breach or default in performance of said terms, covenants or conditions.

14. GOVERNING LAW

This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of Illinois.

Amended as of June 16, 2005

Ø9 WCT9 ESS WHERE7 2, the parties have caused this License Agreement to be e1ecuted, effective as of the date of last signature written below.

BLUE CROSS AND BLUE SHIELD ASSOCIATION

Byx__

Datex__

Controlled Affiliate

Byx_____

Datex_____

Plan

Byx_____

Datex_____

EXHIBIT A
C7 9 TR7 LLED A22O1LOATE LO0E9 SE STA9 DARDS
LO2E O9 SURA9 CE C7 MPA9 O1ES
Page Nof G

PREAMBLE

The standards for licensing Life Oisurance Companies (Life and Health Oisurance companies, as defined by state statute) are established by BCBSA and are sub4ect to change from time"to"time upon the affirmative vote of three"fourths (0/') of the Plans and three"fourths (0/') of the total weighted vote of all Plans. Each Licensed Plan is required to use a standard controlled affiliate license form provided by BCBSA and to cooperate fully in assuring that the licensed Life Oisurance Company maintains compliance with the license standards.

An organiIation meeting the following standards shall be eligible for a license to use the Licensed Marks within the service area of its sponsoring Licensed Plan to the e1tent and the manner authoriIed under the Controlled Affiliate License applicable to Life Oisurance Companies and the principal license to the Plan.

Standard 1 - Organization and Governance

The LO0C shall be organiIed and operated in such a manner that it is controlled by a licensed Plan or Plans which have, directly or indirectlyxN) not less than "N of the voting control of the LO0C; and G) the legal ability to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the LO0C with which it does not concur; and 0) operational control of the LO0C.

Of the LO0C is a mutual company, the Plan or its designee(s) shall have and maintain, in lieu of the requirements of items Nand Gabove, pro1ies representing at least "N of the votes at any policyholder meeting and shall demonstrate that there is no reason to believe such pro1ies shall be revoked by sufficient policyholders to reduce such percentage below "N .

Standard 2 - State Licensure

The LO0C must maintain unimpaired licensure or certificate of authority to operate under applicable state laws as a life and health insurance company in each state in which the LO0C does business.

Standard 3 - Records and Examination

The LO0C and its sponsoring licensed Plan(s) shall maintain and furnish, on a timely and accurate basis, such records and reports regarding the LO0C as may be required in order to establish compliance with the license agreement.

EXHIBIT A
C7 9 TR7 LLED A22O1LOATE LO0CE9 SE STA9 DARDS
LO2E O9 SURA9 CE C7 MPA9 O0ES
Page Gof G

LO0C and its sponsoring licensed Plan(s) shall permit BCBSA to e1amine the
affairs of the LO0C and shall agree that BCBSAjs board may submit a written report to the chief e1ecutive officer(s) and the board(s) of directors of the sponsoring Plan(s).

Standard 4 - Mediation

The LO0C and its sponsoring Plan(s) shall agree to use the then"current BCBSA mediation and mandatory dispute resolution processes, in lieu of a legal action between or among another licensed controlled affiliate, a licensed Plan or BCBSA.

Standard 5 - Financial Responsibility

The LO0C shall maintain adequate financial resources to protect its customers and meet its business obligations.

Standard 6 - Cooperation with Affiliate License Performance Response Process Protocol

The LO0C and its Sponsoring Plan(s) shall cooperate with BCBSA5s Board of Directors and its Brand Enhancement & Protection Committee in the
administration of the Affiliate License Performance Response Process Protocol (ALPRPP) and in addressing LO0C compliance problems identified thereunder.

CONTROLLED AFFILIATE
TRADEMARK LICENSE AGREEMENT
FOR LIFE AND DISABILTY INSURANCE PRODUCTS

This Agreement by and among Blue Cross and Blue Shield Association ("BCBSA") and _____ , (FLife and Disability Controlled Affiliate:) which is a company offering life and disability insurance products owned and controlled by , , _____ (individually, FSponsoring Plan: and when referred to collectively, FSponsoring Plans:).

Whereas, BCBSA is the owner of the BLUE CR7 SS and BLUE SHOELD word and design service marks and any derivatives thereof (FLicensed Marks:);

Whereas, each Sponsoring Plan is licensed separately by BCBSA to use one or more of the Licensed Marks in a particular Service Area;

Whereas, the Sponsoring Plans and the Life and Disability Controlled Affiliate desire that the latter be entitled to use the appropriate Licensed Marks in connection with life and disability insurance products in some or all of such Sponsoring Plans5 Service Areas and in the Service Areas of other Regular Member Plans, as defined in the BCBSA By'laws, (FBlue Plans:) consistent with the terms of this Agreement.

9 7 W, THERE27 RE, in consideration of the foregoing and the mutual agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as followsx

1. GRANT OF LICENSE

A. Sub4ect to the terms and conditions of this Agreement, BCBSA hereby grants to the Life and Disability Controlled Affiliate the limited right to use the Licensed Marks in connection with and only in connection with the following life and disability insurance products authoriIed by state lawx(N) - roupxTerm Life, Long Term Disability, Whole Life, Benefit Life, Universal Life; (G) 0ndividualxTerm Life, Whole Life, Dependent Life, Spouse Life; (0) 7 therxDisability 0ncome, Short Term Disability, Long Term Disability, 0ncome Replacement; and (') such other life and disability products approved by BCBSA in writing (FLicensed Products:) in the Service Areas served by the Sponsoring Plans or in the Service Area or Areas of one or more other licensed Blue Plans, provided that such Blue Plans have consented to such use as authoriIed by this Agreement. Life and Disability Controlled Affiliate may not use the Licensed Marks in its legal or trade name.

B. 9 otwithstanding that the license granted to Life and Disability Controlled Affiliate is a license to use all of the Licensed Marks, Life and Disability Controlled Affiliate may only use those of the Licensed Marks in the Service Area of a Sponsoring Plan or other consenting Blue Plan as described below that such Plan is authoriIed to use as a Blue Plan pursuant to its separate license agreements with BCBSA.

C. Life and Disability Controlled Affiliate may use the Licensed Marks in the Service Areas of Sponsoring Plans or in the Service Area of a Blue Plan that is not a signatory to this Agreement only after such Sponsoring Plan(s) or non" signatory Blue Plan consents to such use by e1ecuting a written consent in substantially the same form as the Consent Agreement attached as E1hibit B.

D. The following provisions apply with respect to Consent Agreements once such agreements have been fully and properly e1ecutedx

(N) All sales, marketing and advertising materials developed by and proposed for use by Life and Disability Controlled Affiliate in the Service Area of Sponsoring Plan or consenting Blue Plan (hereinafter, such consenting Sponsoring Plan or consenting Blue Plan collectively referred to FConsenting Plan(s):) must clearly identify the Consenting Plan (for e1ample, a statement on such materials that reads FThis product is offered with the cooperation of Blue Cross and/or Blue Shield of]- eography®);

(G) To the e1tent the Consenting Plan has separate divisions or other Affiliates that use the Licensed Marks in distinct geographic areas within its Service Area, consent obtained under this Agreement may be limited to one or more of such specific geographic areas as specified by the Consenting Plan in its signed Consent Agreement. 2or purposes of this entire Agreement, all references to the Service Area of a Sponsoring Plan, Blue Plan or Consenting Plan may include the entire Service Area or a distinct geographic area within such Service Area as specified in this Section ND (G);

(0) Where BCBSA has licensed two or more Blue Plans to use the same Licensed Marks in the same Service Area, in addition to the requirements set forth in Section D (N) above, the sales, marketing and advertising materials referenced in such section above must be communicated to the Consenting Plan5s e1isting and prospective accounts through or with the approval of such Consenting Plan, and the personnel of such Consenting Plan must actively participate in all sales and marketing activities conducted by Life and Disability Controlled Affiliate in the same Service Area, including participating in meetings (whether in"person or via telephone, video or internet conference) with both e1isting and prospective accounts of the Consenting Plan;

(’) Life and Disability Controlled Affiliate shall be entitled to use in a Service Area only those Licensed Marks that the Consenting Plan has been granted by BCBSA the license to use under its Blue Plan license agreements (for e1ample, if a Consenting Plan is licensed to use only the Blue Cross Marks in its Service Area, the materials used by Life and Disability Controlled Affiliate in that Service Area may only contain or reference the Blue Cross Marks and not the Blue Shield Marks).

(“) Of a Consent Agreement is terminated, Life and Disability Controlled Affiliate shall, unless BCBSA and the Consenting Plan agree in their sole discretion to a phase out in writing, immediately (i) cease all use of the Licensed Marks, including in connection with any and all sales and marketing of the Licensed Products in the Service Area where consent has been terminated, and (ii) notify its customers that it is no longer a licensee and provide instruction on how the customer can contact BCBSA or a designated licensee to obtain further information on securing coverage. The notification required by this paragraph shall be in writing and in form approved by BCBSA.

2. QUALITY CONTROL

A. Life and Disability Controlled Affiliate agrees to use the Licensed Marks only in relation to the sale, marketing and administration of the Licensed Products and further agrees to be bound by the conditions regarding quality control shown in E1hibit A and the - uidelines to Administer the
Standards for Trademark License Agreement for Life and Disability Insurance Products attached thereto.

B. Life and Disability Controlled Affiliate agrees that BCBSA may, from time”to”time, upon reasonable notice, review and inspect the manner and method of Life and Disability Controlled Affiliatejs rendering of service and use of the Licensed Marks.

C. Life and Disability Controlled Affiliate agrees that it will provide on an annual basis (or more often if reasonably required by BCBSA) a report to BCBSA demonstrating Life and Disability Controlled Affiliatejs compliance with the requirements of this Agreement including but not limited to the quality control provisions of E1hibit A.

D. As used herein, a Life and Disability Controlled Affiliate is defined asxAn entity organiIed and operated in such a manner that it is Nzz' owned and controlled by Sponsoring Plans. Absent written approval by BCBSA of an alternative method of control, control shall mean the legal authority, directly or indirectly through wholly”owned subsidiariesx(a) to select members of the Life and Disability Controlled Affiliatejs governing body having not less than Nzz' voting control thereof; (b) to e1ercise operational control with respect to the governance

thereof; and (c) to prevent any change in its articles of incorporation, bylaws or other governing documents deemed inappropriate. In addition, a Sponsoring Plan or Plans shall own at least Nzz' of any for profit Life and Disability Controlled Affiliate.

3. SERVICE MARK USE

Life and Disability Controlled Affiliate shall at all times make proper service mark use of the Licensed Marks and shall ensure all uses of the Licensed Marks comply with the BCBSA Brand Regulations, as amended by BCBSA from time to time. Life and Disability Controlled Affiliate recognizes and agrees that all use of the Licensed Marks by Life and Disability Controlled Affiliate shall inure to the benefit of BCBSA.

4. SUBLICENSING AND ASSIGNMENT

The license hereby granted to Life and Disability Controlled Affiliate to use the Licensed Marks is and shall be personal to Life and Disability Controlled Affiliate and shall not be assignable by any act of the Life and Disability Controlled Affiliate, directly or indirectly, without the written consent of BCBSA. Said license shall not be assignable by operation of law, nor shall Life and Disability Controlled Affiliate mortgage or part with possession or control of this license or any right hereunder, and the Life and Disability Controlled Affiliate shall have no right to grant any sublicense to use the Licensed Marks.

5. INFRINGEMENTS

Life and Disability Controlled Affiliate shall promptly notify BCBSA of any suspected acts of infringement, unfair competition or passing off which may occur in relation to the Licensed Marks. Life and Disability Controlled Affiliate shall not be entitled to require BCBSA to take any actions or institute any proceedings to prevent infringement, unfair competition or passing off by third parties. Life and Disability Controlled Affiliate agrees to render to BCBSA, free of charge, all reasonable assistance in connection with any matter pertaining to the protection of the Licensed Marks by BCBSA. BCBSA shall have sole control of the defense and resolution of any claim of infringement brought or threatened by others.

6. LIABILITY INDEMNIFICATION

Life and Disability Controlled Affiliate hereby agrees to save, defend, indemnify and hold BCBSA harmless from and against all claims, damages, liabilities and costs of every kind, nature and description which may arise as a result of Life and Disability Controlled Affiliatejs conduct.

7. LICENSE TERM

A. The license granted by this Agreement shall remain in effect for a period of one (N) year and shall be automatically e1tended for additional one (N) year periods, unless either BCBSA or Life and Disability Controlled Affiliate notifies the other party in writing of the termination hereof at least si1ty (%z) days prior to e1piration of any license period.

B. This Agreement may be terminated by BCBSA for cause at any time provided that Life and Disability Controlled Affiliate has been given a reasonable opportunity to cure and shall not effect such a cure within thirty (0z) days of receiving written notice of the intent to terminate (or commence a cure within such thirty day period and continue diligent efforts to complete the cure if such curing cannot reasonably be completed within such thirty day period). By way of e1ample and not for purposes of limitation, Life and Disability Controlled Affiliatejs failure to abide by the conditions regarding use of the Licensed Marks set forth in Section Nof this Agreement or the quality control provisions of Section G(other than with respect to Section GD which is sub4ect to immediate termination as stated in Section 3 C (N) below) shall be considered proper grounds for termination of this Agreement.

C. This Agreement and all of Life and Disability Controlled Affiliatejs rights hereunder shall immediately terminate without any further action by any party or entity in the event thatx

(N) Life and Disability Controlled Affiliate shall no longer comply with Section GD (or Standard 9 o. N (7 rganiIation and - overnance) of E1hibit A); or

(G) Any Sponsoring Plan ceases to be authoriIed to use the Licensed Marks; or

(0) Appropriate fees for Life and Disability Controlled Affiliate pursuant to Section 6 of this Agreement are more than si1ty (%z) days in arrears to BCBSA.

Upon termination of this Agreement for cause or otherwise, Life and Disability Controlled Affiliate agrees that it shall immediately discontinue all use of the Licensed Marks.

0n the event of any disagreement between Life and Disability Controlled Affiliate and BCBSA as to whether grounds e1ist for termination or as to any other term or condition hereof, the decision of BCBSA shall control, sub4ect to provisions for mediation or mandatory dispute resolution in effect between the parties.

Upon termination of this Agreement, Licensed Life and Disability Controlled Affiliate shall immediately notify all of its customers that it is no longer a licensee of BCBSA and provide instruction on how the customer can contact BCBSA or a designated licensee to obtain further information on securing coverage. The notification required by this paragraph shall be in writing and in a form approved by BCBSA. BCBSA shall have the right to audit the terminated entityjs books and records to verify compliance with this paragraph.

8. ROYALTIES

Life and Disability Controlled Affiliate will pay to BCBSA a fee for this license in accordance with the following formulax

- An annual fee of five thousand dollars ($“,zzz) per license, plus
- .z“' of gross revenue per year from group products sold under the Licensed Marks, plus
- .“' of gross revenue per year from individual products sold under the Licensed Marks

On the event that any license period is greater or less than one (N) year, any amounts due shall be prorated. Royalties under this formula will be calculated, billed and paid in arrears.

Life and Disability Controlled Affiliate will promptly and timely transmit to BCBSA all fees owed by Life and Disability Controlled Affiliate as determined by the above formula.

9. JOINT VENTURE

9 othing contained in this Agreement shall be construed as creating a 4oint venture, partnership, agency or employment relationship between any Sponsoring Plan and Life and Disability Controlled Affiliate or between among them and/or BCBSA.

10. VOTING

2or all provisions of this Agreement referring to voting, the term ‘Plans5 shall mean all entities licensed under the Blue Cross License Agreement and/or the Blue Shield License Agreement, and in all votes of the Plans under this Agreement the Plans shall vote together. 2or weighted votes of the Plans, the Plan shall have a number of votes equal to the number of weighted votes (if any) that it holds as a Blue Cross Plan plus the number of weighted votes (if any) that it holds as a Blue Shield Plan. 2or all other votes of the Plans, the

Plan shall have one vote. 2or all questions requiring an affirmative three"fourths weighted vote of the Plans, the requirement shall be deemed satisfied with a lesser weighted vote unless the greater ofx(i) %"Gor more of the Plans (rounded to the nearest whole number, with z." or multiples thereof being rounded to the ne1t higher whole number) fail to cast weighted votes in favor of the question; or (ii) three (0) of the Plans fail to cast weighted votes in favor of the question. 9 otwithstanding the foregoing provision, if there are thirty"nine (08) Plans, the requirement of an affirmative three"fourths weighted vote shall be deemed satisfied with a lesser weighted vote unless four (') or more Plans fail to cast weighted votes in favor of the question.

11. NOTICES AND CORRESPONDENCE

9 otices regarding the sub4ect matter of this Agreement or breach or termination thereof shall be in writing and shall be addressed in duplicate to the last known address of each other party, marked respectively to the attention of its President and, if any, its - eneral Counsel.

12. COMPLETE AGREEMENT

This Agreement contains the complete understandings of the parties in relation to the sub4ect matter hereof. This Agreement may only be amended byx(a) a writing signed by all parties; or (b) a writing approved by the affirmative vote of three" fourths of the Blue Plans and three"fourths of the total then current weighted vote of all the Blue Plans as officially recorded by the BCBSA Corporate Secretary. Upon such adoption by the Blue Plans, this Agreement and all other Trademark License Agreements for Life and Disability 0nsurance Products then in effect shall simultaneously be amended.

13. SEVERABILITY

0f any term of this Agreement is held to be unlawful by a court of competent 4urisdiction, such finding shall in no way affect the remaining obligations of the parties hereunder and the court may substitute a lawful term or condition for any unlawful term or condition so long as the effect of such substitution is to provide the parties with the benefits of this Agreement.

14. NONWAIVER

9 o waiver by BCBSA of any breach or default in performance on the part of the Life and Disability Controlled Affiliate or any other licensee of any of the terms, covenants or conditions of this Agreement shall constitute a waiver of any subsequent breach or default in performance of said terms, covenants or conditions.

15. GOVERNING LAW

This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of 01inois.

Ø WCT9 ESS WHERE7 2, the parties have caused this License Agreement to be e1ecuted, effective as of the date of last signature written below.

BLUE CROSS AND BLUE SHIELD ASSOCIATION

Byx__

Datex__

Life and Disability Controlled Affiliate:

Byx__

Datex__

Sponsoring Plan:

Byx__

Datex__

9 amex__

Sponsoring Plan:

Byx__

Datex__

9 amex__

[Add other Sponsoring Plans as necessary]

EXHIBIT A

LICENSE STANDARDS APPLICABLE TO TRADEMARK LICENSE AGREEMENT FOR LIFE AND DISABILITY INSURANCE PRODUCTS Page 1 of 2

Standard 1 - Organization and Governance

Any Life and Disability Controlled Affiliate licensed under the Trademark License Agreement for Life and Disability Insurance Products (Flicensee:) shall be organiIed and operated in such a manner that it is an entity organiIed and operated in such a manner that it is Nzz' owned and controlled by Sponsoring Plans. Absent written approval by BCBSA of an alternative method of control, control shall mean the legal authority, directly or indirectly through wholly"owned subsidiariesx(a) to select members of the Life and Disability Controlled Affiliatejs governing body having not less than Nzz' voting control thereof; (b) to e1ercise operational control with respect to the governance thereof; and (c) to prevent any change in its articles of incorporation, bylaws or other governing documents deemed inappropriate. In addition, a Sponsoring Plan or Plans shall own at least Nzz' of any for profit Life and Disability Controlled Affiliate.

Standard 2 - State Licensure

The licensee must maintain unimpaired licensure or certificate of authority to operate under applicable state laws as a life company in each state in which the licensee does business.

Standard 3 - Records and Examination

The licensee shall maintain and furnish, on a timely and accurate basis, such records and reports regarding the licensee as may be required in order to establish compliance with the Agreement. The licensee shall permit BCBSA to e1amine the affairs of the licensee and shall agree that BCBSAjs board may submit a written report to the chief e1ecutive officer(s) and the board(s) of directors of the Sponsoring Plan(s).

Standard 4 - Mediation

The licensee, its Sponsoring Plan(s) and all consenting Blue Plans shall agree to use the then"current BCBSA mediation and mandatory dispute resolution processes, in lieu of a legal action between or among another licensed Life and Disability Controlled Affiliate, a Sponsoring Plan and or consenting Blue Plan or BCBSA.

EXHIBIT A
LICENSE STANDARDS APPLICABLE TO TRADEMARK LICENSE AGREEMENT FOR LIFE AND DISABILITY INSURANCE PRODUCTS Page 2 of 2

Standard 5 - Financial Responsibility

The licensee shall maintain adequate financial resources to protect its customers and meet its business obligations.

Standard 6 - Cooperation with BCBSA Governance

The licensee shall cooperate with BCBSA's Board of Directors and its Brand Enhancement & Protection Committee in the administration of and in addressing licensee compliance problems that may be identified in connection with the operation or administration of the Trademark License Agreement for Life and Disability Insurance Products.

EXHIBIT B

CONSENT AGREEMENT

This Consent Agreement is made and entered into by and among the undersigned Blue Plan, and_____ (FLife and Disability Controlled Affiliate:), and the Blue Cross and Blue Shield Association (FBCBSA:) and shall be deemed effective on_____ (FEffective Date:).

Whereas, BCBSA owns the Blue Cross and Blue Shield word and design service marks and any derivative mark thereof (the FBrands:);

Whereas, the undersigned Blue Plan is licensed to use one or more of the Brands within a specific geographic area (FService Area:);

Whereas Life and Disability Controlled Affiliate is licensed by BCBSA to use one or more of the Brands to offer life and disability insurance products (FProducts:) as defined and authoriIed in the Trademark License Agreement for Life and Disability Insurance Products (FLife and Disability License Agreement:);

Whereas neither the Blue Plan nor its affiliates offer the Products under any of the Brands in such Blue Plan5s Service Area or portion thereof where Blue Plan has consented to sale of the Products by Life and Disability Controlled Affiliate; and

Whereas BCBSA and the undersigned Blue Plan desire to consent to Life and Disability Controlled Affiliate5s use of the Brands in Blue Plan5s Service Area consistent with the terms of the Life and Disability License Agreement and this Consent Agreement.

9 ow, therefore, in consideration of the obligations and conditions stated in this Agreement, Blue Plan, Life and Disability Controlled Affiliate and BCBSA agree as followsx

N Life and Disability Controlled Affiliate may market, sell, administer and underwrite the Products in Blue Plan5s Service Area under the Brands licensed to Blue Plan in such Service Area sub4ect to the terms of this Consent Agreement, the Life and Disability License Agreement and Blue Plan5s license agreement(s) with BCBSA. Life and Disability Controlled Affiliate5s rights under the Brands to offer the Products under the Brands are limited to offering the Products only under the Brand(s) licensed to the consenting Blue Plan.

G Life and Disability Controlled Affiliate shall work with the undersigned Blue Plan to develop a written sales and marketing agreement that identifies the relationship between it and Blue Plan for the sales,

marketing and customer service for the Products. The term of the sales and marketing agreement shall be the same as the term of this Consent Agreement.

0. All sales, marketing and advertising materials developed by and proposed for use by Life and Disability Controlled Affiliate in a consenting Blue Plan5s Service Area must clearly identify the consenting Blue Plan (for e1ample, a statement on such materials that reads FThis product is offered with the cooperation of Blue Cross and/or Blue Shield of]- eography®);

’ . Life and Disability Controlled Affiliate may use the Brands to sell the Products in the following Service Area or portion thereof as designated by Blue Planx

_____

“. Of two or more Blue Plans to use the same Licensed Marks in the same Service Area, Life and Disability Controlled Affiliate shall work with the consenting Blue Plan in the following mannerx(a) the sales, marketing and advertising materials must be communicated to the consenting Blue Plan5s e1isting and prospective accounts through or with the approval of such Blue Plan, and (b) the personnel of such Blue Plan must actively participate in all sales and marketing activities conducted by Life and Disability Controlled Affiliate in the same Service Area, including participating in meetings (whether in”person or via telephone, video or internet conference) with both e1isting and prospective accounts of the consenting Blue Plan;

% Life and Disability Controlled Affiliate shall be entitled to use in a Service Area only those Licensed Marks that the consenting Blue Plan has been granted by BCBSA the license to use under its license agreement (for e1ample, if a consenting Blue Plan is licensed to use only the Blue Cross Marks in its Service Area, the materials used by Life and Disability Controlled Affiliate in that Service Area may only contain or reference the Blue Cross Marks and not the Blue Shield Marks).

3. Of this Consent Agreement is terminated, Life and Disability Controlled Affiliate shall, unless each BCBSA and the Blue Plan agree in their sole discretion to a phase out in writing, immediately (i) cease all use of the Licensed Marks, including in connection with any and all sales and marketing of the Licensed Products in the Service Area where consent has been terminated, and (ii) notify its customers that it is no longer a licensee of BCBSA and provide instruction on how the customer can contact BCBSA or a designated licensee to obtain further information on securing coverage. The notification required by this paragraph shall be in writing and in form approved by BCBSA.

6. The term of this Consent Agreement shall be one year from the Effective Date. Unless either Blue Plan or Life and Disability Controlled Affiliate provides the other party with written notice of its desire not to renew this Consent Agreement at least %z days prior to e1piration of the term or any e1tended term or unless terminated as provided in Paragraph 8 below, this Consent Agreement shall automatically renew for subsequent one year periods.

8. This Consent Agreement may be terminated as followsx

A. Upon mutual written consent of Life and Disability Controlled Affiliate and Blue Plan;

B. By Blue Plan or Life and Disability Controlled Affiliate upon %z days advance written notice to the non" terminating party and BCBSA; or

C. By Blue Plan immediately if Life and Disability Controlled Affiliate does not comply with this Consent Agreement or the sales protocol agreement.

Nz. This Consent Agreement shall automatically terminate if Blue Plan5s primary licensee agreement terminates for any reason or if the Life and Disability License Agreement terminates for any reason.

Agreed and Accepted byx

]Blue Plan®x

Byx_____

Titlex_____

BLUE CR7 SS A9 D BLUE SHI0ELD ASS7 CO\TO7 9 x

Byx_____

Titlex_____

LO2E A9 D DO3SABO1LOTY C7 9 TR7 LLED A22O1LO\TEx

Byx_____

Titlex_____

E1hibit NB

BLUE SHIELD
CONTROLLED AFFILIATE LICENSE AGREEMENT
APPLICABLE TO REGIONAL MEDICARE ADVANTAGE PPO PRODUCTS
(Adopted by Member Plans at their November 18, 2016)

This Agreement by and among Blue Cross and Blue Shield Association ("BCBSA") and_____ (FControlled Affiliate"), a Controlled Affiliate of the Blue Cross Plan(s), known as_____ ("Controlling Plans"), each of which is also a Party signatory hereto.

WHEREAS, BCBSA is the owner of the BLUE SHOELD and BLUE SHOELD Design service marks;

WHEREAS, under the Medicare ModerniIation Act, companies may apply to and be awarded a contract by the Centers for Medicare and Medicaid Services (FCMS:) to offer Medicare Advantage PP7 products in geographic regions designated by CMS (hereafter Fregional MAPP7 products:).

WHEREAS, some of the CMS"designated regions include the Service Areas, or portions thereof, of more than one Plan.

WHEREAS, the Controlling Plans and Controlled Affiliate desire that the latter be entitled to use the BLUE SHOELD and BLUE SHOELD Design service marks (collectively the "Licensed Marks") as service marks and be entitled to use the term BLUE SHOELD in a trade name ("Licensed 9 ame") to offer regional MAPP7 products in a region that includes the Service Areas, or portions thereof, of more than one Controlling Plan;

9 7 W THERE27 RE, in consideration of the foregoing and the mutual agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as followsx

1. GRANT OF LICENSE

Sub4ect to the terms and conditions of this Agreement, BCBSA hereby grants to Controlled Affiliate the right to use the Licensed Marks and 9 ame in connection with, and only in connection with the sale, marketing and administration of regional MAPP7 products and related services.

This grant of rights is non"e1clusive and is limited to the following statesx _____ (the FRegion:). Controlled Affiliate may use the Licensed

Marks and 9 ame in its legal name on the following conditionsx(i) the legal name must be approved in advance, in writing, by BCBSA; (ii) Controlled Affiliate shall not do business outside the Region under any name or mark e1cept business conducted in the Service Area of a Controlling Plan provided that Controlled Affiliate is separately licensed by BCBSA to use the Licensed Marks and 9 ame in connection with health care plans and related services in the Service Area of such Controlling Plan; and (iii) Controlled Affiliate shall not use the Licensed Marks and 9 ame, or any derivative thereof, as part of any name or symbol used to identify itself in any securities market. Controlled Affiliate may use the Licensed Marks and 9 ame in its Trade 9 ame only with the prior, written, consent of BCBSA.

2. QUALITY CONTROL

A. Controlled Affiliate agrees to use the Licensed Marks and 9 ame only in connection with the licensed services and further agrees to be bound by the conditions regarding quality control shown in attached E1hibit A as they may be amended by BCBSA from time"to"time.

B. Controlled Affiliate agrees to comply with all applicable federal, state and local laws.

C. Controlled Affiliate agrees that it will provide on an annual basis (or more often if reasonably required by the Controlling Plans or by BCBSA) a report or reports to the Controlling Plans and BCBSA demonstrating Controlled Affiliatejs compliance with the requirements of this Agreement including but not limited to the quality control provisions of this paragraph and the attached E1hibit A.

D. Controlled Affiliate agrees that the Controlling Plans and/or BCBSA may, from time"to"time, upon reasonable notice, review and inspect the manner and method of Controlled Affiliatejs rendering of service and use of the Licensed Marks and 9 ame.

E. As used herein, a Controlled Affiliate is defined as an entity organiIed and operated in such a manner, that it meets the following requirementsx

(N) Controlled Affiliate is owned or controlled by two or more Controlling Plans;

(G) Each Controlling Plan is authoriIed pursuant to a separate Blue Shield License Agreement to use the Licensed Marks in a geographic area in the Region and every geographic area in the Region is so licensed to at least one of the Controlling Plans; and

(0) The Controlling Plans must have the legal authority directly or indirectly through wholly”owned subsidiariesx

(a) to select members of the Controlled Affiliate5s governing body having not less than Nzz' voting control thereof;

(b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Controlling Plans do not concur;

(c) to e1ercise control over the policy and operations of the Controlled Affiliate; and

9 otwithstanding anything to the contrary in (a) through (c) hereof, the Controlled Affiliate5s establishing or governing documents must also require written approval by each of the Controlling Plans before the Controlled Affiliate canx

(i) change its legal and/or trade names;

(ii) change the geographic area in which it operates (e1cept such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iii) change any of the type(s) of businesses in which it engages (e1cept such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iv) take any action that any Controlling Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and 9 ame.

0n addition, the Controlling Plans directly or indirectly through wholly owned subsidiaries shall own Nzz' of any for”profit Controlled Affiliate.

3. SERVICE MARK USE

A. Controlled Affiliate recogniIes the importance of a comprehensive national network of independent BCBSA licensees which are committed to strengthening the Licensed Marks and 9 ame. The Controlled Affiliate further recogniIes that its actions within the Region may affect the value of the Licensed Marks and 9 ame nationwide.

B. Controlled Affiliate shall at all times make proper service mark use of the Licensed Marks and 9 ame, including but not limited to use of such symbols or words as BCBSA shall specify to protect the Licensed Marks and 9 ame and shall comply with such rules (generally applicable to Controlled Affiliates licensed to use the Licensed Marks and 9 ame) relative to service mark use, as are issued from time'to'time by BCBSA. Controlled Affiliate recogniIes and agrees that all use of the Licensed Marks and 9 ame by Controlled Affiliate shall inure to the benefit of BCBSA.

C. Controlled Affiliate may not directly or indirectly use the Licensed Marks and 9 ame in a manner that transfers or is intended to transfer in the Region the goodwill associated therewith to another mark or name, nor may Controlled Affiliate engage in activity that may dilute or tarnish the unique value of the Licensed Marks and 9 ame.

D. Controlled Affiliate shall use its best efforts to promote and build the value of the Licensed Marks and 9 ame in connection with the sale, marketing and administration of regional MAPP7 products and related services.

4. SUBLICENSING AND ASSIGNMENT

Controlled Affiliate shall not, directly or indirectly, sublicense, transfer, hypothecate, sell, encumber or mortgage, by operation of law or otherwise, the rights granted hereunder and any such act shall be voidable at the sole option of any Controlling Plan or BCBSA. This Agreement and all rights and duties hereunder are personal to Controlled Affiliate.

5. INFRINGEMENT

Controlled Affiliate shall promptly notify the Controlling Plans and the Controlling Plans shall promptly notify BCBSA of any suspected acts of infringement, unfair competition or passing off that may occur in relation to the Licensed Marks and 9 ame. Controlled Affiliate shall not be entitled to require the Controlling Plans or BCBSA to take any actions or institute any proceedings to prevent infringement, unfair competition or passing off by third parties. Controlled Affiliate agrees to render to the Controlling Plans and BCBSA, without charge, all reasonable assistance in connection with any matter pertaining to the protection of the Licensed Marks and 9 ame by BCBSA.

6. LIABILITY INDEMNIFICATION

Controlled Affiliate and the Controlling Plans hereby agree to save, defend, indemnify and hold BCBSA harmless from and against all claims, damages, liabilities and costs of every kind, nature and description (e1cept those arising solely as a result of BCBSAjs negligence) that may arise as a result of or related to Controlled Affiliatejs rendering of services under the Licensed Marks and 9 ame.

7. LICENSE TERM

A. E1cept as otherwise provided herein, the license granted by this Agreement shall remain in effect for a period of one (N) year and shall be automatically e1tended for additional one (N) year periods unless terminated pursuant to the provisions herein.

B. This Agreement and all of Controlled Affiliatejs rights hereunder shall immediately terminate without any further action by any party or entity in the event thatx(i) any one of the Controlling Plans ceases to be authoriIed to use the Licensed Marks and 9 ame; or (ii) pursuant to Paragraph N‘(a)(1) of the Blue Shield License Agreement any one of the Controlling Plans ceases to be authoriIed to use the Licensed 9 ames and Marks in the Region.

C. 9 otwithstanding any other provision of this Agreement, this license to use the Licensed Marks and 9 ame may be forthwith terminated by the Controlling Plans or the affirmative vote of the ma4ority of the Board of Directors of BCBSA present and voting at a special meeting e1pressly called by BCBSA for the purpose on ten (Nz) days written notice to the Controlling Plans advising of the specific matters at issue and granting the Controlling Plans an opportunity to be heard and to present their response to the Board forx(N) failure to comply with any applicable minimum capital or liquidity requirement under the quality control standards of this Agreement; or (G) failure to comply with the "7 rganiIation and - overnance" quality control standard of this Agreement; or (0) impending financial insolvency; or (’) failure to comply with any of the applicable requirements of Standards G; 0, ’ , or “ of attached E1hibit A; or (“) the pendency of any action instituted against the
Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking

appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business or seeking the declaration or establishment of a trust for any of its property or business, unless this Controlled Affiliate License Agreement has been earlier terminated under paragraph 3(E); or (%) such other reason as is determined in good faith immediately and irreparably to threaten the integrity and reputation of BCBSA, the Plans (including the Controlling Plans), any other licensee including Controlled Affiliate and/or the Licensed Marks and 9 ame.

D. E1cept as otherwise provided in Paragraphs 3(B), 3(C) or 3(E) herein, should Controlled Affiliate fail to comply with the provisions of this Agreement and not cure such failure within thirty (0z) days of receiving written notice thereof (or commence a cure within such thirty day period and continue diligent efforts to complete the cure if such curing cannot reasonably be completed within such thirty day period) BCBSA or the Controlling Plans shall have the right to issue a notice that the Controlled Affiliate is in a state of noncompliance. Of a state of noncompliance as aforesaid is undisputed by the Controlled Affiliate or is found to e1ist by a mandatory dispute resolution panel and is uncured as provided above, BCBSA shall have the right to seek 4udicial enforcement of the Agreement or to issue a notice of termination thereof. 9 otwithstanding any other provisions of this Agreement, any disputes as to the termination of this License pursuant to Paragraphs 3(B), 3(C) or 3(E) of this Agreement shall not be sub4ect to mediation and mandatory dispute resolution. All other disputes between or among BCBSA, any of the Controlling Plans and/or Controlled Affiliate shall be submitted promptly to mediation and mandatory dispute resolution. The mandatory dispute resolution panel shall have authority to issue orders for specific performance and assess monetary penalties. E1cept, however, as provided in Paragraphs 3(B) and 3(E) of this Agreement, this license to use the Licensed Marks and 9 ame may not be finally terminated for any reason without the affirmative vote of a ma4ority of the present and voting members of the Board of Directors of BCBSA.

E. This Agreement and all of Controlled Affiliatejs rights hereunder shall immediately terminate without any further action by any party or entity in the event thatx

(N) Controlled Affiliate shall no longer comply with item G(E) above;

(G) Appropriate dues, royalties and other payments for Controlled Affiliate pursuant to paragraph 8 hereof, which are the royalties for this License Agreement, are more than si1ty (%z) days in arrears to BCBSA; or

(0) Any of the following events occurx(i) a voluntary petition shall be filed by Controlled Affiliate seeking bankruptcy, reorganiIation, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief, or (ii) an involuntary petition or proceeding shall be filed against Controlled Affiliate seeking bankruptcy, reorganiIation, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief and such petition or

proceeding is consented to or acquiesced in by Controlled Affiliate or is not dismissed within si1ty (%z) days of the date upon which the petition or other document commencing the proceeding is served upon the Controlled Affiliate, or (iii) an order for relief is entered against Controlled Affiliate in any case under the bankruptcy laws of the United States, or Controlled Affiliate is ad4udged bankrupt or insolvent as those terms are defined in the Uniform Commercial Code as enacted in the State of 0linois by any court of competent 4urisdiction, or (iv) Controlled Affiliate makes a general assignment of its assets for the benefit of creditors, or (v) any government or any government official, office, agency, branch, or unit assumes control of Controlled Affiliate or delinquency proceedings (voluntary or involuntary) are instituted, or (vi) an action is brought by Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business, or (vii) an action is instituted by any governmental entity or officer against Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business and such action is consented to or acquiesced in by Controlled Affiliate or is not dismissed within one hundred thirty (N0z) days of the date upon which the pleading or other document commencing the action is served upon the Controlled Affiliate, provided that if the action is stayed or its prosecution is en4oined, the one hundred thirty (N0z) day period is tolled for the duration of the stay or in4unction, and provided further, that the Association5s Board of Directors may toll or e1tend the N0z day period at any time prior to its e1piration, or (viii) a trustee, interim trustee, receiver or other custodian for any of Controlled Affiliatejs property or business is appointed or the Controlled Affiliate is ordered dissolved or liquidated. 9 otwithstanding any other provision of this Agreement, a declaration or a request for declaration of the e1istence of a trust over any of the Controlled Affiliate5s property or business shall not in itself be deemed to constitute or seek appointment of a trustee, interim trustee, receiver or other custodian for purposes of subparagraphs 3(E)(0)(vii) and (viii) of this Agreement.

2. Upon termination of this Agreement for cause or otherwise, Controlled Affiliate agrees that it shall immediately discontinue all use of the Licensed Marks and 9 ame, including any use in its trade name, e1cept to the e1tent that it continues to be authoriIed to use the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan.

- . Upon termination of this Agreement, Controlled Affiliate shall immediately notify all of its customers to whom it provides products or services under the Licensed Marks pursuant to this Agreement that it is no longer a licensee of BCBSA and, if directed by the Association5s Board of Directors, shall provide instruction on how the customer can contact BCBSA or a designated licensee to obtain further information on securing coverage. The notification required by this paragraph shall be in writing and in a form approved by BCBSA. The BCBSA shall

have the right to audit the terminated entityjs books and records to verify compliance with this paragraph.

H. On the event this Agreement terminates pursuant to 3(B) hereof, upon termination of this Agreement the provisions of Paragraph 3(-) shall not apply and the following provisions shall apply, e1cept that, in the event that Controlled Affiliate is separately licensed by BCBSA to use the Licensed Marks in the Service Area of a Controlling Plan and termination of this Agreement is due to a partial termination of such Controlling Plan5s license pursuant to Paragraph N‘(a)(1)(ii) of the Blue Shield License Agreement, the notices, national account listing, payment, and audit right listed below shall be applicable solely with respect to the Region and the geographic area for which the Controlling Plan5s license to use the Licensed 9 ames and Marks is terminatedx

(N) The Controlled Affiliate shall send a notice through the U.S. mails, with first class postage affi1ed, to all individual and group customers, providers, brokers and agents of products or services sold, marketed, underwritten or administered by the Controlled Affiliate under the Licensed Marks and 9 ame. The form and content of the notice shall be specified by BCBSA and shall, at a minimum, notify the recipient of the termination of the license, the consequences thereof, and instructions for obtaining alternate products or services licensed by BCBSA. This notice shall be mailed within N‘ days after termination.

(G) The Controlled Affiliate shall deliver to BCBSA within five days of a request by BCBSA a listing of national accounts in which the Controlled Affiliate is involved (in a control, participating or servicing capacity), identifying the national account and the Controlled Affiliate5s role therein.

(0) Unless the cause of termination is an event respecting BCBSA stated in paragraph N‘(a) or (b) of the Plan5s license agreement with BCBSA to use the Licensed Marks and 9 ame, the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans shall be 4intly liable for payment to BCBSA of an amount equal to $G‘ multiplied by the number of Licensed Enrollees of the Controlled Affiliate; provided that if any Plan other than a Controlling Plan is permitted by BCBSA to use marks or names licensed by BCBSA in a geographic area in the Region, the payment for Licensed Enrollees in such geographic area shall be multiplied by a fraction, the numerator of which is the number of Licensed Enrollees of the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans in such geographic area and the denominator of which is the total number of Licensed Enrollees in such geographic area. Licensed Enrollee means each and every person and covered dependent who is enrolled as an individual or member of a group receiving products or services sold, marketed or administered under marks or names licensed by BCBSA as determined at the earlier of (i) the end of the last fiscal year of the terminated entity which ended prior to termination or (ii) the fiscal year which ended before any transactions causing the termination began. 9 otwithstanding the

foregoing, the amount payable pursuant to this subparagraph H. (0) shall be due only to the e1tent that, in BCBSA5s opinion, it does not cause the net worth of the Controlled Affiliate, the Controlling Plans or any other Licensed Controlled Affiliates of the Controlling Plans to fall below Nzz' of the Health Risk'Based Capital formula, or its equivalent under any successor formula, as set forth in the applicable financial responsibility standards established by BCBSA (provided such equivalent is approved for purposes of this subparagraph by the affirmative vote of three'fourths of the Plans and three'fourths of the total then current weighted vote of all the Plans); measured as of the date of termination, and ad4usted for the value of any transactions not made in the ordinary course of business. This payment shall not be due in connection with transactions e1clusively by or among Plans (including the Controlling Plans) or their affiliates, including reorganiIations, combinations or mergers, where the BCBSA Board of Directors determines that the license termination does not result in a material diminution in the number of Licensed Enrollees or the e1tent of their coverage. O0 the event that the Controlled Affiliate5s license is reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent 4urisdiction, BCBSA shall reimburse the Controlled Affiliate (and/or the Controlling Plans or their other Licensed Controlled Affiliates, as the case may be) for payments made under this subparagraph 3.H.(0) only to the e1tent that such payments e1ceed the amounts due to BCBSA pursuant to paragraph 3.K. and any costs associated with reestablishing the terminated Controlling Plan5s Service Area or the Region, including any payments made by BCBSA to a Plan or Plans (including the other Controlling Plans), or their Licensed Controlled Affiliates, for purposes of replacing the Controlled Affiliate.

(') BCBSA shall have the right to audit the books and records of the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans to verify compliance with this paragraph 3.H.

(“) As to a breach of 3.H.(N), (G), (0) or ('), the parties agree that the obligations are immediately enforceable in a court of competent 4urisdiction. As to a breach of 3.H.(N), (G) or (') by the Controlled Affiliate, the parties agree there is no adequate remedy at law and BCBSA is entitled to obtain specific performance.

O BCBSA shall be entitled to en4oin the Controlled Affiliate or any related party in a court of competent 4urisdiction from entry into any transaction which would result in a termination of this Agreement unless a Controlling Plan5s license from BCBSA to use the Licensed Marks and 9 ames has been terminated pursuant to Nz(d) of such Controlling Plan5s license agreement upon the required %0month written notice.

J. BCBSA acknowledges that it is not the owner of assets of the Controlled Affiliate.

K. O0 the event this Agreement terminates and is subsequently reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent 4urisdiction, the Controlled Affiliate, the Controlling Plans, and any other

Licensed Controlled Affiliates of the Controlling Plans shall be 4oint liable for reimbursing BCBSA the reasonable costs incurred by BCBSA in connection with the termination and the reinstatement or court action, and any associated legal proceedings, including but not limited toxoutside legal fees, consulting fees, public relations fees, advertising costs, and costs incurred to develop, lease or establish an interim provider network. Any amount due to BCBSA under this subparagraph may be waived in whole or in part by the BCBSA Board of Directors in its sole discretion.

8. DISPUTE RESOLUTION

The parties agree that any disputes between or among them or between or among any of them and one or more Plans or Controlled Affiliates of Plans that use in any manner the Blue Shield and Blue Shield Marks and 9 ame are sub4ect to the

Mediation and Mandatory Dispute Resolution process attached to and made a part of each Controlling Plan5s License from BCBSA to use the Licensed Marks and 9 ame as E1hibit " as amended from time"to"time, which documents are incorporated herein by reference as though fully set forth herein.

9. LICENSE FEE

Controlled Affiliate will pay to BCBSA a fee for this License determined pursuant to the formula(s) set forth in E1hibit B.

10. JOINT VENTURE

9 othing contained in this Agreement shall be construed as creating a 4oint venture, partnership, agency or employment relationship between the Controlling Plans and Controlled Affiliate or between either and BCBSA.

11. NOTICES AND CORRESPONDENCE

9 otices regarding the sub4ect matter of this Agreement or breach or termination thereof shall be in writing and shall be addressed in duplicate to the last known address of each other party, marked respectively to the attention of its President and, if any, its - eneral Counsel.

12. COMPLETE AGREEMENT

This Agreement contains the complete understandings of the parties in relation to the sub4ect matter hereof. This Agreement may only be amended by the affirmative vote of three"fourths of the Plans and three"fourths of the total then current weighted vote of all the Plans as officially recorded by the BCBSA Corporate Secretary.

13. SEVERABILITY

Of any term of this Agreement is held to be unlawful by a court of competent 4urisdiction, such findings shall in no way affect the remaining obligations of the parties hereunder and the court may substitute a lawful term or condition for any unlawful term or condition so long as the effect of such substitution is to provide the parties with the benefits of this Agreement.

14. NONWAIVER

9 o waiver by BCBSA of any breach or default in performance on the part of Controlled Affiliate or any other licensee of any of the terms, covenants or conditions of this Agreement shall constitute a waiver of any subsequent breach or default in performance of said terms, covenants or conditions.

14A. VOTING

2or all provisions of this Agreement referring to voting, the term 'Plans5shall mean all entities licensed under the Blue Cross License Agreement and/or the Blue Shield License Agreement, and in all votes of the Plans under this Agreement the Plans shall vote together. 2or weighted votes of the Plans, the Plan shall have a number of votes equal to the number of weighted votes (if any) that it holds as a Blue Cross Plan plus the number of weighted votes (if any) that it holds as a Blue Shield Plan. 2or all other votes of the Plans, the Plan shall have one vote. 2or all questions requiring an affirmative three"fourths weighted vote of the Plans, the requirement shall be deemed satisfied with a lesser weighted vote unless the greater ofx(i) %"Gor more of the Plans (rounded to the nearest whole number, with z." or multiples thereof being rounded to the ne1t higher whole number) fail to cast weighted votes in favor of the question; or (ii) three (0) of the Plans fail to cast weighted votes in favor of the question. 9 otwithstanding the foregoing provision, if there are thirty"nine (08) Plans, the requirement of an affirmative three"fourths weighted vote shall be deemed satisfied with a lesser weighted vote unless four (') or more Plans fail to cast weighted votes in favor of the question.

15. GOVERNING LAW

This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of 0linois.

16. HEADINGS

The headings inserted in this agreement are for convenience only and shall have no bearing on the interpretation hereof.

Ø WCT9 ESS WHERE7 2, the parties have caused this License Agreement to be e1ecuted and effective as of the date of last signature written below.

Controlled Affiliate:

Byx_____

Datex_____

Controlling Plan:

Byx__

Datex__

Controlling Plan:

Byx__

Datex__

BLUE CROSS AND BLUE SHIELD ASSOCIATION

Byx__

Datex__

EXHIBIT A

CONTROLLED AFFILIATE LICENSE STANDARDS APPLICABLE TO REGIONAL MEDICARE ADVANTAGE PPO PRODUCTS
November 2016

PREAMBLE

The standards for licensing Controlled Affiliates for Medicare Advantage PP7 Products are established by BCBSA and are sub4ect to change from time"to"time upon the affirmative vote of three"fourths (0/') of the Plans and three"fourths (0/') of the total weighted vote. Each Controlling Plan is required to use a standard Controlled Affiliate license form provided by BCBSA and to cooperate fully in assuring that the licensed Controlled Affiliate maintains compliance with the license standards.

Standard 1 - Organization and Governance

A Controlled Affiliate is defined as an entity organiIed and operated in such a manner, that it meets the following requirementsx

(N) Controlled Affiliate is owned or controlled by two or more Controlling Plans;

(G) Each Controlling Plan is authoriIed pursuant to a separate Blue Shield License Agreement to use the Licensed Marks in a geographic area in the Region and every geographic area in the Region is so licensed to at least one of the Controlling Plans; and

(0) The Controlling Plans must have the legal authority directly or indirectly through wholly"owned subsidiariesx

(a) to select members of the Controlled Affiliate5s governing body having not less than Nzz' voting control thereof;

(b) prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Controlling Plans do not concur;

(c) e1ercise control over the policy and operations of the Controlled Affiliate; and

EXHIBIT A (continued)

9 otwithstanding anything to the contrary in (a) through (c) hereof, the Controlled Affiliate5s establishing or governing documents must also require written approval by each of the Controlling Plans before the Controlled Affiliate canx

(i) change its legal and/or trade names;

(ii) change the geographic area in which it operates (e1cept such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iii) change any of the type(s) of businesses in which it engages (e1cept such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iv) take any action that any Controlling Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and 9 ame.

Oa addition, the Controlling Plans directly or indirectly through wholly"owned subsidiaries shall own Nzz' of any for"profit Controlled Affiliate.

Standard 2 - Financial Responsibility

A Controlled Affiliate shall be operated in a manner that provides reasonable financial assurance that it can fulfill all of its contractual obligations to its customers.

Standard 3 - State Licensure/Certification

A Controlled Affiliate shall maintain appropriate and unimpaired licensure and certifications.

EXHIBIT A (continued)

Standard 4 - Certain Disclosures

A Controlled Affiliate shall make adequate disclosure in contracting with third parties and in disseminating public statements ofx

a. the structure of the Blue Cross and Blue Shield System; and
b. the independent nature of every licensee.

Standard 5 - Reports and Records for Controlled Affiliates

A Controlled Affiliate and/or its Controlling Plans shall furnish, on a timely and accurate basis, reports and records relating to these Standards and the License Agreements between BCBSA and Controlled Affiliate.

Standard 6 - Best Efforts

During each year, a Controlled Affiliate shall use its best efforts to promote and build the value of the Blue Shield Marks.

Standard 7 - Participation in Certain National Programs

A Controlled Affiliate shall effectively and efficiently participate in certain national programs from time to time as may be adopted by Member Plans for the purposes of providing ease of claims processing for customers receiving benefits outside of the Controlled Affiliate5s service area.

9 ational program requirements includex

a. Oter'Plan Teleprocessing System (OTS); and

b. Oter'Plan Medicare Advantage Program.

Standard 8 - Participation in Master Business Associate Agreement

Controlled Affiliates shall comply with the terms of the Business Associate Agreement for Blue Cross and Blue Shield Licensees to the e1tent they perform the functions of a business associate or subcontractor to a business associate, as defined by the Business Associate Agreement.

Amended as of November 15, 2007

EXHIBIT B

**ROYALTY FORMULA FOR SECTION 9 OF THE
CONTROLLED AFFILIATE LICENSE AGREEMENTS
APPLICABLE TO REGIONAL MEDICARE ADVANTAGE PPO PRODUCTS**

Controlled Affiliate will pay BCBSA a fee for this license in accordance with the following formulax

An amount equal to its pro rata share of each Controlling Plan dues payable to BCBSA computed with the addition of the Controlled Affiliatejs members using the Marks on regional MAPP7 products and related services as reported on the Quarterly Enrollment Report with BCBSA. The payment by each Controlling Plan of its dues to BCBSA, including that portion described in this paragraph, will satisfy the requirement of this paragraph, and no separate payment will be necessary.

Amended as of June 14, 2007

E1hibit NC

BLUE SHIELD
CONTROLLED AFFILIATE LICENSE AGREEMENT
APPLICABLE TO REGIONAL MEDICARE PART D PRESCRIPTION DRUG PLAN PRODUCTS
(Adopted by Member Plans at their November 18, 2016 meeting)

This Agreement by and among Blue Cross and Blue Shield Association ("BCBSA") and_____ (FControlled Affiliate"), a Controlled Affiliate of the Blue Cross Plan(s), known as_____ ("Controlling Plans"), each of which is also a Party signatory hereto.

WHEREAS, BCBSA is the owner of the BLUE SHOELD and BLUE SHOELD Design service marks;

WHEREAS, under the Medicare ModerniIation Act, companies may apply to and be awarded a contract by the Centers for Medicare and Medicaid Services (FCMS:) to offer Medicare Part D Prescription Drug Plan products in geographic regions designated by CMS (hereafter Fregional PDP products:).

WHEREAS, some of the CMS"designated regions include the Service Areas, or portions thereof, of more than one Plan.

WHEREAS, the Controlling Plans and Controlled Affiliate desire that the latter be entitled to use the BLUE SHOELD and BLUE SHOELD Design service marks (collectively the "Licensed Marks") as service marks and be entitled to use the term BLUE SHOELD in a trade name ("Licensed 9 ame") to offer regional PDP products in a region that includes the Service Areas, or portions thereof, of more than one Controlling Plan;

9 7 W THERE27 RE, in consideration of the foregoing and the mutual agreements hereinafter set forth and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as followsx

1. GRANT OF LICENSE

Sub4ect to the terms and conditions of this Agreement, BCBSA hereby grants to Controlled Affiliate the right to use the Licensed Marks and 9 ame in connection with, and only in connection with the sale, marketing and administration of regional PDP products and related services.

This grant of rights is non"e1clusive and is limited to the following statesx _____ (the FRegion:). Controlled Affiliate may use the Licensed

Marks and 9 ame in its legal name on the following conditionsx(i) the legal name must be approved in advance, in writing, by BCBSA; (ii) Controlled Affiliate shall not do business outside the Region under any name or mark e1cept business conducted in the Service Area of a Controlling Plan provided that Controlled Affiliate is separately licensed by BCBSA to use the Licensed Marks and 9 ame in connection with health care plans and related services in the Service Area of such Controlling Plan; and (iii) Controlled Affiliate shall not use the Licensed Marks and 9 ame, or any derivative thereof, as part of any name or symbol used to identify itself in any securities market. Controlled Affiliate may use the Licensed Marks and 9 ame in its Trade 9 ame only with the prior, written, consent of BCBSA.

2. QUALITY CONTROL

A. Controlled Affiliate agrees to use the Licensed Marks and 9 ame only in connection with the licensed services and further agrees to be bound by the conditions regarding quality control shown in attached E1hibit A as they may be amended by BCBSA from time"to"time.

B. Controlled Affiliate agrees to comply with all applicable federal, state and local laws.

C. Controlled Affiliate agrees that it will provide on an annual basis (or more often if reasonably required by the Controlling Plans or by BCBSA) a report or reports to the Controlling Plans and BCBSA demonstrating Controlled Affiliatejs compliance with the requirements of this Agreement including but not limited to the quality control provisions of this paragraph and the attached E1hibit A.

D. Controlled Affiliate agrees that the Controlling Plans and/or BCBSA may, from time"to"time, upon reasonable notice, review and inspect the manner and method of Controlled Affiliatejs rendering of service and use of the Licensed Marks and 9 ame.

E. As used herein, a Controlled Affiliate is defined as an entity organiIed and operated in such a manner, that it meets the following requirementsx

(N) Controlled Affiliate is owned or controlled by two or more Controlling Plans;

(G) Each Controlling Plan is authoriIed pursuant to a separate Blue Shield License Agreement to use the Licensed Marks in a geographic area in the Region and every geographic area in the Region is so licensed to at least one of the Controlling Plans; and

(0) The Controlling Plans must have the legal authority directly or indirectly through wholly”owned subsidiariesx

(a) to select members of the Controlled Affiliate5s governing body having not less than Nzz' voting control thereof;

(b) to prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Controlling Plans do not concur;

(c) to e1ercise control over the policy and operations of the Controlled Affiliate; and

9 otwithstanding anything to the contrary in (a) through (c) hereof, the Controlled Affiliate5s establishing or governing documents must also require written approval by each of the Controlling Plans before the Controlled Affiliate canx

(i) change its legal and/or trade names;

(ii) change the geographic area in which it operates (e1cept such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iii) change any of the type(s) of businesses in which it engages (e1cept such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iv) take any action that any Controlling Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and 9 ame.

0n addition, the Controlling Plans directly or indirectly through wholly owned subsidiaries shall own Nzz' of any for”profit Controlled Affiliate.

3. SERVICE MARK USE

A. Controlled Affiliate recognizes the importance of a comprehensive national network of independent BCBSA licensees which are committed to strengthening the Licensed Marks and Name. The Controlled Affiliate further recognizes that its actions within the Region may affect the value of the Licensed Marks and Name nationwide.

B. Controlled Affiliate shall at all times make proper service mark use of the Licensed Marks and Name, including but not limited to use of such symbols or words as BCBSA shall specify to protect the Licensed Marks and Name and shall comply with such rules (generally applicable to Controlled Affiliates licensed to use the Licensed Marks and Name) relative to service mark use, as are issued from time to time by BCBSA. Controlled Affiliate recognizes and agrees that all use of the Licensed Marks and Name by Controlled Affiliate shall inure to the benefit of BCBSA.

C. Controlled Affiliate may not directly or indirectly use the Licensed Marks and Name in a manner that transfers or is intended to transfer in the Region the goodwill associated therewith to another mark or name, nor may Controlled Affiliate engage in activity that may dilute or tarnish the unique value of the Licensed Marks and Name.

D. Controlled Affiliate shall use its best efforts to promote and build the value of the Licensed Marks and Name in connection with the sale, marketing and administration of regional PDP products and related services.

4. SUBLICENSING AND ASSIGNMENT

Controlled Affiliate shall not, directly or indirectly, sublicense, transfer, hypothecate, sell, encumber or mortgage, by operation of law or otherwise, the rights granted hereunder and any such act shall be voidable at the sole option of any Controlling Plan or BCBSA. This Agreement and all rights and duties hereunder are personal to Controlled Affiliate.

5. INFRINGEMENT

Controlled Affiliate shall promptly notify the Controlling Plans and the Controlling Plans shall promptly notify BCBSA of any suspected acts of infringement, unfair competition or passing off that may occur in relation to the Licensed Marks and Name. Controlled Affiliate shall not be entitled to require the Controlling Plans or BCBSA to take any actions or institute any proceedings to prevent infringement, unfair competition or passing off by third parties. Controlled Affiliate agrees to render to the Controlling Plans and BCBSA, without charge, all reasonable assistance in connection with any matter pertaining to the protection of the Licensed Marks and Name by BCBSA.

6. LIABILITY INDEMNIFICATION

Controlled Affiliate and the Controlling Plans hereby agree to save, defend, indemnify and hold BCBSA harmless from and against all claims, damages, liabilities and costs of every kind, nature and description (e1cept those arising solely as a result of BCBSAjs negligence) that may arise as a result of or related to Controlled Affiliatejs rendering of services under the Licensed Marks and 9 ame.

7. LICENSE TERM

A. E1cept as otherwise provided herein, the license granted by this Agreement shall remain in effect for a period of one (N) year and shall be automatically e1tended for additional one (N) year periods unless terminated pursuant to the provisions herein.

B. This Agreement and all of Controlled Affiliatejs rights hereunder shall immediately terminate without any further action by any party or entity in the event thatx(i) any one of the Controlling Plans ceases to be authoriIed to use the Licensed Marks and 9 ame; or (ii) pursuant to Paragraph N‘(a)(1) of the Blue Shield License Agreement any one of the Controlling Plans ceases to be authoriIed to use the Licensed 9 ames and Marks in the Region.

C. 9 otwithstanding any other provision of this Agreement, this license to use the Licensed Marks and 9 ame may be forthwith terminated by the Controlling Plans or the affirmative vote of the ma4ority of the Board of Directors of BCBSA present and voting at a special meeting e1pressly called by BCBSA for the purpose on ten (Nz) days written notice to the Controlling Plans advising of the specific matters at issue and granting the Controlling Plans an opportunity to be heard and to present their response to the Board forx(N) failure to comply with any applicable minimum capital or liquidity requirement under the quality control standards of this Agreement; or (G) failure to comply with the "7 rganiIation and - overnance" quality control standard of this Agreement; or (0) impending financial insolvency; or (’) failure to comply with any of the applicable requirements of Standards G, 0, ’ , or “ of attached E1hibit A; or (“) the pendency of any action instituted against the Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business or seeking the declaration or establishment of a trust for any of its property or business, unless this Controlled Affiliate License Agreement has been earlier terminated under paragraph 3(E); or (%) such other reason as is determined in good faith immediately and irreparably to threaten the integrity and reputation of BCBSA, the Plans (including the Controlling Plans), any other licensee including Controlled Affiliate and/or the Licensed Marks and 9 ame.

D. E1cept as otherwise provided in Paragraphs 3(B), 3(C) or 3(E) herein, should Controlled Affiliate fail to comply with the provisions of this Agreement and not cure such failure within thirty (0z) days of receiving written notice thereof (or commence a cure within such thirty day period and continue diligent efforts to

complete the cure if such curing cannot reasonably be completed within such thirty day period) BCBSA or the Controlling Plans shall have the right to issue a notice that the Controlled Affiliate is in a state of noncompliance. Of a state of noncompliance as aforesaid is undisputed by the Controlled Affiliate or is found to e1ist by a mandatory dispute resolution panel and is uncured as provided above, BCBSA shall have the right to seek 4udicial enforcement of the Agreement or to issue a notice of termination thereof. 9 otwithstanding any other provisions of this Agreement, any disputes as to the termination of this License pursuant to Paragraphs 3(B), 3(C) or 3(E) of this Agreement shall not be sub4ect to mediation and mandatory dispute resolution. All other disputes between or among BCBSA, any of the Controlling Plans and/or Controlled Affiliate shall be submitted promptly to mediation and mandatory dispute resolution. The mandatory dispute resolution panel shall have authority to issue orders for specific performance and assess monetary penalties. E1cept, however, as provided in Paragraphs 3(B) and 3(E) of this Agreement, this license to use the Licensed Marks and 9 ame may not be finally terminated for any reason without the affirmative vote of a ma4ority of the present and voting members of the Board of Directors of BCBSA.

E. This Agreement and all of Controlled Affiliatejs rights hereunder shall immediately terminate without any further action by any party or entity in the event thatx

(N) Controlled Affiliate shall no longer comply with item G(E) above;

(G) Appropriate dues, royalties and other payments for Controlled Affiliate pursuant to paragraph 8 hereof, which are the royalties for this License Agreement, are more than si1ty (%z) days in arrears to BCBSA; or

(0) Any of the following events occurx(i) a voluntary petition shall be filed by Controlled Affiliate seeking bankruptcy, reorganiIation, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief, or (ii) an involuntary petition or proceeding shall be filed against Controlled Affiliate seeking bankruptcy, reorganiIation, arrangement with creditors or other relief under the bankruptcy laws of the United States or any other law governing insolvency or debtor relief and such petition or proceeding is consented to or acquiesced in by Controlled Affiliate or is not dismissed within si1ty (%z) days of the date upon which the petition or other document commencing the proceeding is served upon the Controlled Affiliate, or (iii) an order for relief is entered against Controlled Affiliate in any case under the bankruptcy laws of the United States, or Controlled Affiliate is ad4udged bankrupt or insolvent as those terms are defined in the Uniform Commercial Code as enacted in the State of 0llinois by any court of competent 4urisdiction, or (iv) Controlled Affiliate makes a general assignment of its assets for the benefit of creditors, or (v) any government or any government official, office, agency, branch, or unit assumes control of Controlled Affiliate or delinquency proceedings (voluntary or involuntary) are instituted, or (vi) an action is brought by Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim

trustee, receiver or other custodian for any of its property or business, or (vii) an action is instituted by any governmental entity or officer against Controlled Affiliate seeking its dissolution or liquidation of its assets or seeking the appointment of a trustee, interim trustee, receiver or other custodian for any of its property or business and such action is consented to or acquiesced in by Controlled Affiliate or is not dismissed within one hundred thirty (N0z) days of the date upon which the pleading or other document commencing the action is served upon the Controlled Affiliate, provided that if the action is stayed or its prosecution is en4oined, the one hundred thirty (N0z) day period is tolled for the duration of the stay or in4unction, and provided further, that the Association5s Board of Directors may toll or e1tend the N0z day period at any time prior to its e1piration, or (viii) a trustee, interim trustee, receiver or other custodian for any of Controlled Affiliatejs property or business is appointed or the Controlled Affiliate is ordered dissolved or liquidated. 9 otwithstanding any other provision of this Agreement, a declaration or a request for declaration of the e1istence of a trust over any of the Controlled Affiliate5s property or business shall not in itself be deemed to constitute or seek appointment of a trustee, interim trustee, receiver or other custodian for purposes of subparagraphs 3(E)(0)(vii) and (viii) of this Agreement.

2. Upon termination of this Agreement for cause or otherwise, Controlled Affiliate agrees that it shall immediately discontinue all use of the Licensed Marks and 9 ame, including any use in its trade name, e1cept to the e1tent that it continues to be authoriIed to use the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan.

- . Upon termination of this Agreement, Controlled Affiliate shall immediately notify all of its customers to whom it provides products or services under the Licensed Marks pursuant to this Agreement that it is no longer a licensee of BCBSA and, if directed by the Association5s Board of Directors, shall provide instruction on how the customer can contact BCBSA or a designated licensee to obtain further information on securing coverage. The notification required by this paragraph shall be in writing and in a form approved by BCBSA. The BCBSA shall have the right to audit the terminated entityjs books and records to verify compliance with this paragraph.

H. 0n the event this Agreement terminates pursuant to 3(B) hereof, upon termination of this Agreement the provisions of Paragraph 3(-) shall not apply and the following provisions shall apply, e1cept that, in the event that Controlled Affiliate is separately licensed by BCBSA to use the Licensed Marks in the Service Area of a Controlling Plan and termination of this Agreement is due to a partial termination of such Controlling Plan5s license pursuant to Paragraph N‘(a)(1)(ii) of the Blue Shield License Agreement, the notices, national account listing, payment, and audit right listed below shall be applicable solely with respect to the Region and the geographic area for which the Controlling Plan5s license to use the Licensed 9 ames and Marks is terminatedx

(N) The Controlled Affiliate shall send a notice through the U.S. mails, with first class postage affi1ed, to all individual and group customers, providers, brokers and agents of products or services sold, marketed, underwritten or administered by the Controlled Affiliate under the Licensed Marks and 9 ame. The form and content of the notice shall be specified by BCBSA and shall, at a minimum, notify the recipient of the termination of the license, the consequences thereof, and instructions for obtaining alternate products or services licensed by BCBSA. This notice shall be mailed within N‘ days after termination.

(G) The Controlled Affiliate shall deliver to BCBSA within five days of a request by BCBSA a listing of national accounts in which the Controlled Affiliate is involved (in a control, participating or servicing capacity), identifying the national account and the Controlled Affiliate5s role therein.

(0) Unless the cause of termination is an event respecting BCBSA stated in paragraph N‘(a) or (b) of the Plan5s license agreement with BCBSA to use the Licensed Marks and 9 ame, the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans shall be 4bintly liable for payment to BCBSA of an amount equal to $G‘ multiplied by the number of Licensed Enrollees of the Controlled Affiliate; provided that if any Plan other than a Controlling Plan is permitted by BCBSA to use marks or names licensed by BCBSA in a geographic area in the Region, the payment for Licensed Enrollees in such geographic area shall be multiplied by a fraction, the numerator of which is the number of Licensed Enrollees of the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans in such geographic area and the denominator of which is the total number of Licensed Enrollees in such geographic area. Licensed Enrollee means each and every person and covered dependent who is enrolled as an individual or member of a group receiving products or services sold, marketed or administered under marks or names licensed by BCBSA as determined at the earlier of (i) the end of the last fiscal year of the terminated entity which ended prior to termination or (ii) the fiscal year which ended before any transactions causing the termination began. 9 otwithstanding the foregoing, the amount payable pursuant to this subparagraph H. (0) shall be due only to the e1tent that, in BCBSA5s opinion, it does not cause the net worth of the Controlled Affiliate, the Controlling Plans or any other Licensed Controlled Affiliates of the Controlling Plans to fall below Nzz' of the Health Risk”Based Capital formula, or its equivalent under any successor formula, as set forth in the applicable financial responsibility standards established by BCBSA (provided such equivalent is approved for purposes of this subparagraph by the affirmative vote of three”fourths of the Plans and three”fourths of the total then current weighted vote of all the Plans); measured as of the date of termination, and ad4usted for the value of any transactions not made in the ordinary course of business. This payment shall not be due in connection with transactions e1clusively by or among Plans (including the Controlling Plans) or their affiliates, including reorganiIations, combinations or mergers, where the BCBSA Board of Directors determines that the license

termination does not result in a material diminution in the number of Licensed Enrollees or the e1tent of their coverage. On the event that the Controlled Affiliate5s license is reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent 4urisdiction, BCBSA shall reimburse the Controlled Affiliate (and/or the Controlling Plans or their other Licensed Controlled Affiliates, as the case may be) for payments made under this subparagraph 3.H.(0) only to the e1tent that such payments e1ceed the amounts due to BCBSA pursuant to paragraph 3.K. and any costs associated with reestablishing the terminated Controlling Plan5s Service Area or the Region, including any payments made by BCBSA to a Plan or Plans (including the other Controlling Plans), or their Licensed Controlled Affiliates, for purposes of replacing the Controlled Affiliate.

(’) BCBSA shall have the right to audit the books and records of the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans to verify compliance with this paragraph 3.H.

(“) As to a breach of 3.H.(N), (G), (0) or (’), the parties agree that the obligations are immediately enforceable in a court of competent 4urisdiction. As to a breach of 3.H.(N), (G) or (’) by the Controlled Affiliate, the parties agree there is no adequate remedy at law and BCBSA is entitled to obtain specific performance.

O BCBSA shall be entitled to en4oin the Controlled Affiliate or any related party in a court of competent 4urisdiction from entry into any transaction which would result in a termination of this Agreement unless a Controlling Plan5s license from BCBSA to use the Licensed Marks and 9 ames has been terminated pursuant to N2(d) of such Controlling Plan5s license agreement upon the required %month written notice.

J. BCBSA acknowledges that it is not the owner of assets of the Controlled Affiliate.

K. On the event this Agreement terminates and is subsequently reinstated by BCBSA or is deemed to have remained in effect without interruption by a court of competent 4urisdiction, the Controlled Affiliate, the Controlling Plans, and any other Licensed Controlled Affiliates of the Controlling Plans shall be 4ointly liable for reimbursing BCBSA the reasonable costs incurred by BCBSA in connection with the termination and the reinstatement or court action, and any associated legal proceedings, including but not limited toxoutside legal fees, consulting fees, public relations fees, advertising costs, and costs incurred to develop, lease or establish an interim provider network. Any amount due to BCBSA under this subparagraph may be waived in whole or in part by the BCBSA Board of Directors in its sole discretion.

8. DISPUTE RESOLUTION

The parties agree that any disputes between or among them or between or among any of them and one or more Plans or Controlled Affiliates of Plans that use in any manner the Blue Shield and Blue Shield Marks and 9 ame are sub4ect to the Mediation and Mandatory Dispute Resolution process attached to and made a part of each Controlling Plan5s License from BCBSA to use the Licensed Marks and 9 ame as E1hibit " as amended from time"to"time, which documents are incorporated herein by reference as though fully set forth herein.

9. LICENSE FEE

Controlled Affiliate will pay to BCBSA a fee for this License determined pursuant to the formula(s) set forth in E1hibit B.

10. JOINT VENTURE

9 othing contained in this Agreement shall be construed as creating a 4oint venture, partnership, agency or employment relationship between the Controlling Plans and Controlled Affiliate or between either and BCBSA.

11. NOTICES AND CORRESPONDENCE

9 otices regarding the sub4ect matter of this Agreement or breach or termination thereof shall be in writing and shall be addressed in duplicate to the last known address of each other party, marked respectively to the attention of its President and, if any, its - eneral Counsel.

12. COMPLETE AGREEMENT

This Agreement contains the complete understandings of the parties in relation to the sub4ect matter hereof. This Agreement may only be amended by the affirmative vote of three"fourths of the Plans and three"fourths of the total then current weighted vote of all the Plans as officially recorded by the BCBSA Corporate Secretary.

13. SEVERABILITY

O f any term of this Agreement is held to be unlawful by a court of competent 4urisdiction, such findings shall in no way affect the remaining obligations of the parties hereunder and the court may substitute a lawful term or condition for any unlawful term or condition so long as the effect of such substitution is to provide the parties with the benefits of this Agreement.

14. NONWAIVER

9 o waiver by BCBSA of any breach or default in performance on the part of Controlled Affiliate or any other licensee of any of the terms, covenants or conditions of this Agreement shall constitute a waiver of any subsequent breach or default in performance of said terms, covenants or conditions.

14A. VOTING

2or all provisions of this Agreement referring to voting, the term 'Plans5shall mean all entities licensed under the Blue Cross License Agreement and/or the Blue Shield License Agreement, and in all votes of the Plans under this Agreement the Plans shall vote together. 2or weighted votes of the Plans, the Plan shall have a number of votes equal to the number of weighted votes (if any) that it holds as a Blue Cross Plan plus the number of weighted votes (if any) that it holds as a Blue Shield Plan. 2or all other votes of the Plans, the Plan shall have one vote. 2or all questions requiring an affirmative three"fourths weighted vote of the Plans, the requirement shall be deemed satisfied with a lesser weighted vote unless the greater ofx(i) %"Gor more of the Plans (rounded to the nearest whole number, with z." or multiples thereof being rounded to the ne1t higher whole number) fail to cast weighted votes in favor of the question; or (ii) three (0) of the Plans fail to cast weighted votes in favor of the question. 9 otwithstanding the foregoing provision, if there are thirty"nine (08) Plans, the requirement of an affirmative three"fourths weighted vote shall be deemed satisfied with a lesser weighted vote unless four (') or more Plans fail to cast weighted votes in favor of the question.

15. GOVERNING LAW

This Agreement shall be governed by, and construed and interpreted in accordance with, the laws of the State of 0linois.

16. HEADINGS

The headings inserted in this agreement are for convenience only and shall have no bearing on the interpretation hereof.

Ø WCT9 ESS WHERE7 2, the parties have caused this License Agreement to be e1ecuted and effective as of the date of last signature written below.

Controlled Affiliate:

Byx__

Datex__

Controlling Plan:

Byx__

Datex__

Controlling Plan:

Byx__

Datex__

BLUE CROSS AND BLUE SHIELD ASSOCIATION

Byx__

Datex__

EXHIBIT A

CONTROLLED AFFILIATE LICENSE STANDARDS APPLICABLE TO REGIONAL MEDICARE PART D PRESCRIPTION DRUG PLAN PRODUCTS November 2016

PREAMBLE

The standards for licensing Controlled Affiliates for Medicare Part D Prescription Drug Plan Products are established by BCBSA and are sub4ect to change from time"to"time upon the affirmative vote of three"fourths (0/') of the Plans and three"fourths (0/') of the total weighted vote. Each Controlling Plan is required to use a standard Controlled Affiliate license form provided by BCBSA and to cooperate fully in assuring that the licensed Controlled Affiliate maintains compliance with the license standards.

Standard 1 - Organization and Governance

A Controlled Affiliate is defined as an entity organiIed and operated in such a manner, that it meets the following requirementsx

(N) Controlled Affiliate is owned or controlled by two or more Controlling Plans;

(G) Each Controlling Plan is authoriIed pursuant to a separate Blue Shield License Agreement to use the Licensed Marks in a geographic area in the Region and every geographic area in the Region is so licensed to at least one of the Controlling Plans; and

(0) The Controlling Plans must have the legal authority directly or indirectly through wholly"owned subsidiariesx

(a) to select members of the Controlled Affiliate5s governing body having not less than Nzz' voting control thereof;

(b) prevent any change in the articles of incorporation, bylaws or other establishing or governing documents of the Controlled Affiliate with which the Controlling Plans do not concur;

(c) e1ercise control over the policy and operations of the Controlled Affiliate; and

EXHIBIT A (continued)

9 otwithstanding anything to the contrary in (a) through (c) hereof, the Controlled Affiliate5s establishing or governing documents must also require written approval by each of the Controlling Plans before the Controlled Affiliate canx

(i) change its legal and/or trade names;

(ii) change the geographic area in which it operates (e1cept such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iii) change any of the type(s) of businesses in which it engages (e1cept such approval shall not be required with respect to business of the Controlled Affiliate conducted under the Licensed Marks within the Service Area of one of the Controlling Plans pursuant to a separate controlled affiliate license agreement with BCBSA sponsored by such Controlling Plan);

(iv) take any action that any Controlling Plan or BCBSA reasonably believes will adversely affect the Licensed Marks and 9 ame.

0n addition, the Controlling Plans directly or indirectly through wholly"owned subsidiaries shall own Nzz' of any for"profit Controlled Affiliate.

Standard 2 - Financial Responsibility

A Controlled Affiliate shall be operated in a manner that provides reasonable financial assurance that it can fulfill all of its contractual obligations to its customers.

Standard 3 - State Licensure/Certification

A Controlled Affiliate shall maintain appropriate and unimpaired licensure and certifications.

EXHIBIT A (continued)

Standard 4 - Certain Disclosures

A Controlled Affiliate shall make adequate disclosure in contracting with third parties and in disseminating public statements ofx

a. the structure of the Blue Cross and Blue Shield System; and
b. the independent nature of every licensee.

Standard 5 - Reports and Records for Controlled Affiliates

A Controlled Affiliate and/or its Controlling Plans shall furnish, on a timely and accurate basis, reports and records relating to these Standards and the License Agreements between BCBSA and Controlled Affiliate.

Standard 6 - Best Efforts

During each year, a Controlled Affiliate shall use its best efforts to promote and build the value of the Blue Shield Marks.

Standard 7 - Participation in Master Business Associate Agreement

Controlled Affiliates shall comply with the terms of the Business Associate Agreement for Blue Cross and Blue Shield Licensees to the e1tent they perform the functions of a business associate or subcontractor to a business associate, as defined by the Business Associate Agreement.

EXHIBIT B

**ROYALTY FORMULA FOR SECTION 9 OF THE
CONTROLLED AFFILIATE LICENSE AGREEMENTS
APPLICABLE TO REGIONAL MEDICARE PART D PRESCRIPTION DRUG PLAN PRODUCTS**

Controlled Affiliate will pay BCBSA a fee for this license in accordance with the following formulax

An amount equal to its pro rata share of each Controlling Plan dues payable to BCBSA computed with the addition of the Controlled Affiliatejs members using the Marks on regional PDP products and related services as reported on the Quarterly Enrollment Report with BCBSA. The payment by each Controlling Plan of its dues to BCBSA, including that portion described in this paragraph, will satisfy the requirement of this paragraph, and no separate payment will be necessary.

Amended as of June 14, 2007

EXHIBIT 2

Membership Standards Page Nof "

Preamble

The Membership Standards apply to all organiIations seeking to become or to continue as Regular Members of the Blue Cross and Blue Shield Association. Any organiIation seeking to become a Regular Member must be found to be in substantial compliance with all Membership Standards at the time membership is granted and the organiIation must be found to be in substantial compliance with all Membership Standards for a period of two (G) years preceding the date of its application. G Membership is sought by an entity which controls or is controlled by one or more Plans, such compliance shall be determined on the basis of compliance by such Plan or Plans.

The Regular Member Plans shall have authority to interpret these Standards.

A Regular Member Plan that operates as a FShell Holding Company: is defined as an entity that assumes no underwriting risk and has less than N of the consolidated enterprise assets (e1cludes investments in subsidiaries) and less than "' of the consolidated enterprise net general and administrative e1penses.

A Regular Member Plan that operates as a FHybrid Holding Company: is defined as an entity that assumes no underwriting risk and has either more than N of the consolidated enterprise assets (e1cludes investments in subsidiaries) or more than "' of the consolidated enterprise net general and administrative e1penses.

Standard Nx A Plan shall maintain a governing Board, which shall control the Plan and ensure that the Plan follows appropriate practices of corporate governance. A Planjs Board shall not be controlled by any special interest group, shall make an annual determination that a ma4ority of its directors are independent, and shall act in the best interest of its Corporation and its customers. The Board shall be composed of a ma4ority of persons other than providers of health care services, who shall be known as public members. A public member shall not be an employee of or have a financial interest in a health care provider, nor be a member of a profession which provides health care services.

Amended as of March 15, 2007

EXHIBIT 2
Membership Standards
Page Gof "

Standard Gx A Plan shall furnish to the Association on a timely and accurate basis reports and records relating to compliance with these Standards and the License Agreements between the Association and the Plans. Such reports and records are the followingx

A. BCBSA Membership Gnformation Request;

B. Triennial trade name and service mark usage material, including disclosure material under Standard 3;

C. Changes in the governance of the Plan, including changes in a Planjs Charter, Articles of Gncorporation, or Bylaws, changes in a Planjs Board composition, or changes in the identity of the Planjs Principal 7 fficers;

D. Quarterly 2inancial Report, Semi"annual FHealth Risk"Based Capital (HRBC) Report: as defined by the 9 AGC, Annual Budget, Annual Certified Audit Report, Gnsurance Department E1amination Report, Annual Statement filed with State Gnsurance Department (with all attachments), Plan, Subsidiary and Affiliate Report; and

- Plans that are a Shell Holding Company as defined in the Preamble hereto are required to furnish only a calendar year"end FHealth Risk"Based Capital (HRBC) Report: as defined by the 9 AGC.

Amended as of November 17, 2011

EXHIBIT 2

Membership Standards Page 0 of "

E. Quarterly Enrollment Report, Quarterly Member Touchpoint Measures Ordel (MTM) through NG0NGzNN, and Semiannual MTM Ordel starting NNGzNGand thereafter.

- 2or purposes of MTM reporting only, a Plan shall file a separate MTM report for each - eographic Market.

Standard 0x A Plan shall be operated in a manner that provides reasonable financial assurance that it can fulfill its contractual obligations to its customers.

Standard ' x A Plan shall be operated in a manner responsive to customer needs and requirements.

Standard "x A Plan shall effectively and efficiently participate in each national program as from time to time may be adopted by the Member Plans for the purposes of providing portability of membership between the Plans and ease of claims processing for customers receiving benefits outside of the Planjs Service Area.

Such programs are applicable to Blue Cross and Blue Shield Plans, and includex

A. Oter'Plan Teleprocessing System (OTS);
B. BlueCard Program;
C. 9 ational Account Programs;
D. Business Associate Agreement for Blue Cross and Blue Shield Licensees, effective April N', Ozz0; and
E. Oter'Plan Medicare Advantage Program.

Amended as of November 21, 2014

EXHIBIT 2

Membership Standards Page ' of "

Standard %x 0n addition to requirements under the national programs listed in Standard "xParticipation in 9 ational Programs, a Plan shall take such action as required to ensure its financial performance in programs and contracts of an inter'Plan nature or where the Association is a party.

Standard 3x A Plan shall make adequate disclosure in contracting with third parties and in disseminating public statements of (i) the structure of the Blue Cross and Blue Shield System, (ii) the independent nature of every Plan, and (iii) the Planjs financial condition.

Standard 6x A Plan shall cooperate with the Associationjs Board of Directors and its Brand Enhancement & Protection Committee in the administration of the Plan Performance Response Process and in addressing Plan performance problems identified thereunder.

Standard 8x A Plan shall obtain a rating of its financial strength from an independent rating agency approved by the Associationjs Board of Directors for such purpose.

Standard Nzx 9 otwithstanding any other provision in this License Agreement, during each year, a Plan and its Controlled Affiliate(s) engaged in providing licensable services (e1cluding Life 0nsurance and Charitable 2oundation Services) shall use their best efforts to promote and build the value of the Blue Shield Marks.

Standard NNx 9 either a Plan nor any Larger Controlled Affiliate shall cause or permit an entity other than a Plan or a Licensed Controlled Affiliate thereof to obtain control of the Plan or Larger Controlled Affiliate or to acquire a substantial portion of its assets related to licensable services.

Amended as of June 16, 2005

EXHIBIT 2

Membership Standards Page " of "

Standard NGx 9 o provider network, or portion thereof, shall be rented or otherwise made available to a 9 ational Competitor if the Licensed Marks or 9 ames are used in any way with such network.

A provider network may be rented or otherwise made available, provided there is no use of the Licensed Marks or 9 ames with respect to the network being rented.

Standard N0x Each Plan shall operate in a manner to reasonablyxN) protect the security and confidentiality of Personally 0dentifiable 0nformation (P00) and Protected Health 0nformation (PHO; G) protect the Brands from reputational damage; and 0) cooperate with BCBSA and other Plans if a data security incident or data breach occurs.

Amended as of June 18, 2015

EXHIBIT 3

**GUIDELINES WITH RESPECT TO USE OF
LICENSED NAME AND MARKS IN CONNECTION WITH NATIONAL ACCOUNTS**

Page Nof 0

N The strength of the Blue Cross/Blue Shield 9 ational Accounts mechanism, and the continued provision of cost effective, quality health care benefits to 9 ational Accounts, are predicated on locally managed provider networks coordinated on a national scale in a manner consistent with effective service to 9 ational Account customers and consistent with the preservation of the integrity of the Blue Cross/Blue Shield system and the Licensed Marks. These guidelines shall be interpreted in keeping with such ends.

G A 9 ational Account is an entity with employee and/or retiree locations in more than one Planjs Service Area. Unless otherwise agreed, a 9 ational Account is deemed located in the Service Area in which the corporate headquarters of the 9 ational Account is located. A local plant, office or division headquarters of an entity may be deemed a separate 9 ational Account when that local plant, office or division headquarters N) has employee locations in more than one Service Area, and G) has independent health benefit decision"making authority for the employees working at such local plant, office or division headquarters and for employees working at other locations outside the Service Area. On such a case, the local plant, office or division headquarters is a 9 ational Account that is deemed located in the Service Area in which such local plant, office or division headquarters is located. The Control Plan of a 9 ational Account is the Plan in whose Service Area the 9 ational Account is located. A participating ("Par") Plan is a Plan in whose Service Area the 9 ational Account has employee and/or retiree locations, but in which the 9 ational Account is not located. On the event that a 9 ational Account parent company consolidates health benefit"decision making for itself and its wholly"owned subsidiary companies, the parent company and the subsidiary companies shall be considered one 9 ational Account. The Control Plan for such a 9 ational Account shall be the Plan in whose Service Area the parent company headquarters is located.

0. The 9 ational Account - uidelines enunciated herein below shall be applicable only with respect to the business of new 9 ational Accounts acquired after January N, N88N

'. Control Plans shall utiliIe 9 ational Account identification cards complying with
then currently effective BCBSA graphic standards in connection with all 9 ational Accounts business to facilitate administration thereof, to minimiIe subscriber and provider confusion, and to reflect a commitment to cooperation among Plans.

Amended as of June 12, 2003

Exhibit 3 Page Gof 0

“. Disputes among Plans and/or BCBSA as to the interpretation or implementation of these - uidelines or as to other 9 ational Accounts issues shall be submitted to mediation and mandatory dispute resolution as provided in the License Agreement. 2or two years from the effective date of the License Agreement, however, such disputes shall be sub4ect to mediation only, with the results of such mediation to be collected and reported in order to establish more definitive operating parameters for 9 ational Accounts business and to serve as ground rules for future binding dispute resolution.

% The Control Plan may use the BlueCard Program (as defined by OPPC) to deliver benefits to employees and non’Medicare eligible retirees in a Participating Plan5s service area if an alternative arrangement with the Participating Plan cannot be negotiated. The Participating Plan5s minimum servicing requirement for those employees and non’Medicare retirees in its service area is to deliver benefits using the BlueCard Program. Account delivery is sub4ect to the policies, provisions and procedures of the BlueCard Program.

3. 2or provider payments in a Participating Plan5s area (on non’BlueCard claims), payment to the provider may be made by the Participating Plan or the Control Plan at the Participating Planjs option. Of the Participating Plan elects to pay the provider, it may not withhold payment of a claim verified by the Control Plan or its designated processor, and payment must be in conformity with service criteria established by the Board of Directors of BCBSA (or an authoriIed committee thereof) to assure prompt payment, good service and minimum confusion with providers and subscribers. The Control Plan, at the Participating Planjs request, will also assure that measures are taken to protect the confidentiality of the data pertaining to provider reimbursement levels and profiles.

Amended as of June 14, 1996

Exhibit 3 Page 0 of 0

6. The Control Plan, in its financial agreements with a 9 ational Account, is e1pected to reasonably reflect the aggregate amount of differentials passed along to the Control Plan by all Participating Plans in a 9 ational Account.

8. 7 ther than in contracting with health care providers or soliciting such contracts in areas contiguous to a Planjs Service Area in order to serve its subscribers or those of its licensed Controlled Affiliate residing or working in its Service Area, a Control Plan may not use the Licensed Marks and/or 9 ame, as a tag line or otherwise, to negotiate directly with providers outside its Service Area.

Amended as of March 13, 2003

EXHIBIT 4

GOVERNMENT PROGRAMS AND CERTAIN OTHER USES

Page Nof N'

N A Plan and its licensed Controlled Affiliate may use the Licensed Marks and 9 ame in bidding on and e1ecuting a contract to serve a - overnment Program, and in thereafter communicating with the - overnment concerning the Program. With respect, however, to such contracts entered into after the N-st day of January, N88N, the Licensed Marks and 9 ame will not be used in communications or transactions with beneficiaries or providers in the - overnment Program located outside a Planjs Service Area, unless the Plan can demonstrate to the satisfaction of BCBSAjs governing body that such a restriction on use of the Licensed Marks and 9 ame will 4eopardiIe its ability to procure the contract for the - overnment Program. As to both e1isting and future contracts for - overnment Programs, Plans will discontinue use of the Licensed Marks and 9 ame as to beneficiaries and Providers outside their Service Area as e1peditiously as circumstances reasonably permit. Effective January N, N88", e1cept as provided in the first sentence above, all use by a Plan of the Licensed Marks and 9 ame in - overnment Programs outside of the Planjs Service Area shall be discontinued. 0ncidental communications outside a Planjs Service Area with resident or former resident beneficiaries of the Plan, and other categories of necessary incidental communications approved by BCBSA, are not prohibited. 2or purposes of this Paragraph N, the term F- overnment Programs: shall mean Medicare Part A, Medicare Part B and other non'risk government programs.

G 0n connection with activity otherwise in furtherance of the License Agreement, a Plan and its Controlled Affiliates that are licensed to use the Licensed Marks and 9 ame in its Service Area pursuant to the Controlled Affiliate License Agreements authoriIed in clauses a) through c) of Paragraph Gof the Plan5s License Agreement with BCBSA may use the Licensed Marks and 9 ame outside the Plan5s Service Area in the following circumstances which are deemed legitimate and necessary and not likely to cause consumer confusionx

GN Common Business Communications

a. sending letterhead, envelopes, and similar items solely for administrative purposes (e.g., not for purposes of marketing, advertising, promoting, selling or soliciting the sale of health care plans and related services);

b. distributing business cards other than in marketing and selling;

c. advertising in publications or electronic media solely to persons for employment;

Amended as of June 19, 2014

EXHIBIT 4 Page Gof N

GG Marketing Spillover

a. advertising in print, electronic or other media which serve, as a substantial market, the Service Area of the Plan or licensed Controlled Affiliate, provided that no Plan or Controlled Affiliate may advertise outside its Service Area on the national broadcast and cable networks and that advertisements in national print media are limited to the smallest regional edition encompassing the Service Area;

b. advertising by direct mail where the addresseejs I ip code plus ' includes, at least in part, the Planjs Service Area or that of a licensed Controlled Affiliate;

G0 Provider Contracting

a. contracting with health care providers or soliciting such contracts in areas contiguous to the Planjs Service Area in order to serve its subscribers or those of such licensed Controlled Affiliates residing or working in its service area;

b. issuing a small sign containing the legal name or trade name of the Plan or such licensed Controlled Affiliates for display by a provider to identify the latter as a participating provider of the Plan or Controlled Affiliate;

c. negotiating rates with a health care provider for services to a specific member, provided that all of the following conditions are metx

(N) the health care provider does not have a contract, applicable to the services rendered or to be rendered, with the Licensee (or any of the Licensees in the case of overlapping Service Areas) in whose Service Area the health care provider is located; and

(G) the Plan or Controlled Affiliate reasonably determines that the member did/does not have a reasonable opportunity to access a participating provider whose contract applies to the services rendered or to be rendered; and

(0) at least one of the following circumstances e1istsx

Amended as of June 19, 2014

EXHIBIT 4

Page 0 of N

(i) the member received emergency services and the Plan or Controlled Affiliate knows or reasonably anticipates that the charges on the claim will meet or e1ceed $“,zzz; or

(ii) a provider, in consultation pre”or post”treatment with the Plan or Controlled Affiliate, makes/made a treatment recommendation or referral to a non”par provider or to a par provider whose contract does not apply to the services to be rendered; or

(iii) the member inadvertently accessed a non”par provider or non”contracted services in the course of receiving services from a par provider (e.g., the member sees a non”par consulting specialist in a participating hospital); and

(’) the Licensee (and in the case of overlapping Service Areas, all of the Licensees) in whose Service Area the health care provider is located consent(s) in advance.

d. contracting with a pharmacy management organiIation (FPharmacy 0ntermediary:) to gain access to a national or regional pharmacy network to provide self”administered prescription drugs to deliver a pharmacy benefit for all of the Plan5s or licensed Controlled Affiliate5s members nationwide, provided, however, that the Pharmacy 0ntermediary may not use the Licensed Marks or 9 ame in contracting with the pharmacy providers in such network;

Amended as of June 19, 2014

EXHIBIT 4

Page ’ of N’

e. contracting with the corporate owner of a national or regional retail pharmacy chain to gain access to the pharmacies in the chain to provide self’administered prescription drugs to deliver a pharmacy benefit for all of the Plan5s or licensed Controlled Affiliate5s members nationwide, provided that (N) the Plan and the Controlled Affiliate may not contract directly with pharmacists or pharmacy stores outside the Plan5s Service Area, and (G) neither the Plan5s or the Controlled Affiliate5s name nor the Licensed Marks or 9 ame may be posted or otherwise displayed at or by any pharmacy store outside the Plan5s Service Area;

f. contracting with a dental management organiIation (FDental 0ntermediary:) to gain access to a national or regional dental network to deliver a routine dental benefit for all of the Plan5s or licensed Controlled Affiliate5s members nationwide, provided, however, that the Dental 0ntermediary may not use the Licensed Marks or 9 ame in contracting with the dental providers in such network;

g. contracting with a vision management organiIation (FVision 0ntermediary:) to gain access to a national or regional vision network to deliver a routine vision benefit for all of the Plan5s or licensed Controlled Affiliate5s members nationwide, provided, however, that the Vision 0ntermediary may not use the Licensed Marks or 9 ame in contracting with the vision providers in such network;

h. contracting with an independent clinical laboratory for analysis and clinical assessment of specimens that are collected within the Plan5s Service Area;

i. contracting with a durable medical equipment or home medical equipment company for durable medical equipment and supplies and home medical equipment and supplies that are shipped to a location within the Plan5s Service Area;

4 contracting with a specialty pharmaceutical company for non’routine biological therapeutics that are ordered by a health care professional located within the Plan5s Service Area;

EXHIBIT 4 Page " of N'

k. contracting with a company that operates provider sites in the Plan5s Service Area, provided that the contract is solely for services rendered at a site (e.g., hospital, mobile van) that is within the Plan5s Service Area;

l. contracting with a company that makes health care professionals available in the Plan5s Service Area (e.g., traveling home health nurse), provided that the contract is solely for services rendered by health care professionals who are located within the Plan5s Service Area.

G' Services to 9 ational Accounts

a. in con4unction with contracting with a 9 ational Account as Control Licensee or Alternate Control Licensee (as those terms are defined in the Oter"Plan Programs Policies and Provisions (FOP Policies:)) to offer Blue"branded Health Coverage to the 9 ational Account, offering Blue"branded Health and Wellness Programs to all members of the 9 ational Account, including members who have not enrolled in the Blue" branded Health Coverage (Fnon"Blue Health Coverage members:), provided thatx

(i) the Plan and/or Licensed Controlled Affiliate has no contact or interaction with providers outside of the Plan5s Service Area, e1cept as specifically provided in the OP Policies and in G' (b); and

(ii) if in accordance with OP Policies another Licensee is soliciting or servicing under the Brands a local plant, office or division of the account that is outside of the Plan5s Service Area, the Plan and/or licensed Controlled Affiliate may not offer Blue"branded Health and Wellness Programs to any employees working at such local plant, office or division without the consent of such other Licensee; and

(iii) if the Plan and/or licensed Controlled Affiliate provides an information card to the non"Blue Health Coverage members, the card may not display the Symbols in the masthead, must contain a prominent disclosure conveying that it is not a health insurance card, and otherwise must be designed so that it is dissimilar to a Blue member identification card.

Amended as of March 26, 2015

EXHIBIT 4 Page %of N

2or purposes of this subparagraph a, the following definitions applyx

"Health and Wellness Program" shall mean a program that includes at least one of the following elements or a related elementx

– Health Risk Assessment and/or Preventive Screenings
– E1ercise and 2itness Programs
– Health and Wellness Events (e.g., attendance at a health fair, a "K walk)
– 9utrition and Weight Management
– Health Education (e.g., smoking cessation classes)
– Prenatal and Parenting Education
– Disease or Chronic Condition Management

The above listing is intended to represent e1amples of the types of programs that may be offered, and other programs, including those offered through different media such as the internet or telephonically, may also be deemed Health and Wellness programs.

"Health Coverage" shall mean providing or administering medical, surgical, hospital, ma4or medical, or catastrophic coverage, or any HM7 , PP7 , P7 S or other managed care plan for the foregoing services.

G' Services to 9ational Accounts (continued)

b. as part of a Health and Wellness Program that is otherwise compliant with Brand Regulation ' .NN' (a), contracting with a health and wellness organiIation to gain access to providers to deliver a discrete health and wellness event (FEvent:) held at a 9ational Account5s worksite outside of the Licensee5s Service Area, provided thatx

(i) the services delivered at the Event are limited to fingerstick screenings for cholesterol and glucose, seasonal flu immuniIations, blood pressure measurements, body mass inde1 measurements, and other routine screenings, immuniIations and measurements; and

(ii) neither such services nor their costs are applied as claims against any benefit plan; and

(iii) the Event is presented during one or more limited periods during a benefit year and is available to all employees at the worksite.

Amended as of March 26, 2015

c. in con4unction with contracting with a 9 ational Account as Control Licensee or Alternate Control Licensee to offer Blue"branded Health Coverage to the 9 ational Account, performing the Eligibility and Enrollment functions of HR administration for all benefit plans offered by the 9 ational Account to its members, including benefit plans that are not underwritten or administered by the Plan, provided thatx

(i) in performing such functions, the Plan and/or licensed Controlled Affiliate does not use the Brands in any communications with health care providers outside of the Plan5s Service Area, and otherwise limits its use of the Brands outside of the Service Area to communications with the account5s members, the other benefit plan providers with which the account has contracted and other reasonably necessary communications to perform such functions; and

(ii) if in accordance with O" Policies another Licensee is soliciting or servicing under the Brands a local plant, office or division of the account that is outside of the Plan5s Service Area, the Plan and/or licensed Controlled Affiliate may not perform Eligibility and Enrollment functions for employees working at such local plant, office or division without the consent of such other Licensee;

2or purposes of this subparagraph b, the following definitions applyxFHealth Coverage: has the meaning set forth in subparagraph

G" .a.

Amended as of March 26, 2015

EXHIBIT 4
Page 6 of N

FEligibility: means services that manage the account5s eligibility data and determine or process determinations relating to eligibility for benefit plans offered by the account to its employees, including such services asx

- monitoring and auditing data to ensure that only entitled individuals are enrolled in each such benefit plan;
- review of eligibility documentation (e.g. marriage licenses, birth certificates, student status verification letters, employment records);
- identification of key member segments such as over"age dependents, part"time employees, employees reaching certain milestones (e.g. Medicare"eligible, retirees);
- termination of coverage for those individuals found to be ineligible for coverage under a benefit plan, and, if applicable, generation of a C7 BRA event; and
- management of Fhour"banking: for union environments in which union members can bank hours to remain eligible for benefits.

FEnrollment: means services that enroll eligible individuals and their spouses/dependents or terminate or change their enrollment in the account5s benefit plans on an ongoing basis and during open enrollment periods, including such services asx

- the coordination of each step in open enrollment process from pro4ect planning and system set"up to the generation of confirmation statements;
- ongoing enrollment support for new hires and changes due to life events and work status ad4ustments;
- evidence of insurability (E7 O) administration for life and disability coverage;
- transmission of eligibility/enrollment information to the account5s benefit plan providers;
- review and reconciliation of error reports received from the account5s benefit plan providers; and
- transmission of information to the account5s payroll system (e.g., benefit deductions, employee demographic data).

Amended as of March 26, 2015

EXHIBIT 4 Page 8 of N

G“ Knowledge Sharing

a. submitting scholarly articles authored or co”authored by the Plan or Controlled Affiliate or its respective employees for publication in peer”reviewed 4ournals;

b. permitting an internal representative of the Licensee (e.g., officer, employee) to speak or present at a conference or symposium outside of the Licensee5s Service Area regarding either (i) healthcare financing, administration, delivery or policy, or (ii) topics within the representative5s functional discipline or e1pertise at the Licensee, for which the event sponsor will issue communications to promote, administer, and/or recap the event that will identify the Licensee5s representative as a participant. The communications outside of the Licensee5s Service Area that mention the Licensee5s representative shall be limited to materials and digital media provided to attendees, on”site signage, advertising in relevant trade publications, direct mail and email to attendees and prospective attendees, and the sponsor5s website, Participation in any conference or symposium outside of the Licensee5s Service Area may not be for the purpose of marketing or selling products or services.

Of the Licensee5s representative wishes to use the Brands in any manner, including use in his/her title, when participating as a speaker or presenter outside of the Licensee5s Service Area about a topic that is not related to healthcare financing, administration, delivery, or policy, or to topics within the representative5s functional discipline or e1pertise at the Licensee, the Licensee must notify BCBSA and receive prior approval from BCBSA before participating.

Amended as of March 26, 2015

EXHIBIT 4 Page Nz of N

G% 7 ther Uses

a. entering into a license agreement between and among BCBSA, the Plan and a debit card issuer located outside the Plan5s Service Area, and entering into a corresponding operating agreement or agreements, in order to offer a debit card bearing the Licensed Marks and 9 ame to eligible persons as defined by the aforementioned license agreement;

b. appearing in communications issued by an independent third party to recogniI e outstanding performance of the Plan or Controlled Affiliate or a member of the Plan5s or Controlled Affiliate5s senior management as part of an established program of the third party for which the Plan has provided information to be considered for the recognition, provided that such use complies with regulations of general application specifically prescribed by BCBSA from time to time;

c. to identify itself as being a 4oint sponsor of an event, program or activity along with other Plans or such Plans5 licensed Controlled Affiliates, provided that such use complies with regulations of general application specifically prescribed by BCBSA from time to time;

d. hosting meetings or events (collectively, Fevents:) in Washington, D.C. related to policy and business issues in the Licensee5s Service Area, or hosting events in con4unction with the assemblies or conventions of national political parties. Such events may not involve marketing or selling products or services. Use of the Brands outside the Licensee5s Service Area in connection with such events shall be limited to materials and digital media provided to attendees and prospective attendees and onsite signage. 2or any such events in Washington, D.C. that are open to attendees other than government officials or their staffs, or are briefings open to all Congressional staff, or are otherwise likely to receive media coverage, the Licensee is required to provide advance notice to BCBSA. 2or events hosted outside of Washington, D.C. in con4unction with the assemblies or conventions of national political parties, the Licensee is required to provide advance notice to BC- SA and to the local Plan;

Amended as of March 26, 2015

EXHIBIT 4 Page N Nof N

e. permitting an affiliate that is not licensed to use the Licensed Marks to identify its corporate relationship with the Plan, provided that such use complies with regulations of general application specifically prescribed by BCBSA from time to time.

0. On connection with activity otherwise in furtherance of the License Agreement, a Controlled Affiliate that is licensed to use the Licensed Marks and 9 ame pursuant to a Controlled Affiliate License Agreement authoriIed in clauses d) or e) of Paragraph Gof the Plan5s License Agreement with BCBSA may use the Licensed Marks and 9 ame outside the Region (as that term is defined in such respective Controlled Affiliate License Agreements) in the following circumstances which are deemed legitimate and necessary and not likely to cause consumer confusionx

a. sending letterhead, envelopes, and similar items solely for administrative purposes (e.g., not for purposes of marketing, advertising, promoting, selling or soliciting the sale of health care plans and related services);

b. distributing business cards other than in marketing and selling;

c. contracting with health care providers or soliciting such contracts in areas contiguous to the Region in order to serve its subscribers residing in the Region, provided that the Controlled Affiliate may not use the names of any of its Controlling Plans in connection with such contracting unless the provider is located in a geographic area that is also contiguous to such Controlling Plan5s Service Area;

d. issuing a small sign containing the legal name or trade name of the Controlled Affiliate for display by a provider to identify the latter as a participating provider of the Controlled Affiliate, provided that the Controlled Affiliate may not use the names of any of its Controlling Plans on such signs unless the provider is located in a geographic area that is also contiguous to such Controlling Plan5s Service Area;

e. advertising in publications or electronic media solely to persons for employment;

Amended as of March 26, 2015

EXHIBIT 4

Page NGof N'

f. advertising in print, electronic or other media which serve, as a substantial market, the Region, provided that the Controlled Affiliate may not advertise outside its Region on the national broadcast and cable networks and that advertisements in national print media are limited to the smallest regional edition encompassing the Region, and provided further that any such advertising by the Controlled Affiliate may not reference the name of any of its Controlling Plans unless the respective Controlling Plan is authoriIed under paragraph Gof this E1hibit ' to advertise in such media;

g. advertising by direct mail where the addresseejs Iip code plus ' includes, at least in part, the Region, provided that such advertising by the Controlled Affiliate may not reference the name of any of its Controlling Plans unless the respective Controlling Plan is authoriIed under paragraph Gof this E1hibit ' to send direct mail to such Iip code plus ' .

h.]0tentionally left blank, pending review by the G1ter'Plan Programs Committee of the applicability of the case management rule to such Controlled Affiliates.®

i. contracting with a pharmacy management organiIation (FPharmacy G1termediary:) to gain access to a national or regional pharmacy network to provide self'administered prescription drugs to deliver a pharmacy benefit for the Controlled Affiliate5s regional Medicare Advantage PP7 or regional Medicare Part D Prescription Drug members enrolled under the Licensed Marks pursuant to such respective Controlled Affiliate License Agreements, provided, however, that the Pharmacy G1termediary may not use the Licensed Marks or 9 ame in contracting with the pharmacy providers in such network;

4 contracting with the corporate owner of a national or regional retail pharmacy chain to gain access to the pharmacies in the chain to provide self'administered prescription drugs to deliver a pharmacy benefit to the Controlled Affiliate5s regional Medicare Advantage PP7 or regional Medicare Part D Prescription Drug members enrolled under the Licensed Marks pursuant to such respective

EXHIBIT 4

Page N0 of N'

Controlled Affiliate License Agreements, provided that (N) the Controlled Affiliate may not contract directly with pharmacists or pharmacy stores outside the Region, and (G) neither the Controlled Affiliate5s name nor the Licensed Marks or 9 ame may be posted or otherwise displayed at or by any pharmacy store outside the Region;

k. contracting with a dental management organiI ation (FDental Ontermediary:) to gain access to a national or regional dental network to deliver a routine dental benefit for the Controlled Affiliate5s regional Medicare Advantage PP7 members enrolled under the Licensed Marks pursuant to such Controlled Affiliate License Agreement, provided, however, that the Dental Ontermediary may not use the Licensed Marks or 9 ame in contracting with the dental providers in such network;

l. contracting with a vision management organiI ation (FVision Ontermediary:) to gain access to a national or regional vision network to deliver a routine vision benefit for the Controlled Affiliate5s regional Medicare Advantage members enrolled under the Licensed Marks pursuant to such Controlled Affiliate License Agreement, provided, however, that the Vision Ontermediary may not use the Licensed Marks or 9 ame in contracting with the vision providers in such network;

m. contracting with an independent clinical laboratory for analysis and clinical assessment of specimens that are collected within the Controlled Affiliate5s Region;

n. contracting with a durable medical equipment or home medical equipment company for durable medical equipment and supplies and home medical equipment and supplies that are shipped to a location within the Controlled Affiliate5s Region;

o. contracting with a specialty pharmaceutical company for non'routine biological therapeutics that are ordered by a health care professional located within the Region;

p. contracting with a company that operates provider sites in the Region, provided that the contract is solely for services rendered at a site (e.g., hospital, mobile van) that is within the Region;

EXHIBIT 4 Page N of N

q. contracting with a company that makes health care professionals

available in the Region (e.g., traveling home health nurse), provided that the contract is solely for services rendered by health care professionals who are located within the Region.

'. BCBSA shall retain the right to use the Licensed Marks in con4unction with the 2ederal Employee Program and with any other national offering made to federal employees pursuant to the 2ederal Employees Health Benefits Program (2EHBP), including the right to license such use to its vendors, but only in the following manner.

a. the Licensed Marks may only be used by BCBSA with the term F2ederal Employee Program: , F2ederal: , F2EP: , or similar language identifying the program as a benefit program for federal employees;

b. the Licensed Marks may not be used by BCBSA with the name(s) of a specific Plan or Plans and;

c. any use by BCBSA in con4unction with a new national 2EHBP

program proposed after the enactment of this amendment will require the approval of the BCBSA Board of Directors.

". Where required by applicable state or local law or regulation, a Plan or its licensed Controlled Affiliate may submit documents that contain the Brands to, and file forms that contain the Brands with, state or local regulators in a state not included in its Service Area, provided that it gives reasonable advance notice to the local Plan of its intent to submit such documents or file such forms. 9 otwithstanding, in no event may a Plan or its licensed Controlled Affiliate use the Brands to register, or to obtain or maintain a license, a certificate of authority, or an equivalent document authoriI ing it to act as a risk'bearing entity or third party administrator in a state not included in its Service Area. Of the local Plan advises BCBSA that it believes its License Agreement has been or would be violated by any submission or filing, BCBSA shall determine whether such submission or filing is required by state or local law or regulation and violates the License Agreement, sub4ect to the Plan5s or licensed Controlled Affiliate5s rights to obtain an independent review of such determination under Paragraph 8(a) and E1hibit " of its License Agreement or Paragraph 6 of the Controlled Affiliate License. 2or purposes of this paragraph, Flocal Plan: is defined as each Plan whose Service Area includes all or part of the state in which the foregoing applicable state or local law or regulation has been enacted.

Amended as of March 26, 2015

EXHIBIT 5

Page Nof CO

MEDIATION AND MANDATORY DISPUTE RESOLUTION (MMDR) RULES

The Blue Cross and Blue Shield Plans ("Plans") and the Blue Cross Blue Shield Association ("BCBSA") recogniIe and acknowledge that the Blue Cross and Blue Shield system is a unique nonprofit and for"profit system offering cost effective health care financing and services. The Plans and BCBSA desire to utiliIe Mediation and Mandatory Dispute Resolution (FMMDR:) to avoid e1pensive and time"consuming litigation that may otherwise occur in the federal and state 4udicial systems. Even MMDR should be viewed, however, as methods of last resort, all other procedures for dispute resolution having failed. E1cept as otherwise provided in the License Agreements, the Plans, their Controlled Affiliates and BCBSA agree to submit all disputes to MMDR pursuant to these Rules and in lieu of litigation.

1. Initiation of Proceedings

A. Pre"MMDR Efforts

Before filing a Complaint to invoke the MMDR process, the CE7 of a complaining party, or his/her designated representative, shall undertake good faith efforts with the other side(s) to try to resolve any dispute.

B. Complaint

To commence a proceeding, the complaining party (or parties) shall provide by certified mail, return receipt requested, a written Complaint to the BCBSA Corporate Secretary (which shall also constitute service on BCBSA if it is a respondent) and to any Plan(s) and/or Controlled Affiliate(s) named therein. The Complaint shall containx

i. identification of the complaining party (or parties) requesting the proceeding;

ii. identification of the respondent(s);

iii. identification of any other persons or entities who are interested in a resolution of the dispute;

iv. a full statement describing the nature of the dispute;

v. identification of all of the issues that are being submitted for resolution;

Amended as of November 21, 1996

vi. the remedy sought;

vii. a statement as to whether the complaining party (or parties) elect(s) first to pursue Mediation;

viii. any request, if applicable, that the matter be handled on an e1pedited basis and the reasons therefor; and

i1. a statement signed by the CE7 of the complaining party affirming that the CE7 has undertaken efforts, or has directed efforts to be undertaken, to resolve the dispute before resorting to the MMDR process.

The complaining party (or parties) shall file and serve with the Complaint copies of all documents which the party (or parties) intend(s) to offer at the Arbitration Hearing and a statement identifying the witnesses the party (or parties) intend(s) to present at the Hearing, along with a summary of each witnessj e1pected testimony.

C. Answer

Within twenty (Gz) days after receipt of the Complaint, each respondent shall serve on BCBSA and on the complaining party (or parties)x

i. a full Answer to the aforesaid Complaint;

ii. a statement of any Counterclaims against the complaining party (or parties), providing with respect thereto the information specified in Paragraph NB., above;

iii. a statement as to whether the respondent elects to first pursue Mediation; and

iv. any request, if applicable, that the matter be handled on an e1pedited basis and the reasons therefor.

The respondent(s) shall file and serve with the Answer or by the date of the 0nitial Conference set forth in Paragraph 0.C., below, copies of all documents which the respondent(s) intend(s) to offer at the Arbitration Hearing and a statement identifying the witnesses the party (or parties) intend(s) to present at the Hearing, along with a summary of each witnessj e1pected testimony.

Amended as of September 20, 2007

EXHIBIT 5 Page 0 of C0

D. Reply To Counterclaim

Within ten (Nz) days after receipt of any Counterclaim, the complaining party (or parties) shall serve on BCBSA and on the responding party (or parties) a Reply to the Counterclaim. Such Reply must provide the same information required by Paragraph NC., above.

2. Mediation

To facilitate the mediation of disputes between or among BCBSA, the Plans and/or their Controlled Affiliates, the BCBSA Board has provided for Mediation under these Rules. Mediation may be pursued in lieu of or in an effort to obviate the Mandatory Dispute Resolution process, and all parties are strongly urged, but not required, to e1haust the mediation procedure provided for herein. C0 the event any party refuses to proceed with Mediation, the parties shall proceed immediately to Mandatory Dispute Resolution, as provided in Section 0.

A. Selection of Mediators

C0 all parties agree to pursue Mediation, they shall promptly attempt to agree uponx(i) the number of mediators desired, not to e1ceed three mediators; and (ii) the selection of e1perienced mediator(s) from an independent entity to mediate all disputes set forth in the Complaint and Answer (and Counterclaim and Reply, if any). C0 the event the parties are unable to agree upon the selection or number of mediators, both within five (“) days of the service of the Answer or Reply to Counterclaim, whichever is later, the BCBSA Corporate Secretary shall immediately refer the matter to a nationally recogniI ed professional ADR organiI ation (such as CPR or JAMS) for mediation by a single mediator to be selected by the ADR organiI ation.

B. Binding Decision

Before the Mediation Hearing described below, the BCBSA Corporate Secretary shall contact the parties to determine whether they wish to be bound by any recommendation of the selected mediator(s) for resolution of the disputes. C0 all wish to be bound, the Corporate Secretary will send appropriate documentation to them for their signatures before the Mediation Hearing begins.

Amended as of September 20, 2007

EXHIBIT 5 Page ’ of C0

C. Mediation Procedure

The Mediator(s) shall apply the mediation procedures and processes provided for herein (not the rules of the ADR organiIation with which they are affiliated) and shall promptly advise the parties of a scheduled Mediation Hearing date. Unless a party requests an e1pedited procedure, or unless all parties to the proceeding agree to one or more e1tensions of time, the Mediation Hearing set forth below shall be completed within forty (’ z) days of BCBSAjs receipt of the Complaint. The selected mediator(s), unless the parties otherwise agree, shall adhere to the following procedurex

i. Each party must be represented by its CE7 or other representative who has been delegated full authority to resolve the dispute. However, parties may send additional representatives as they see fit.

ii. Each party will be given one”half hour to present its case, beginning with the complaining party (or parties), followed by the other party or parties. The parties are free to structure their presentations as they see fit, using oral statements or direct e1amination of witnesses. However, neither cross”e1amination nor questioning of opposing representatives will be permitted. At the close of each presentation, the selected mediator(s) will be given an opportunity to ask questions of the presenters and witnesses. All parties must be present throughout the Mediation Hearing. The selected mediator(s) may e1tend the time allowed for each partyjs presentation at the Mediation Hearing. The selected mediator(s) may meet in e1ecutive session, outside the presence of the parties, or may meet with the parties separately, to discuss the controversy.

iii. After the close of the presentations, the parties will attempt to negotiate a settlement of the dispute. Of the parties desire, the selected mediators, or any one or more of the selected mediator(s), will sit in on the negotiations.

Amended as of September 20, 2007

iv. After the close of the presentations, the selected mediator(s) may meet privately to agree upon a recommendation for resolution of the dispute which would be submitted to the parties for their consideration and approval. Of the parties have previously agreed to be bound by the results of this procedure, this recommendation shall be binding upon the parties.

v. The purpose of the Mediation Hearing is to assist the parties to settle their grievances short of mandatory dispute resolution. As a result, the Mediation Hearing has been designed to be as informal as possible. Rules of evidence shall not apply. There will be no transcript of the proceedings, and no party may make a tape recording of the Mediation Hearing.

vi. On order to facilitate a free and open discussion, the Mediation proceeding shall remain confidential. A "Stipulation to Confidentiality" which prohibits future use of settlement offers, all position papers or other statements furnished to the selected mediator(s), and decisions or recommendations in any Mediation proceeding shall be e1ecuted by each party.

vii. Upon request of the selected mediator(s), or one of the parties, BCBSA staff may also submit documentation at any time during the proceedings.

D. 9 otice of Termination of Mediation

Of the Mediation cannot be completed within the prescribed or agreed time period due to the lack of cooperation of any party, as determined by the selected mediator(s), or if the Mediation does not result in a final resolution of all disputes at the Mediation Hearing or within ten (N2) days after the Mediation Hearing, any party or any one of the selected mediator(s) shall so notify the BCBSA Corporate Secretary, who shall promptly issue a 9 otice of Termination of Mediation to all parties, to the selected mediator(s), and to the MDR Administrator. Such notice shall serve to bring the Mediation to an end and to initiate Mandatory Dispute Resolution. Upon agreement of all parties and the mediator(s), the Mediation process may continue at the same time the MDR process is invoked. On such case, the 9 otice of Termination of Mediation described above serves to initiate the MDR proceeding, but does not terminate mediation proceedings, which may proceed simultaneous with the MDR proceeding.

Amended as of September 20, 2007

EXHIBIT 5 Page %of G0

3. Mandatory Dispute Resolution (MDR)

Of any party elects not to first pursue Mediation, or if a 9 otice of Termination of Mediation is issued as set forth in Paragraph GD., above, then the unresolved disputes set forth in any Complaint and Answer (and Counterclaim and Reply, if any) shall be sub4ect to mandatory binding arbitration (herein referred to as FMDR:).

A. MDR Administrator

The Administrator for purposes of Mandatory Arbitration shall be an independent nationally recogniIed entity such as CPR or JAMS, specialiIing in alternative dispute resolution. On the event the parties pursued Mediation with CPR, JAMS or a similar organiIation, that organiIation also shall serve as the MDR Administrator, unless all parties notify the BCBSA Corporate Secretary in writing within two (G) days of receiving the 9 otice of Termination of Mediation that they wish to pursue MDR with another nationally recogniIed organiIation serving as MDR Administrator.

On the event the parties (i) did not pursue Mediation, (ii) pursued mediation with a Mediator not affiliated with an ADR organiIation that offers a panel of arbitrators, or (iii) all parties that pursued Mediation notified the BCBSA Corporate Secretary that they wish to have an MDR Administrator that is different from the organiIation with which their mediator was affiliated, they shall promptly attempt to agree on a nationally recogniIed ADR entity that supplies a panel of arbitrators. Of they reach such agreement within five (“) days of the 9 otice of Termination of Mediation or receipt of the Answer or Reply to Counterclaim (whichever is later), the parties shall promptly inform the BCBSA Corporate Secretary of their agreed upon ADR organiIation. On the event the parties are unable to reach agreement on an MDR Administrator within that timeframe, the BCBSA Corporate Secretary shall immediately refer the matter to CPR, JAMS or a similar organiIation for MDR.

Any person who served as a Mediator shall not serve as an arbitrator for the same or similar dispute for purposes of MDR.

B. Rules for MDR

The rules controlling all aspects of MDR shall be e1clusively those provided for herein. The rules promulgated or otherwise used by the MDR Administrator organiIation shall not apply.

Amended as of September 20, 2007

EXHIBIT 5 Page 3 of CO

C. Qnitial Conference

Within seven (3) days after a 9 otice of Termination has issued, or the matter has otherwise been referred to an MDR Administrator, or within five (“) days after the time for filing and serving the Answer or Reply to any Counterclaim (whichever is later) if the parties elect first not to mediate, the parties shall confer with the Administrator to discuss selecting a dispute resolution panel ("the Panel"). This conference (the FQnitial Conference:) may be by telephone. The parties are encouraged to agree to the composition of the Panel and to present that agreement to the Administrator at the Qnitial Conference. Of the parties do not agree on the composition of the Panel by the time of the Qnitial Conference, or by any e1tension thereof agreed to by all parties and the Administrator, then the Panel Selection Process set forth in subparagraph D, below, shall be followed.

D. Panel Selection Process

The Administrator shall designate, prior to the Qnitial Conference, at least seven potential arbitrators. Each party shall be permitted to strike any designee for cause and the Administrator shall determine the sufficiency thereof in its sole discretion. The Administrator will designate a replacement for any designee so stricken. Each party shall then be permitted one peremptory strike from the list of designees. The Administrator shall set the dates for e1ercising all strikes, which shall be set to encourage the prompt selection of arbitrators.

After the parties e1ercise any designee strikes for cause and their peremptory strike against any designee of their choice, the parties shall each rank the remaining panel members in order of preference and provide the Administrator, without serving on any other party, their ranked list. The Administrator shall not disclose any party5s ranked list to members of the panel or to other parties.

2rom the remaining designees, and after considering opportunities to ma1imi1e, so far as possible, the collectively stated arbitrator preferences provided by the parties on their ranked lists, the Administrator shall select a three member Panel. The Panel Selection Process shall be completed no later than ten (Nz) days after the Qnitial Conference.

Each Arbitrator shall be compensated at his or her normal hourly rate or, in the absence of an established rate, at a reasonable hourly rate to be promptly fi1ed by the Administrator for all time spent in connection with the proceedings and shall be reimbursed for any travel and other reasonable e1penses.

Amended as of September 20, 2007

E. Duties 7 f The Arbitrators

The Panel shall promptly designate a Presiding Arbitrator for the purposes reflected below, but shall retain the power to review and modify any ruling or other action of said Presiding Arbitrator. Each Arbitrator shall be an independent Arbitrator, shall be governed by the Code of Ethics for Arbitrators in Commercial Disputes, and shall at or prior to the commencement of any Arbitration Hearing take an oath to that effect. Each Arbitrator shall promptly disclose in writing to the Panel and to the parties any circumstances, whenever arising, that might cause doubt as to such Arbitratorjs compliance, or ability to comply, with said Code of Ethics, and, absent resignation by such Arbitrator, the remaining Arbitrators shall determine in their sole discretion whether the circumstances so disclosed constitute grounds for disqualification and for replacement. With respect to such circumstances arising or coming to the attention of a party after an Arbitratorjs selection, a party may likewise request the Arbitratorjs resignation or a determination as to disqualification by the remaining Arbitrators. With respect to a sole Arbitrator, the determination as to disqualification shall be made by the Administrator.

There shall be no e1 parte communication between the parties or their counsel and any member of the Panel.

2. Paneljs Jurisdiction And Authority

The Paneljs 4urisdiction and authority shall e1tend to all disputes between or among the Plans, their Controlled Affiliates, and/or BCBSA, e1cept for those disputes e1cepted from these MMDR procedures as set forth in the License Agreements.

With the e1ception of punitive or treble damages, the Panel shall have full authority to award the relief it deems appropriate to resolve the partiesj disputes, including monetary awards and in4unctions, mandatory or prohibitory. The Panel has no authority to award punitive or treble damages e1cept that the Panel may allocate or assess responsibility for punitive or treble damages assessed by another tribunal. Sub4ect to the above limitations, the Panel may, by way of e1ample, but not of limitationx

Amended as of September 20, 2007

EXHIBIT 5 Page 8 of C0

i. interpret or construe the meaning of any terms, phrase or provision in any license between BCBSA and a Plan or a Controlled Affiliate relating to the use of the BLUE CR7 SSX or BLUE SHCELDX service marks.

ii. determine whether BCBSA, a Plan or a Controlled Affiliate has violated the terms or conditions of any license between the BCBSA and a Plan or a Controlled Affiliate relating to the use of the BLUE CR7 SSX or BLUE SHCELDX service marks.

iii. decide challenges as to its own 4urisdiction.

iv. issue such orders for interim relief as it deems appropriate pending Hearing and Award in any Arbitration.

C0is understood that the Panel is e1pected to resolve issues based on governing principles of law, preserving to the ma1imum e1tent legally possible the continued integrity of the Licensed Marks and the BLUE CR7 SS/BLUE SHCELD system. The Panel shall apply federal law to all issues which, if asserted in the United States District Court, would give rise to federal question 4urisdiction, C6 U.S.C. § N00N The Panel shall apply C0linois law to all issues involving interpretation, performance or construction of any License Agreement or Controlled Affiliate License Agreement unless the agreement otherwise provides. As to other issues, the Panel shall choose the applicable law based on conflicts of law principles of the State of C0linois.

- . Administrative Conference

Within five (“) days of the Panel being selected, the Presiding Arbitrator shall confer with the parties and the other members of the Panel and shall schedule, in writing, a conference in which the parties and the Panel shall participate (the FAdministrative Conference:). The Administrative Conference shall take place no later than fifteen (N‘) days after the Panel is selected. At the Administrative Conference the parties and the Panel shall discuss the scheduling of the Arbitration Hearing and any other matter appropriate to be considered, including but not limited toxany written discovery in the form of requests for production of documents or requests to admit facts; the identity of any witness whose deposition a party may desire and a showing of e1ceptional good cause for the taking

Amended as of September 20, 2007

of any such deposition; the desirability of bifurcation or other separation of the issues; the need for and the type of record of conferences and hearings, including the need for transcripts; the need for e1pert witnesses and how e1pert testimony should be presented; the appropriateness of motions to dismiss and/or for full or partial summary 4udgment; consideration of stipulations; the desirability of presenting any direct testimony in writing; and the necessity for any on"site inspection by the Panel. Of the parties agree, the Administrative Conference may be by telephone.

H. Discovery

i. ***Requests for Production of Documents***xAll requests for the production of documents must be served no later than five (") days after the date of the 0nitial Conference. Within twenty (Gz) days after receipt of a request for production of documents, a party shall (a) serve responses and ob4ections to the request, (b) produce all responsive, non"privileged documents to the requesting party, and (c) to the e1tent any responsive documents are withheld on the grounds of attorney"client privilege or work product, produce a log identifying such documents in the manner specified in 2ed. R. Civ. P. G?(b)("). Of, after reviewing a privilege log, the requesting party believes attorney"client privilege or work product protection was improperly claimed by the producing party with respect to any document, the requesting party may ask the Presiding Arbitrator to conduct an in"camera inspection of the same. With respect to documentary and other discovery produced in any MDR proceeding by BCBSA, the fact that a party5s CE7 or other senior officers may serve on the BCBSA Board of Directors, BCBSA Board Committees or other BCBSA work groups, task forces and the like, shall not be a basis for defeating an otherwise valid claim of attorney"client privilege or work product protection over such documentary or other discovery materials by BCBSA.

ii. ***Requests for Admissions***xRequests for Admissions may be served up to twenty"one (GN) days prior to the discovery cut"off set by the Presiding Arbitrator. A party served with Requests 2or Admissions must respond within twenty (Gz) days of receipt of said request. The good faith use of and response to Requests for Admissions is encouraged, and the Panel shall have full discretion, with reference to the 2ederal Rules of Civil Procedure, in awarding appropriate sanctions with respect to abuse of the procedure.

Amended as of September 20, 2007

EXHIBIT 5 Page NNof GO

iii. Depositions: As a general rule, the parties will not be permitted to take party or non"party deposition testimony for discovery

purposes. The Presiding Arbitrator, in his or her sole discretion, shall have the authority to permit a party to take such deposition testimony upon a showing of e1ceptional good cause. The parties will be permitted to take de bene esse deposition[N] testimony to the fullest e1tent permitted by law of any witness who cannot be compelled to testify at the Arbitration Hearing. 9 o deposition, for discovery purposes or otherwise, shall e1ceed three (0) hours, e1cluding ob4ections and colloquy of counsel. Depositions may be recorded in any manner recogniIed by the 2ederal Rules of Civil Procedure and the parties shall specify in each notice of deposition or request for permission to take deposition testimony the manner in which such deposition shall be recorded.

iv. Expert witness(es) xOf a party intends to present the testimony of an e1pert witness during the oral hearing, it shall provide all other parties with a written statement setting forth the information

required to be provided by 2ed. R. Civ. P. G%(a)(G)(B) ten (Nz) days prior to the discovery cut"off set by the Presiding Arbitrator. Of a party intends to present the testimony of a rebuttal e1pert witness during the Arbitration Hearing, it shall provide all other parties with a written statement setting forth the information required to be provided by 2ed. R. Civ. P. G%(a)(G)(B) within twenty (Gz) days after the date on which the written statement of the e1pert witness whose testimony is to be rebutted was produced.

v. Discovery cut-off*:* The Presiding Arbitrator shall determine the date on which the discovery period will end, but the discovery period shall not e1ceed thirty (0z) days from the date of the Administrative Conference without the agreement of all parties.

Amended as of September 20, 2007

[N] As used in these Rules, Fde bene esse deposition: means a deposition that is not taken for discovery purposes, but is taken for the purposes of reading part or all of the deposition transcript into the record at the Arbitration Hearing, to the e1tent permitted b the Panel, because the witness cannot be compelled to testify at the Arbitration Hearing or has e1ercised a right provided under these Rules to provide deposition testminoy in lieu of testimony at the Arbitration Hearing.

EXHIBIT 5

Page NGof C0

vi. ***Additional discovery***xAny additional discovery will be at the discretion of the Presiding Arbitrator.

vii. ***Discovery Disputes:*** Any discovery disputes shall be raised by motion to the Presiding Arbitrator, who is authoriIed to resolve all such disputes, and whose resolution will be binding on the parties unless modified by the Arbitration Panel. Prior to raising any discovery dispute with the Presiding Arbitrator, the parties shall meet and confer, telephonically or in person, in an attempt to resolve or narrow the dispute. Of a party refuses to comply with a decision resolving a discovery dispute, the Panel, in keeping with 2ed. R. Civ. P. 03, may refuse to allow that party to support or oppose designated claims or defenses, prohibit that party from introducing designated matters into evidence or, in e1treme cases, decide an issue submitted for resolution adversely to that party.

viii. ***Extensions:*** The time for responding to discovery requests may be e1tended by the Presiding Arbitrator for good and sufficient cause shown. Any request for such an e1tension shall be made in writing.

O Panel Suggested Settlement/Mediation

At any point during the proceedings, the Panel at the request of any party or on its own initiative, may suggest that the parties e1plore settlement and that they do so at or before the conclusion of the Arbitration Hearing, and the Panel shall give such assistance in settlement negotiations as the parties may request and the Panel may deem appropriate. Alternatively, the Panel may direct the parties to endeavor to mediate their disputes as provided above, or to e1plore a mini"trial proceeding, or to have an independent party render a neutral evaluation of the parties5respective positions. The Panel shall enter such sanctions as it deems appropriate with respect to any party failing to pursue in good faith such Mediation or other alternate dispute resolution methods.

Amended as of September 20, 2007

EXHIBIT 5 Page N0 of G0

J. Subpoenas on Third Parties

Pursuant to, and consistent with, the 2ederal Arbitration Act, 8 U.S.C. § 8 *et seq*., and sub4ect to Paragraph 0.- (iii) above, a party may request the issuance of a subpoena on any third party, including but not limited to any third party Blue Plan or any officer, employee or director of a third party Blue Plan, to compel deposition testimony or the production of documents, and, if good and sufficient cause is shown, the Panel shall issue such a subpoena.

K. Arbitration Hearing

An Arbitration Hearing will be held within thirty (0z) days after the Administrative Conference if no discovery is taken, or within thirty (0z) days after the close of discovery, unless all parties and the Panel agree to e1tend the Arbitration Hearing date, or unless the parties agree in writing to waive the Arbitration Hearing. The parties may mutually agree on the location of the Arbitration Hearing. 0f the parties fail to agree, the Arbitration Hearing shall be held in Chicago, 0llinois, or at such other location determined by the Presiding Arbitrator to be most convenient to the participants. The Panel will determine the date(s) and time(s) of the Arbitration Hearing(s) after consultation with all parties and shall provide reasonable notice thereof to all parties or their representatives.

L. Arbitration Hearing Memoranda

Twenty (Gz) days prior to the Arbitration Hearing, each party shall submit to the other party (or parties) and to the Panel an Arbitration Hearing Memorandum which sets forth the applicable law and any argument as to any relevant issue. The Arbitration Hearing Memorandum will supplement, and not repeat, the allegations, information and documents contained in or with the Complaint, Answer, Counterclaim and Reply, if any. Ten (Nz) days prior to the Arbitration Hearing, each party shall submit to each other party a list of all e1pert and fact witnesses (but not including rebuttal fact witness) that such party intends to have testify at the Arbitration Hearing and a brief summary of the testimony each such witness is e1pected to give. 0n addition, no later than five (“) days prior to the Arbitration, each party may submit to each other party and to the Panel a Response Arbitration Hearing Memorandum which sets forth any response to another partyjs Arbitration Hearing Memorandum.

Amended as of September 20, 2007

EXHIBIT 5 Page N of C0

M. 9 otice 2or Testimony

Ten (Nz) days prior to the Arbitration Hearing, any party may serve a 9 otice on any other party (or parties) requesting the attendance at the Arbitration Hearing of any officer, employee or director of the other party (or parties) for the purpose of providing noncumulative testimony. Of a party fails to produce one of its officers, employees or directors whose noncumulative testimony during the Arbitration Hearing is reasonably requested by an adverse party, the Panel may refuse to allow that party to support or oppose designated claims or defenses, prohibit that party from introducing designated matters into evidence or, in e1treme cases, decide an issue submitted for mandatory dispute resolution adversely to that party; provided, however, that a party may refuse to produce a director to testify if, within two (G) days of receiving a notice requesting the attendance of such director at the Arbitration Hearing, the party agrees to make the director available for a de bene esse deposition at a mutually convenient time at any location within fifty ("z) miles of the director5s primary residence chosen by the party requesting the director5s testimony. This Rule may not be used for the purpose of burdening or harassing any party, and the Presiding Arbitrator may impose such orders as are appropriate so as to prevent or remedy any such burden or harassment.

Pursuant to, and consistent with, the 2ederal Arbitration Act, 8 U.S.C. § 8 *et seq.*, twenty (Gz) days or more prior to the Arbitration Hearing, a party may request the issuance of a subpoena on any third party, including but not limited to any third party Blue Plan, BCBSA or any officer, employee or director of a third party Blue Plan or BCBSA for the purpose of providing noncumulative testimony at the Arbitration Hearing, and, if good and sufficient cause is shown, the Panel shall issue such a subpoena; provided however, that a director of a third party Blue Plan or BCBSA may refuse to testify if, within two (G) days of receiving a subpoena requesting the attendance of such director at the Arbitration Hearing, the director agrees to make him/herself available for a de bene esse deposition at a mutually convenient time at any location within fifty ("z) miles of the director5s primary residence chosen by the party requesting the director5s testimony. Each Blue Plan agrees to waive, on its own behalf and on behalf of its directors and officers, any ob4ection it otherwise might have to any such subpoena based on service, venue or e1traterritoriality.

Amended as of September 20, 2007

EXHIBIT 5 Page N‘ of C0

9 . Arbitration Hearing Procedures

i. ***Attendance at Arbitration Hearing***xAny person having a direct interest in the proceeding is entitled to attend the Arbitration Hearing. The Presiding Arbitrator shall otherwise have the power to require the e1clusion of any witness, other than a party or other essential person, during the testimony of any other witness. C0 shall be discretionary with the Presiding Arbitrator to determine the propriety of the attendance of any other person.

ii. ***Confidentiality***xThe Panel and all parties shall maintain the privacy of the Arbitration Proceeding. The parties and the Panel shall treat the Arbitration Hearing and any discovery or other proceedings or events related thereto, including any award resulting therefrom, as confidential e1cept as otherwise necessary in connection with a 4udicial challenge to or enforcement of an award or unless otherwise required by law.

iii. ***Stenographic Record***xAny party, or if the parties do not ob4ect, the Panel, may request that a stenographic or other record be made of any Arbitration Hearing or portion thereof. The costs of the recording and/or of preparing the transcript shall be borne by the requesting party and by any party who receives a copy thereof. C0 the Panel requests a recording and/or a transcript, the costs thereof shall be borne equally by the parties.

iv. ***Oaths***xThe Panel may require witnesses to testify under oath or affirmation administered by any duly qualified person and, if requested by any party, shall do so.

v. ***Order of Arbitration Hearing***xAn Arbitration Hearing shall be opened by the recording of the date, time, and place of the Arbitration Hearing, and the presence of the Panel, the parties, and their representatives, if any. The Panel may, at the beginning of the Arbitration Hearing, ask for statements clarifying the issues involved.

Amended as of September 20, 2007

EXHIBIT 5

Page №‰of Œ0

Unless otherwise agreed, the complaining party (or parties) shall then present evidence to support their claim(s). The respondent(s) shall then present evidence supporting their defenses and Counterclaims, if any. The complaining party (or parties) shall then present evidence supporting defenses to the Counterclaims, if any, and rebuttal.

Witnesses for each party shall submit to questions by adverse parties and/or the Panel.

The Panel has the discretion to vary these procedures, but shall afford a full and equal opportunity to all parties for the presentation of any material and relevant evidence.

vi. ***Evidence***xThe parties may offer such evidence as is relevant and material to the dispute and shall produce such evidence as the Panel may deem necessary to an understanding and resolution of the dispute. Unless good cause is shown, as determined by the Panel or agreed to by all other parties, no party shall be permitted to offer evidence at the Arbitration Hearing which was not disclosed prior to the Arbitration Hearing by that party. The Panel may receive and consider the evidence of witnesses by affidavit upon such terms as the Panel deems appropriate.

The Panel shall be the 4ıdge of the relevance and materiality of the evidence offered, and conformity to legal rules of evidence, other than enforcement of the attorney"client privilege and the work product protection, shall not be necessary. The 2ederal Rules of Evidence shall be considered by the Panel in conducting the Arbitration Hearing but those rules shall not be controlling. All evidence shall be taken in the presence of the Panel and all of the parties, e1cept where any party is in default or has waived the right to be present.

Settlement offers by any party in connection with Mediation or MDR proceedings, decisions or recommendations of the selected mediators, and a partyjs position papers or statements furnished to the selected mediators shall not be admissible evidence or considered by the Panel without the consent of all parties.

vii. ***Closing of Arbitration Hearing***xThe Presiding Arbitrator shall specifically inquire of all parties whether they have any further proofs to offer or witnesses to be heard. Upon receiving negative replies or if he or she is satisfied that the record is complete, the Presiding Arbitrator shall declare the Arbitration Hearing closed with an appropriate notation made on the record. Sub4ect to being reopened as provided below, the time within which the Panel is required to make the award shall commence to run, in the absence of contrary agreement by the parties, upon the closing of the Arbitration Hearing.

With respect to comple1 disputes, the Panel may, in its sole discretion, defer the closing of the Arbitration Hearing for a period of up to thirty (0z) days after the presentation of proofs in order to permit the parties to submit post" hearing briefs and argument, as the Panel deems appropriate, prior to making an award.

2or good cause, the Arbitration Hearing may be reopened for up to thirty (0z) days on the Paneljs initiative, or upon application of a party, at any time before the award is made

7 . Awards

An Award must be in writing and shall be made promptly by the Panel and, unless otherwise agreed by the parties or specified by law, no later than thirty (0z) days from the date of closing the Arbitration Hearing. Of all parties so request, the Award shall contain findings of fact and conclusions of law. The Award, and all other rulings and determinations by the Panel, may be by a ma4rity vote.

Parties shall accept as legal delivery of the Award the placing of the Award or a true copy thereof in the mail addressed to a party or its representative at its last known address or personal service of the Award on a party or its representative.

Awards are binding only on the parties to the Arbitration and are not binding on any non"parties to the Arbitration and may not be used or cited as precedent in any other proceeding.

Amended as of September 20, 2007

After the e1piration of twenty (Cz) days from initial delivery, the Award (with corrections, if any) shall be final and binding on the parties, and the parties shall undertake to carry out the Award without delay.

Proceedings to confirm, modify or vacate an Award shall be conducted in conformity with and controlled by the 2ederal Arbitration Act. 8 U.S.C. § N, *et seq*.

P. Return of Documents

Within si1ty (%z) days after the Award and the conclusion of any 4udicial proceedings with respect thereto, each party and the Panel shall return any documents produced by any other party, including all copies thereof. Of a party receives a discovery request in any other proceeding which would require it to produce any documents produced to it by any other party in a proceeding hereunder, it shall not produce such documents without first notifying the producing party and giving said party reasonable time to respond, if appropriate, to the discovery request.

4. Miscellaneous

A. E1pedited Procedures

Any party to a Mediation may direct a request for an e1pedited Mediation Hearing to the Chairman of the Mediation Committee, to the selected Mediators, and to all other parties at any time. The Chairman of the Mediation Committee, or at his or her direction, the then selected Mediators, shall grant any request which is supported by good and sufficient reasons. Of such a request is granted, the Mediation shall be completed within as short a period as practicable, as determined by the Chairman of the Mediation Committee or, at his or her direction, the then selected Mediators.

Any party to an Arbitration may direct a request for e1pedited proceedings to the Administrator, to the Panel, and to all other parties at any time. The Administrator, or the Presiding Arbitrator if the Panel has been selected, shall grant any such request which is supported by good and sufficient reasons. Of such a request is granted, the Arbitration shall be completed within as short a time as practicable, as determined by the Administrator and/or the Presiding Arbitrator.

B. Temporary or Preliminary O24unctive Relief

Any party may seek temporary or preliminary in4unctive relief with the filing of a Complaint or at any time thereafter. Of such relief is sought prior to the time that an Arbitration Panel has been selected, then the Administrator shall select a single Arbitrator who is a lawyer who has no interest in the sub4ect matter of the dispute, and no connection to any of the parties, to hear and determine the request for temporary or preliminary in4unction. Of such relief is sought after the time that an Arbitration Panel has been selected, then the Arbitration Panel will hear and determine the request. The request for temporary or preliminary in4unctive relief will be determined with reference to the temporary or preliminary in4unction standards set forth in 2ed. R. Civ. P. %‘.

C. Defaults and Proceedings in the Absence of a Party

Whenever a party fails to comply with the MDR Rules in a manner deemed material by the Panel, the Panel shall fi1 a reasonable time for compliance and, if the party does not comply within said period, the Panel may enter an 7 rder of default or afford such other relief as it deems appropriate. Arbitration may proceed in the event of a default or in the absence of any party who, after due notice, fails to be present or fails to obtain an e1tension. An Award shall not be made solely on the default or absence of a party, but the Panel shall require the party who is present to submit such evidence as the Panel may require for the making of findings, determinations, conclusions, and Awards.

D. 9 otice

Each party shall be deemed to have consented that any papers, notices, or process necessary or proper for the initiation or continuation of a proceeding under these rules or for any court action in connection therewith may be served on a party by mail addressed to the party or its representative at its last known address or by personal service, in or outside the state where the MDR proceeding is to be held.

The Corporate Secretary and the parties may also use facsimile transmission, tele1, telegram, or other written forms of electronic communication to give the notices required by these rules.

EXHIBIT 5 Page Gz of GD

E. E1penses

The e1penses of witnesses shall be paid by the party causing or requesting the appearance of such witnesses. All e1penses of the MDR proceeding, including compensation, required travel and other reasonable e1penses of the Panel, and the cost of any proof produced at the direct request of the Panel, shall be borne equally by the parties and shall be paid periodically on a timely basis, unless they agree otherwise or unless the Panel in the Award assesses such e1penses, or any part thereof against any party (or parties). On e1ceptional cases, the Panel may award reasonable attorneysj fees as an item of e1pense, and the Panel shall promptly determine the amount of such fees based on affidavits or such other proofs as the Panel deems sufficient.

2. Disqualification or Disability of A Panel Member

On the event that any Arbitrator of a Panel with more than one Arbitrator should become disqualified, resign, die, or refuse or be unable to perform or discharge his or her duties after the commencement of MDR but prior to the rendition of an Award, and the parties are unable to agree upon a replacement, the remaining Panel member(s)x

i. shall designate a replacement, sub4ect to the right of any party to challenge such replacement for cause.

ii. shall decide the e1tent to which previously held hearings shall be repeated.

If the remaining Panel members consider the proceedings to have progressed to a stage as to make replacement impracticable, the parties may agree, as an alternative to the recommencement of the Mandatory Dispute Resolution process, to resolution of the dispute by the remaining Panel members.

On the event that a single Arbitrator should become disqualified, resign, die, or refuse or be unable to perform or discharge his or her duties after the commencement of MDR but prior to the rendition of an Award, and the parties are unable to agree upon a replacement, the Administrator shall appoint a successor, sub4ect to the right of any party to challenge such successor for cause, and the successor shall decide the e1tent to which previously held proceedings shall be repeated.

- . E1tensions of Time

Sub4ect to the provisions of Paragraph 0.H.(viii), any time limit set forth in these Rules may be e1tended upon agreement of the parties and approval ofx(N) the Mediator if the proceeding is then in Mediation; (G) the Administrator if the proceeding is in Arbitration, but no Arbitration Panel has been selected; or (0) the Arbitration Panel, if the proceeding is in Arbitration and the Arbitration Panel has been selected.

H. 0ntervention

The Plans, their Controlled Affiliates, and BCBSA, to the e1tent sub4ect to MMDR pursuant to their License Agreements, shall have the right to move to intervene in any pending Arbitration. A written motion for intervention shall be made tox(N) the Administrator, if the proceeding is in Arbitration, but no Arbitration Panel has been selected; or (G) the Arbitration Panel, if the proceeding is in Arbitration and the Arbitration Panel has been selected. The written motion for intervention shall be delivered to the BCBSA Corporate Secretary (which shall also constitute service on the BCBSA if it is a respondent) and to any Plan(s) and/or Controlled Affiliate(s) which are parties to the proceeding. Any party to the proceeding can submit written ob4ections to the motion to intervene. The motion for intervention shall be granted upon good cause shown. 0ntervention also may be allowed by stipulation of the parties to the Arbitration proceeding. 0ntervention shall be allowed upon such terms as the Arbitration Panel decides.

O BCBSA Assistance 0n Resolution of Disputes

The resources and personnel of the BCBSA may be requested by any member Plan at any time to try to resolve disputes with another Plan.

J. 9 eutral Evaluation

The parties can voluntarily agree at any time to have an independent party render a neutral evaluation of the parties5respective positions.

Amended as of September 20, 2007

EXHIBIT 5 Page GGof GO

K. Recovery of Attorney 2ees and E1penses

i. Motions to Compel

9 othwithstanding any other provisions of these Rules, any Party sub4ect to the License Agreements (for purposes of this Section K and all of its subsections only hereinafter referred to collectively and individually as a FParty:) that initiates a court action or administrative proceeding solely to compel adherence to these Rules shall not be determined to have violated these Rules by initiating such action or proceeding.

ii Recovery of 2ees, E1penses and Costs

The Arbitration Panel may, in its sole discretion, award a Party its reasonable attorneys5 fees, e1penses and costs associated with a filing to compel adherence to these Rules and/or reasonable attorneys5 fees, e1penses and costs incurred in responding to an action filed in violation of these Rules; provided, however, that neither fees, e1penses, nor costs shall be awarded by the Arbitration Panel if the Party from which the award is sought can demonstrate to the Arbitration panel, in its sole discretion, that it did not violate these Rules or that it had reasonable grounds for believing that its action did not violate these Rules.

iii Requests for Reimbursement

2or purposes of this Section K, any Party may request reimbursement of fees, e1penses and/or costs by submitting said request in writing to the Arbitration Panel at any time before an award is delivered pursuant to Paragraph 0.7 above, with a copy to the Party from which reimbursement is sought, e1plaining why it is entitled to such reimbursement. The Party from which reimbursement is sought shall have twenty (Gz) days to submit a response to such request to the Arbitration Panel with a copy to the Party seeking reimbursement.

Amended as of September 20, 2007

EXHIBIT 5 Page CO of CO

L. Calculation of Time and Deadlines

On computing any period of time prescribed or allowed under these rules, the day of the act or event from which the designated period of time begins to run shall not be included. The last day of the period so computed shall be included, unless it is a Saturday, a Sunday, or a legal holiday, in which event the period runs until the end of the ne1t day which is not one of the aforementioned days. When the period of time prescribed is less than si1 (%) days, intermediate Saturdays, Sundays and legal holidays shall be e1cluded in the computation. As used in this rule, Flegal holiday: includes 9 ew Year5s Day, Martin Luther King, Jr. Day, Washington5s Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, Christmas Day and any other day appointed as a holiday by the President or the Congress of the United States.

Amended as of September 20, 2007

Exhibit 21

Legal Name	*State*
American Imaging Management, Inc. (d/b/a AIM Specialty Health)	Illinois
AMERIGROUP Community Care of New Mexico, Inc.	New Mexico
AMERIGROUP Corporation (d/b/a AMERIGROUP CORPORATION; AGP Corporation; AMGP; AMGP Corporation; AMGP Missouri, Inc.; Amerigroup)	Delaware
AMERIGROUP District of Columbia, Inc.	Washington D.C.
AMERIGROUP Florida, Inc. (d/b/a AMERIGROUP Community Care)	Florida
Amerigroup Insurance Company	Texas
Amerigroup Iowa, Inc.	Iowa
Amerigroup Kansas, Inc.	Kansas
AMERIGROUP Maryland, Inc. (d/b/a AMERIGROUP Community Care)	Maryland
AMERIGROUP Mississippi, Inc.	Mississippi
AMERIGROUP Nevada, Inc. (d/b/a AMERIGROUP Community Care)	Nevada
AMERIGROUP New Jersey, Inc. (d/b/a AMERIGROUP Community Care)	New Jersey
AMERIGROUP Ohio, Inc. (d/b/a AMERIGROUP Community Care)	Ohio
AMERIGROUP Oklahoma, Inc.	Oklahoma
Amerigroup Partnership Plan, LLC	Illinois
AMERIGROUP Tennessee, Inc. (d/b/a AMERIGROUP Community Care)	Tennessee
AMERIGROUP Texas, Inc. (d/b/a AMERIGROUP Community Care)	Texas
AMERIGROUP Washington, Inc.	Washington
AMGP Georgia Managed Care Company, Inc. (d/b/a AMERIGROUP; AMERIGROUP Community Care; AMERIGROUP Georgia; AMGP Georgia)	Georgia
Anthem Blue Cross Life and Health Insurance Company	California
Anthem Financial, Inc.	Delaware
Anthem Health Insurance Company of Nevada	Nevada
Anthem Health Plans of Kentucky, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	Kentucky
Anthem Health Plans of Maine, Inc. (d/b/a Anthem Blue Cross and Blue Shield and Associated Hospital Service)	Maine
Anthem Health Plans of New Hampshire, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	New Hampshire
Anthem Health Plans of Virginia, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	Virginia
Anthem Health Plans, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	Connecticut
Anthem Holding Corp. (d/b/a Anthem Properties, Inc.)	Indiana
Anthem Insurance Companies, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	Indiana
Anthem Kentucky Managed Care Plan, Inc. (d/b/a Anthem Blue Cross and Blue Shield Medicaid)	Kentucky
Anthem Life & Disability Insurance Company	New York
Anthem Life Insurance Company	Indiana
Anthem Partnership Holding Company, LLC	Indiana
Anthem Southeast, Inc.	Indiana
Anthem UM Services, Inc.	Indiana
Anthem Workers' Compensation, LLC	Indiana
Arcus Enterprises, Inc.	Delaware
ARCUS HealthyLiving Services, Inc.	Indiana
Associated Group, Inc.	Indiana
ATH Holding Company, LLC	Indiana
Better Health, Inc.	Florida

Legal Name	*State*
Blue Cross and Blue Shield of Georgia, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	Georgia
Blue Cross Blue Shield Healthcare Plan of Georgia, Inc. (d/b/a Anthem Blue Cross and Blue Shield)	Georgia
Blue Cross Blue Shield of Wisconsin (d/b/a Anthem Blue Cross and Blue Shield)	Wisconsin
Blue Cross of California (d/b/a Anthem Blue Cross)	California
Blue Cross of California Partnership Plan, Inc.(d/b/a Anthem Blue Cross Partnership Plan)	California
CareMore Health Plan	California
CareMore Health Plan of Arizona, Inc.	Arizona
CareMore Health Plan of Nevada	Nevada
CareMore Health Plan of Texas, Inc.	Texas
CareMore Health System	California
CareMore Holdings, Inc.	Delaware
CareMore IPA of New York, LLC	New York
CareMore Services Company, LLC	Indiana
CareMore, LLC	Indiana
Cerulean Companies, Inc.	Georgia
Claim Management Services, Inc.(d/b/a Anthem Blue Cross and Blue Shield)	Wisconsin
Community Care Health Plan of Louisiana, Inc.	Louisiana
Community Insurance Company (d/b/a Anthem Blue Cross and Blue Shield)	Ohio
Compcare Health Services Insurance Corporation (d/b/a Anthem Blue Cross and Blue Shield)	Wisconsin
Crossroads Acquisition Corp.	Delaware
DeCare Analytics, LLC	Minnesota
DeCare Dental Health International, LLC	Minnesota
DeCare Dental Insurance Ireland, Ltd.	Ireland
DeCare Dental Networks, LLC	Minnesota
DeCare Dental, LLC	Minnesota
DeCare Operations Ireland, Limited	Ireland
Designated Agent Company, Inc. (d/b/a Access Insurance Agency, Inc.)	Kentucky
EHC Benefits Agency, Inc.	New York
Empire HealthChoice Assurance, Inc. (d/b/a Empire Blue Cross; Empire Blue Cross Blue Shield)	New York
Empire HealthChoice HMO, Inc. (d/b/a Empire Blue Cross HMO; Empire Blue Cross Blue Shield HMO)	New York
Federal Government Solutions, LLC	Wisconsin
Golden West Health Plan, Inc.	California
Government Health Services, LLC	Wisconsin
Greater Georgia Life Insurance Company (d/b/a Anthem Life)	Georgia
Health Core, Inc.	Delaware
Health Management Corporation (d/b/a LiveHealth Online; HMC of Virginia; Health Management of Virginia)	Virginia
Health Ventures Partner, L.L.C.	Illinois
HealthKeepers, Inc.	Virginia
HealthLink HMO, Inc. (d/b/a HealthLink HMO)	Missouri
HealthLink, Inc.	Illinois
HealthPlus HP, LLC (d/b/a Empire BlueCross BlueShield HealthPlus)	New York
Healthy Alliance Life Insurance Company (d/b/a Anthem Blue Cross and Blue Shield)	Missouri
HMO Colorado, Inc. (d/b/a HMO Colorado; HMO Nevada)	Colorado

Legal Name	*State*
HMO Missouri, Inc. (d/b/a Amerigroup Missouri; Anthem Blue Cross and Blue Shield)	Missouri
Imaging Management Holdings, LLC	Delaware
Living Complete Technologies, Inc.	Maryland
Matthew Thornton Health Plan, Inc.	New Hampshire
Meridian Resource Company, LLC	Wisconsin
National Government Services, Inc. (d/b/a NGS of Indiana)	Indiana
National Telehealth Network, LLC	Delaware
Park Square Holdings, Inc.	California
Park Square I, Inc.	California
Park Square II, Inc.	California
PHP Holdings, Inc.	Florida
Resolution Health, Inc.	Delaware
RightCHOICE Managed Care, Inc. (d/b/a RightCHOICE Benefit Administrators; Anthem Blue Cross and Blue Shield)	Delaware
Rocky Mountain Hospital and Medical Service, Inc.(d/b/a Anthem Blue Cross and Blue Shield)	Colorado
SellCore, Inc. (d/b/a SellCore Insurance Services, Inc.)	Delaware
Simply Healthcare Holdings, Inc.	Florida
Simply Healthcare Plans, Inc. (d/b/a Clear Health Alliance)	Florida
Southeast Services, Inc.	Virginia
State Sponsored Business UM Services, Inc.	Indiana
The Anthem Companies of California, Inc.	California
The Anthem Companies, Inc.	Indiana
TrustSolutions, LLC	Wisconsin
UNICARE Health Plan of West Virginia, Inc.	West Virginia
UNICARE Illinois Services, Inc.	Illinois
UniCare Life & Health Insurance Company	Indiana
UNICARE National Services, Inc.	Delaware
UniCare Specialty Services, Inc.	Delaware
UtiliMED IPA, Inc.	New York
WellPoint Acquisition, LLC	Indiana
WellPoint Behavioral Health, Inc.	Delaware
WellPoint California Services, Inc.	Delaware
WellPoint Dental Services, Inc.	Delaware
WellPoint Health Solutions, Inc.	Indiana
WellPoint Holding Corp.	Delaware
WellPoint Information Technology Services, Inc.	California
WellPoint Insurance Services, Inc.	Hawaii
WellPoint Military Care Corporation	Indiana
WPMI (Shanghai) Enterprise Service Co., Ltd.	China
WPMI, LLC	Delaware

Exhibit 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

- Form S-8 No. 333-84906 and Form S-8 No. 333-129334 pertaining to the Anthem 401(k) Plan;
- Form S-8 No. 333-159830 pertaining to the Anthem Incentive Compensation Plan;
- Form S-8 No. 333-156099 pertaining to the Anthem, Inc. Employee Stock Purchase Plan;
- Post-Effective Amendment No. 1 to Form S-3 No. 333-200749 pertaining to the Anthem, Inc. registration of senior debt securities, subordinated debt securities, preferred stock, common stock, depositary shares, warrants, rights, stock purchase contracts and stock purchase units; and
- Form S-4 No. 333-207218 pertaining to the Anthem, Inc. registration of shares of common stock and the joint Proxy Statement of Anthem, Inc. and Cigna Corporation

of our report dated February 22, 2017, with respect to the consolidated financial statements and schedule of Anthem, Inc., and the effectiveness of internal control over financial reporting of Anthem, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2016.

/S/ ERNST & YOUNG LLP
Indianapolis, Indiana
February 22, 2017

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULE 13a-14(a) AND RULE 15d-14(a) OF THE EXCHANGE ACT RULES,
AS ADOPTED PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Joseph R. Swedish, certify that:

1. I have reviewed this report on Form 10-K of Anthem, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 22, 2017

/s/ JOSEPH R. SWEDISH
Chairman, President and
Chief Executive Officer

Exhibit 31.C

RETI FAHROI ENP USTLSOPI I N
TSa E 13-4l( )-DOP5 TSa E 1dHHl( )-DNA I XE EGRXOP, E ORI TSa EL0
OLO5NUI E5 USTLSOPI I N
LERI ENP 32CNA I XE LOTBOPELANGa EY ORI NAC22C

I, John E. Gallina, certify that:

1. I have reviewed this report on Form 10-K of Anthem, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

   a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 22, 2017

/s/ JOHN E. GALLINA

Executive Vice President and
Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Anthem, Inc. (the "Company") on Form 10-K for the period ended December 31, 2016 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joseph R. Swedish, Chairman, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ JOSEPH R. SWEDISH

Joseph R. Swedish
Chairman, President and Chief Executive Officer
February 22, 2017

Exhibit 32.2

1 ECRTI TI FRTAO NPCUP FOR RA
S8 P.U1 . UE1 RTAO S350,
FUFDANRED NPCUP FOR RA
UE1 RTAO 906 AI RHE UFCBFOEU-AXLEY F1 R AI 2002

In connection with the Annual Report of Anthem, Inc. (the "Company") on Form 10-K for the period ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John E. Gallina, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 907 of the Sarbanes-Oxley Act of 2002, that6

(1) : he Report fully complies with the reTuirements of section 13(a) or 15(d) of the Securities Exchange Act of 193q4and

(2) : he information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

;s; JO/ H E. GANNIHA

John E. Gallina
Executive Vice President and Chief Financial Officer
February 22, 201L

This page is intentionally left blank

10-K 1 cvs-2018231x10k.htm FORM 10-K

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

☑ **Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the fiscal year ended December 31, 2018

OR

☐ **Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the transition period from _____ to_____
Commission file number 001-01011

CVSHealth

CVS HEALTH CORPORATION
(Exact name of registrant as specified in its charter)

Delaware	**05-0494040**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
One CVS Drive, Woonsocket, Rhode Island	**02895**
(Address of principal executive offices)	(Zip Code)

(401) 765-1500
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Common Stock, par value $0.01 per share	**New York Stock Exchange**
Title of each class	Name of each exchange on which registered

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☑ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ Yes ☑ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☑ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☑ Yes ☐ No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☑ Accelerated filer ☐
Non-accelerated filer ☐ Smaller reporting company ☐
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☑ No

The aggregate market value of the registrant's common stock held by non-affiliates was approximately $65,262,991,789 as of June 30, 2018, based on the closing price of the common stock on the New York Stock Exchange. For purposes of this calculation, only executive officers and directors are deemed to be the affiliates of the registrant.

As of February 19, 2019, the registrant had 1,297,082,165 shares of common stock issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The following materials are incorporated by reference into this Form 10-K:

Portions of the Annual Report to Stockholders for the fiscal year ended December 31, 2018 (the "Annual Report") are incorporated by reference in response to Items 1, 1A, 2 and 3 of Part I and Items 5, 6, 7, 7A, 8 and 9A of Part II, in each case to the extent described therein.

Information contained in the definitive proxy statement for CVS Health Corporation's 2019 Annual Meeting of Stockholders, to be filed on or about April 5, 2019 (the "Proxy Statement"), is incorporated by reference in response to Items 10 through 14 of Part III to the extent described therein.

TABLE OF CONTENTS

PART I

Item 1. Business

Overview

CVS Health Corporation, together with its subsidiaries (collectively, "CVS Health," the "Company," "we," "our" or "us"), is the nation's premier health innovation company helping people on their path to better health. Whether in one of its pharmacies or through its health services and plans, CVS Health is pioneering a bold new approach to total health by making quality care more affordable, accessible, simple and seamless. CVS Health is community-based and locally focused, engaging consumers with the care they need when and where they need it. The Company has more than 9,900 retail locations, approximately 1,100 walk-in medical clinics, a leading pharmacy benefits manager with approximately 92 million plan members, a dedicated senior pharmacy care business serving more than one million patients per year, expanding specialty pharmacy services, and a leading stand-alone Medicare Part D prescription drug plan. CVS Health also serves an estimated 38 million people through traditional, voluntary and consumer-directed health insurance products and related services, including rapidly expanding Medicare Advantage offerings. The Company believes its innovative health care model increases access to quality care, delivers better health outcomes and lowers overall health care costs.

On November 28, 2018 (the "Aetna Acquisition Date"), the Company acquired Aetna Inc. ("Aetna") for a combination of cash and CVS Health stock (the "Aetna Acquisition"). The Company acquired Aetna to help improve the consumer health care experience by combining Aetna's health care benefits products and services with CVS Health's more than 9,900 retail locations, approximately 1,100 walk-in medical clinics and integrated pharmacy capabilities with the goal of becoming the new, trusted front door to health care. Under the terms of the merger agreement, Aetna shareholders received $145.00 in cash and 0.8378 CVS Health shares for each Aetna share. The transaction valued Aetna at approximately $212 per share or approximately $70 billion. Including the assumption of Aetna's debt, the total value of the transaction was approximately $78 billion. The Company financed the cash portion of the purchase price through a combination of cash on hand and by issuing approximately $45.0 billion of new debt, including senior notes and term loans. For additional information, see Note 2 ''Acquisition of Aetna'' contained in the "Notes to Consolidated Financial Statements" in the Annual Report, which is incorporated by reference herein.

On October 10, 2018, the Company and Aetna entered into a consent decree with the United States Department of Justice (the "DOJ") that allowed the Company's proposed acquisition of Aetna to proceed, provided Aetna agreed to sell its individual standalone Medicare Part D prescription drug plans. As part of the agreement reached with the DOJ, Aetna entered into a purchase agreement with a subsidiary of WellCare Health Plans, Inc. ("WellCare") for the divestiture of Aetna's standalone Medicare Part D prescription drug plans effective December 31, 2018. On November 30, 2018, Aetna completed the sale of its standalone Medicare Part D prescription drug plans. Aetna's standalone Medicare Part D prescription drug plans had an aggregate of approximately 2.3 million members as of December 31, 2018. Aetna will provide administrative services to, and will retain the financial results of, the divested plans through 2019.

As a result of the Aetna Acquisition, the Company added the Health Care Benefits segment, which is the equivalent of the former Aetna Health Care segment. Certain aspects of Aetna's operations, including products for which the Company no longer solicits or accepts new customers, such as large case pensions and long-term care insurance products, are included in the Company's Corporate/Other segment. The Company now has four reportable segments: Pharmacy Services, Retail/LTC, Health Care Benefits and Corporate/Other.

Business Strategy

The combined company expects to transform the consumer health care experience and build healthier communities through a new innovative health care model that is local, easier to use, less expensive and puts consumers at the center of their care. The Company believes that improving the consumer's health care experience will improve consumer engagement with their health which will lead to improved health outcomes and lower total health care costs. The Company believes there are three imperatives to accomplishing this transformation: be local, make it simple and improve health. These imperatives also guide the Company's five key strategies for delivering medical cost savings for its customers: improve common chronic disease management, reduce unnecessary hospital readmissions, improve the

efficiency of the sites at which medical members receive care, optimize primary care delivery and improve the Company's complex chronic disease management capabilities.

Pharmacy Services Segment

The Pharmacy Services segment provides a full range of pharmacy benefit management ("PBM") solutions, including plan design offerings and administration, formulary management, retail pharmacy network management services, mail order pharmacy, specialty pharmacy and infusion services, Medicare Part D services, clinical services, disease management services and medical spend management. The Pharmacy Services segment's clients are primarily employers, insurance companies, unions, government employee groups, health plans, Medicare Part D prescription drug plans ("PDPs"), Medicaid managed care ("Managed Medicaid") plans, plans offered on public health insurance exchanges ("Public Exchanges") and private health insurance exchanges ("Private Exchanges" and together with Public Exchanges, "Insurance Exchanges"), other sponsors of health benefit plans and individuals throughout the United States. In addition, the Company is a national provider of drug benefits to eligible beneficiaries under the Medicare Part D prescription drug program. The Pharmacy Services segment operates retail specialty pharmacy stores, specialty mail order pharmacies, mail order dispensing pharmacies, compounding pharmacies and branches for infusion and enteral nutrition services. During the year ended December 31, 2018, the Company's PBM filled or managed approximately 1.9 billion prescriptions on a 30-day equivalent basis.

PBM Services

The Company dispenses prescription drugs directly through its mail order dispensing and specialty mail order pharmacies and through pharmacies in its retail network. All prescriptions processed by the Company are analyzed, processed and documented by the Company's proprietary prescription management systems. These systems provide essential features and functionality to allow a plan member to utilize their prescription drug benefits. These systems also streamline the process by which prescriptions are processed by staff and network pharmacists by enhancing review of various items through automation, including plan eligibility, early refills, duplicate dispensing, appropriateness of dosage, drug interactions or allergies, over-utilization and potential fraud.

Plan Design Offerings and Administration
The Company administers pharmacy benefit plans for clients who contract with it to facilitate prescription drug coverage and claims processing for their eligible plan members. The Company assists its PBM clients in designing pharmacy benefit plans that help improve health outcomes while minimizing the costs to the client. The Company also assists PBM clients in monitoring the effectiveness of their plans through frequent, informal communications, the use of proprietary software, as well as through formal annual, quarterly and sometimes monthly performance reviews.

The Company makes recommendations to help PBM clients design benefit plans that promote the use of lower cost, clinically appropriate drugs and helps its PBM clients control costs by recommending plan designs that encourage the use of generic equivalents of brand name drugs when such equivalents are available. Clients also have the option, through plan design, to further lower their pharmacy benefit plan costs by setting different member payment levels for different products on their drug lists or "formularies," which helps guide members to choose lower cost alternatives through appropriate financial incentives.

Formulary Management
The Company utilizes an independent panel of doctors, pharmacists and other medical experts, referred to as the CVS Caremark National Pharmacy and Therapeutics Committee, to review and approve the selection of drugs that meet the Company's standards of safety and efficacy for inclusion on one of the Company's template formularies. The Company's formularies provide recommended products in numerous drug classes to help ensure member access to clinically appropriate drugs with alternatives within a class under the client's pharmacy benefit plan, while helping to drive the lowest net cost for clients that select one of the Company's formularies. To help improve clinical outcomes for members and clients, the Company conducts ongoing, independent reviews of all drugs, including, but not limited to, those appearing on the formularies and generic equivalent products. Many of the Company's clients choose to adopt a template formulary offering as part of their plan design. Beginning in 2018, clients had new capabilities to offer real time benefits information for a member's specific plan design, provided digitally at the point of prescribing, at the pharmacy and directly to members.

Retail Pharmacy Network Management Services
The Company maintains a national network of more than 68,000 retail pharmacies, consisting of approximately 41,000 chain pharmacies (which includes CVS Pharmacy locations) and 27,000 independent pharmacies, in the United States,

including Puerto Rico, the District of Columbia, Guam and the United States Virgin Islands. When a customer fills a prescription in a retail pharmacy, the pharmacy sends prescription data electronically to the Company from the point-of-sale. This data interfaces with the Company's proprietary prescription management systems, which verify relevant plan member data and eligibility, while also performing a drug utilization review to help evaluate clinical appropriateness and safety and confirming that the pharmacy will receive payment for the prescription. The Company is also able to build client-specific pharmacy networks and

managed pharmacy network solutions to further drive savings for clients. These include a performance-based pharmacy network with approximately 30,000 stores that is anchored by CVS Pharmacy and Walgreens, along with up to 10,000 independent pharmacies across the United States. The performance-based network is designed to deliver unit cost savings and to improve clinical outcomes in order to help to lower overall health care costs for participating payors and their members.

Mail Order Pharmacy Services
The Pharmacy Services segment operates mail order dispensing pharmacies in the United States. Plan members or their prescribers submit prescriptions or refill requests, primarily for maintenance medications, to these pharmacies via mail, telephone, fax, e-prescribing or the Internet, and staff pharmacists review these prescriptions and refill requests with the assistance of the Company's prescription management systems. This review may involve communications with the prescriber and, with the prescriber's approval when required, can result in generic substitution, therapeutic interchange or other actions designed to help reduce cost and/or improve quality of treatment. The Company's mail order dispensing pharmacies have been awarded Mail Order Pharmacy accreditation from Utilization Review Accreditation Commission ("URAC"), a health care accrediting organization that establishes quality standards for the health care industry.

Specialty Pharmacy and Infusion Services
The Pharmacy Services segment operates specialty mail order pharmacies, retail specialty pharmacy stores and branches for infusion and enteral nutrition services in the United States. These specialty mail order pharmacies are used for delivery of advanced medications to individuals with chronic or genetic diseases and disorders. The Company's specialty mail order pharmacies also have been awarded Specialty Pharmacy accreditation from URAC. Substantially all of the Company's mail service specialty mail order pharmacies also have been accredited by the Joint Commission, which is an independent, not-for-profit organization that accredits and certifies health care programs and organizations in the United States.

Medicare Part D Services
The Company participates in the administration of the Medicare Part D prescription drug program through the provision of PBM services to those health plan clients and other clients that have qualified as a PDP or as a Medicare Advantage prescription drug plan and by offering Medicare Part D pharmacy benefits through its SilverScript subsidiary that is a PDP that has contracted with the United States Centers for Medicare & Medicaid Services ("CMS"). The Company also assists employer, union and other health plan clients that qualify for the retiree drug subsidy made available under Medicare Part D by collecting and submitting eligibility and/or drug cost data to CMS in order for such clients to obtain the subsidy and offers Medicare Part D pharmacy benefits to such clients' retirees through Employer Group Waiver Plans ("EGWPs") sponsored by SilverScript.

Clinical Services
The Company offers multiple clinical programs and services to help clients manage overall pharmacy and health care costs in a clinically appropriate manner. These programs are primarily designed to promote better health outcomes, and to help target inappropriate medication utilization and non-adherence to medication, each of which may result in adverse medical events that negatively affect member health and client pharmacy and medical spend. These programs include utilization management ("UM"), medication management, quality assurance, adherence and counseling programs to complement the client's plan design and clinical strategies. To help address the opioid epidemic, the Company introduced an industry-leading UM approach that limits to seven days the supply of opioids dispensed for certain acute prescriptions for patients who are new to therapy; limits the daily dosage of opioids dispensed based on the strength of the opioid; and requires the use of immediate-release formulations of opioids before extended-release opioids are dispensed. The Company's Pharmacy Advisor program facilitates pharmacist counseling, both face-to-face and over the telephone, to help participating plan members with certain chronic diseases, such as diabetes and cardiovascular conditions, to identify gaps in care, adhere to their prescribed medications and manage their health conditions. The Company also has digital connectivity that helps to lower drug costs for patients by providing expanded visibility to lower cost alternatives through enhanced analytics and data sharing.

Disease Management Programs
The Company's clinical programs and services utilize advanced protocols and offer clients convenience in working with health care providers ("providers") and other third parties. The Company's integrated disease management programs cover diseases such as rheumatoid arthritis, Parkinson's disease, seizure disorders and multiple sclerosis. The majority of these

integrated programs are accredited by the National Committee for Quality Assurance ("NCQA"), a private, not-for-profit organization that evaluates, accredits and certifies a wide range of health care organizations.

Medical Benefit Management
The Company's NovoLogix® online preauthorization tool helps identify and capture cost savings opportunities for specialty drugs billed under the medical benefit by identifying outliers to appropriate dosages and costs, and helps to ensure clinically appropriate use of specialty drugs.

Pharmacy Services Information Systems

The majority of the Pharmacy Services segment's clients have migrated to a single claim adjudication platform. This platform incorporates architecture that centralizes the data generated from filling mail order prescriptions, adjudicating retail pharmacy claims and delivering other solutions to PBM clients. The Health Engagement Engine® technology and proprietary clinical algorithms help connect the various parts of the enterprise and serve an essential role in cost management and health improvement. This capability transforms pharmacy data into actionable interventions at key points of care such as mail and specialty pharmacists to help provide quality care.

Pharmacy Services Clients

The Company's Pharmacy Services clients are primarily employers, insurance companies, unions, government employee groups, health plans, Medicare Part D plans, Managed Medicaid plans and plans offered on public and private health insurance exchanges, other sponsors of health benefit plans and individuals located throughout the United States. Pharmaceuticals are provided to eligible members in benefit plans maintained by clients and utilize the Company's information systems, among other things, to help perform safety checks, drug interaction screening and identify opportunities for generic substitution. Substantially all of the Pharmacy Services segment's revenue is generated from dispensing and managing prescription drugs to eligible members in benefit plans maintained by clients. In 2018, 2017 and 2016, revenues from Aetna accounted for approximately 9.8%, 12.3% and 11.7%, respectively, of the Company's consolidated total revenues. On the Aetna Acquisition Date, Aetna became a wholly-owned subsidiary of CVS Health. Subsequent to the Aetna Acquisition Date, revenues from Aetna will continue to be reported in the Pharmacy Services segment; however, these revenues are eliminated in the consolidated financial statements.

Pharmacy Services Seasonality

The majority of Pharmacy Services segment revenues are not seasonal in nature. However, quarterly earnings and operating cash flows are impacted by the Medicare Part D benefit design and changes in the composition of PDP membership. The Medicare Part D standard benefit design results in coverage that varies with a member's cumulative annual out-of-pocket costs. The benefit design generally results in employers or other entities that sponsor the Company's products ("plan sponsors") sharing a greater portion of the responsibility for total prescription drug costs in the early part of the year. As a result, the PDP pay percentage or benefit ratio generally decreases and operating income generally increases as the year progresses.

Pharmacy Services Competition

The Company believes the primary competitive factors in the pharmacy services industry include: (i) the ability to negotiate favorable discounts from drug manufacturers as well as to negotiate favorable discounts from, and access to, retail pharmacy networks; (ii) the ability to identify and apply effective cost management programs utilizing clinical strategies, including the development and utilization of preferred formularies; (iii) the ability to market PBM products and services; (iv) the commitment to provide flexible, clinically-oriented services to clients and be responsive to clients' needs; (v) the quality, scope and costs of products and services offered to clients and their members; and (vi) operational excellence in delivering services. The Pharmacy Services segment has a significant number of competitors (e.g., the Express Scripts business of Cigna Corporation, OptumRx, Prime Therapeutics, MedImpact and Humana) offering PBM services, including large, national PBM companies, PBMs owned by large national health plans and smaller standalone PBMs. References to competitors and other companies throughout this Annual Report on Form 10-K, including the information incorporated by reference herein, are for illustrative or comparison purposes only and do not indicate that these companies are the Company's or any segment's only competitors or closest competitors.

Retail/LTC Segment

The Retail/LTC segment sells prescription drugs and a wide assortment of general merchandise, including over-the-counter drugs, beauty products, cosmetics and personal care products, provides health care services through its MinuteClinic® walk-in medical clinics and conducts long-term care ("LTC") pharmacy operations, which distribute prescription drugs and provide related pharmacy consulting and other ancillary services to chronic care facilities and other care settings. Prior to January 2, 2018, the Retail/LTC segment also provided commercialization services under the name RxCrossroads®. The Company divested its RxCrossroads subsidiary on January 2, 2018. As of December 31, 2018, the

Retail/LTC segment operated more than 9,900 retail locations, over 1,100 MinuteClinic® locations as well as online retail pharmacy websites, LTC pharmacies and onsite pharmacies. During the year ended December 31, 2018, the Retail/LTC segment filled approximately 1.3 billion prescriptions

on a 30-day equivalent basis. In December 2018, the Company held approximately 26% of the United States retail pharmacy market.

Retail/LTC Products and Services

A typical retail store sells prescription drugs and a wide assortment of high-quality, nationally advertised brand name and proprietary brand merchandise. Front store categories include over-the-counter drugs, beauty products, cosmetics and personal care products. LTC operations include distribution of prescription drugs and related consulting and ancillary services. The Company purchases merchandise from numerous manufacturers and distributors. The Company believes that competitive sources are readily available for substantially all of the products carried in its retail stores and the loss of any one supplier would not likely have a material effect on the Retail/LTC segment. The Company's MinuteClinics offer a variety of health care services.

Retail/LTC revenues by major product group are as follows:

	Percentage of Revenues		
	2018	**2017**	**2016**
Pharmacy [(1)]	76.4%	75.0%	75.0%
Front store and other [(2)]	23.6%	25.0%	25.0%
	100.0%	100.0%	100.0%

(1) Pharmacy includes LTC sales and sales in pharmacies within Target Corporation stores.
(2) "Other" represents less than 5% of the "Front store and other" revenue category.

Pharmacy
Pharmacy revenues represented approximately three-fourths of Retail/LTC segment revenues in each of 2018, 2017 and 2016. The Company believes that retail pharmacy operations will continue to represent a critical part of the Company's business due to industry demographics, e.g., an aging American population consuming a greater number of prescription drugs, prescription drugs being used more often as the first line of defense for managing illness, the introduction of new pharmaceutical products, and Medicare Part D growth. The Company believes the retail pharmacy business benefits from investment in both people and technology, as well as innovative collaborations with health plans, PBMs and providers. Given the nature of prescriptions, consumers want their prescriptions filled accurately by professional pharmacists using the latest tools and technology, and ready when promised. Consumers also need medication management programs and better information to help them get the most out of their health care dollars. To assist consumers with these needs, the Company has introduced integrated pharmacy health care services that provide an earlier, easier and more effective approach to engaging consumers in behaviors that can help lower costs, improve health and save lives.

Front Store
Front store revenues reflect the Company's strategy of innovating with new and unique products and services, using innovative personalized marketing and adjusting the mix of merchandise to match customers' needs and preferences. A key component of the front store strategy is the ExtraCare® card program, which is one of the largest and most successful retail loyalty programs in the United States. The ExtraCare program allows the Company to balance marketing efforts so it can reward its best customers by providing them with automatic sale prices, customized coupons, ExtraBucks® rewards and other benefits. The Company continues to launch and enhance new and exclusive brands to create unmatched offerings in beauty products and deliver other unique product offerings, including a full range of high-quality CVS Health and other proprietary brand products that are only available through CVS stores. The Company currently carries approximately 7,000 CVS Health and proprietary brand products, which accounted for approximately 23% of front store revenues during 2018.

MinuteClinic
As of December 31, 2018, the Company operated approximately 1,100 MinuteClinic® locations in the United States. The clinics are staffed by nurse practitioners and physician assistants who utilize nationally established guidelines to deliver a variety of health care services. Payors value these clinics because they provide convenient, high-quality, cost-effective care, in many cases offering an attractive alternative to more expensive sites of care. As a result, visits paid for by

employers, health insurers or other third parties accounted for approximately 91% of MinuteClinic's total revenues in 2018. MinuteClinic is collaborating with the Pharmacy Services and Health Care Benefits segments to help meet the needs of CVS Caremark's client plan members and the Company's health plan members by offering programs that can improve member health and lower costs.

MinuteClinic is now affiliated with more than 75 major health systems and continues to build a platform that supports primary care.

Long-term Care Pharmacy Operations
The Retail/LTC segment provides LTC pharmacy services through the Omnicare business. Omnicare's customers consist of skilled nursing facilities, assisted living facilities, independent living communities, hospitals, correctional facilities, and other health care service providers. The Company provides pharmacy consulting, including monthly patient drug therapy evaluations, to assist in compliance with state and federal regulations and provide proprietary clinical and health management programs. It also provides pharmaceutical case management services for retirees, employees and dependents who have drug benefits under corporate-sponsored health care programs.

Onsite Pharmacies
The Company also operates a limited number of pharmacies located at client sites, which provide certain health plan members and customers with a convenient alternative for filling their prescriptions.

Retail Store Development

The addition of new retail locations has played, and will continue to play, a key role in the Company's continued growth and success. The Company's store development program focuses on three areas: entering new markets, adding stores within existing markets and relocating stores to more convenient sites. During 2018, the Company opened 145 new retail locations, relocated approximately 35 stores and closed approximately 30 locations. During the last five years, the Company opened approximately 900 new and relocated locations, and acquired approximately 1,825 locations, including the pharmacies acquired from Target Corporation ("Target") in 2015. The Company believes that continuing to grow its store base appropriately and locate retail stores in more accessible markets are essential components of competing effectively in the current health care environment. As a result, the Company believes that its store development program is an integral part of its ability to meet the needs of customers and maintain its leadership position in the retail pharmacy market given the changing health care landscape.

Retail/LTC Information Systems

The Company has continued to invest in information systems to enable it to deliver exceptional customer service, enhance safety and quality, and expand patient care services while lowering operating costs. The proprietary WeCARE Workflow supports pharmacy teams by prioritizing work to meet customer expectations, facilitating prescriber outreach, and seamlessly integrating clinical programs. This solution delivers improved efficiency and enhances the customer experience, as well as providing a framework to accommodate the evolution of pharmacy practice and the expansion of clinical programs. The Health Engagement Engine technology and proprietary clinical algorithms enable the Company to help identify opportunities for pharmacists to deliver face-to-face counseling regarding patient health and safety matters, including adherence issues, gaps in care and management of certain chronic health conditions. The Company's digital strategy is to empower the consumer to navigate their pharmacy experience and manage their condition through integrated online and mobile solutions that offer utility and convenience. The Company's LTC digital technology suite, Omniview®, improves the efficiency of customers' operations with tools that include executive dashboards, pre-admission pricing, electronic ordering of prescription refills, proof-of-delivery tracking, access to patient profiles, receipt and management of facility bills, and real-time validation of Medicare Part D coverage, among other capabilities.

Retail/LTC Customers

The success of the Retail/LTC segment's businesses is dependent upon the Company's ability to establish and maintain contractual relationships with pharmacy benefit managers and other payors on acceptable terms. Pharmacy benefit managers, managed care organizations, government funded health care programs, commercial employers and other third party payors accounted for 99.5% of the Retail/LTC segment's pharmacy revenues. No single Retail/LTC payor accounted for 10% or more of the Company's consolidated total revenues in 2018, 2017 or 2016.

Retail/LTC Seasonality

The majority of Retail/LTC segment revenues, particularly pharmacy revenues, generally are not seasonal in nature. However, front store revenues tend to be higher during the December holiday season. In addition, both pharmacy and front

store revenues are affected by the timing and severity of the cough, cold and flu season. Uncharacteristic or extreme weather conditions also can adversely affect consumer shopping patterns and Retail/LTC revenues, expenses and results of operations.

Retail/LTC Competition

The retail drugstore business is highly competitive. The Company believes that it competes principally on the basis of: (i) store location and convenience, (ii) customer service and satisfaction, (iii) product selection and variety, and (iv) price. In the markets it serves, the Company competes with other drugstore chains (e.g., Walgreens and Rite Aid), supermarkets, discount retailers (e.g., Wal-Mart), independent pharmacies, restrictive pharmacy networks, membership clubs, Internet companies, and retail health clinics (including urgent care centers), as well as mail order dispersing pharmacies.

LTC pharmacy services are highly regional or local in nature, and within a given geographic area of operation, highly competitive. The Company's largest LTC pharmacy competitor nationally is PharMerica. The Company also competes with numerous local and regional institutional pharmacies, pharmacies owned by long-term care facilities and local retail pharmacies. Some states have enacted "freedom of choice" or "any willing provider" requirements as part of their state Medicaid programs or in separate legislation, which may increase the competition that the Company faces in providing services to long-term care facility residents in these states.

References to competitors and other companies throughout this Annual Report on Form 10-K, including the information incorporated by reference herein, are for illustrative or comparison purposes only and do not indicate that these companies are the Company's or any segment's only competitors or closest competitors.

Health Care Benefits Segment

The Health Care Benefits segment is one of the nation's leading diversified health care benefits providers, serving an estimated 38 million people as of December 31, 2018. The Health Care Benefits segment has the information and resources to help members, in consultation with their health care professionals, make better informed decisions about their health care. The Health Care Benefits segment offers a broad range of traditional, voluntary and consumer-directed health insurance products and related services, including medical, pharmacy, dental, behavioral health, medical management capabilities, Medicare Advantage and Medicare Supplement plans, PDPs, Medicaid health care management services, workers' compensation administrative services and health information technology ("HIT") products and services. The Health Care Benefits segment's customers include employer groups, individuals, college students, part-time and hourly workers, health plans, health care providers, governmental units, government-sponsored plans, labor groups and expatriates.

Health Care Benefits Products and Services

The Company refers to insurance products (where it assumes all or a majority of the risk for medical and dental care costs) as "Insured" and administrative services contract products (where the plan sponsor assumes all or a majority of the risk of medical and dental care costs) as "ASC." Health Care Benefits products and services consist of the following:

- *Commercial Medical*: The Health Care Benefits segment offers point-of-service ("POS"), preferred provider organization ("PPO"), health maintenance organization ("HMO") and indemnity benefit ("Indemnity") plans. Commercial medical products also include health savings accounts ("HSAs") and consumer-directed health plans that combine traditional POS or PPO and/or dental coverage, subject to a deductible, with an accumulating benefit account (which may be funded by the plan sponsor and/or the member in the case of HSAs). Principal products and services are targeted specifically to large multi-site national, mid-sized and small employers, individual insureds and expatriates. The Company offers medical stop loss insurance coverage for certain employers who elect to self-insure their health benefits. Under this product, the Company assumes risk for costs associated with large individual claims and/or aggregate loss experience within an employer's plan above a pre-set annual threshold.
- *Government Medical*: In select geographies, the Health Care Benefits segment offers Medicare Advantage plans, Medicare Supplement plans and prescription drug coverage for Medicare beneficiaries; participates in Medicaid and subsidized Children's Health Insurance Programs ("CHIP"); and participates in demonstration projects for members who are eligible for both Medicare and Medicaid ("Duals"). These Government Medical products are further described below:
    - *Medicare Advantage and PDP:* Through annual contracts with CMS, the Company offers HMO and PPO products for eligible individuals in certain geographic areas through the Medicare Advantage program. Members typically receive enhanced benefits over traditional fee-for-service Medicare coverage ("Original

Medicare"), including reduced cost-sharing for preventive care, vision and other services. The Company offered network-based HMO and/or PPO plans in 1,317 counties in 40 states and Washington, D.C. in 2018. The Company has expanded to 1,416 counties in 45 states and Washington, D.C. for 2019. The Company is a national provider of drug benefits under the Medicare Part D prescription drug program to both individuals and EGWPs. All Medicare eligible individuals are eligible to participate in this voluntary prescription drug plan. Members typically receive

coverage for certain prescription drugs, usually subject to a deductible, co-insurance and/or co-payment. On November 30, 2018, Aetna completed the sale of all of its standalone Medicare Part D prescription drug plans to WellCare effective on December 31, 2018. Aetna will provide administrative services to, and retain the financial results of, the divested plans through 2019. For certain qualifying employer groups, the Company offers Medicare PPO products nationally. When combined with the Company's PDP product, these national PPO plans form an integrated national Insured Medicare product for employers that provides medical and pharmacy benefits.

- *Medicare Supplement:* For certain Medicare eligible members, the Company offers supplemental coverage for certain health care costs not covered by Original Medicare. The products included in the Medicare Supplement portfolio help to cover some of the gaps in Original Medicare, and include coverage for Medicare deductibles and coinsurance amounts. The Company offered a wide selection of Medicare Supplement products in 49 states and Washington, D.C. in 2018.
- *Medicaid and CHIP:* The Company offers health care management services to individuals eligible for Medicaid and CHIP under multi-year contracts with government agencies in various states that are subject to annual appropriations. CHIP are state-subsidized insurance programs that provide benefits for families with uninsured children. The Company offered these services on an Insured or ASC basis in 16 states in 2018.
- *Duals:* The Company provides health coverage to beneficiaries who are dually eligible for both Medicare and Medicaid coverage. These members must meet certain income and resource requirements in order to qualify for this coverage. The Company coordinates 100% of the care for these members and may provide them with additional services in order to manage their health care costs. During 2018, the Company offered services on an Insured basis to Duals in four states under demonstration projects.

- *Pharmacy*: The Company offers PBM services and specialty and home delivery pharmacy services. The Company also performs various PBM services for Aetna pharmacy customers consisting of: product development, Commercial formulary management, pharmacy rebate contracting and administration, sales and account management and precertification programs. The Pharmacy Services segment performs the administration of selected functions for retail pharmacy network contracting and claims administration; home delivery and specialty pharmacy order fulfillment and inventory purchasing and management; and certain administrative services. Other suppliers also provide certain PBM services.
- *Specialty*: The Health Care Benefits segment has a portfolio of additional health products and services that complement its medical products such as dental plans, behavioral health and employee assistance products, provider network access and vision products and workers' compensation administrative services.
- *Consumer Health Products and Services*: The Company has a portfolio of products and services aimed at creating a holistic and integrated approach to individual health and wellness. These products and services complement the Commercial Medical and Government Medical products and enable enhanced delivery to and experience for customers.

Health Care Benefits Provider Networks

The Company contracts with physicians, hospitals and other providers for services they provide to members. The Company uses a variety of techniques designed to help encourage appropriate utilization of medical services ("utilization") and maintain affordability of quality coverage. In addition to contracts with providers for negotiated rates of reimbursement, these techniques include creating risk sharing arrangements that align economic incentives with providers, the development and implementation of guidelines for the appropriate utilization of medical services and the provision of data to providers to enable them to improve health care quality. At December 31, 2018, the Company's underlying nationwide provider network had approximately 1.3 million participating providers, including over 697 thousand primary care and specialist physicians and approximately 5,700 hospitals. Other providers in the Company's provider networks also include laboratory, imaging, urgent care and other freestanding health facilities.

Health Care Benefits Quality Assessment

CMS uses a 5-star rating system to monitor Medicare health care and drug plans and ensure that they meet CMS's quality standards. CMS uses this rating system to provide Medicare beneficiaries with a tool that they can use to compare the overall quality of care and level of customer service of companies that provide Medicare health care and drug plans. The

rating system considers a variety of measures adopted by CMS, including quality of preventative services, chronic illness management and overall customer satisfaction. See “Health Care Benefits Pricing” below in this Item 1 for further discussion of star ratings. The Company seeks Health Plan accreditation for Aetna HMO plans from the NCQA. Health care plans seeking accreditation must pass a rigorous, comprehensive review and must annually report on their performance.

Aetna Life Insurance Company ("ALIC"), a wholly-owned subsidiary of the Company, has received nationwide NCQA PPO Health Plan accreditation. As of December 31, 2018, all of the Company's Commercial HMO and all of ALIC's PPO members who were eligible participated in HMOs or PPOs that are accredited by the NCQA.

The Company's provider selection and credentialing/re-credentialing policies and procedures are consistent with NCQA and URAC, as well as state and federal, requirements. In addition, the Company is certified under the NCQA Credentials Verification Organization ("CVO") certification program for all certification options and has URAC CVO accreditation.

Quality assessment programs for contracted providers who participate in the Company's networks begin with the initial review of health care practitioners. Practitioners' licenses and education are verified, and their work history is collected by the Company or in some cases by the practitioner's affiliated group or organization. The Company generally requires participating hospitals to be certified by CMS or accredited by the Joint Commission, the American Osteopathic Association, or Det Norske Veritas Healthcare.

The Company also offers quality and outcome measurement programs, quality improvement programs, and health care data analysis systems to providers and purchasers of health care services.

Health Care Benefits Information Systems

The Health Care Benefits segment currently operates and supports an end to end suite of information technology platforms to support member engagement, enrollment, health benefit administration, care management, service operations, financial reporting and analytics. The multiple platforms are supported by an integration layer to facilitate the transfer of real-time data. There is continued focus and investment in digital products to offer innovative solutions and a seamless experience to the Company's members through mobile and web channels. Capabilities available to members include digital wallet, provider search, cost transparency and behavioral monitoring. The Health Care Benefits segment care management solution supports the Company's clinicians with data and recommendations. The Company continues to scale its clinical platform and its local personalized care model. The Company aims to build an integrated 360 degree view of the member to ensure that it can guide them through their healthcare journey and provide them a high level of service. Through its analytics platform the Company is beginning to harness the power of data to help drive healthier outcomes and proactive care and enable consumers to take the next best action for their health.

Health Care Benefits Customers

Medical membership is dispersed throughout the United States, and the Company also serves medical members in certain countries outside the United States. See Note 17 ''Segment Reporting'' contained in the "Notes to Consolidated Financial Statements" in the Annual Report, which is incorporated by reference herein, for additional information on foreign customers. The Company offers a broad range of traditional, voluntary and consumer-directed health insurance products and related services, many of which are available nationwide. Depending on the product, the Company markets to a range of customers including employer groups, individuals, college students, part-time and hourly workers, health plans, providers, governmental units, government-sponsored plans, labor groups and expatriates.

The following table presents total medical membership by United States and other geographic region and funding arrangement at December 31, 2018:

In thousands	**Insured**	**ASC**	**Total**
Northeast	1,961	3,232	5,193
Southeast	1,752	2,886	4,638
Mid-America	1,632	2,530	4,162
West	1,618	4,510	6,128
Other	587	1,393	1,980
Total medical membership	7,550	14,551	22,101

For additional information on medical membership, see the caption “Management’s Discussion and Analysis of Financial Condition and Results of Operations — Health Care Benefits Segment” in the Annual Report, which section is incorporated by reference herein.

The Company markets both Commercial Insured and ASC products and services primarily to employers that sponsor the Company's products for the benefit of their employees and their employees' dependents. Frequently, larger employers offer employees a choice among coverage options, from which the employee makes his or her selection during a designated annual open enrollment period. Typically, employers pay all of the monthly premiums to the Company and, through payroll deductions, obtain reimbursement from employees for a percentage of the premiums that is determined by each employer. Some Health Care Benefits products are sold directly to employees of employer groups on a fully employee-funded basis. In some cases, the Company bills the covered individual directly.

The Company offers Insured Medicare coverage on an individual basis as well as through employer groups to their retirees. Medicaid and CHIP members are enrolled on an individual basis. The Company also offers Insured health care coverage to members who are dually-eligible for both Medicare and Medicaid.

Health Care Benefits products are sold through the Company's sales personnel; through independent brokers, agents and consultants who assist in the production and servicing of business; and Private Exchanges. For large plan sponsors, independent consultants and brokers are frequently involved in employer health plan selection decisions and sales. In some instances, the Company may pay commissions, fees and other amounts to brokers, agents, consultants and sales representatives who place business with the Company. In certain cases, the customer pays the broker for services rendered, and the Company may facilitate that arrangement by collecting the funds from the customer and transmitting them to the broker. The Company supports marketing and sales efforts with an advertising program that may include television, radio, billboards, print media and social media, supplemented by market research and direct marketing efforts.

The United States federal government is a significant customer of the Health Care Benefits segment through contracts with CMS for coverage of Medicare-eligible individuals, federal employee-related benefit programs and Medicaid products and services. Other than the contracts with CMS, the Health Care Benefits segment is not dependent upon a single customer or a few customers the loss of which would have a significant effect on the earnings of the segment. The loss of business from any one, or a few, independent brokers or agents would not have a material adverse effect on the earnings of the Health Care Benefits segment. For additional information, see Note 17 ''Segment Reporting'' contained in the "Notes to Consolidated Financial Statements" in the Annual Report, which is incorporated by reference herein.

Health Care Benefits Pricing

For Commercial Insured plans, contracts containing the pricing and other terms of the relationship are generally established in advance of the policy period and typically have a duration of one year. Fees under ASC plans are generally fixed for a period of one year.

Generally, a fixed premium rate is determined at the beginning of the policy period for Commercial Insured plans. The Company typically cannot recover unanticipated increases in health care and other benefit costs in the current policy period; however, it may consider prior experience for a product in the aggregate or for a specific customer, among other factors, in determining premium rates for future policy periods. Where required by state laws, premium rates are filed and approved by state regulators prior to contract inception. Future results of operations could be adversely affected if the premium rates requested are not approved or are adjusted downward or their approval is delayed by state or federal regulators.

The Company has Medicare Advantage and PDP contracts with CMS to provide HMO, PPO and prescription drug coverage to Medicare beneficiaries in certain geographic areas. Under these annual contracts, CMS pays the Company a fixed capitation payment and/or a portion of the premium, both of which are based on membership and adjusted for demographic and health risk factors. CMS also considers inflation, changes in utilization patterns and average per capita fee-for-service Medicare costs in the calculation of the fixed capitation payment or premium. PDP contracts also provide a risk-sharing arrangement with CMS to limit the Company's exposure to unfavorable expenses or benefit from favorable expenses. Amounts payable to the Company under the Medicare arrangements are subject to annual revision by CMS, and the Company elects to participate in each Medicare service area or region on an annual basis. Premiums paid to the Company for Medicare products are subject to federal government reviews and audits, which can result, and have resulted, in retroactive and prospective premium adjustments and refunds to the government and/or members. In addition to payments received from CMS, some of Medicare Advantage products and all PDP products require a supplemental premium to be paid by the member or sponsoring employer. In some cases these supplemental premiums are adjusted

based on the member's income and asset levels. Compared to Commercial Medical products, Medicare contracts generate higher per member per month revenues and health care and other benefit costs.

The Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act (collectively, the "ACA") ties a portion of each Medicare Advantage plan's reimbursement to the plan's "star ratings." Since 2015, plans must have a star rating of four or higher (out of five) to qualify for a quality bonus in their basic premium rates. CMS released 2019

star ratings in October 2018. The 2019 star ratings will be used to determine which Medicare Advantage plans have ratings of four stars or higher and qualify for bonus payments in 2020. Based on membership at December 31, 2018, 79% of the Company's Medicare Advantage members were in plans with 2019 star ratings of at least 4.0 stars.

Rates for Medicare Supplement products are regulated at the state level and vary by state and plan.

Under Insured Medicaid contracts, state government agencies pay the Company fixed monthly rates per member that vary by state, line of business and demographics; and the Company arranges, pays for and manages the health care services provided to Medicaid beneficiaries. These rates are subject to change by each state, and, in some instances, provide for adjustment for health risk factors. CMS requires these rates to be actuarially sound. The Company also receives fees from customers where it provides services under ASC Medicaid contracts. ASC Medicaid contracts generally are for periods of more than one year, and certain of them contain performance incentives and limited financial risk sharing with respect to certain medical, financial and operational metrics. Under these arrangements, performance is evaluated annually, with associated financial incentive opportunities, and financial risk share obligations are typically limited to a percentage of the fees otherwise payable to the Company. Payments to the Company under Medicaid contracts are subject to the annual appropriation process in the applicable state.

Under Duals contracts, the rate setting process is generally established by CMS in partnership with the state government agency participating in the demonstration project. Both CMS and the state government agency may seek premium and other refunds under certain circumstances, including if the Company fails to comply with CMS regulations or other contractual requirements.

The Company offers HMO and consumer-directed medical and dental plans to federal employees under the Federal Employees Health Benefits ("FEHB") Program and the Federal Employees Dental and Vision Insurance Program. Premium rates and fees for those plans are subject to federal government review and audit, which can result, and have resulted, in retroactive and prospective premium and fee adjustments and refunds to the government and/or members.

Beginning in 2014, the ACA imposed significant new industry-wide fees, assessments and taxes, including an annual levy called the Health Insurer Fee (the "HIF"). In December 2015, the Consolidated Appropriation Act was enacted, which included a one year suspension of the HIF for 2017. In January 2018, the HIF was suspended for 2019. For additional information on the ACA fees, assessments and taxes, see Note 1 ''Significant Accounting Policies'' contained in the "Notes to Consolidated Financial Statements" in the Annual Report, which is incorporated by reference herein. The Company's goal is to collect in premiums and fees where possible, or solve for all of these ACA-related fees, assessments and taxes.

Health Care Benefits Seasonality

The majority of Health Care Benefits segment revenues are not seasonal in nature. However, the Health Care Benefits segment's quarterly operating income progression is impacted by (i) the seasonality of benefit costs which generally increase during the year as Insured members progress through their annual deductibles and out-of-pocket expense limits and (ii) the seasonality of operating expenses which are generally the highest during the fourth quarter due to increased marketing spending associated with Medicare annual enrollment. As a result, the Health Care Benefits segment's operating income generally is the highest in the first quarter of the year and lowest in the fourth quarter of the year.

Health Care Benefits Competition

The health care benefits industry is highly competitive, primarily due to a large number of for-profit and not-for-profit competitors, competitors' marketing and pricing and a proliferation of competing products, including new products that are continually being introduced into the marketplace. New entrants into the marketplace, as well as consolidation within the industry, have contributed to and are expected to intensify the competitive environment. In addition, the rapid pace of change as the industry evolves towards a consumer-focused retail marketplace, including Public and Private Exchanges, and the increased use of technology to interact with members, providers and customers, increase the risks currently faced from new entrants and disruptive actions by existing competitors compared to prior periods. References to competitors and other companies throughout this Annual Report on Form 10-K, including the information incorporated by reference

herein, are for illustrative or comparison purposes only and do not indicate that these companies are the Company's or any segment's only competitors or closest competitors.

The Company believes that the significant factors that distinguish competing health plans include the perceived overall quality (including accreditation status), quality of service, comprehensiveness of coverage, cost (including premium rates, provider discounts and member out-of-pocket costs), product design, financial stability and ratings, breadth and quality of

provider networks, ability to offer different provider network options, providers available in such networks, and quality of member support and care management programs. The Company believes that it is competitive on each of these factors. The Company's ability to increase the number of persons covered by its health plans or to increase Health Care Benefits segment revenues is affected by its ability to differentiate itself from its competitors on these factors. Competition may also affect the availability of services from health care providers, including primary care physicians, specialists and hospitals.

Insured products compete with local and regional health care benefits plans, health care benefits and other plans sponsored by other large commercial health care benefit insurance companies, health system owned health plans, new entrants into the marketplace and numerous for-profit and not-for-profit organizations operating under licenses from the Blue Cross and Blue Shield Association. The largest competitor in Medicare products is Original Medicare. Additional Health Care Benefits segment competitors include other types of medical and dental provider organizations, various specialty service providers (including PBM services providers), health care consultants, financial services companies, integrated health care delivery organizations (networks of providers who also coordinate administrative services for and assume insurance risk of their members), third party administrators ("TPAs"), HIT companies and, for certain plans, programs sponsored by the federal or state governments. Emerging competitors include start up health care benefits plans, technology companies, provider-owned health plans, new joint ventures (including not-for-profit joint ventures among firms from multiple industries), technology firms, financial services firms that are distributing competing products on their proprietary Private Exchanges, and consulting firms that are distributing competing products on their proprietary Private Exchanges, as well as non-traditional distributors such as retail companies. The Company's ability to increase the number of persons enrolled in Insured Commercial Medical products also is affected by the desire and ability of employers to self-fund their health coverage.

The Health Care Benefits segment's ASC plans compete primarily with other large commercial health care benefit companies, numerous for-profit and not-for-profit organizations operating under licenses from the Blue Cross and Blue Shield Association and TPAs.

The Health Care Benefits segment's international products compete with local, global and United States based health plans and commercial health care benefit insurance companies, many of whom have a longer operating history and better brand recognition and greater marketplace presence in one or more geographies.

The provider solutions and HIT marketplaces and products are evolving rapidly. The Company competes for provider solutions and HIT business with other large health plans and commercial health care benefit insurance companies as well as information technology companies and companies that specialize in provider solutions and HIT. Many information technology product competitors have longer operating histories, better brand recognition, greater marketplace presence and more experience in developing innovative products.

In addition to competitive pressures affecting the Company's ability to obtain new customers or retain existing customers, the Health Care Benefits segment's medical membership has been and may continue to be adversely affected by adverse and/or uncertain economic conditions and reductions in workforce by existing customers due to adverse and/or uncertain general economic conditions, especially in the United States and industries where such membership is concentrated.

Health Care Benefits Reinsurance

The Company currently has several reinsurance agreements with non-affiliated insurers that relate to Health Care Benefits insurance policies. The Company entered into these contracts to reduce the risk of catastrophic losses which in turn reduces capital and surplus requirements. The Company frequently evaluates reinsurance opportunities and refines its reinsurance and risk management strategies on a regular basis.

Corporate/Other Segment

The Company presents the remainder of its financial results in the Corporate/Other segment, which consists of:

•

Management and administrative expenses to support the overall operations of the Company, which include certain aspects of executive management and the corporate relations, legal, compliance, human resources, information technology and finance departments; and

- Products for which the Company no longer solicits or accepts new customers such as large case pensions and long-term care insurance products.

Generic Sourcing Venture

The Company and Cardinal Health, Inc. ("Cardinal") each have a 50% ownership in Red Oak Sourcing, LLC ("Red Oak"), a generic pharmaceutical sourcing entity. Under this arrangement, the Company and Cardinal contributed their sourcing and supply chain expertise to Red Oak and agreed to source and negotiate generic pharmaceutical supply contracts for both companies through Red Oak. Red Oak does not own or hold inventory on behalf of either company.

Working Capital Practices

The Company funds the growth of its businesses through a combination of cash flow from operations, commercial paper and other short-term borrowings, proceeds from sale-leaseback transactions and long-term borrowings. For additional information on the Company's working capital practices, see the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources" in the Annual Report, which section is incorporated by reference herein. The majority of the Retail/LTC segment non-pharmacy revenues are paid in cash, or with debit or credit cards. Managed care organizations, pharmacy benefit managers, government funded health care programs, commercial employers and other third party insurance programs, which represent the vast majority of the Company's consolidated pharmacy revenues, typically settle in less than 30 days. With the exception of the Medicare Part D services, described further below, the remainder of the Company's consolidated pharmacy revenues are paid in cash, or with debit or credit cards. Employer groups, individuals, college students, part-time and hourly workers, health plans, providers, governmental units, government-sponsored plans (with the exception of Medicare Part D services, which are described below), labor groups and expatriates, which represent the vast majority of Health Care Benefits segment revenues, typically settle in less than 30 days. As a provider of Medicare Part D services, the Company contracts annually with CMS. Utilization of services each plan year results in the accumulation of either a receivable from or a payable to CMS. The timing of settlement of the receivable or payable with CMS takes several quarters which impacts working capital from year to year.

Colleague Development

As of December 31, 2018, the Company employed approximately 295,000 colleagues in 50 states, the District of Columbia, Puerto Rico and a number of countries outside the United States. To deliver the highest levels of service to customers, the Company devotes considerable time and attention to its people and service standards. The Company emphasizes attracting and training knowledgeable, friendly and helpful associates to work in the organization.

Intellectual Property

The Company has registered and/or applied to register a variety of trademarks and service marks used throughout its businesses, as well as domain names, and relies on a combination of copyright, patent, trademark and trade secret laws, in addition to contractual restrictions, to establish and protect the Company's proprietary rights. The Company regards its intellectual property as having significant value in the Pharmacy Services, Retail/LTC and Health Care Benefits segments. The Company is not aware of any facts that could materially impact the continuing use of any of its intellectual property.

Government Regulation

Overview

The Company's operations are subject to comprehensive federal, state and local laws and regulations and comparable multiple levels of international regulation in the jurisdictions in which it does business. There also continues to be a heightened level of review and/or audit by federal, state and international regulators of the health and related benefits industry's business and reporting practices. In addition, many of the Company's PBM clients and the Company's payors in the Retail/LTC Segment, including insurers, Medicare Part D plans, Managed Medicaid plans and managed care organizations ("MCOs"), are themselves subject to extensive regulations that affect the design and implementation of prescription drug benefit plans that they sponsor. Similarly, the Company's LTC clients, such as skilled nursing facilities, are subject to government regulations, including many of the same government regulations to which the Company is subject.

The laws and rules governing the Company's businesses and interpretations of those laws and rules continue to expand and become more restrictive each year and are subject to frequent change. The application of these complex legal and regulatory requirements to the detailed operation of the Company's businesses creates areas of uncertainty. Further, there are numerous proposed health care laws and regulations at the federal, state and international levels, some of which could adversely affect the Company's businesses if they are enacted. The Company cannot predict whether pending or future federal or state legislation or

court proceedings, including future United States Congressional appropriations, will change various aspects of the industries in which it operates or the health care industry generally or the impact those changes will have on the Company's businesses, results of operations and/or cash flows, but the effects could be materially adverse. Any failure or alleged failure to comply with applicable laws and regulations as summarized below, or any adverse applications or interpretations of, or changes in, the laws and regulations affecting the Company and/or its businesses, could have a material adverse effect on the Company's results of operations, financial condition and/or cash flows. See Item 3, "Legal Proceedings" for further information.

The Company cannot give any assurances that its businesses, financial condition, results of operations and/or cash flows will not be materially adversely affected, or that it will not be required to materially change its business practices, based on: (i) future enactment of new health care or other laws or regulations; (ii) the interpretation or application of existing laws or regulations, including the laws and regulations described in this Government Regulation section, as they may relate to one or more of the Company's businesses, one or more of the industries in which it operates and/or the health care industry generally; (iii) pending or future federal or state governmental investigations of one or more of the Company's businesses, one or more of the industries in which it operates and/or the health care industry generally; (iv) pending or future government audits, investigations or enforcement actions against the Company; (v) adverse developments in any pending *qui tam* lawsuit against the Company, whether sealed or unsealed, or in any future *qui tam* lawsuit that may be filed against the Company; or (vi) adverse developments in other pending or future legal proceedings against the Company or affecting one or more of the industries in which it operates and/or the health care industry generally.

Laws and Regulations Related to Multiple Segments of the Company's Business

Laws Related to Reimbursement by Government Programs - The Company is subject to various federal and state laws concerning its submission of claims for reimbursement by Medicare, Medicaid and other federal and state government-sponsored health care programs. Potential sanctions for violating these laws include recoupment or reduction of government reimbursement amounts, civil penalties, treble damages, and exclusion from participation in government health care programs. Such laws include the federal False Claims Act (the "False Claims Act"), the federal anti-kickback statute, state false claims acts and anti-kickback statutes in most states, the federal "Stark Law" and related state laws. In particular, the False Claims Act prohibits intentionally submitting, conspiring to submit, or causing to be submitted, false claims, records, or statements to the federal government, or intentionally failing to return overpayments, in connection with reimbursement by federal government programs. In addition, any claim for government reimbursement also violates the False Claims Act where it results from a violation of the federal anti-kickback statute.

Both federal and state false claims laws permit private individuals to file qui tam or "whistleblower" lawsuits on behalf of the federal or state government. Participants in the health and related benefits industry, including the Company, frequently are subject to actions under the False Claims Act or similar state laws. The federal Stark Law generally prohibits physicians from referring Medicare or Medicaid beneficiaries for certain services, including outpatient prescription drugs, to any entity with which the physician, or an immediate family member of the physician, has a financial relationship. The Stark Law further prohibits the entity receiving a prohibited referral from presenting a claim for reimbursement by Medicare or Medicaid for services furnished pursuant to the prohibited referral. Various states have enacted similar laws.

The ACA - The ACA made broad-based changes to the United States health care system. If the ACA is not further amended, repealed or replaced, certain of its components will continue to be phased in until 2022. While the Company anticipates continued efforts in 2019 and beyond to invalidate, modify, repeal or replace the ACA, the Company expects aspects of the ACA to continue to significantly impact its business operations and results of operations, including pricing, medical benefit ratios ("MBRs") and the geographies in which the Company's products are available.

While most of the significant aspects of the ACA became effective during or prior to 2014, parts of the ACA continue to evolve through the promulgation of executive orders, regulations and guidance as well as ongoing litigation. Additional changes to the ACA and those regulations and guidance at the federal and/or state level are likely, and those changes are likely to be significant. Growing federal and state budgetary pressures make it more likely that any changes, including changes at the state level in response to changes to, or invalidation, repeal or replacement of, the ACA and/or changes in the funding levels and/or payment mechanisms of federally supported benefit programs, will be adverse to us. For example, if any elements of the ACA are invalidated or repealed at the federal level, the Company expects that some states

would seek to enact similar requirements, such as prohibiting pre-existing condition exclusions, prohibiting rescission of insurance coverage, requiring coverage for dependents up to age 26, requiring guaranteed renewability of insurance coverage and prohibiting lifetime limits on insurance coverage.

The expansion of health care coverage contemplated by the ACA is being funded in part by reductions to the reimbursements the Company and other health plans are paid by the federal government for Medicare members, among other sources. While not all-inclusive, the following are some of the key provisions of the ACA (assuming it continues to be implemented in its current form) that become effective on or after January 1, 2019. The Company continues to evaluate these provisions and the related regulations and regulatory guidance to determine the impact that they will have on its business operations and results of operations:

- The imposition on the Company and other health insurers, health plans and other market participants of significant fees, assessments and taxes, including an annual non-tax deductible industry-wide HIF that was $14.3 billion for 2018 and has been suspended for 2019. As currently enacted, the HIF will apply for 2020, be higher for 2020 than for 2018 and increase in 2021 and annually thereafter.
- A non-tax deductible 40% excise tax on employer-sponsored health care benefits above a certain threshold beginning in 2022.
- Reduced funding for Medicaid expansion, which began in 2017.

The ACA also specifies minimum medical loss ratios ("MLRs") for Commercial and Medicare Insured products, specifies features required to be included in Commercial benefit designs, limits Commercial individual and small group rating and pricing practices, encourages additional competition (including potential incentives for new market entrants) and significantly increases federal and state oversight of health plans, including regulations and processes that could delay or limit the Company's ability to appropriately increase its health plan premium rates. This in turn could adversely affect the Company's ability to continue to participate in certain product lines and/or geographies that it serves today.

Potential repeal of the ACA, ongoing legislative, regulatory and administrative policy changes to the ACA, the results of congressional and state level elections, the December 2018 U.S. District Court decision invalidating the ACA and other pending litigation challenging aspects of the law or funding for the law and federal budget negotiations continue to create uncertainty about the ultimate impact of the ACA. The pending litigation challenging the ACA includes challenges by various states of the federal government's decision to curtail payments related to the Cost-Sharing Subsidy Program. The time frame for conclusion and final outcome and ultimate impact of this litigation are uncertain. Given the inherent difficulty of foreseeing the nature and scope of future changes to the ACA and how states, businesses and individuals will respond to those changes, the Company cannot predict the impact on it of future changes to the ACA. It is reasonably possible that invalidation, repeal or replacement of or other changes to the ACA and/or states' responses to such changes, in the aggregate, could have a significant adverse effect on the Company's businesses, results of operations and cash flows.

Medicare Regulation - The Company's Medicare Advantage products compete directly with Original Medicare and Medicare Advantage products offered by other Medicare Advantage organizations and Medicare Supplement products offered by other insurers. The Company's Medicare PDP and Medicare Supplement products are products that Medicare beneficiaries who are enrolled in Original Medicare purchase to enhance their Original Medicare coverage.

The Company continues to expand the number of counties in which it offers Medicare products. The Company expects to further expand its Medicare service area and products in 2019 and is seeking to substantially grow its Medicare membership, revenue and results of operations over the next several years, including through growth in Medicare Supplement products. The anticipated organic expansion of the Medicare service area and Medicare products offered and the Medicare-related provisions of the ACA significantly increase the Company's exposure to funding and regulation of, and changes in government policy with respect to and/or funding or regulation of, the various Medicare programs in which the Company participates, including changes in the amounts payable to us under those programs and/or new reforms or surcharges on existing programs. For example, since the 2014 contract year, the ACA has required minimum MLRs for Medicare Advantage and Medicare Part D plans of 85%. If a Medicare Advantage or Medicare Part D contract pays minimum MLR rebates for three consecutive years, it will become ineligible to enroll new members. If a Medicare Advantage contract pays rebates for five consecutive years, it will be terminated by CMS.

The Company's Medicare Advantage and PDP products are heavily regulated by CMS. The regulations and contractual requirements applicable to the Company and other private participants in Medicare programs are complex, expensive to comply with and subject to change. For example, in the second quarter of 2014, CMS issued a final rule implementing the ACA requirements that Medicare Advantage and PDP plans report and refund to CMS overpayments that those plans

receive from CMS. The precise interpretation, impact and legality of this rule are not clear and are subject to pending litigation. Payments the Company receives from CMS for its Medicare Advantage and Part D businesses also are subject to risk adjustment based on the health status of the individuals enrolled. Elements of that risk adjustment mechanism continue to be challenged by the DOJ, the Office of Inspector General ("OIG") and CMS itself. Substantial changes in the risk adjustment mechanism, including changes

that result from enforcement or audit actions, could materially affect the fairness of the Company's Medicare reimbursement, require the Company to raise prices or reduce the benefits offered to Medicare beneficiaries, and potentially limit the Company's (and the industry's) participation in the Medicare program.

The Company has invested significant resources to comply with Medicare standards, and its Medicare compliance efforts will continue to require significant resources. CMS may seek premium and other refunds, prohibit the Company from continuing to market and/or enroll members in or refuse to passively enroll members in one or more of the Company's Medicare or Medicare-Medicaid demonstration (historically known as "dual eligible") plans, exclude us from participating in one or more Medicare, dual eligible or dual eligible special needs plan programs and/or institute other sanctions and/or civil monetary penalties against the Company if it fails to comply with CMS regulations or its Medicare contractual requirements. The Company's Medicare Supplement products are regulated at the state level.

CMS regularly audits the Company's performance to determine its compliance with CMS's regulations and its contracts with CMS and to assess the quality of services it provides to Medicare Advantage and PDP beneficiaries. For example, CMS currently conducts risk adjustment data validation ("RADV") audits of a subset of Medicare Advantage contracts for each contract year. Since 2013, CMS has selected certain of the Company's Medicare Advantage contracts for various years for RADV audit. The OIG also is auditing the Company's risk adjustment data and that of other companies, and the Company expects CMS and the OIG to continue auditing risk adjustment data. The Company also has received Civil Investigative Demands ("CIDs") from, and provided documents and information to, the Civil Division of the DOJ in connection with a current investigation of its patient chart review processes in connection with risk adjustment data submissions under Parts C and D of the Medicare program.

On October 26, 2018, CMS issued proposed rules related to, among other things, changes to the RADV audit methodology established by CMS in 2012, CMS projects that the changes to the RADV audit methodology would increase its recoveries from Medicare Advantage plans as a result of RADV audits. CMS has requested comments on the proposed rules, including whether the proposed RADV rule change should apply retroactively to audits of Medicare Advantage plans for contract year 2011 and forward. The Company is evaluating the potential adverse effect, which could be material, on the Company's results of operations, financial condition, and cash flows if the proposed RADV rule change were adopted as proposed. CMS also has announced its intent to use third party auditors to attain its ultimate goal of subjecting all Medicare Advantage contracts to either a comprehensive or a targeted RADV audit for each contract year.

A portion of each Medicare Advantage plan's reimbursement is tied to the plan's "star ratings." The star rating system considers a variety of measures adopted by CMS, including quality of preventative services, chronic illness management, compliance and overall customer satisfaction. Only Medicare Advantage plans with an overall star rating of four or more stars (out of five stars) are eligible for a quality bonus in their basic premium rates. As a result, the Company's Medicare Advantage plans' results of operations in 2019 and going forward will be significantly affected by their star ratings. The Company's star ratings and past performance scores are adversely affected by the compliance issues that arise each year in its Medicare operations. CMS released the Company's 2019 star ratings in October 2018. The Company's 2019 star ratings will be used to determine which of its Medicare Advantage plans have ratings of four stars or higher and qualify for bonus payments in 2020. Based on the Company's membership at December 31, 2018, 79% of its Medicare Advantage members were in plans with 2019 star ratings of at least 4.0 stars. CMS will release updated stars ratings in October 2019 that will be used to determine which Medicare Advantage plans have ratings of four stars or higher and qualify for bonus payments in 2021. CMS also gives PDPs star ratings which affect PDP's enrollment and result in contract termination if the PDP is rated less than three stars for three consecutive years. CMS continues to revise its star ratings system to make it harder to achieve four stars or more. Despite the Company's success in maintaining high star ratings and other quality measures for 2019 and the continuation of its improvement efforts, there can be no assurances that it will be successful in maintaining or improving its star ratings in future years. Accordingly, the Company's Medicare Advantage plans may not be eligible for full level quality bonuses, which could adversely affect the benefits such plans can offer, reduce membership and/or reduce profit margins.

Overall, the Company projects the benchmark payment rates in CMS's April 2018 final notice detailing final Medicare Advantage benchmark payment rates for 2019 (the "Final Notice") will increase funding for the Company's Medicare Advantage business, excluding the impact of coding trend, by approximately 2.5 percent in 2019 compared to 2018. This 2019 rate increase only partially offsets the challenge the Company faces from the impact of the increasing cost of medical

care (including prescription medications) and CMS local and national coverage decisions that require the Company to pay for services and supplies that are not factored into the Company's bids. The federal government may seek to impose restrictions on the configuration of pharmacy or other provider networks for Medicare Advantage and/or PDP plans, or otherwise restrict the ability of these plans to alter benefits, negotiate prices or establish other terms to improve affordability or maintain viability of products. The Company currently believes that the payments received and will receive in the near term are adequate to justify

the Company's continued participation in the Medicare Advantage and PDP programs, although there are economic and political pressures to continue to reduce spending on the program, and this outlook could change.

Going forward, the Company expects CMS, the OIG, the DOJ, other federal agencies and the United States Congress to continue to scrutinize closely each component of the Medicare program (including Medicare Advantage, PDP, demonstration projects such as Medicare-Medicaid plans and provider network access and adequacy), modify the terms and requirements of the program and possibly seek to recast or limit private insurers' role. It is not possible to predict the outcome of this Congressional or regulatory activity, any of which could adversely affect the Company.

Anti-Remuneration Laws - Federal law prohibits, among other things, an entity from knowingly and willfully offering, paying, soliciting or receiving, subject to certain exceptions and "safe harbors," any remuneration to induce the referral of individuals or the purchase, lease or order of items or services for which payment may be made under Medicare, Medicaid or certain other federal and state health care programs. A number of states have similar laws, some of which are not limited to services paid for with government funds. Sanctions for violating these federal and state anti-remuneration laws may include imprisonment, criminal and civil fines, and exclusion from participation in Medicare, Medicaid and other federal and state government-sponsored health care programs. Companies involved in public health care programs such as Medicare and/or Medicaid are required to maintain compliance programs to detect and deter fraud, waste and abuse, and are often the subject of fraud, waste and abuse investigations and audits. The Company has invested significant resources to comply with Medicare and Medicaid program standards. Ongoing vigorous law enforcement and the highly technical regulatory scheme mean that the Company's compliance efforts in this area will continue to require significant resources.

Antitrust and Unfair Competition - The Federal Trade Commission ("FTC") investigates and prosecutes practices that are "unfair trade practices" or "unfair methods of competition." Numerous lawsuits have been filed throughout the United States against pharmaceutical manufacturers, retail pharmacies and/or PBMs under various federal and state antitrust and unfair competition laws challenging, among other things: (i) brand name drug pricing and rebate practices of pharmaceutical manufacturers, (ii) the maintenance of retail or specialty pharmacy networks by PBMs, and (iii) various other business practices of PBMs and retail pharmacies. To the extent that the Company appears to have actual or potential market power in a relevant market or CVS Pharmacy, CVS Specialty or MinuteClinic plays a unique or expanded role in a PBM or Health Care Benefits segment product offering, the Company's business arrangements and uses of confidential information may be subject to heightened scrutiny from an anti-competitive perspective and possible challenge by state or federal regulators or private parties.

Privacy and Confidentiality Requirements - Many of the Company's activities involve the receipt, use and disclosure by the Company of personally identifiable information ("PII") as permitted in accordance with applicable federal and state privacy and data security laws, which require organizations to provide appropriate privacy and security safeguards for such information. In addition to PII, the Company uses and discloses de-identified data for analytical and other purposes when permitted. Additionally, there are industry standards for handling credit card data known as the Payment Card Industry Data Security Standard, which are a set of requirements designed to help ensure that entities that process, store or transmit credit card information maintain a secure environment. Certain states have incorporated these requirements into state laws or enacted other requirements relating to the use and/or disclosure of PII.

The federal Health Insurance Portability and Accountability Act of 1996 and the regulations issued thereunder (collectively, "HIPAA"), as further modified by the American Recovery and Reinvestment Act of 2009 ("ARRA") impose extensive requirements on the way in which health plans, health care providers, health care clearinghouses (known as "covered entities") and their business associates use, disclose and safeguard protected health information ("PHI"). Further, ARRA requires us and other covered entities to report any breaches of PHI to impacted individuals and to the United States Department of Health and Human Services ("HHS") and to notify the media in any states where 500 or more people are impacted by the unauthorized release or use of or access to PHI. Criminal penalties and civil sanctions may be imposed for failing to comply with HIPAA standards. The Health Information Technology for Economic and Clinical Health Act (the "HITECH Act"), enacted as part of ARRA, amended HIPAA to impose additional restrictions on third-party funded communications using PHI and the receipt of remuneration in exchange for PHI. The HITECH Act also extended HIPAA privacy and security requirements and penalties directly to business associates. HHS has begun to audit health plans, providers and other parties to enforce HIPAA compliance, including with respect to data security.

In addition to HIPAA, state health privacy laws apply to the extent they are more protective of individual privacy than is HIPAA, including laws that place stricter controls on the release of information relating to specific diseases or conditions and requirements to notify members of unauthorized release or use of or access to PHI. States also have adopted regulations to implement provisions of the Financial Modernization Act of 1999 (also known as the Gramm-Leach-Bliley Act ("GLBA")) which generally require insurers, including health insurers, to provide customers with notice regarding how their non-public

personal health and financial information is used and the opportunity to "opt out" of certain disclosures before the insurer shares such information with a non-affiliated third party. Like HIPAA, GLBA sets a "floor" standard, allowing states to adopt more stringent requirements governing privacy protection. Complying with additional state requirements requires us to make additional investments beyond those the Company has made to comply with HIPAA and GLBA.

The Cybersecurity Information Sharing Act of 2015 encourages organizations to share cyber threat indicators with the federal government and, among other things, directs HHS to develop a set of voluntary cybersecurity best practices for organizations in the health care industry. In addition, states have begun to enact more comprehensive privacy laws and regulations addressing consumer rights to data protection or transparency. States also are starting to issue regulations and proposed regulations specifically related to cybersecurity, such as the regulations issued by the New York Department of Financial Services. Complying with conflicting cybersecurity regulations, which may differ from state to state, requires significant resources. In addition, differing approaches to state privacy and/or cyber-security regulation and varying enforcement philosophies may materially and adversely affect the Company's ability to standardize its products and services across state lines. Widely-reported large scale commercial data breaches in the United States and abroad increase the likelihood that additional data security legislation will be considered by additional states. These legislative and regulatory developments will impact the design and operation of the Company's businesses, its privacy and security strategy and its web-based and mobile assets.

Finally, Public Exchanges are required to adhere to privacy and security standards with respect to PII, and to impose privacy and security standards that are at least as protective of PII as those the Public Exchange has implemented for itself or non-Public Exchange entities, which include insurers offering plans through the Public Exchanges and their designated downstream entities, including PBMs and other business associates. These standards may differ from, and be more stringent than, HIPAA.

Consumer Protection Laws - The federal government has many consumer protection laws, such as the Federal Trade Commission Act, the Federal Postal Service Act, the Consumer Product Safety Act and the FTC's Telemarketing Sales Rule. Most states also have similar consumer protection laws. In addition, the federal government and most states have adopted laws and/or regulations requiring places of public accommodation, health care services and other goods and services to be accessible to people with disabilities. These consumer protection and accessibility laws and regulations have been the basis for investigations, lawsuits and multistate settlements relating to, among other matters, the marketing of loyalty programs, and health care products and services, pricing accuracy, expired front store products, financial incentives provided by drug manufacturers to pharmacies in connection with therapeutic interchange programs, disclosures related to how personal data is used and protected and the accessibility of goods and services to people with disabilities. As a result of the Company's direct-to-consumer activities, including mobile and web-based solutions offered to members and to other consumers, the Company also is subject to federal and state regulations applicable to electronic communications and to other general consumer protection laws and regulations. For example, the California Consumer Privacy Act will become effective in 2020, and the Company expects additional federal and state regulation of consumer privacy protection to be enacted in 2019. The Company expects these new laws and regulations to impact the design of its products and services and the management and operation of its businesses and to increase its compliance costs.

Telemarketing and Other Outbound Contacts - Certain federal and state laws, such as the Telephone Consumer Protection Act, give the FTC, Federal Communications Commission and state attorneys general the ability to regulate, and bring enforcement actions relating to, telemarketing practices and certain automated outbound contacts such as phone calls, texts or emails. Under certain circumstances, these laws provide consumers with a private right of action. Violations of these laws could result in substantial statutory penalties and other sanctions.

Pharmacy and Professional Licensure and Regulation - The Company is subject to a variety of intersecting federal and state statutes and regulations that govern the wholesale distribution of drugs; operation of retail, specialty, infusion, LTC and mail order pharmacies; licensure of facilities and professionals, including pharmacists, technicians, nurses and other healthcare professionals; registration of facilities with the United States Drug Enforcement Administration ("DEA") and analogous state agencies that regulate controlled substances; packaging, storing, shipping and tracking of pharmaceuticals; repackaging of drug products; labeling, medication guides and other consumer disclosures; interactions with prescribers and health care professionals; compounding of prescription medications; dispensing of controlled and non-controlled substances; counseling of patients; transfers of prescriptions; advertisement of prescription products and pharmacy services; security; inventory control; recordkeeping; reporting to Boards of Pharmacy, the United States Food and Drug

Administration (“FDA”), the Consumer Product Safety Commission, the DEA and related state agencies; and other elements of pharmacy practice. Pharmacies are highly regulated and have contact with a wide variety of federal, state and local agencies, with various powers to investigate, inspect, audit or solicit information, including Boards of Pharmacy and Nursing, the DEA, the FDA, the United States Department of Justice, HHS and others. Many of these agencies have broad enforcement powers, conduct audits on a regular

basis, can impose substantial fines and penalties, and may revoke the license, registration or program enrollment of a facility or professional.

State Insurance, HMO and Insurance Holding Company Regulation - A number of states regulate affiliated groups of insurers and HMOs such as the Company under holding company statutes. These laws may, among other things, require prior regulatory approval of dividends and material intercompany transfers of assets and transactions between the regulated companies and their affiliates, including their parent holding companies. The Company expects the states in which its insurance and HMO subsidiaries are licensed to continue to expand their regulation of the corporate governance and internal control activities of its insurance companies and HMOs. Changes to state insurance, HMO and/or insurance holding company laws or regulations or changes to the interpretation of those laws or regulations, including due to regulators' increasing concerns regarding insurance company and/or HMO solvency due, among other things, to recent and expected payor insolvencies, could negatively affect the Company's businesses in various ways, including through increases in solvency fund assessments, requirements that the Company hold greater levels of capital and/or delays in approving dividends from regulated subsidiaries.

PBM offerings of prescription drug coverage under certain risk arrangements may be subject to laws and regulations in various states. Such laws may require that the party at risk become licensed as an insurer, establish reserves or otherwise demonstrate financial viability. Laws that may apply in such cases include insurance laws and laws governing MCOs and limited prepaid health service plans.

The states of domicile of the Company's regulated subsidiaries have statutory risk-based capital, or "RBC", requirements for health and other insurance companies and HMOs based on the RBC Model Act. These RBC requirements are intended to assess the capital adequacy of life and health insurers and HMOs, taking into account the risk characteristics of a company's investments and products. The RBC Model Act sets forth the formula for calculating RBC requirements, which are designed to take into account asset risks, insurance risks, interest rate risks and other relevant risks with respect to an individual company's business. In general, under these laws, an insurance company or HMO must submit a report of its RBC level to the insurance department or insurance commissioner of its state of domicile for each calendar year. At December 31, 2018, the RBC level of each of the Company's insurance and HMO subsidiaries was above the level that would require regulatory action.

For information regarding restrictions on certain payments of dividends or other distributions by the Company's HMO and insurance company subsidiaries, see Note 12 ''Shareholders' Equity'' contained in the "Notes to Consolidated Financial Statements" in the Annual Report, which is incorporated by reference herein.

The holding company laws for the states of domicile of certain of the Company's subsidiaries also restrict the ability of any person to obtain control of an insurance company or HMO without prior regulatory approval. Under those statutes, without such approval (or an exemption), no person may acquire any voting security of an insurance holding company (such as the Company's parent company, CVS Health Corporation) that controls an insurance company or HMO, or merge with such a holding company, if as a result of such transaction such person would control the insurance holding company. Control is generally defined as the direct or indirect power to direct or cause the direction of the management and policies of a person and is presumed to exist if a person directly or indirectly owns or controls 10% or more of the voting securities of another person.

Certain states have laws that prohibit submitting a false claim or making a false record or statement in order to secure reimbursement from an insurance company. These state laws vary, and violation of them may lead to the imposition of civil or criminal penalties.

Government Agreements and Mandates - The Company and/or its various affiliates are subject to certain consent decrees, settlement and other agreements, corrective action plans and corporate integrity agreements with various federal, state and local authorities relating to such matters as privacy practices, controlled substances, Medicare Part D prescription drug plans, expired products, environmental and safety matters, marketing and advertising practices, PBM, LTC and other pharmacy operations and various other business practices. Certain of these agreements contain ongoing reporting, monitoring and/or other compliance requirements for the Company. Failure to meet the Company's obligations under these agreements could result in civil or criminal remedies, financial penalties, administrative remedies, and/or exclusion from participation in federal health care programs.

Environmental and Safety Regulation - The Company's businesses are subject to various federal, state and local laws, regulations and other requirements pertaining to protection of the environment, public health and employee safety, including, for example, regulations governing the management of hazardous substances, the cleaning up of contaminated sites, and the maintenance of safe working conditions in the Company's stores, distribution centers and other facilities. Governmental agencies at the federal, state and local levels continue to focus on the retail and health care sectors' compliance with such laws

and regulations, and have at times pursued enforcement activities. Any failure to comply with these regulations could result in fines or other sanctions by government authorities.

ERISA Regulation - The Employee Retirement Income Security Act of 1974 ("ERISA"), provides for comprehensive federal regulation of certain employee pension and benefit plans, including private employer and union sponsored health plans and certain other plans that contract with us to provide PBM services. In general, the Company assists plan sponsors in the administration of their health benefit plans, including the prescription drug benefit portion of those plans, in accordance with the plan designs adopted by the plan sponsors. In addition, the Company may have fiduciary duties where it has specifically contracted with a plan sponsor to accept limited fiduciary responsibility, such as for the adjudication of initial prescription drug benefit claims and/or the appeals of denied claims under a plan. In addition to its fiduciary provisions, ERISA imposes civil and criminal liability on service providers to health plans and certain other persons if certain forms of illegal remuneration are made or received. These provisions of ERISA are broadly written and their application to specific business practices is often uncertain.

Some of the Company's health and related benefits and large case pensions products and services and related fees also are subject to potential issues raised by judicial interpretations relating to ERISA. Under those interpretations, together with United States Department of Labor ("DOL") regulations, the Company may have ERISA fiduciary duties with respect to PBM members and/or certain general account assets held under contracts that are not guaranteed benefit policies. As a result, certain transactions related to those general account assets are subject to conflict of interest and other restrictions, and the Company must provide certain disclosures to policyholders annually. The Company must comply with these restrictions or face substantial penalties.

In addition, ERISA generally preempts all state and local laws that relate to employee benefit plans, but the extent of the pre-emption continues to be reviewed by courts.

Other Legislative Initiatives and Regulatory Initiatives - The United States federal and state governments, as well as governments in other countries where the Company does business, continue to enact and seriously consider many broad-based legislative and regulatory proposals that have had a material impact on or could materially impact various aspects of the health care and related benefits system and the Company's businesses. For example:

- Under the Budget Control Act of 2011 and the American Taxpayer Relief Act of 2012 significant, automatic across-the-board budget cuts (known as sequestration) began in March 2013, including Medicare spending cuts of not more than 2% of total program costs per year through 2024. Significant uncertainty remains as to whether and how the United States Congress will proceed with actions that create additional federal revenue and/or with entitlement reform. The Company cannot predict future federal Medicare or federal or state Medicaid funding levels or the impact that future federal or state budget actions or entitlement program reform, if it occurs, will have on the Company's businesses, operations or results of operations, but the effects could be materially adverse, particularly on the Company's Medicare and/or Medicaid revenues, MBRs and results of operations.
- The European Union's ("EU's") General Data Protection Regulation ("GDPR") began to apply across the EU during 2018.
- Other significant legislative and/or regulatory measures which are or recently have been under consideration include the following:
    - Elimination of the payment of manufacturer's rebates on prescription drugs to PBMs, PDPs and Managed Medicaid organizations in connection with federally funded health care programs. In January 2019, HHS proposed regulations that would exclude such rebates from the safe harbor that currently is available for such payments under the federal anti-kickback statute.
    - Imposing requirements and restrictions on the design and/or administration of pharmacy benefits plans offered by the Company's and its clients' health plans and/or its PBM clients and/or the services the Company provides to those clients, including restricting or eliminating the use of formularies for prescription drugs; restricting the Company's ability to require members to obtain drugs through a home delivery or specialty pharmacy; restricting the Company's ability to place certain specialty or other drugs in the higher cost tiers of its pharmacy formularies; restricting the Company's ability to make changes to drug formularies and/or clinical programs; limiting or eliminating rebates on pharmaceuticals; requiring the use of up front purchase price discounts on pharmaceuticals in lieu of rebates; restricting the Company's ability to configure

its health plan and retail pharmacy networks; and restricting or eliminating the use of certain drug pricing methodologies.

- Increased federal or state government regulation of, or involvement in, the pricing and/or purchasing of drugs.

- Restricting the Company's ability to limit providers' participation in its networks and/or remove providers from its networks by imposing network adequacy requirements or otherwise (including in its Medicare and Commercial Health Care Benefits products).
- Imposing assessments on (or to be collected by) health plans or health carriers, which may or may not be passed onto their customers. These assessments may include assessments for insolvency, the uninsured, uncompensated care, Medicaid funding or defraying health care provider medical malpractice insurance costs.
- Mandating coverage by the Company and its clients' health plans for additional conditions and/or specified procedures, drugs or devices (for example, high cost pharmaceuticals, experimental pharmaceuticals and oral chemotherapy regimens).
- Regulating electronic connectivity.
- Mandating or regulating the disclosure of provider fee schedules and other data about the Company's payments to providers.
- Mandating or regulating disclosure of provider outcome and/or efficiency information.
- Prescribing or limiting members' financial responsibility for health care or other covered services they utilize.
- Assessing the medical device status of HIT products and/or solutions, mobile consumer wellness tools and clinical decision support tools, which may require compliance with FDA requirements in relation to some of these products, solutions and/or tools.
- Imposing payment levels for services rendered to the Company's members by providers who do not have contracts with the Company.
- Restricting the ability of employers and/or health plans to establish or impose member financial responsibility.
- Amending or supplementing ERISA to impose greater requirements on PBMs, the administration of employer-funded benefit plans or limit the scope of current ERISA pre-emption, which would among other things expose us and other health plans to expanded liability for punitive and other extra-contractual damages and additional state regulation.

It is uncertain whether the Company can counter the potential adverse effects of such potential legislation or regulation on its results of operations or cash flows, including whether it can recoup, through higher premium rates, expanded membership or other measures, the increased costs of mandated coverage or benefits, assessments, fees, taxes or other increased costs, including the cost of modifying its systems to implement any enacted legislation or regulations.

The Company's businesses also may be affected by other legislation and regulations. The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Financial Reform Act") creates incentives for whistleblowers to speak directly to the government rather than utilizing internal compliance programs and reduces the burden of proof under the Foreign Corrupt Practices Act of 1977 (the "FCPA"). There also are laws and regulations that set standards for the escheatment of funds to states.

Health savings accounts, health reimbursement arrangements and flexible spending accounts and certain of the tax, fee and subsidy provisions of the ACA also are regulated by the United States Department of the Treasury and the Internal Revenue Service.

The Company also may be adversely affected by court and regulatory decisions that expand or revise the interpretations of existing statutes and regulations or impose medical malpractice or bad faith liability. Federal and state courts continue to consider cases, and federal and state regulators continue to issue regulations and interpretations, addressing bad faith liability for denial of medical claims, the scope of ERISA's fiduciary duty requirements, the scope of the False Claims Act and the pre-emptive effect of ERISA on state laws.

Contract Audits - The Company is subject to audits of many of its contracts, including its PBM client contracts, its PBM rebate contracts, its PBM network contracts, its contracts relating to Medicare Advantage, and/or Medicare Part D, the agreements the Company's pharmacies enter into with other payors, its Medicaid contracts and its customer contracts.

Because some of the Company's contracts are with state or federal governments or with entities contracted with state or federal agencies, audits of these agreements are often regulated by the federal or state agencies responsible for administering federal or state benefits programs, including those which operate Medicaid fee for service plans, Managed Medicaid plans, Medicare Part D plans or Medicare Advantage organizations.

Federal Employee Health Benefits Program - The Company's subsidiaries contract with the Office of Personnel Management (the "OPM") to provide managed health care services under the FEHB program in their service areas. These contracts with the

OPM and applicable government regulations establish premium rating arrangements for this program. OPM regulations require that community-rated FEHB plans meet a FEHB program-specific MLR by plan code and market. Managing to these rules is complicated by the simultaneous application of the minimum MLR standards and associated premium rebate requirements of the ACA. The Company also has a contractual arrangement with carriers for the FEHB program, such as the BlueCross BlueShield Association, to provide pharmacy services to federal employees, postal workers, annuitants, and their dependents under the Government-wide Service Benefit Plan, as authorized by the FEHB Act and as part of the FEHB program. Additionally, the Company manages certain FEHB plans on a "cost-plus" basis. These arrangements subject the Company to certain aspects of FEHB Act, and other federal regulations, such as the FEHB Acquisition Regulation, that otherwise would not be applicable to the Company. The OPM also is auditing the Company and its other contractors to, among other things, verify that plans meet their applicable FEHB program-specific MLR and the premiums established under the OPM's Insured contracts and costs allocated pursuant to the OPM's cost-based contracts are in compliance with the requirements of the applicable FEHB program. The OPM may seek premium refunds or institute other sanctions against the Company if it fails to comply with the FEHB program requirements.

Disease Management Services Regulation - The Company provides disease management programs to health plan and PBM plan members for complex medical conditions and arranges for those members to receive disease management programs for common medical conditions. State laws regulate the practice of medicine, the practice of pharmacy and the practice of nursing. Clinicians engaged in a professional practice in connection with the provision of disease management services must satisfy applicable state licensing requirements and must act within their scope of practice.

Third Party Administration and Other State Licensure Laws - Many states have licensure or registration laws governing certain types of administrative organizations, such as PPOs, TPAs and companies that provide utilization review services. Several states also have licensure or registration laws governing the organizations that provide or administer consumer card programs (also known as cash card or discount card programs).

International Regulation - The Company currently has insurance licenses in several foreign jurisdictions and does business directly or through local affiliations in numerous countries around the world. The Company is taking steps to be able to continue to serve customers in the European Economic Area following the United Kingdom's pending exit from the EU ("Brexit"). However, the impact of Brexit on the Company's international business and results of operations is uncertain.

The Company's international operations are subject to different, and sometimes more stringent, legal and regulatory requirements, which vary widely by jurisdiction, including anti-corruption laws; economic sanctions laws; various privacy, insurance, tax, tariff and trade laws and regulations; corporate governance, privacy, data protection (including the EU's General Data Protection Regulation which began to apply across the EU during 2018), data mining, data transfer, labor and employment, intellectual property, consumer protection and investment laws and regulations; discriminatory licensing procedures; compulsory cessions of reinsurance; required localization of records and funds; higher premium and income taxes; limitations on dividends and repatriation of capital; and requirements for local participation in an insurer's ownership. In addition, the expansion of the Company's operations into foreign countries increases the Company's exposure to the anti-bribery, anti-corruption and anti-money laundering provisions of United States law, including the FCPA, and corresponding foreign laws, including the U.K. Bribery Act 2010 (the "UK Bribery Act").

Anti-Corruption Laws - The FCPA prohibits offering, promising or authorizing others to give anything of value to a foreign government official to obtain or retain business or otherwise secure a business advantage. The Company also is subject to applicable anti-corruption laws of the jurisdictions in which it operates. In many countries outside the United States, health care professionals are employed by the government. Therefore, the Company's dealings with them are subject to regulation under the FCPA. Violations of the FCPA and other anti-corruption laws may result in severe criminal and civil sanctions as well as other penalties, and the United States Securities and Exchange Commission (the "SEC") and the DOJ have increased their enforcement activities with respect to the FCPA. The UK Bribery Act is an anti-corruption law that is broader in scope than the FCPA and applies to all companies with a nexus to the United Kingdom. Disclosures of FCPA violations may be shared with the UK authorities, thus potentially exposing companies to liability and potential penalties in multiple jurisdictions. The Company has internal control policies and procedures and conducts training and compliance programs for its employees to deter prohibited practices. However, if the Company's employees or agents fail to comply with applicable laws governing its international operations, it may face investigations, prosecutions and other legal proceedings and actions which could result in civil penalties, administrative remedies and criminal sanctions.

Anti-Money Laundering Regulations - Certain lines of the Company's businesses are subject to Treasury anti-money laundering regulations. Those lines of business have implemented anti-money laundering policies designed to insure their

compliance with the regulations. The Company also may be subject to anti-money laundering laws in non-U.S. jurisdictions where it operates.

Office of Foreign Assets Control - The Company also is subject to regulation by OFAC. OFAC administers and enforces economic and trade sanctions based on United States foreign policy and national security goals against targeted foreign countries and regimes, terrorists, international narcotics traffickers, those engaged in activities related to the proliferation of weapons of mass destruction, and other threats to the national security, foreign policy or economy of the United States. In addition, the Company may be subject to similar regulations in the non-U.S. jurisdictions in which it operates.

Laws and Regulations Related to the Pharmacy Services Segment

In addition to the laws and regulations discussed above that may affect multiple segments of the Company's business, the Company is subject to federal, state and local statutes and regulations governing the operation of its Pharmacy Services segment specifically. Among these are the following:

PBM Laws and Regulation - Legislation seeking to regulate PBM activities in a comprehensive manner has been introduced or enacted in a number of states. This legislation could adversely affect the Company's ability to conduct business on commercially reasonable terms in states where the legislation is in effect. In addition, certain quasi-regulatory organizations, including the National Association of Boards of Pharmacy and the National Association of Insurance Commissioners ("NAIC") and the National Council of Insurance Legislators, have issued model regulations or may propose future regulations concerning PBMs and/or PBM activities. Similarly, credentialing organizations such as NCQA and URAC may establish voluntary standards regarding PBM, mail or specialty pharmacy activities. While the actions of these quasi-regulatory or standard-setting organizations do not have the force of law, they may influence states to adopt their requirements or recommendations and influence client requirements for PBM or specialty pharmacy services. Moreover, any standards established by these organizations could also impact the Company's health plan clients and/or the services provided to them and/or the Company's health plans.

The Company's PBM activities also are regulated directly and indirectly at the federal and state levels, including being subject to the False Claims Act and state false claims acts and federal and state anti-kickback laws. These laws and regulations govern, and proposed legislation and regulations may govern and/or further restrict, critical PBM practices, including disclosure, receipt and retention of rebates and other payments received from pharmaceutical manufacturers; use of, administration of and/or changes to drug formularies, maximum allowable cost ("MAC") list pricing, average wholesale prices ("AWPs") and/or clinical programs; the offering to plan sponsors of pricing that includes retail network "differential" or "spread" (i.e., a difference between the drug price charged to the plan sponsor by a PBM and the price paid by the PBM to the dispensing provider); disclosure of data to third parties; drug utilization management practices; the level of duty a PBM owes its customers; configuration of pharmacy networks; the operations of the Company's pharmacies (including audits of its pharmacies); disclosure of negotiated provider reimbursement rates; disclosure of fees associated with administrative service agreements and patient care programs that are attributable to members' drug utilization; and registration or licensing of PBMs. Failure by the Company or one of its PBM services suppliers to comply with these laws or regulations could result in material fines and/or sanctions and could have a material adverse effect on the Company's results of operations and/or cash flows.

PDPs and the Company's PBM service contracts, including those in which the Company assumes certain risks under performance guarantees or similar arrangements, are generally not subject to insurance regulation by the states. However, state departments of insurance are increasing their oversight of PBM activities due to legislation passing in several states requiring PBMs to register or obtain a license with the department. Rulemaking is either underway or has already taken place in a few states with the areas of focus on licensure requirements, pharmacy reimbursement for generics (MAC reimbursement) and pharmacy audits - most of which fall under the state insurance code.

Pharmacy Network Access Legislation - Medicare Part D and a majority of states now have some form of legislation affecting the Company's (and its health plans' and its health plan clients') ability to limit access to a pharmacy provider network or remove network providers. For example, certain "any willing provider" legislation may require the Company or its clients to admit a nonparticipating pharmacy if such pharmacy is willing and able to meet the plan's price and other applicable terms and conditions for network participation. These laws could negatively affect the services and economic benefits achievable through a limited pharmacy provider network. Also, a majority of states now have some form of

legislation affecting the Company's ability (and the Company's and its client health plans' ability) to conduct audits of network pharmacies regarding claims submitted to the Company for payment. These laws could negatively affect the Company's ability to recover overpayments of claims submitted by network pharmacies that the Company identifies through pharmacy audits.

Pharmacy Pricing Legislation - Several states have passed legislation regulating the Company's ability to manage and establish MACs for generic prescription drugs. MAC methodology is a common cost management practice used by private and public payors (including CMS) to pay pharmacies for dispensing generic prescription drugs. MAC prices specify the allowable reimbursement by a PBM for a particular strength and dosage of a generic drug that is available from multiple manufacturers but sold at different prices. State legislation can regulate the disclosure of MAC prices and MAC price methodologies, the kinds of drugs that a PBM can pay for at a MAC price, and the rights of pharmacies to appeal a MAC price established by a PBM. These laws could negatively affect the Company's ability to establish MAC prices for generic drugs.

Formulary and Plan Design Regulation - A number of government entities regulate the administration of prescription drug benefits. HHS regulates how Medicare Part D formularies are developed and administered, including requiring the inclusion of all drugs in certain classes and categories, subject to limited exceptions. Under the ACA, CMS imposes drug coverage requirements for health plans required to cover essential health benefits, including plans offered through federal or state Public Exchanges. Additionally, the NAIC and health care accreditation agencies like NCQA and URAC have developed model acts and standards for formulary development that are often incorporated into government requirements. Many states regulate the scope of prescription drug coverage, as well as the delivery channels to receive prescriptions, for insurers, MCOs and Medicaid managed care plans. The increasing government regulation of formularies could significantly affect the Company's ability to develop and administer formularies, networks and other plan design features on behalf of its insurer, MCO and other clients. Similarly, some states prohibit health plan sponsors from implementing certain restrictive design features. This regulation could limit or preclude (i) limited networks, (ii) a requirement to use particular providers, (iii) copayment differentials among providers and (iv) formulary tiering practices.

FDA Regulation - The FDA regulates the Company's compounding pharmacy and clinical research operations.

Laws and Regulations Related to the Retail/LTC Segment

In addition to the laws and regulations discussed above that may affect multiple segments of the Company's business, the Company is subject to federal, state and local statutes and regulations governing the operation of its Retail/LTC segment specifically. Among these are the following:

FDA Regulation - The FDA generally has authority to, among other things, regulate the manufacture, distribution, sale and labeling of many products sold through retail pharmacies, including prescription drugs, over-the-counter medications, medical devices (including mobile medical devices), cosmetics, dietary supplements and certain food items. The FDA regulates the Company's activities as a distributor of store brand products.

Retail Clinics - States regulate retail clinics operated by nurse practitioners or physician assistants through physician oversight, clinic and lab licensure requirements and the prohibition of the corporate practice of medicine. A number of states have implemented or proposed laws or regulations that impact certain components of retail clinic operations such as physician oversight, signage, third party contracting requirements, bathroom facilities, and scope of services. These laws and regulations may affect the operation and expansion of the Company's owned and managed retail clinics.

Other Laws - Other federal, state and local laws and regulations also impact the Company's retail operations, including laws and regulations governing the practice of optometry, the practice of audiology, the provision of dietician services and the sale of durable medical equipment, contact lenses, eyeglasses, hearing aids and alcohol.

Laws and Regulations Related to the Health Care Benefits Segment

Overview - Differing approaches to state insurance regulation and varying enforcement philosophies may materially and adversely affect the Company's ability to standardize its Health Care Benefits products and services across state lines. These laws and regulations, including the ACA, restrict how the Company conducts its business and result in additional burdens and costs to the Company. Significant areas of governmental regulation include premium rates and rating methodologies, underwriting rules and procedures, required benefits, sales and marketing activities, provider rates of payment, restrictions on health plans' ability to limit providers' participation in their networks and/or remove providers from their networks and financial condition (including reserves and minimum capital or risk based capital requirements). These laws and regulations are different in each jurisdiction and vary from product to product.

Each health insurer and HMO must file periodic financial and operating reports with the states in which it does business. In addition, health insurers and HMOs are subject to state examination and periodic license renewal. Applicable laws also restrict the ability of the Company's regulated subsidiaries to pay dividends, and certain dividends require prior regulatory approval. In

addition, some of the Company's businesses and related activities may be subject to PPO, managed care organization, utilization review or TPA-related licensure requirements and regulations. These licensure requirements and regulations differ from state to state, but may contain provider network, contracting, product and rate, financial and reporting requirements. There also are laws and regulations that set specific standards for the Company's delivery of services, payment of claims, fraud prevention, protection of consumer health information, and payment for covered benefits and services.

Required Regulatory Approvals - The Company must obtain and maintain regulatory approvals to price, market and administer many of its Health Care Benefits products. Supervisory agencies, including CMS, the Center for Consumer Information and Insurance Oversight and the DOL, as well as state health, insurance, managed care and Medicaid agencies and state boards of pharmacy have broad authority to take one or more of the following actions:

- Grant, suspend and revoke the Company's licenses to transact business;
- Suspend or exclude the Company from participation in government programs;
- Suspend or limit the Company's authority to market products;
- Regulate many aspects of the products and services the Company offers, including the pricing and underwriting of many of its products and services;
- Assess damages, fines and/or penalties;
- Terminate the Company's contract with the government agency and/or withhold payments from the government agency to the Company;
- Impose retroactive adjustments to premiums and require the Company to pay refunds to the government, customers and/or members;
- Restrict the Company's ability to conduct acquisitions or dispositions;
- Require the Company to maintain minimum capital levels in its subsidiaries and monitor its solvency and reserve adequacy;
- Regulate the Company's investment activities on the basis of quality, diversification and other quantitative criteria; and/or
- Exclude the Company's plans from participating in Public Exchanges if they are deemed to have a history of "unreasonable" premium rate increases or fail to meet other criteria set by HHS or the applicable state.

The Company's operations, current and past business practices, current and past contracts, and accounts and other books and records are subject to routine, regular and special investigations, audits, examinations and reviews by, and from time to time the Company receives subpoenas and other requests for information from, federal, state and international supervisory and enforcement agencies, attorneys general and other state, federal and international governmental authorities and legislators.

Commercial Product Pricing and Underwriting Restrictions - Pricing and underwriting regulation by states limits the Company's underwriting and rating practices and those of other health insurers, particularly for small employer groups, and varies by state. In general, these limitations apply to certain customer segments and limit the Company's ability to set prices for new or renewing groups, or both, based on specific characteristics of the group or the group's prior claim experience. In some states, these laws and regulations restrict the Company's ability to price for the risk it assumes and/or reflect reasonable costs in the Company's pricing.

The ACA expanded the premium rate review process by, among other things, requiring the Company's Commercial Insured rates to be reviewed for "reasonableness" at either the state or the federal level. HHS established a federal premium rate review process that generally applies to proposed premium rate increases equal to or exceeding a federally (or lower state) specified threshold. HHS's rate review process imposes additional public disclosure requirements as well as additional review on filings requesting premium rate increases equal to or exceeding this "reasonableness" threshold. These combined state and federal review requirements may prevent, further delay or otherwise affect the Company's ability to price for the risk it assumes, which could adversely affect its MBRs and results of operations, particularly during periods of increased utilization of medical services and/or medical cost trend or when such utilization and/or trend exceeds the Company's projections.

The ACA also specifies minimum MLRs of 85% for large group Commercial products and 80% for individual and small group Commercial products. Because the ACA minimum MLRs are structured as “floors” for many of their requirements, states have the latitude to enact more stringent rules governing its various restrictions. For Commercial products, states have and may adopt higher minimum MLR requirements, use more stringent definitions of “medical loss ratio,” incorporate minimum MLR requirements into prospective premium rate filings, require prior approval of premium rates or impose other requirements related to minimum MLR. Minimum MLR requirements and similar actions further limit the level of margin the Company can

earn in its Insured Commercial business while leaving the Company exposed to medical costs that are higher than those reflected in its pricing. The Company also may be subject to significant fines, penalties, premium refunds and litigation if it fails to comply with minimum MLR laws and regulations.

In addition, the Company requested significant increases in its premium rates in its Commercial small group Health Care Benefits business for 2019 and expects to continue to request significant increases in those rates for 2020 and beyond in order to adequately price for projected medical cost trends, required expansions of coverage and significant assessments, fees and taxes imposed by the federal and state governments, including the ACA. The Company's rates also must be adequate to reflect adverse selection in its products, particularly in small group Commercial products, which the Company expects to continue and potentially worsen in 2019. These significant rate increases heighten the risks of adverse public and regulatory action and adverse selection and the likelihood that the Company's requested premium rate increases will be denied, reduced or delayed, which could lead to operating margin compression.

Many of the laws and regulations governing the Company's pricing and underwriting practices also limit the differentials in premium rates insurers and other carriers may charge between new and renewal business, and/or between groups based on differing characteristics. They may also require that carriers disclose to customers the basis on which the carrier establishes new business and renewal premium rates and limit the ability of a carrier to terminate customers' coverage. In addition, HHS' rules on rates impose additional public disclosure requirements on any rate filings that exceed the "reasonableness" threshold and require additional review of those rates.

Medicaid Regulation - The Company is seeking to substantially grow its Medicaid, dual eligible and dual eligible special needs plan businesses over the next several years. As a result, the Company also is increasing its exposure to changes in government policy with respect to and/or regulation of the various Medicaid, dual eligible and dual eligible special needs plan programs in which the Company participates, including changes in the amounts payable to the Company under those programs.

Since 2017, Managed Medicaid products, including those the Company offers, are subject to a minimum MLR of 85%. A Medicaid managed care quality rating system and provider network adequacy requirements also apply to Medicaid products. Because the minimum MLR is structured as a "floor", states have the latitude to enact more stringent rules governing these various restrictions. For Managed Medicaid products, states may adopt higher minimum MLR requirements, use more stringent definitions of "medical loss ratio" or impose other requirements related to minimum MLR. Minimum MLR requirements and similar actions further limit the level of margin the Company can earn in its Insured Medicaid products while leaving the Company exposed to medical costs that are higher than those reflected in its pricing. The Company also may be subject to significant fines, penalties, premium refunds and litigation if it fails to comply with minimum MLR laws and regulations.

The impact of Medicaid expansion under the ACA is uncertain. The future of the ACA is uncertain, and states may opt out of the elements of the ACA requiring expansion of Medicaid coverage without losing their current federal Medicaid funding. To date, a number of states and the District of Columbia have expanded Medicaid coverage to the higher eligibility levels contemplated by the ACA. In addition, the election of new governors and/or state legislatures may impact states' previous decisions regarding Medicaid expansion. Proposals for substantial changes to federal funding of state Medicaid programs are likely to be considered in 2019 and beyond, including the possibility of converting federal Medicaid support to block grants and per capita caps on federal funding. Uncertainty regarding federal funding is causing and will continue to cause states to re-evaluate their Medicaid expansions and consider new assessments, fees and/or taxes on health plans. That re-evaluation may adversely affect Medicaid payment rates, the Company's revenues and its Medicaid membership in those states.

The economic aspects of the Medicaid, dual eligible and dual eligible special needs plan business vary from state to state and are subject to frequent change. Medicaid premiums are paid by each state and differ from state to state. The federal government and certain states also are considering proposals and legislation for Medicaid and dual eligible program reforms or redesigns, including restrictions on the collection of manufacturer's rebates on pharmaceuticals by Medicaid MCOs and their contracted PBMs, further program, population and/or geographic expansions of risk-based managed care, increasing beneficiary cost-sharing or payment levels, and changes to benefits, reimbursement, eligibility criteria, provider network adequacy requirements (including requiring the inclusion of specified high cost providers in the Company's networks) and program structure. In some states, current Medicaid and dual eligible funding and premium revenue may

not be adequate for the Company to continue program participation. The Company's Medicaid and dual eligible contracts with states (or sponsors of Medicaid managed care plans) are subject to cancellation by the state (or the sponsors of the managed care plans) after a short notice period without cause (for example, when a state discontinues a managed care program) or in the event of insufficient state funding.

The Company's Medicaid, dual eligible and dual eligible special needs plan products also are heavily regulated by CMS and state Medicaid agencies, which have the right to audit the Company's performance to determine compliance with CMS

contracts and regulations. The Company's Medicaid products, dual eligible products and CHIP contracts also are subject to complex federal and state regulations and oversight by state Medicaid agencies regarding the services provided to Medicaid enrollees, payment for those services, network requirements (including mandatory inclusion of specified high-cost providers), and other aspects of these programs, and by external review organizations which audit Medicaid plans on behalf of the state Medicaid agencies. The laws, regulations and contractual requirements applicable to the Company and other participants in Medicaid and dual eligible programs, including requirements that the Company submit encounter data to the applicable state agency, are extensive, complex and subject to change. The Company has invested significant resources to comply with these standards, and its Medicaid and dual eligible program compliance efforts will continue to require significant resources. CMS and/or state Medicaid agencies may fine the Company, withhold payments to the Company, seek premium and other refunds, terminate the Company's existing contracts, elect not to award the Company new contracts or not to renew the Company's existing contracts, prohibit the Company from continuing to market and/or enroll members in or refuse to automatically assign members to one or more of the Company's Medicaid or dual eligible products, exclude the Company from participating in one or more Medicaid or dual eligible programs and/or institute other sanctions and/or civil monetary penalties against the Company if it fails to comply with CMS or state regulations or contractual requirements.

The Company cannot predict whether pending or future federal or state legislation or court proceedings will change various aspects of the Medicaid program, nor can it predict the impact those changes will have on its business operations or results of operations, but the effects could be materially adverse.

State Workers' Compensation Laws - The Company's workers' compensation business includes the comparison of medical claims data against the applicable state's fee schedule pricing, including applicable regulations and clinical guidelines. State fee schedules, which typically represent the maximum reimbursement for medical services provided to the injured worker, differ by state and change as state laws and regulations are passed and/or amended. The Company's workers' compensation business also includes PBM and care management services, both of which are regulated at the state level. The Company's workers' compensation customers include insurance carriers and TPAs who also are regulated at the state level. The laws and regulations applicable to the Company and other participants in the workers' compensation business are extensive, complex and subject to change. The Company has invested significant resources to comply with these standards, and its workers' compensation compliance efforts will continue to require significant resources. The Company may be subject to significant fines, penalties and litigation if it fails to comply with those laws and regulations.

Federal and State Reporting - The Company is subject to extensive financial and business reporting requirements, including penalties for inaccuracies and/or omissions, at both the federal and state level. The Company's ability to comply with certain of these requirements depends on receipt of information from third parties that may not be readily available or reliably provided in all instances. The Company is and will continue to be required to modify its information systems, dedicate significant resources and incur significant expenses to comply with these requirements. However, the Company cannot eliminate the risks of unavailability of or errors in its reports.

Product Design and Administration and Sales Practices - State and/or federal regulatory scrutiny of health care benefit product design and administration and marketing and advertising practices, including the filing of insurance policy forms, the adequacy of provider networks, the accuracy of provider directories, and the adequacy of disclosure regarding products and their administration, is increasing as are the penalties being imposed for inappropriate practices. Medicare, Medicaid and dual eligible products and products offering more limited benefits in particular continue to attract increased regulatory scrutiny.

Guaranty Fund Assessments/Solvency Protection - Under guaranty fund laws existing in all states, insurers doing business in those states can be assessed (in most states up to prescribed limits) for certain obligations of insolvent insurance companies to policyholders and claimants. The life and health insurance guaranty associations in which the Company participates that operate under these laws respond to insolvencies of long-term care insurers as well as health insurers. The Company's assessments generally are based on a formula relating to its health care premiums in the state compared to the premiums of other insurers. Certain states allow assessments to be recovered over time as offsets to premium taxes. Some states have similar laws relating to HMOs and/or other payors such as not-for-profit consumer governed health plans established under the ACA. While historically the Company has ultimately recovered more than half of guaranty fund assessments through statutorily permitted premium tax offsets, significant increases in assessments could lead to legislative and/or regulatory actions that may limit future offsets.

Available Information

CVS Health Corporation was incorporated in Delaware in 1996. The corporate office is located at One CVS Drive, Woonsocket, Rhode Island 02895, telephone (401) 765-1500. The Company's common stock is listed on the New York Stock

Exchange under the trading symbol "CVS." General information about CVS Health is available through the Company's website at *http://www.cvshealth.com*. The Company's financial press releases and filings with the SEC are available free of charge within the Investors section of the Company's website at *http://www.cvshealth.com/investors*. In addition, the SEC maintains an internet site that contains reports, proxy and information statements and other information regarding issuers, such as the Company, that file electronically with the SEC. The address of that website is *http://www.sec.gov.* The information on or linked to the Company's website is neither a part of nor incorporated by reference in this Annual Report on Form 10-K or any of the Company's other SEC filings.

In accordance with guidance provided by the SEC regarding use by a company of its websites and social media channels as a means to disclose material information to investors and to comply with its disclosure obligations under Regulation FD, CVS Health Corporation (the "Registrant") hereby notifies investors, the media and other interested parties that it intends to continue to use its media and investor relations website (http://investors.cvshealth.com/) and its Twitter feed (@CVSHealthIR) to publish important information about the Registrant, including information that may be deemed material to investors. The list of social media channels that the Registrant uses may be updated on its media and investor relations website from time to time. The Registrant encourages investors, the media, and other interested parties to review the information the Registrant posts on its website and social media channels as described above, in addition to information announced by the Registrant through its SEC filings, press releases and public conference calls and webcasts.

Item 1A. Risk Factors

You should carefully consider each of the following risks and uncertainties and all of the other information set forth in this Annual Report on Form 10-K. These risks and uncertainties and other factors may affect forward-looking statements, including those we make in this Annual Report on Form 10-K or elsewhere, such as in news releases or investor or analyst calls, meetings or presentations. The risks and uncertainties described below are not the only ones we face. There can be no assurance that we have identified all the risks that affect us. Additional risks and uncertainties not presently known to us or that we currently believe to be immaterial also may adversely affect our businesses. Any of these risks or uncertainties could cause our actual results to differ materially from our expectations and the expected results discussed in our forward-looking statements. You should not consider past results to be an indication of future performance.

If any of the following risks or uncertainties develops into actual events or if the circumstances described in the risks or uncertainties occur or continue to occur, these events or circumstances could have a material adverse effect on our businesses, results of operations, cash flows and/or financial condition. In that case, our stock price could decline materially, among other effects on us. You should read the following section in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" (which includes our "Cautionary Statement Concerning Forward-Looking Statements" at the end of such section) in the Annual Report, which is incorporated by reference herein, and our consolidated financial statements and the related notes.

Overarching Risks

Risks to our brand and reputation, the Aetna Acquisition, data governance risks, effectiveness of our talent management and alignment of talent to our business needs, and potential changes in public policy, laws and regulations present overarching risks to our enterprise in 2019 and beyond.

We expect to face significant business challenges and uncertainties in 2019. Risks to our brand and reputation, the Aetna Acquisition, data governance risks, effectiveness of our talent management and alignment of talent to our business needs, and potential changes in public policy, laws and regulations present overarching risks to our enterprise in 2019 and beyond. There can be no assurance regarding our ability to avoid harm to our brand and reputation, our ability to manage the risks inherent in the Aetna Acquisition or our data governance risks, our ability to manage and align our talent to our business needs or our ability to manage the risks presented by changes in public policy, laws or regulations. In addition, there can be no assurance that the Aetna Acquisition, United States government fiscal policy, changes to the United States health care system (including changes to the ACA, to drug reimbursement and/or drug pricing laws and regulations and/or to laws and regulations governing PBMs' interactions with government funded health care programs) or other unanticipated risks will not require us to revise the ways in which we conduct business, put us at risk of loss of business or materially adversely affect our businesses, cash flows, financial condition or results of operations.

Our brand and reputation are two of our most important assets; negative public perception of the industries in which we operate, or of our industries' or our practices, can adversely affect our businesses, results of operations, cash flows and prospects.

Reputational risk is inherent in many of the risks we face. The industries in which we operate regularly are negatively perceived by the public and subject to negative publicity, including as a result of adverse media coverage, litigation against us and other industry participants, the ongoing public debates over drug pricing, government involvement in drug pricing and purchasing, PBMs and the future of the ACA, governmental hearings and/or investigations and actual or perceived shortfalls regarding our industries' or our own products and/or business practices (including PBM operations, drug pricing, insurance coverage determinations and social media and other media relations activities). This risk may be increased as the federal government continues to consider increased involvement in drug reimbursement, pricing and/or purchasing and changes to the laws and regulations governing PBMs', PDPs' and/or Managed Medicaid organizations' interactions with government funded health care programs, and as states seek to maintain, replace or repeal elements of the ACA such as Public Exchanges and Medicaid expansion within increasingly challenging budget constraints. This risk also may be increased as we continue to offer products and services that make greater use of data and as our business model becomes more focused on delivering health care to consumers. Significant reductions or interruptions in funding for government health programs we serve also may lead us to reduce our exposure to these programs, which could adversely affect our brand and reputation.

Negative public perception and/or publicity of our industries in general, or of us or our key vendors, brokers or product distribution networks in particular, can further increase our costs of doing business and adversely affect our results of operations and our stock price by:

- Adversely affecting our brand and reputation;
- Adversely affecting our ability to market and sell our products and/or services and/or retain our existing customers and members;
- Requiring us to change our products and/or services;
- Reducing or restricting the compensation we can receive for our products and/or services; and/or
- Increasing or significantly changing the regulatory and legislative requirements with which we must comply.

Data governance failures can adversely affect our reputation, businesses and prospects. Our use and disclosure of members', customers' and other constituents' sensitive information is subject to complex regulations at multiple levels. We would be adversely affected if we or our business associates or other vendors fail to adequately protect members', customers' or other constituents' sensitive information.

Our information systems are critical to the operation of our businesses. We collect, process, maintain, retain, evaluate, utilize and distribute large amounts of personal health and financial information and other confidential and sensitive data about our customers, members and other constituents in the ordinary course of our businesses. Some of our information systems rely upon third party systems to accomplish these tasks. The use and disclosure of such information is regulated at the federal, state and international levels, and these laws, rules and regulations are subject to change and increased enforcement activity, such as the EU's GDPR which began to apply across the EU during 2018 and the audit program implemented by HHS under HIPAA. In some cases, such laws, rules and regulations also apply to our vendors and/or may hold us liable for any violations by our vendors. International laws, rules and regulations governing the use and disclosure of such information are generally more stringent than in the United States, and they vary from jurisdiction to jurisdiction. Noncompliance with any privacy or security laws or regulations, or any security breach, cyber-attack or cybersecurity breach, and any incident involving the theft, misappropriation, loss or other unauthorized disclosure of, or access to, sensitive or confidential member, customer or other constituent information, whether by us, by one of our vendors or by another third party, could require us to expend significant resources to remediate any damage, interrupt our operations and damage our brand and reputation, and could also result in investigations, regulatory enforcement actions, material fines and penalties, loss of customers, litigation or other actions which could have a material adverse effect on our brand, reputation, businesses, results of operations and cash flows.

Our businesses depend on our customers' and members' willingness to entrust us with their health related and other sensitive personal information. Events that adversely affect that trust, including inadequate disclosure to our members or customers of our uses of their information, failing to keep our information technology systems and our members', customers' and other constituents' sensitive information secure from significant attack, theft, damage, loss or unauthorized disclosure or access, whether as a result of our action or inaction or that of our business associates, vendors or other third parties, could adversely affect our brand and reputation, membership and results of operations and also can and/or has exposed us to mandatory disclosure to the media, litigation (including class action litigation), governmental investigations and enforcement proceedings,

material fines, penalties and/or remediation costs, and compensatory, special, punitive and statutory damages, consent orders, adverse actions against our licenses to do business and/or injunctive relief, any of which could adversely affect our businesses, cash flows, results of operations or financial condition. Large scale data breaches at other entities increase the challenge we and our vendors face in maintaining the security of our information technology systems and of our customers', members' and other constituents' sensitive information. There can be no assurance that additional such failures will not occur, or if any do occur, that we will detect them or that they can be sufficiently remediated.

We face significant competition in attracting and retaining talented employees. Further, managing succession for, and retention of, key executives is critical to our success, and our failure to do so could adversely affect our future performance.

Our ability to attract and retain qualified and experienced employees is essential to meet our current and future goals and objectives. There is no guarantee we will be able to attract and retain such employees or that competition among potential employers will not result in increased salaries or other benefits. If we are unable to retain existing employees or attract additional employees, or we experience an unexpected loss of leadership, we could experience a material adverse effect on our businesses and results of operations.

In addition, our failure to adequately plan for succession of senior management and other key management roles or the failure of key employees to successfully transition into new roles could have a material adverse effect on our businesses and results of operations. The succession plans we have in place and our employment arrangements with certain key executives do not guarantee the services of these executives will continue to be available to us.

We are subject to potential changes in public policy, laws and regulations, including reform of the United States health care system, that can adversely affect the markets for our products and services and our businesses, operations, results of operations, cash flows and prospects.

The political environment in which we operate remains uncertain. It is reasonably possible that our business operations and results of operations could be materially adversely affected by legislative, regulatory and public policy changes at the federal or state level, increased government involvement in drug reimbursement, pricing and/or purchasing, increased regulation of PBMs, changes to Medicare, Medicaid or the regulatory environment for health care benefits, including the ACA, changes to drug reimbursement and/or pricing laws and regulations, changes to the laws and regulations governing PBMs', PDPs' and/or Managed Medicaid organizations' interactions with government funded health care programs, changes to immigration policies and/or many other public policy initiatives. For example, in January 2019, HHS proposed regulations that would exclude from the current safe harbor under the federal anti-kickback statute manufacturer's rebates on prescription drugs paid to PBMs, PDPs and Managed Medicaid organizations in connection with federally funded health care programs. It is not possible to predict whether or when any such changes will occur or what form any such changes may take (including through the use of United States Presidential Executive Orders). Other significant changes to health care system legislation or regulation as well as changes with respect to tax and trade policies, tariffs and other government regulations affecting trade between the United States and other countries are also possible and could adversely affect us. If we fail to respond adequately to such changes, including by implementing strategic and operational initiatives, or do not do so as effectively as our competitors, our businesses, operations and results of operations may be materially adversely affected.

In addition to efforts to amend, repeal or replace the ACA and related regulations, we expect the federal and state governments to continue to enact and seriously consider many broad-based legislative and regulatory proposals that will or could materially impact various aspects of the health care and related benefits system and our businesses. Potential modification to the ACA, including changes in enforcement and/or funding that further destabilize the Public Exchanges, as well as significant changes to Medicaid funding could impact the number of Americans with health insurance and, consequently, prescription drug coverage. Further changes to federal health care laws, including the ACA, drug reimbursement and pricing laws and/or laws governing PBMs', PDPs' and/or Managed Medicaid organizations' interactions with government funded health care programs, are probable. We cannot predict the effect, if any, that new health care legislation, future changes to the ACA or the implementation or failure to implement the outstanding provisions of ACA, may have on our retail pharmacy, LTC pharmacy, specialty pharmacy, pharmacy services and/or Health Care Benefits operations and/or results of operations. The federal and many state governments also are considering

changes in the interpretation, enforcement and/or application of existing programs, laws and regulations, including changes to payments under and funding of Medicare and Medicaid programs.

In addition, much of the branded and generic drug product that we sell in our retail, mail and specialty pharmacies, and much of the other merchandise we sell, is manufactured in whole or in substantial part outside of the United States. In most cases, the products or merchandise are imported by others and sold to us. As a result, significant changes in tax or trade policies, tariffs or trade relations between the United States and other countries, such as the imposition of unilateral tariffs on imported products, could result in significant increases in our costs, restrict our access to suppliers, depress economic activity, and have a material

adverse effect on our businesses, cash flows and results of operations. In addition, other countries may change their business and trade policies and such changes, as well as any negative sentiments towards the United States in response to increased import tariffs and other changes in United States trade regulations, could adversely affect our businesses.

We cannot predict the enactment or content of new legislation and regulations or changes to existing laws or regulations or their enforcement, interpretation or application, or the effect they will have on our business operations or results of operations, which could be materially adverse. Even if we could predict such matters, it is not possible to eliminate the adverse impact of public policy changes that would fundamentally change the dynamics of one or more of the industries in which we operate. Examples of such change include: the federal or one or more state governments fundamentally restructuring or reducing the funding available for Medicare, Medicaid, dual eligible or dual eligible special needs plan programs, increasing its involvement in drug reimbursement, pricing and/or purchasing, changing the laws and regulations governing PBMs', PDPs' and/or Managed Medicaid organizations' interactions with government funded health care programs, changing the tax treatment of health or related benefits, or repealing or otherwise significantly altering the ACA. The likelihood of adverse changes remains high due to state and federal budgetary pressures, and our businesses and results of operations could be materially and adversely affected by such changes, even if we correctly predict their occurrence. For more information on these matters, see "Government Regulation" included in Item 1 of this Annual Report on Form 10-K.

Our enterprise strategy may not be an effective response to the changing dynamics in the industries in which we operate, or we may not be able to implement our strategy and related strategic projects.

Our strategy includes effectively investing our capital and human resources in appropriate strategic projects, current operations and acquisitions to transform our businesses in response to the changing dynamics in the industries in which we operate. Our strategic projects include, among other things: integrating the Aetna Acquisition; significant investments in human and technology resources to expand our consumer-oriented products and services; optimizing our business platforms; managing certain significant technology projects; further improving relations with manufacturers, suppliers and health care providers; negotiating contract changes with customers, manufacturers, suppliers and health care providers and implementing other business process improvements. Implementing our strategic initiatives will require significant investments of capital and human resources. Among other things, we will need to simultaneously acquire and develop new personnel, products and systems to serve existing and new customers with existing and new products and to enhance our existing customer service, information technology, control and compliance processes and systems. The future performance of our businesses will depend in large part on our ability to design and implement our strategic initiatives, some of which will occur over several years. If these initiatives do not achieve their objectives, our results of operations could be adversely affected.

Our enterprise strategy may not be an effective response to the changing dynamics in the industries in which we operate, and we may fail to recognize and position ourselves to capitalize upon market opportunities. We may not have sufficient advance notice and resources to develop and effectively implement an alternative strategy. If our existing competitors and/or new entrants (whether vertical, horizontal or online/digital/e-commerce) into one or more of our businesses create new disruptive business models and/or develop new offerings that customers, members and/or health care providers prefer to our offerings, we may lose customers, members and/or providers, and our results of operations, cash flows and/or prospects may be adversely affected. In addition, our results of operations, cash flows and/or prospects may be adversely affected by consolidation among the participants in the industries in which we operate and/or our customer base. Our businesses and results of operations could be materially and adversely affected by such changes, even if we correctly predict their occurrence.

Risks Related to Our Businesses

Efforts to reduce reimbursement levels and alter health care financing practices could adversely affect our businesses.

The continued efforts of HMOs, MCOs, PBMs, government entities, and other third party payors to reduce prescription drug costs and pharmacy reimbursement rates, as well as litigation and other legal proceedings relating to how drugs are priced, may adversely affect our profitability. In particular, increased utilization of generic drugs (which normally yield a higher gross profit rate than equivalent brand named drugs) has resulted in pressure to decrease reimbursement payments to retail, specialty, LTC and mail order pharmacies for generic drugs, causing a reduction in our margins on sales of

generic drugs. Historically, the effect of this trend on generic profitability has been mitigated by the introduction of new multi-source generic drugs as well as inflation on brand name drugs and by our efforts to negotiate reduced acquisition costs of generic drugs with manufacturers. However, in recent years, there has been significant consolidation within the generic manufacturing industry and in 2019 we expect fewer new multi-source generic drugs to be introduced and lower brand name drug inflation than in recent prior years, and it is possible that these and other external factors may enhance the ability of manufacturers to sustain or increase pricing of generic drugs and diminish our ability to negotiate reduced acquisition costs. Any inability to offset increased brand name or

generic prescription drug costs or to modify our activities to lessen the financial impact of such increased costs could have a significant adverse effect on our results of operations.

In addition, during the past several years, the United States health care industry has been subject to an increase in governmental regulation and audits at both the federal and state levels. Efforts to control health care costs, including prescription drug costs, are continuing at the federal and state government levels. Changing political, economic and regulatory influences may significantly affect health care financing and reimbursement practices. For example, we anticipate that federal and state governments will continue to review and assess alternative health care delivery systems, payment methodologies and operational requirements for health care providers, including LTC facilities and pharmacies, and participants in government funded health care programs. A change in the composition of pharmacy prescription volume toward programs offering lower reimbursement rates could adversely affect our profitability. Any action taken to repeal or replace all or significant parts of ACA also could adversely affect our profitability, though it is unclear at this time what the full effects of any such changes would be.

The ACA made several significant changes to Medicaid rebates and to reimbursement rates. One of these changes was to revise the definition of the Average Manufacturer Price, a pricing element common to most payment formulas, and the reimbursement formula for generic drugs. This change has adversely affected the reimbursements we receive when we dispense prescription drugs to Medicaid recipients. In addition, the ACA made other changes that affect the coverage and plan designs that are or will be provided by many of our health plan clients, including the requirement for health insurers to meet a minimum MLR to avoid having to pay rebates to enrollees. These ACA changes may not affect our businesses directly, but they could indirectly impact our services, business practices and/or results of operations.

Gross margins in the industries in which we operate may decline.

The PBM industry has been experiencing margin pressure as a result of competitive pressures and increased client demands for lower prices, increased revenue sharing, enhanced service offerings and/or higher service levels. In that regard, we maintain contractual relationships with generic drug manufacturers and brand name drug manufacturers that provide for purchase discounts and/or rebates on drugs dispensed by pharmacies in our retail network and by our specialty and mail order pharmacies (all or a portion of which may be passed on to clients). Manufacturer's rebates often depend on a PBM's ability to meet contractual market share or other requirements, including in some cases the placement of a manufacturer's products on the PBM's formularies. If we lose our relationship with one or more drug manufacturers, or if the discounts or rebates provided by drug manufacturers decline, our businesses and results of operations could be adversely affected. Further, competitive pressures in the PBM industry have resulted in our clients sharing in a larger portion of rebates and/or discounts received from drug manufacturers. Marketplace dynamics and regulatory changes also have impacted our ability to offer plan sponsors pricing that includes the use of retail "differential" or "spread", which could adversely affect our future profitability, and we expect these trends to continue. Further, changes in existing federal or state laws or regulations or the adoption of new laws or regulations relating to additional regulation of PBMs, drug pricing or purchasing, patent term extensions, purchase discount and/or rebate arrangements with drug manufacturers, or additional regulation of PBMs, formulary management or other PBM services could also reduce the discounts or rebates we receive. In addition, changes in federal or state laws or regulations or the adoption of new laws or regulations relating to claims processing and billing, including our ability to use MAC lists and collect transmission fees, could adversely affect our profitability.

Our retail pharmacy, specialty pharmacy and LTC pharmacy operations also have been affected by the margin pressures described above, including client demands for lower prices, generic pricing and network reimbursement pressure. In addition, as competition increases in the geographies in which we operate, including competition from new entrants, a significant increase in general pricing pressures could occur, and this could require us to reevaluate our pricing structures to remain competitive. A shift in the mix of our pharmacy prescription volume towards programs offering lower reimbursement rates could adversely affect our margins, including the ongoing shift in pharmacy mix towards 90-day prescriptions at retail and the ongoing shift in pharmacy mix towards Medicare Part D prescriptions. Finally, the margins of our LTC business are further affected by the increased efforts of health care payors to negotiate reduced or capitated pricing arrangements. These actions could also adversely affect the margins of our LTC business.

Our results of operations are affected by the health of the economy in general and in the geographies we serve.

Our businesses are affected by the United States economy and consumer confidence in general and in the geographies we serve, including various economic factors, inflation and changes in consumer purchasing power, preferences and/or spending patterns. It is possible that an unfavorable, uncertain or volatile economic environment will cause a decline in drug utilization, an increase in health care utilization and dampen demand for PBM services as well as consumer demand for products sold in our retail stores. Further, economic conditions including interest rate fluctuations, changes in capital market conditions and

regulatory changes may affect our ability to obtain necessary financing on acceptable terms, our ability to secure suitable store locations under acceptable terms and our ability to execute sale-leaseback transactions under acceptable terms. Adverse changes in the United States economy, consumer confidence and economic conditions could have an adverse effect on our businesses and financial results. This adverse effect could be further exacerbated by the increasing prevalence of high deductible health plans and health plan designs favoring co-insurance over co-payments as members and other consumers may decide to postpone, or not to seek, medical treatment which may lead them to incur more expensive medical treatment in the future and/or decrease our prescription volumes.

In addition, our Health Care Benefits membership remains concentrated in certain geographic areas in the United States and in certain industries. Unfavorable changes in health care or other benefit costs or reimbursement rates or increased competition in those geographic areas where our membership is concentrated could therefore have a disproportionately adverse effect on our Health Care Benefits results of operations. Our Health Care Benefits membership has been and may continue to be affected by workforce reductions by our customers due to adverse and/or uncertain general economic conditions, especially in the United States geographies and industries where our membership is concentrated. As a result, we may not be able to profitably grow and diversify our Health Care Benefits membership geographically, by product type or by customer industry, and our revenue and results of operations may be disproportionately affected by adverse changes affecting our customers.

We operate in a highly competitive business environment. Competitive and economic pressures may limit our ability to increase pricing to reflect higher costs or may force us to accept lower margins. If customers elect to self-insure, reduce benefits or adversely renegotiate or amend their agreements with us, our revenues and results of operations will be adversely affected. We may not be able to obtain appropriate pricing on new or renewal business.

Each of our businesses currently operates in a highly competitive and evolving business environment. We must compete successfully with existing competitors and new entrants, including strategic alliances and online, digital and e-commerce companies.

The competitive success of our retail pharmacy business, as well as our specialty pharmacy operations with third-party payors, is dependent on our ability to establish and maintain contractual relationships with PBMs and other payors on acceptable terms in an environment where some PBM clients are considering adopting narrow or restricted retail pharmacy networks. As a pharmacy retail business, we compete with other drugstore chains, supermarkets, online and other discount retailers, independent pharmacies, membership clubs, convenience stores and mass merchants, some of which are aggressively expanding into markets we serve. We also face competition from other retail health care clinics, as well as other mail order pharmacies and PBMs. Disruptive innovation by existing or new competitors could alter the competitive landscape in the future and require us to accurately identify and assess such changes and make timely and effective changes to our strategies and business model to compete effectively. Competition may also come from other sources in the future. Changes in market dynamics or the actions of competitors or manufacturers, including industry consolidation, the emergence of new competitors and strategic alliances, and decisions to exclude us from new narrow or restricted retail pharmacy networks, could materially and adversely affect our businesses, results of operations, cash flows and prospects.

We also could be adversely affected if we fail to identify or effectively respond to changes in market dynamics. For example, specialty pharmacy represents a significant and growing proportion of prescription drug spending in the United States, a significant portion of which is dispensed outside of traditional retail pharmacies. Because our specialty pharmacy operations focus on complex and high-cost medications that serve a relatively limited universe of patients, the future growth of this business depends to a significant extent upon expanding our ability to access key drugs and successfully penetrate key treatment categories.

The competitive success of our LTC pharmacy operations is dependent upon our ability to compete in each geographic region where we have operations. In the geographic regions we serve, we compete with PharMerica, our largest LTC pharmacy competitor, as well as with numerous local and regional institutional pharmacies, pharmacies owned by long-term care facilities and local retail pharmacies. Our LTC pharmacy customers consist of skilled nursing facilities, assisted living facilities, independent living communities, hospitals, correctional facilities, and other health care service providers. One of our growth opportunities is to increase our penetration rate in the assisted living segment, where residents can choose which pharmacy will provide them with prescription drugs. The ability of a resident of an assisted living facility to

select the pharmacy that supplies him or her with prescription drugs could adversely affect our business, financial condition and results of operations because there can be no assurance that such resident will select us.

The competitive success of our pharmacy services business is impacted by its ability to establish and maintain contractual relationships with network pharmacies in an environment where some PBM clients are considering adopting narrow or restricted retail pharmacy networks. Competitors in the PBM industry (e.g., the Express Scripts business of Cigna Corporation,

OptumRx, Prime Therapeutics, MedImpact and Humana), include large, national PBM companies, PBMs owned by large national health plans and smaller standalone PBMs. Competition also may come from other sources in the future. In addition, changes in the overall composition of our pharmacy networks, or reduced pharmacy access under our networks, could adversely affect our claims volume and/or our competitiveness generally.

Customer contracts in our Health Care Benefits segment are generally for a period of one year, and our customers have considerable flexibility in moving between us and our competitors. One of the key factors on which we compete for customers, especially in uncertain economic environments, is overall cost. We are therefore under pressure to contain premium price increases despite being faced with increasing health care and other benefit costs and increasing operating costs. If we are unable to increase our prices to reflect increasing costs, our profitability will be adversely affected. If we are unable to limit our price increases, we may lose members to competitors with more favorable pricing, adversely affecting our revenues and results of operations. In response to rising prices, our customers may elect to self-insure or to reduce benefits in order to limit increases in their benefit costs. Alternatively, our customers may purchase different types of products from us that are less profitable. Such elections may result in reduced membership in our more profitable Insured products and/or lower premiums for our Insured products, which may adversely affect our revenues and results of operations, although such elections also may reduce our health care and other benefit costs. In addition, our Medicare, Medicaid and CHIP products are subject to termination without cause, periodic re-bid, rate adjustment and program redesign, as customers seek to contain their benefit costs, particularly in an uncertain economy. These actions may adversely affect our membership, revenues and results of operations

Competitors in each of our businesses may offer services and pricing terms that we may not be willing or able to offer. For example, strong competition in the PBM marketplace has generated greater client demand for lower pricing, increased revenue sharing and enhanced product and service offerings. Unless we can demonstrate enhanced value to our clients through innovative product and service offerings, particularly in a rapidly changing health care industry, we may be unable to remain competitive.

We may lose clients and/or fail to win new business. If we fail to compete effectively in the geographies and product areas in which we operate, including maintaining or increasing membership in our Health Care Benefits segment, our results of operations, financial condition and cash flows could be materially and adversely affected.

Our PBM business generates revenues primarily by contracting with clients to provide prescription drugs and related health care services to plan members. PBM client contracts often have terms of approximately three years in duration, so approximately one third of a PBM's client base typically is subject to renewal each year. In some cases, however, PBM clients may negotiate a shorter or longer contract term or may require early or periodic renegotiation of pricing prior to expiration of a contract. Our clients are generally well informed and organized, can move between our competitors and often seek competing bids prior to expiration of their contracts. In addition, the reputational impact of a service-related incident could adversely affect our businesses. These factors, together with the impact of competitive pressures, could make it difficult for us to attract new clients, retain existing clients and cross-sell additional products and/or services. Further, the PBM industry has been affected by consolidation activity that may continue in the future. If one or more of our PBM clients is acquired by an entity that is not also our client, we may be unable to retain all or a portion of the acquired client's business. These circumstances, either individually or in the aggregate, could result in an adverse effect on our businesses and financial results. Therefore, we continually face challenges in competing for new PBM business and retaining or renewing our existing PBM business. With respect to our LTC pharmacy business, reimbursement from skilled nursing facilities for prescriptions we dispense is determined pursuant to our agreements with those skilled nursing facilities. The termination of these agreements generally terminates our ability to provide services to any of the residents of that facility, resulting in the loss of revenue from any source for those residents. There can be no assurance that we will be able to win new business or secure renewal business on terms as favorable to us as the present terms.

Additionally, with respect to our retail and LTC pharmacy businesses, reimbursement under Medicare Part D, as well as reimbursement from certain private third-party payors, is determined pursuant to agreements that we negotiate with those payors or their PBM representatives. The loss of those agreements, or a material change in the terms of those agreements, could adversely affect our results of operations and cash flows. In addition, restricted networks that exclude our retail or specialty pharmacies adversely affect those businesses.

The health care and related benefits industry is highly competitive, primarily due to a large number of for-profit and not-for-profit competitors, our competitors' marketing and pricing, and a proliferation of competing products, including new products that are continually being introduced into the marketplace. Our Health Care Benefits segment faces significant competition in all of the geographies and product areas in which it operates. New entrants into the marketplace, as well as consolidation within the industry, have contributed to and are expected to intensify the competitive environment. In addition, the rapid pace of change as the industry evolves towards a consumer-focused retail marketplace, including Insurance Exchanges, and the

increased use of technology to interact with members, providers and customers, increase the risks we currently face from new entrants and disruptive actions by existing competitors compared to prior periods.

Our Health Care Benefits segment competes on the basis of many factors, including perceived overall quality, quality of service, comprehensiveness of coverage, cost (including premium, provider discounts and member out-of-pocket costs), product design, financial stability and ratings, breadth and quality of provider networks, providers available in such networks, and quality of member support and care management programs. Our Health Care Benefits segment's competitors include, among others, UnitedHealth Group Incorporated, Anthem, Inc., Humana Inc., Cigna Corporation, WellCare Health Plans, Inc., Centene Corporation, Molina Healthcare, Inc., Kaiser Permanente, health system owned health plans and new entrants into the marketplace, and numerous for-profit and not-for-profit organizations operating under licenses from the Blue Cross and Blue Shield Association. The Health Care Benefits segment's largest competitor in its Medicare products is Original Medicare. Additional competitors in this segment's businesses include other types of medical and dental provider organizations, various specialty service providers (including PBM services providers), health care consultants, financial services companies, integrated health care delivery organizations (networks of providers who also coordinate administrative services for and assume insurance risk of their members), TPAs, HIT companies and, for certain plans, programs sponsored by the federal or state governments. Emerging competitors include start up health care benefit plans, provider-owned health plans, new joint ventures (including for-profit and not-for-profit joint ventures among firms from multiple industries), technology firms, financial services firms that are distributing competing products on their proprietary Private Exchanges, consulting firms that are distributing competing products on their proprietary Private Exchanges, as well as non-traditional distributors such as retail companies. In particular geographies, competitors may have greater capabilities, resources or membership; a more established reputation; superior supplier or health care professional pricing and contract terms; better business relationships; or other factors that give such competitors a competitive advantage. The Health Care Benefits segment competes for sales on Insurance Exchanges and is developing and expanding its Consumer Health Products and Services product and service offerings, where we face additional risks from existing and new competitors (including our vendors) who have lower cost structures, greater experience marketing to consumers and/or who target the higher margin portions of our business. Among the Health Care Benefits segment's international and HIT competitors, many have longer operating histories, better brand recognition and greater market presence in many of the areas in which the segment is seeking to expand and more experience at rapidly innovating products.

There can be no assurance that the Aetna Acquisition will not adversely affect any of our segments' respective abilities to attract new clients or retain existing clients or our ability to cross-sell additional products and/or services within any segment or between segments. If we do not compete effectively in the geographies and product areas in which we operate, our businesses, results of operations, financial condition and cash flows could be materially and adversely affected.

We are exposed to risks relating to the solvency of our customers and of other insurers.

If our customers' operating and financial performance deteriorates, or they are unable to make scheduled payments or obtain adequate financing, our customers may not be able to pay timely, or may delay payment of, amounts owed to us. Any inability of our customers to pay us for our products and services may adversely affect our businesses, financial condition and results of operations. In addition, both state and federal government sponsored payers, as a result of budget deficits or reductions, may suspend payments or seek to reduce their healthcare expenditures resulting in our customers delaying payments to us or renegotiating their contracts with us. Any delay or reduction in payments by such government sponsored payers may adversely affect our businesses, financial condition and results of operations.

We are subject to assessments under guaranty fund laws for obligations of insolvent insurance companies (such as the discounted estimated liability expense of $231 million pretax for our estimated share of future assessments for Penn Treaty Network America Insurance Company and one of its subsidiaries that Aetna recorded in the first quarter of 2017), HMOs, ACA co−ops and other payors to policyholders and claimants.

We face risks relating to the market availability, pricing, suppliers and safety profiles of prescription drugs that we purchase and sell.

We dispense significant volumes of brand-name and generic drugs from our retail, LTC, specialty and mail order pharmacies and through our PBM's network of retail pharmacies. When increased safety risk profiles or manufacturing or

other supply issues of specific drugs or classes of drugs occur, or drugs become subject to greater restrictions as controlled substances, physicians may cease writing prescriptions for these drugs or the utilization of these drugs may be otherwise reduced.

Additionally, adverse publicity regarding drugs with higher safety risk profiles may result in reduced consumer demand for such drugs. On occasion, products are withdrawn by their manufacturers or transition to over-the-counter products, which can

result in lower prescription utilization. In addition, future FDA rulings could restrict the supply or increase the cost of products sold to our customers. Our results of operations and cash flows may decline as a result of such regulatory rulings or market changes.

Further, we acquire a substantial amount of our mail and specialty pharmacies' prescription drug supply from a limited number of suppliers. Our agreements with these suppliers are often short-term and easily cancelable by either party without cause. In addition, these agreements may limit our ability to provide services for competing drugs during the term of the agreement and may allow the supplier to distribute through channels other than us. Certain of these agreements also allow pricing and other terms to be adjusted periodically for changing market conditions or required service levels. A termination or modification to any of these relationships could have a material adverse effect on our businesses, financial condition and results of operations. Moreover, many products distributed by our specialty pharmacy business are manufactured with ingredients that are susceptible to supply shortages. In some cases, we depend upon a single source of supply. Any such supply shortages or loss of any such single source of supply could adversely affect our results of operations and cash flows.

In addition, our suppliers are independent entities subject to their own operational and financial risks that are outside our control. If our current suppliers were to stop selling prescription drugs to us or delay delivery, including as a result of supply shortages, supplier production disruptions, supplier quality issues, closing or bankruptcies of our suppliers, or for other reasons, we may be unable to procure alternatives from other suppliers in a timely and efficient manner and on acceptable terms, or at all.

A disruption in our business operations could occur as a result of contamination of drugs, a failure to maintain necessary shipment and storage conditions, errors in mail order processing, the unavailability of prescription drugs provided by suppliers, labor disruptions or other unanticipated disruptions at our mail order dispensing pharmacy facilities, specialty pharmacy facilities, call centers, data centers or corporate facilities, among other factors. Such disruption could reduce our ability to process and dispense prescriptions and provide products and services to our customers.

If any products we distribute are in limited supply for significant periods of time, our financial condition and results of operations could be materially and adversely affected.

We face risks related to the frequency and rate of the introduction and pricing of generic drugs and brand name prescription drug products.

The profitability of our Retail/LTC and Pharmacy Services segments is dependent upon the utilization of prescription drug products. Utilization trends are affected by, among other factors, the introduction of new and successful prescription drugs as well as lower-priced generic alternatives to existing brand name products because we generally earn higher gross margins on the sale of generic alternatives than on brand name equivalents. In addition, inflation in the price of brand name drugs can affect utilization, particularly given the increase in high deductible health plans. Accordingly, our businesses and results of operations could be adversely affected by a slowdown or delay in the number or magnitude of new and successful prescription drugs and/or generic alternatives, as well as inflation in the price of brand name drugs. For example, we project that the operating income of our Pharmacy Services and Retail/LTC segments may be reduced in 2019 compared to 2018 due in part to fewer new multi-source generic drugs being introduced and lower brand name drug price inflation in 2019 than 2018.

Possible changes in industry pricing benchmarks and drug pricing generally can adversely affect our PBM business.

It is possible that the pharmaceutical industry or regulators may evaluate and/or develop an alternative pricing reference to replace AWP or Wholesale Acquisition Cost ("WAC"), which are the pricing references used for many of our PBM and LTC client contracts, drug purchase agreements, retail network contracts, specialty payor agreements and other contracts with third party payors in connection with the reimbursement of drug payments. In addition, many state Medicaid fee-for-service programs ("FFS Medicaid") have established pharmacy network payments on the basis of Actual Acquisition Cost ("AAC"). The use of an AAC basis in FFS Medicaid could have an impact on reimbursement practices in other commercial and government products. Future changes to the use of AWP, WAC or to other published pricing benchmarks used to establish drug pricing, including changes in the basis for calculating reimbursement by federal and state health programs and/or other payors, could impact the reimbursement we receive from Medicare and Medicaid programs, the

reimbursement we receive from our PBM clients and other payors and/or our ability to negotiate rebates and/or discounts with drug manufacturers, wholesalers, PBMs and retail pharmacies. A failure or inability to fully offset any increased prices or costs or to modify our operations to mitigate the impact of such increases could have a material adverse effect on our results of operations. Additionally, any future changes in drug prices could be significantly different than our projections. The effect of these possible changes on our businesses cannot be predicted at this time.

Product liability, product recall or personal injury issues could damage our reputation.

The products that we sell could become subject to contamination, product tampering, mislabeling, recall or other damage. In addition, errors in the dispensing and packaging of drugs and consuming drugs in a manner that is not prescribed could lead to serious injury or death. Product liability or personal injury claims may be asserted against us with respect to any of the drugs or other products we sell or services we provide. For example, we are a defendant in litigation proceedings relating to opioids and the sale of products containing talc. Our businesses involve the provision of professional services, including by pharmacists, physician assistants, nurses and nurse practitioners, that exposes us to professional liability claims. Should a product or other liability issue arise, the coverage limits under our insurance programs and the indemnification amounts available to us may not be adequate to protect us against claims. We also may not be able to maintain our existing levels of insurance on acceptable terms in the future. Damage to our reputation in the event of a product liability or personal injury issue or judgment against us or a product recall could have a significant adverse effect on our businesses, financial condition and results of operations.

We face challenges in growing our Medicare Advantage and Medicare Part D membership.

We are seeking to substantially grow our Medicare Advantage and Medicare Part D membership, revenue and results of operations in 2019 and over the next several years, including by significantly expanding our Medicare Advantage service area. The organic expansion of our Medicare Advantage service area is subject to the ability of CMS to process our requests for service area expansions and our ability to build cost competitive provider networks in the expanded service areas that meet applicable network adequacy requirements. CMS' decisions on our requests for service area expansions also may be affected adversely by compliance issues that arise each year in our Medicare operations. If we are not successful in expanding our Medicare Advantage service area, we may not be able to achieve our Medicare Advantage growth goals.

We face challenges in growing our Medicaid membership, and expanding our Medicaid membership exposes us to additional risks.

We are seeking to substantially grow our Medicaid, dual eligible and dual eligible special needs plan membership over the next several years. In many instances, to acquire and retain our government customers' business, we must bid against our competitors in a highly competitive environment. Winning bids often are challenged successfully by unsuccessful bidders. Our ability to maintain and grow membership, revenues and results of operations in our Medicaid products is dependent on our remaining competitive on price, performance and preparing successful bids. In cases where a successful bid is challenged, we incur defense costs and may incur unreimbursed implementation and other costs to meet contractual deadlines even if we ultimately lose the challenge.

If we are successful in expanding our Medicaid membership, we may increase our exposure to states that face budgetary pressures, hospitals and other providers that face revenue challenges associated with uncompensated care and pressures on our operating margins driven by the projected rapid growth in the size of and cost of care for the Medicaid eligible population.

A change in our Health Care Benefits product mix may adversely affect our profit margins.

Our Insured Health Care Benefits products that involve greater potential risk generally tend to be more profitable than our ASC products. Historically, smaller employer groups have been more likely to purchase Insured Health Care Benefits products because such purchasers are generally unable or unwilling to bear greater liability for health care expenditures, although recently even relatively small employers have moved to ASC products. We also serve government-sponsored programs, including Medicare and Medicaid, that are subject to competitive bids and regulatory requirements and have lower profit margins than the Insured Commercial products in our Health Care Benefits segment. Although our Health Care Benefits membership is projected to continue to shift towards Government products in 2019, the profitability of each of those products differs and may be less than the profitability of an Insured Commercial product. A shift of enrollees from more profitable products to less profitable products could have a material adverse effect on our results of operations.

We may not be able to accurately forecast health care and other benefit costs, which could adversely affect our Health Care Benefits segment's results of operations. There can be no assurance that the future health care and other benefit costs of our Insured Health Care Benefits products will not exceed our projections.

Premiums for our Insured Health Care Benefits products, which comprised 87% of our Health Care Benefits revenues for 2018, are priced in advance based on our forecasts of health care and other benefit costs during a fixed premium period, which is generally one year. These forecasts are typically developed several months before the fixed premium period begins, are influenced by historical data (and recent historical data in particular), are dependent on our ability to anticipate and detect medical cost trends and changes in our members' behavior and healthcare utilization patterns and require a significant degree of

judgment. For example, our revenue on Medicare policies is based on bids submitted in June of the year before the contract year. Cost increases in excess of our projections cannot be recovered in the fixed premium period through higher premiums. As a result, our profits are particularly sensitive to the accuracy of our forecasts and our ability to anticipate and detect medical cost trends. Even relatively small differences between predicted and actual health care and other benefit costs as a percentage of premium revenues can result in significant adverse changes in our results of operations.

Our health care and other benefit costs can be affected by external events that we cannot forecast or anticipate and over which we have little or no control, such as emerging changes in the economy and/or public policy, additional government mandated benefits or other regulatory changes, changes in our members' behavior and healthcare utilization patterns, changes in health care practices, new technologies, increases in the cost of prescription drugs, influenza related health care costs (which may be substantial and were higher than Aetna projected in 2017-2018), direct-to-consumer marketing by drug manufacturers, clusters of high cost cases, epidemics, pandemics, terrorist attacks or other man-made disasters, natural disasters or other events that materially increase utilization of medical and/or other covered services, including prescription drugs, as well as changes in provider billing practices. Our health care and other benefit costs also can be affected by changes in our business mix, product designs, contracts with providers, medical management, underwriting, rating and/or claims processing methods and processes, and our medical management initiatives may not deliver the reduction in utilization and/or medical cost trend that we project.

It is particularly difficult to accurately anticipate, detect, price, forecast, manage and reserve for medical cost trends and utilization of medical and/or other covered services during and following periods when such utilization and/or trends are below recent historical levels, during periods of changing economic conditions and employment levels and for products with substantial membership growth and/or turnover. For example, as of December 31, 2018, we held a premium deficiency reserve of $16 million for the 2019 coverage year related to our Medicaid products. We expect utilization to increase in 2019 when compared to 2018.

If health care and other benefit costs are higher than the levels reflected in our pricing or if we are not able to obtain appropriate pricing on new or renewal business, our prices will not reflect the risk we assume, and our results of operations will be adversely affected. If health care and other benefit costs are lower than we predict, our prices may be higher than those of our competitors, which may cause us to lose Health Care Benefits membership.

A number of factors, many of which are beyond our control, contribute to rising health care and other benefit costs. If we are unable to satisfactorily manage our health care and other benefit costs, our Health Care Benefits segment's results of operations and competitiveness will be adversely affected.

A number of factors contribute to rising health care and other benefit costs, including previously uninsured members entering the health care system, changes in members' behavior and healthcare utilization patterns, turnover in our membership, additional government mandated benefits or other regulatory changes, changes in the health status of our members, the aging of the population and other changing demographic characteristics, advances in medical technology, increases in the number and cost of prescription drugs (including specialty pharmacy drugs), direct-to-consumer marketing by drug manufacturers, the increasing influence of social media on our members' utilization and other behavior, changes in health care practices and inflation. In addition, government-imposed limitations on Medicare and Medicaid reimbursements to health plans and providers have caused the private sector to bear a greater share of increasing health care and other benefits costs over time, and future amendments or repeal or replacement of the ACA that increase the uninsured population may exacerbate this problem. Other factors that affect our health care and other benefit costs include changes as a result of the ACA, changes to the ACA and other changes in the regulatory environment, the evolution toward a consumer driven business model, changes in health care practices, general economic conditions (such as inflation and employment levels), new technologies, influenza related health care costs (which may be substantial and were higher than Aetna projected in 2017-2018), clusters of high-cost cases, epidemics or pandemics, health care provider and member fraud, and numerous other factors that are or may be beyond our control.

Our Health Care Benefits segment's results of operations and competitiveness depend in large part on our ability to appropriately manage future health care and other benefit costs through underwriting criteria, product design, provider network configuration, negotiation of favorable provider contracts and medical management programs. Our medical cost management programs may not be successful and may have a smaller impact on health care and benefit costs than we

expect. The factors described above may adversely affect our ability to predict and manage health care and other benefit costs, which can adversely affect our competitiveness and results of operations.

The reserves we hold for expected claims in our Insured Health Care Benefits products are based on estimates that involve an extensive degree of judgment and are inherently variable. Any reserve, including a premium deficiency reserve, may be

insufficient. If actual claims exceed our estimates, our results of operations could be materially adversely affected, and our ability to take timely corrective actions to limit future costs may be limited.

A large portion of health care claims are not submitted to us until after the end of the quarter in which services are rendered by providers to our members. Our reported health care costs payable for any particular period reflect our estimates of the ultimate cost of such claims as well as claims that have been reported to us but not yet paid. We also must estimate the amount of rebates payable under the ACA's, CMS's and OPM's minimum MLR rules and the amounts payable by us to, and receivable by us from, the United States federal government under the ACA's remaining premium stabilization program.

Our estimates of health care costs payable are based on a number of factors, including those derived from historical claim experience, but this estimation process also makes use of extensive judgment. Considerable variability is inherent in such estimates, and the accuracy of the estimates is highly sensitive to changes in medical claims submission and processing patterns and/or procedures, turnover and other changes in membership, changes in product mix, changes in the utilization of medical and/or other covered services, including prescription drugs, changes in medical cost trends, changes in our medical management practices and the introduction of new benefits and products. We estimate health care costs payable periodically, and any resulting adjustments, including premium deficiency reserves, are reflected in current-period results of operations within benefit costs. For example, as of December 31, 2018, we held a premium deficiency reserve of $16 million for the 2019 coverage year related to our Medicaid products. A worsening (or improvement) of health care cost trend rates or changes in claim payment patterns from those that we assumed in estimating health care costs payable as of December 31, 2018 would cause these estimates to change in the near term, and such a change could be material.

Furthermore, if we are not able to accurately and promptly anticipate and detect medical cost trends or accurately estimate the cost of incurred but not yet reported claims or reported claims that have not been paid, our ability to take timely corrective actions to limit future costs and reflect our current benefit cost experience in our pricing process may be limited, which would further exacerbate the extent of any adverse impact on our results of operations. These risks are particularly acute during and following periods when utilization of medical and/or other covered services and/or medical cost trends are below recent historical levels and in products where there is significant turnover in our membership each year, and such risks are further magnified by the ACA and other legislation and regulations that limit our ability to price for our projected and/or experienced increases in utilization and/or medical cost trends.

Extreme events, or the threat of extreme events, could materially increase our health care (including behavioral health) costs. We cannot predict whether or when any such events will occur.

Nuclear, biological or other attacks, whether as a result of war or terrorism, other man-made disasters, natural disasters, epidemics, pandemics and other extreme events can affect the United States economy in general, our industries and us specifically. In particular, such extreme events or the threat of such extreme events could result in significant health care (including behavioral health) costs, which would also be affected by the government's actions and the responsiveness of public health agencies and other insurers. In addition, our employees and those of our vendors are concentrated in certain large, metropolitan areas which may be particularly exposed to these events. Such events could adversely affect our businesses, cash flows and results of operations, and, in the event of extreme circumstances, our financial condition or viability, particularly if our responses to such events are less adequate than those of our competitors.

Changes in Public Policy and Other Legal and Regulatory Risks

Legislative and regulatory changes could create significant challenges to our Medicare Advantage and Medicare Part D revenues and results of operations, and proposed changes to these programs could create significant additional challenges. Entitlement program reform, if it occurs, could have a material adverse effect on our businesses, operations and/or results of operations.

Medicare Advantage payment rates to health plans have been cut over the last several years, with additional reductions to be phased in through 2019. CMS issued the Final Notice in April 2018. Overall, we project the benchmark rates in the Final Notice will increase funding for our Medicare Advantage business, excluding the impact of coding trend, by approximately 2.5 percent in 2019 compared to 2018. This 2019 rate increase only slightly offsets the challenge we face from the impact of the increasing cost of medical care (including prescription medications), the HIF and CMS local and

national coverage decisions that require us to pay for services and supplies that are not factored into our bids and creates continued pressure on the Medicare Advantage program and our Medicare Advantage results of operations. We cannot predict future Medicare funding levels, the impact of future federal budget actions or ensure that such changes or actions will not have an adverse effect on our Medicare results of operations.

In addition, the "star ratings" from CMS for our Medicare Advantage plans will continue to have a significant effect on our plans' results of operations. Since 2015, only Medicare Advantage plans with a star rating of four or higher (out of five) are eligible for a quality bonus in their basic premium rates. CMS continues to change its rating system to make achieving and maintaining a four or higher star rating more difficult. Our star ratings and past performance scores are adversely affected by the compliance issues that arise each year in our Medicare operations. If our star ratings fall below 4 for a significant portion of our Medicare Advantage membership or do not match the performance of our competitors or the star rating quality bonuses are reduced or eliminated, our revenues and results of operations may be significantly adversely affected.

Payments we receive from CMS for our Medicare Advantage and Part D businesses also are subject to risk adjustment based on the health status of the individuals we enroll. Elements of that risk adjustment mechanism continue to be challenged by the DOJ, the OIG and CMS itself. Substantial changes in the risk adjustment mechanism, including changes that result from enforcement or audit actions, could materially affect the fairness of our Medicare reimbursement, require us to raise prices or reduce the benefits we offer to Medicare beneficiaries, and potentially limit our (and the industry's) participation in the Medicare program.

Medicare Part D has resulted in increased utilization of prescription medications and puts pressure on our pharmacy gross margin rates due to regulatory and competitive pressures. Further, as a result of the ACA and changes to the retiree drug subsidy rules, clients of our PBM could decide to discontinue providing prescription drug benefits to their Medicare-eligible members. To the extent this phenomenon occurs, the adverse effects of increasing customer migration into Medicare Part D may outweigh the benefits we realize from growth of our Medicare Part D business. In addition, if the cost and complexity of Medicare Part D exceed management's expectations or prevent effective program implementation or administration; if changes to the regulations regarding how drug costs are reported for Medicare Part D are implemented in a manner that adversely affects the profitability of our Medicare Part D business; if changes to the applicable regulations impact our ability to retain fees from third parties including network pharmacies; if the government alters Medicare Part D program requirements or reduces funding because of the higher-than-anticipated cost to taxpayers of Medicare Part D or for other reasons; if the government mandates the use of point-of-sale manufacturer's rebates or up front drug pricing discounts, makes drug manufacturer's rebates illegal, or makes changes to how pharmacy pay-for-performance is calculated; or if reinsurance thresholds are reduced below their current levels, our Medicare Part D results of operations and our ability to expand our Medicare Part D business could be adversely affected.

More generally, our Medicare results of operations and our ability to expand our Medicare membership and revenues also could be adversely affected if we fail to design and maintain programs that are attractive to Medicare Advantage or Part D participants; if CMS imposes restrictions on our Medicare business as a result of audits or other regulatory actions; if we fail to successfully implement corrective actions or other remedial measures sufficient to prevent or remove any applicable restrictions that may be imposed by CMS; or if we are not successful in retaining enrollees, or winning contract renewals or new contracts under Medicare's competitive bidding process.

Federal funding for expanded Medicaid coverage began to decrease in 2017. This reduction is causing states to re-evaluate funding for their Medicaid expansions. That re-evaluation may adversely affect Medicaid payment rates, our Medicaid membership in those states, our revenues, our MBRs and our results of operations.

We may not be able to obtain adequate premium rate increases in our Insured Health Care Benefits products, which would have an adverse effect on our revenues, MBRs and results of operations and could magnify the adverse impact of increases in health care and other benefit costs and of ACA assessments, fees and taxes.

Premium rates for our Insured Health Care Benefits products generally must be filed with state insurance regulators and are subject to their approval, which creates risk for us in the current political and regulatory environment. The ACA generally requires a review by HHS in conjunction with state regulators of premium rate increases that exceed a federally specified threshold (or lower state-specific thresholds set by states determined by HHS to have adequate processes). Rate reviews can magnify the adverse impact on our operating margins and results of operations of increases in health care and other benefit costs, increased utilization of covered services, and ACA assessments, fees and taxes, by restricting our ability to reflect these increases and/or these assessments, fees and taxes in our pricing. The risk of increases in utilization of medical and/or other covered services and/or in health care and other benefit costs is particularly acute during and following periods when utilization has been below recent historical levels, during periods of changing economic

conditions and/or employment levels and in products where there is significant turnover in our membership each year. Further, our ability to reflect ACA assessments, fees and taxes in our Medicare rates is limited. Similarly, our ability to reflect them in our Medicaid and/or CHIP premium rates is limited due, among other things, to the budgetary pressures currently facing many state governments. This could magnify the adverse impact on our operating margins and results of operations of increases in utilization of medical and other covered services, health care and other benefit costs and/or medical cost trends that exceed our projections.

Since 2013, HHS has issued determinations to health plans that their rate increases were "unreasonable," and we continue to experience challenges to appropriate premium rate increases in certain states. Regulators or legislatures in a number of states have implemented or are considering limits on premium rate increases, either by enforcing existing legal requirements more stringently or proposing different regulatory standards. Regulators or legislatures in a number of states also have conducted hearings on proposed premium rate increases, which can result, in some instances have resulted, in substantial delays in implementing proposed rate increases even if they ultimately are approved. Our plans can be excluded from participating in small group Public Exchanges if they are deemed to have a history of "unreasonable" rate increases. We requested significant increases in our premium rates in our small group Commercial Health Care Benefits products for 2019 and expect to continue to request significant increases in those rates for 2020 and beyond in order to adequately price for projected medical cost trends, required expansions of coverage and significant assessments, fees and taxes imposed by the federal and state governments, including the ACA. Our rates also must be adequate to reflect the risk that our products will be selected by people with a higher risk profile or utilization rate than the pool of participants we anticipated when we established the pricing for the applicable products (also known as "adverse selection") in our products, particularly in small group products, which we expect to continue and potentially worsen in 2019 following the expiration of the ACA's risk corridor and reinsurance programs at the end of 2016. These significant rate increases heighten the risks of adverse public and regulatory reaction and adverse selection and the likelihood that our requested premium rate increases will be denied, reduced or delayed, which could lead to operating margin compression.

We anticipate continued regulatory and legislative action to increase regulation of premium rates in our Insured Health Care Benefits products. We may not be able to obtain rates that are actuarially justified or that are sufficient to make our policies profitable in any product line or geography. If we are unable to obtain adequate rates and/or rate increases, it could materially and adversely affect our operating margins and our ability to earn adequate returns on Insured Health Care Benefits business in one or more states or cause us to withdraw from certain geographies and/or products.

Minimum MLR rebate requirements limit the level of margin we can earn in our Insured Health Care Benefits products while leaving us exposed to higher than expected medical costs. Challenges to our minimum MLR rebate methodology and/or reports could adversely affect our results of operations.

The ACA requires us to pay minimum MLR rebates each year with respect to prior years. The ACA's minimum MLR rebate requirements limit the level of margin we can earn in our Commercial Insured and Medicare Insured businesses. CMS minimum MLR rebate regulations limit the level of margin we can earn in our Medicaid Insured business. Certain portions of our Health Care Benefits Medicaid and FEHB program business also are subject to minimum MLR rebate requirements in addition to but separate from those imposed by the ACA. Minimum MLR rebate requirements leave us exposed to medical costs that are higher than those reflected in our pricing. The process supporting the management and determination of the amount of MLR rebates payable is complex and requires judgment, and the minimum MLR reporting requirements are detailed. Federal and state auditors are challenging our Commercial Health Care Benefits business' compliance with the ACA's minimum MLR requirements as well as our FEHB plans' compliance with the OPM's FEHB program-specific minimum MLR requirements. Our Medicare and Medicaid contracts also are subject to minimum MLR audits. If a Medicare Advantage or Medicare Part D contract pays minimum MLR rebates for three consecutive years, it will become ineligible to enroll new members. If a Medicare Advantage or Medicare Part D contract pays such rebates for five consecutive years, it will be terminated by CMS. Additional challenges to our methodology and/or reports relating to minimum MLR and related rebates by federal and state regulators and private litigants are reasonably possible. The outcome of these audits and additional challenges could adversely affect our results of operations.

Our business activities are highly regulated. Our Pharmacy Services, Medicare Advantage, Medicare Part D, Medicaid, dual eligible, dual eligible special needs plan, small group and certain other products are subject to particularly extensive and complex regulations. If we fail to comply with applicable laws and regulations, we could be subject to significant adverse regulatory actions or suffer brand and reputational harm which may have a material adverse effect on our businesses. Compliance with existing and future laws, regulations and/or judicial decisions may reduce our profitability and limit our growth.

Our businesses are subject to extensive regulation and oversight by state, federal and international governmental authorities. The laws and regulations governing our operations and interpretations of those laws and regulations are increasing in number and complexity, change frequently and can be inconsistent or conflicting. In general, these laws and regulations are designed to benefit and protect customers, members and providers rather than us or our investors. In

addition, the governmental authorities that regulate our businesses have broad latitude to make, interpret and enforce the laws and regulations that govern us and continue to interpret and enforce those laws and regulations more strictly and more aggressively each year. In connection with the Aetna Acquisition, we also agreed to undertakings with certain state regulators that place various restrictions on certain of our businesses and the payment of dividends by certain of our subsidiaries.

Our Pharmacy Services products are subject to:

- The clinical quality, patient safety and other risks inherent in the dispensing, packaging and distribution of drugs and other health care products and services, including claims related to purported dispensing and other operational errors (any failure by us to adhere to the laws and regulations applicable to the dispensing of drugs could subject our Pharmacy Services businesses to civil and criminal penalties).
- Federal and state anti-kickback and other laws that govern our relationship with drug manufacturers, customers and consumers.
- Compliance requirements under ERISA, including fiduciary obligations in connection with the development and implementation of items such as drug formularies and preferred drug listings.
- Federal and state legislative proposals and/or regulatory activity that could adversely affect pharmacy benefit industry practices.

Our Health Care Benefits products are highly regulated, particularly those that serve Medicare, Medicaid, dual eligible, dual eligible special needs and small group Commercial customers and members. The laws and regulations governing participation in Medicare Advantage, Medicare Part D, Medicaid, dual eligible and dual eligible special needs plan programs are complex, are subject to interpretation and can expose us to penalties for non-compliance, including penalties under the False Claims Act and state false claims acts. In addition, the ACA may have expanded the jurisdiction of, and our exposure to, the False Claims Act to products that are sold on Public Exchanges or otherwise subject to the ACA. The scope of the practices and activities that are prohibited by federal and state false claims acts is the subject of pending litigation. Claims under federal and state false claims acts can be brought by the government or by private individuals on behalf of the government through a *qui tam* or "whistleblower" suit, and we are a defendant in a number of such proceedings. If we are convicted of fraud or other criminal conduct in the performance of a health program or if there is an adverse decision against us under the False Claims Act, we may be temporarily or permanently suspended from participating in government health care programs, including Medicare Advantage, Medicare Part D, Medicaid, dual eligible and dual eligible special needs plan programs, and we also may be required to pay significant fines and/or other monetary penalties.

If we fail to comply with laws and regulations that apply to government programs, we could be subject to criminal fines, civil penalties, premium refunds, prohibitions on marketing or active or passive enrollment of members, corrective actions, termination of our contracts or other sanctions which could have a material adverse effect on our ability to participate in Medicare Advantage, Medicare Part D, Medicaid, dual eligible, dual eligible special needs plan and other programs, cash flows, financial condition and results of operations.

Our businesses, profitability and growth also may be adversely affected by (i) judicial and regulatory decisions that change and/or expand the interpretations of existing statutes and regulations, impose medical or bad faith liability, increase our responsibilities under ERISA or the remedies available under ERISA, or reduce the scope of ERISA pre-emption of state law claims or (ii) other legislation and regulations.

If our compliance or other systems and processes fail or are deemed inadequate, we may suffer brand and reputational harm and become subject to regulatory actions or litigation which could adversely affect our businesses, results of operations, cash flows and/or financial condition.

Our businesses are subject to extensive and complex regulations, and many of our contracts with customers include detailed requirements. In order to be eligible to offer certain products or bid on certain contracts, we must demonstrate that we have robust systems in place to ensure that we comply with all applicable legal, regulatory and contractual requirements. These systems frequently are reviewed and audited by our customers and regulators. If our systems and processes designed to maintain compliance with applicable legal and contractual requirements, and to prevent and detect instances of, or the potential for, non-compliance fail or are deemed inadequate, we may suffer brand and reputational harm and be subject to regulatory actions, litigation and other proceedings which may result in damages, fines, suspension or loss of licensure, suspension or exclusion from participation in government programs and/or other penalties, any of which could adversely affect our businesses, cash flows, results of operations or financial condition.

Our litigation and regulatory risk profile are changing as a result of the Aetna Acquisition and as we offer new products and services and expand in business areas beyond our historical core businesses of Retail/LTC and Pharmacy Services.

Historically, we focused primarily on providing Retail/LTC and Pharmacy Services products and services. As a result of the Aetna Acquisition, we have significantly expanded our presence in Health Care Benefits products and services (including

products and services offered in multiple countries outside of the United States), which present a different litigation and regulatory risk profile than the products and services that we historically have offered.

The increased volume of business in areas beyond our historical core business and new products and services subject us to litigation and regulatory risks that are different from the risks of providing Retail/LTC and Pharmacy Services products and services and increase significantly our exposure to other risks.

We routinely are subject to litigation and other adverse legal proceedings, including class actions and qui tam actions. Many of these proceedings seek substantial damages which may not be covered by insurance. These proceedings may be costly to defend, result in changes in our business practices, harm our brand and reputation and adversely affect our businesses and results of operations.

Pharmacy services, retail pharmacy, LTC pharmacy and health care benefits are highly regulated and litigious industries. We are currently subject to various litigation matters, investigations, regulatory audits, inspections, government inquiries, and regulatory and other legal proceedings. Litigation, and particularly securities, collective or class action and *qui tam* litigation, is often expensive and disruptive. Certain of the lawsuits against us are or are purported to be class actions or *qui tam* actions. Litigation related to our provision of professional services in our pharmacies, specialty pharmacies, medical clinics and LTC facilities also has increased as we expand our services along the continuum of health care.

The majority of these proceedings relate to the conduct of our Retail/LTC, Pharmacy Services and Health Care Benefits operations and allege various violations of law. In addition, we operate in jurisdictions outside the United States, where contractual rights, tax positions and applicable regulations may be subject to interpretation or uncertainty to a greater degree than in the United States, and are therefore more likely to be subject to dispute by customers, members, governmental authorities and others. We are incurring expenses to resolve these proceedings. The outcome of litigation and other adverse legal proceedings is always uncertain, and outcomes that are not justifiable by the evidence or existing law or regulation can and do occur.

Litigation has been and may be brought against us by private individuals on behalf of the government through a *qui tam* or "whistleblower" suit. Under the provisions of the federal and various state false claims acts, private citizens may bring lawsuits alleging that a violation of the federal anti-kickback statute or similar laws has resulted in the submission of "false" claims to federal and/or state health care programs, including Medicare and Medicaid, and we are a defendant in a number of such proceedings. When a private individual brings a whistleblower suit, the defendant often will not be made aware of the suit for many months or even years, until the government commences its own investigation or determines whether it will intervene. Whistleblower suits have resulted in significant settlements between governmental agencies and health care companies. The significant incentives and protections provided under the Financial Reform Act increase the risk of whistleblower suits.

Many of the legal proceedings against us seek substantial damages (including non-economic or punitive damages and treble damages), and certain of these proceedings also seek changes in our business practices. While we currently have insurance coverage for some potential liabilities, other potential liabilities may not be covered by insurance, insurers may dispute coverage, or the amount of our insurance may not be enough to cover the damages awarded or costs incurred. In addition, some types of damages, like punitive damages, may not be covered by insurance, and in some jurisdictions the coverage of punitive damages is prohibited. Insurance coverage for all or some forms of liability may become unavailable or prohibitively expensive in the future.

We cannot predict the outcome of any of these matters, and the costs incurred may be substantial regardless of outcome. Litigation and other adverse legal proceedings could materially adversely affect our businesses or results of operations because of brand and reputational harm to us caused by such proceedings, the costs of defending such proceedings, the costs of settlement or judgments against us, or the changes in our operations that could result from such proceedings. See Item 3 of this Annual Report on Form 10-K for additional information.

We frequently are subject to regular and special governmental audits, investigations and reviews that could result in changes to our business practices and also could result in material refunds, fines, penalties, civil liabilities, criminal liabilities and other sanctions.

As one of the largest national retail and LTC pharmacy, pharmacy services and health care benefits providers, we frequently are subject to regular and special governmental market conduct and other audits, investigations and reviews by, and we receive subpoenas and other requests for information from, various federal and state agencies, regulatory authorities, attorneys general, committees, subcommittees and members of the United States Congress and other state, federal and international governmental authorities. For example, we have received CIDs from, and provided documents and information to, the Civil Division of the

DOJ in cooperation with a current investigation of our patient chart review processes in connection with risk adjustment data submissions under Parts C and D of the Medicare program. Several such audits, investigations and reviews currently are pending, some of which may be resolved in 2019, and the results of which may be adverse to us.

Federal and state governments have made investigating and prosecuting health care and other insurance fraud, waste and abuse a priority. Fraud, waste and abuse prohibitions encompass a wide range of activities, including kickbacks for referral of members, billing for unnecessary medical and/or other covered services, improper marketing and violations of patient privacy rights. The regulations and contractual requirements applicable to us and other industry participants are complex and subject to change, making it necessary for us to invest significant resources in complying with our regulatory and contractual requirements. Ongoing vigorous law enforcement and the highly technical regulatory scheme mean that our compliance efforts in this area will continue to require significant resources. In addition, our medical costs and the medical expenses of our Health Care Benefits ASC customers may be adversely affected if we do not prevent or detect fraudulent activity by providers and/or members.

Regular and special governmental audits, investigations and reviews by federal, state and international regulators could result in changes to our business practices, and also could result in significant or material premium refunds, fines, penalties, civil liabilities, criminal liabilities or other sanctions, including suspension or exclusion from participation in government programs and suspension or loss of licensure. Any of these audits, investigations or reviews could have a material adverse effect on our financial condition, results of operations or businesses or result in significant liabilities and negative publicity for our company. For example, since 2013, CMS has selected certain of the Company's Medicare Advantage contracts for various years for RADV audit. In addition, federal and state auditors are challenging our Commercial Health Care Benefits business' compliance with the ACA's minimum MLR requirements as well as our FEHB plans' compliance with OPM's FEHB program-specific minimum MLR requirements. Our Medicare and Medicaid contracts also are subject to minimum MLR audits. If a Medicare Advantage or Medicare Part D contract pays minimum MLR rebates for three consecutive years, it will become ineligible to enroll new members. If a Medicare Advantage or Medicare Part D contract pays such rebates for five consecutive years, it will be terminated by CMS.

We are subject to retroactive adjustments to and/or withholding of certain premiums and fees, including as a result of CMS RADV audits. We generally rely on health care providers to appropriately code claim submissions and document their medical records. If these records do not appropriately support our risk adjusted premiums, we may be required to refund premium payments to CMS and/or pay fines and penalties under the False Claims Act.

Premiums and/or fees for Medicare members, certain federal government employee groups and Medicaid beneficiaries are subject to retroactive adjustments and/or withholding by the federal and applicable state governments. Our business that is subject to the ACA, including amounts payable to us or payable by us under the ACA's premium stabilization programs and our risk adjustment and reinsurance data, also is subject to audit by governmental authorities. CMS regularly audits our performance to determine our compliance with CMS's regulations and our contracts with CMS and to assess the quality of the services we provide to our Medicare members.

CMS uses various payment mechanisms to allocate and adjust premium payments to our and other companies' Medicare plans by considering the applicable health status of Medicare members as supported by information prepared, maintained and provided by health care providers. We collect claim and encounter data from providers and generally rely on providers to appropriately code their submissions to us and document their medical records, including the diagnosis data submitted to us with claims. CMS pays increased premiums to Medicare Advantage plans and PDPs for members who have certain medical conditions identified with specific diagnosis codes.

Federal regulators review and audit the providers' medical records to determine whether those records support the related diagnosis codes that determine the members' health status and the resulting risk-adjusted premium payments to us. In that regard, CMS has instituted RADV audits of a subset of Medicare Advantage plans for various contract years, including certain of our plans for various contract years, to validate coding practices and supporting medical record documentation maintained by health care providers and the resulting risk adjusted premium payments to the plans. CMS may require us to refund premium payments if our risk adjusted premiums are not properly supported by medical record data. The OIG also is auditing our risk adjustment data and that of other companies, and we expect CMS and the OIG to continue auditing risk adjustment data. We also have received CIDs from, and provided documents and information to, the Civil

Division of the DOJ in connection with a current investigation of our patient chart review processes in connection with risk adjustment data submissions under Parts C and D of the Medicare program.

In 2012, CMS revised its audit methodology for RADV audits to determine refunds payable by Medicare Advantage plans for contract year 2011 and forward. Under the revised methodology, among other things, CMS will project the error rate identified

in the audit sample of approximately 200 members to all risk adjusted premium payments made under the contract being audited. For contract years prior to 2011, CMS did not project sample error rates to the entire contract. As a result, the revised methodology may increase our exposure to premium refunds to CMS based on incomplete medical records maintained by providers. On October 26, 2018, CMS issued proposed rules related to, among other things, changes to the RADV audit methodology established by CMS in 2012. CMS projects that the changes to the RADV audit methodology would increase its recoveries from Medicare Advantage plans as a result of RADV audits. CMS has requested comments on the proposed rules, including whether the proposed RADV rule change should apply retroactively to audits of Medicare Advantage plans for contract year 2011 and forward. We are evaluating the potential adverse effect, which could be material, on our results of operations, financial condition and cash flows if the proposed RADV rule change were adopted as proposed. CMS also has announced its intent to use third party auditors to attain its ultimate goal of subjecting all Medicare Advantage contracts to either a comprehensive or a targeted RADV audit for each contract year. We are currently unable to predict which of our Medicare Advantage contracts will be selected for future audit, the amounts of any retroactive refunds of, or prospective adjustments to, Medicare Advantage premium payments made to us, the effect of any such refunds or adjustments on the actuarial soundness of our Medicare Advantage bids, or whether any RADV audit findings would require us to change our method of estimating future premium revenue in future bid submissions to CMS or compromise premium assumptions made in our bids for prior contract years, the current contract year or future contract years.

If we fail to report and correct errors discovered through our own auditing procedures or during a CMS audit or otherwise fail to comply with the applicable laws and regulations, we could be subject to fines, civil monetary penalties or other sanctions, including fines and penalties under the False Claims Act, which could have a material adverse effect on our ability to participate in Medicare Advantage, Part D or other government programs, and on our financial condition, cash flows and results of operations.

CMS has issued a final rule implementing ACA requirements that Medicare Advantage and PDP plans report and refund to CMS overpayments that those plans receive from CMS. However, CMS's statements in formalized guidance regarding "overpayments" to Medicare Advantage plans appear to be inconsistent with CMS's prior RADV audit guidance. These statements appear to equate each Medicare Advantage risk adjustment data error with an "overpayment" without reconciliation to the principles underlying the fee for service adjustment comparison contemplated by CMS's RADV audit methodology. The precise interpretation, impact and legality of the final rule are not clear and are subject to pending litigation. If Medicare Advantage plans were not paid based on payment model principles that align with the requirements of the Social Security Act or such payments were not implemented correctly, it could have a material adverse effect on our results of operations, financial condition and/or cash flows.

Certain of our Medicaid contracts require the submission of complete and correct encounter data. The accurate and timely reporting of encounter data is increasingly important to the success of our Medicaid programs because more states are using encounter data to determine compliance with performance standards and, in part, to set premium rates. We have expended and may continue to expend additional effort and incur significant additional costs to collect accurate, or to correct inaccurate or incomplete, encounter data and have been and could be exposed to premium withholding, operating sanctions and financial fines and penalties for noncompliance. We have experienced challenges in obtaining complete and accurate encounter data due to difficulties with providers and third-party vendors submitting claims in a timely fashion in the proper format, and with state agencies in coordinating such submissions. As states increase their reliance on encounter data, these difficulties could affect the Medicaid premium rates we receive and how Medicaid membership is assigned to us, which could have a material adverse effect on our Medicaid results of operations and cash flows and/or our ability to bid for, and continue to participate in, certain Medicaid programs.

Any premium or fee refunds, adjustments or withholding or civil or criminal fines or penalties, or other sanctions, including restrictions on or changes in the way we do business, loss of licensure or exclusion from participation in government programs, resulting from regulatory audits or investigations, whether as a result of RADV, Public Exchange related, recovery audit program or other audits or investigations by CMS, the OIG, HHS, the DOJ or otherwise, including audits of our minimum MLR rebates, methodology and/or reports, could be material and could adversely affect our results of operations, financial condition and cash flows.

Programs funded in whole or in part by the U.S. federal government account for a significant portion of our revenues. The U.S. federal government and our other government customers may reduce funding for health care or other

programs, cancel or decline to renew contracts with us, or make changes that adversely affect the number of persons eligible for certain programs, the services provided to enrollees in such programs, our premiums and our administrative and health care and other benefit costs, any of which could have a material adverse effect on our businesses, results of operations and cash flows. In addition, an extended federal government shutdown or a delay by Congress in raising the federal government's debt ceiling could lead to a delay, reduction, suspension or cancellation of federal government spending and a

significant increase in interest rates that could, in turn, have a material adverse effect on our businesses, results of operations and cash flows.

Programs funded in whole or in part by the United States federal government account for a significant portion of our revenue, and we expect that percentage to increase. As our government funded businesses grow, our exposure to changes in federal and state government policy with respect to and/or regulation of the various government funded programs in which we participate also increases.

Our revenues from government funded programs, including our Medicare, Medicaid, dual eligible and dual eligible special needs plan businesses and our government customers in our Commercial business, are dependent on annual funding by the federal government and/or applicable state or local governments. Federal, state and local governments have the right to cancel or not to renew their contracts with us on short notice without cause or if funds are not available. Funding for these programs is dependent on many factors outside our control, including general economic conditions, continuing government efforts to contain health care costs and budgetary constraints at the federal or applicable state or local level and general political issues and priorities.

For example, CMS is transitioning the process of calculating Medicare members' risk scores from using diagnoses data from the Risk Adjustment Processing System, or RAPS, to using diagnoses data from the Encounter Data System, or EDS. The RAPS process requires Medicare Advantage plans to apply a filter logic based on CMS guidelines and only submit claims that satisfy those guidelines. For submissions through EDS, CMS requires Medicare Advantage plans to submit all encounter data, and CMS applies the risk adjustment filtering logic to determine the risk scores. For 2019, 25% of the risk score will be calculated from claims data submitted through EDS, up from 15% in 2018. For 2020, the EDS percentage will increase to 50%. The transition from RAPS to EDS could result in different risk scores from each dataset as a result of plan processing issues, CMS processing issues or filtering logic differences between RAPS and EDS and could have a material adverse effect on our results of operations, financial condition and/or cash flows.

In addition, while the ACA provided substantial federal funding for the expansion of the number of people who qualify to enroll in Medicaid beginning in 2014, that funding began to decrease in 2017, and the future of that funding is uncertain. As a result, in 2019, states are preparing for the adverse impact on their budgets and programs by seeking to reduce their Medicaid expenditures and/or changing the design of their Medicaid programs. These changes could have a material adverse effect on the revenues, medical benefit ratios and results operations of our Medicaid contracts and/or our ability to grow our Medicaid membership, revenues and results of operations.

Our government customers also determine the eligibility criteria, premium levels and other aspects of Medicare, Medicaid, dual eligible and dual eligible special needs plan programs that affect the number of persons enrolled in these programs, the services provided to enrollees under these programs, the conditions for participating in these programs and our administrative and health care and other benefit costs under these programs. For example, states may require participation on their Public Exchange as a condition to participating in their Medicaid or state employee health benefit programs and/or take program design actions that shift provider costs from state employee plans to Commercial and Medicare plans. In the past, determinations of this type have at times adversely affected our results of operations from and willingness to participate in such programs, and they may do so again in the future. If a government customer reduces premium levels or increases premiums by less than the increase in our costs (such as by not allowing us to recover ACA and other applicable fees, taxes and assessments), and we cannot offset the adverse impact of these actions with supplemental premiums and/or changes in benefit plans, then our businesses and results of operations could be adversely affected. In addition, if states allow certain programs to expire, reduce the number of firms with which they contract for Managed Medicaid services or choose to opt out of Medicaid expansion, we could experience reduced Medicaid enrollment or reduced Medicaid enrollment growth, which would adversely affect our businesses, revenues and results of operations.

The federal government's "debt ceiling", or the amount of debt the federal government is permitted to borrow to meet its legal obligations (including, among other things, interest on the national debt, Medicare and Medicaid premiums and contributions to the FEHB program), is limited by statute and can only be raised by an act of Congress.

During a federal government shutdown or if Congress does not raise the debt ceiling before the federal government's current obligations approach or exceed its cash on hand and incoming receipts, federal government spending may be subject to delay, reduction, suspension or cancellation, which may be prolonged. Over 30% of our Health Care Benefits

segment’s revenues are derived from health care coverage programs that are funded in whole or in part by the federal government, including the Medicare, Medicaid, dual eligible and dual eligible specials needs plan programs, CHIP and the FEHB program. When federal spending is delayed, suspended or curtailed, we continue to receive claims from providers providing services to beneficiaries of these programs, and we remain liable for, and are required to fund, such claims. A federal government shutdown or a failure to

timely raise the debt ceiling could have a material adverse effect on our businesses, results of operations, cash flows, brand and reputation and, in the case of a prolonged shutdown or failure to raise the debt ceiling, our financial condition.

If the United States defaults on its obligations due to a failure to timely raise the debt ceiling or otherwise, or its credit rating is downgraded by any of the credit rating agencies, interest rates could rise, financial markets could become volatile and/or the availability of credit (and short-term credit in particular) could be adversely affected, thereby increasing our borrowing costs, adversely affecting the value of our investment portfolio, and/or adversely affecting our ability to access the capital markets, which could have a material adverse effect on our results of operations, financial condition and cash flows and could adversely affect our liquidity.

Our results of operations may be adversely affected by changes in laws and policies governing employers and by union organizing activity.

The federal and certain state legislatures continue to consider and pass legislation that increases our costs of doing business, including increased minimum wages and requiring employers to provide paid sick leave. In addition, our employee related operating costs may be increased by union organizing activity. If we are unable to reflect these increased expenses in our pricing or otherwise modify our operations to mitigate the effects of such increases, our results of operations will be adversely affected.

Risks Related to Customer Perceptions of our Products and Services

We must develop and maintain a relevant omni-channel experience for our retail customers.

Our business has evolved from a retail store experience to interaction with customers across numerous channels, including in-store, online, mobile and social media, among others. Omni-channel retailing is rapidly evolving and we must keep pace with changing customer expectations and new developments by our competitors. Our customers are increasingly using mobile phones, tablets, computers and other devices to comparison shop, determine product availability and complete purchases through mobile commerce applications. As a result, the portion of total consumer expenditures with all retailers occurring online and through mobile commerce applications is increasing and the pace of this increase could accelerate. We must compete by offering a consistent and convenient shopping experience for our customers regardless of the ultimate sales channel and by investing in, providing and maintaining mobile commerce applications for our customers that have the right features and are reliable and easy to use. If we are unable to make, improve or develop relevant customer-facing technology in a timely manner that keeps pace with technological developments and dynamic customer expectations, our ability to compete and our results of operations could be materially and adversely affected. In addition, if our online activities or our other customer-facing technology systems do not function as designed, we may experience a loss of customer confidence, data security breaches, lost sales, or be exposed to fraudulent purchases, any of which could materially and adversely affect our business operations, reputation and results of operations.

We must maintain and improve our relationships with our retail and specialty pharmacy customers and increase the demand for our products and services, including proprietary brands. If we fail to develop new products, differentiate our products from those of our competitors or demonstrate the value of our products to our customers and members, our ability to retain or grow our customer base may be adversely affected.

The success of our businesses depends in part on customer loyalty, superior customer service and our ability to persuade customers to frequent our retail stores and online sites and to purchase products in additional categories and our proprietary brands. Failure to timely identify or effectively respond to changing consumer preferences and spending patterns, and evolving demographic mixes in our markets, an inability to expand the products being purchased by our clients and customers, or the failure or inability to obtain or offer particular categories of products could adversely affect our relationship with our customers and clients and the demand for our products and services and could result in excess inventories of products.

We offer our retail customers proprietary brand products that are available exclusively at our retail stores and through our online retail sites. The sale of proprietary products subjects us to unique risks including potential product liability risks, mandatory or voluntary product recalls, potential supply chain and distribution chain disruptions for raw materials and finished products, our ability to successfully protect our intellectual property rights and the rights of applicable third

parties, and other risks generally encountered by entities that source, market and sell private-label products. Any failure to adequately address some or all of these risks could have an adverse effect on our retail business, results of operations and financial condition. Additionally, an increase in the sales of our proprietary brands may adversely affect our sales of products owned by our suppliers which, consequently, could adversely impact certain of our supplier relationships. Our ability to locate qualified, economically stable suppliers who satisfy our requirements, and to acquire sufficient products in a timely and effective manner,

is critical to ensuring, among other things, that customer confidence is not diminished. Any failure to develop sourcing relationships with a broad and deep supplier base could adversely affect our financial performance and erode customer loyalty.

Our specialty pharmacy business focuses on complex and high-cost medications, many of which are made available by manufacturers to a limited number of pharmacies (so-called limited distribution drugs), that serve a relatively limited universe of patients. As a result, the future growth of our specialty pharmacy business is dependent largely upon expanding our base of drugs or penetration in certain treatment categories. Any contraction of our base of patients or reduction in demand for the prescriptions we currently dispense could have an adverse effect on our specialty pharmacy business, results of operations and cash flows.

We operate in rapidly evolving industries. Our customers generally, and our larger customers in particular, are well-informed and organized and, along with our individual customers, can easily move between us and our competitors. These factors require us to differentiate our products and solutions, anticipate changes in customer and consumer preferences, anticipate and effectively compete with the products and solutions of new and existing competitors and innovate and deliver new and existing products and solutions that demonstrate value to our customers and members, particularly in response to marketplace changes from public policy. Any failure to do so may adversely affect our ability to retain or grow customers and/or profitable medical membership, which can adversely affect our results of operations.

In order to be competitive in the increasingly consumer-oriented marketplace for our health care products and services, we will need to develop and deploy consumer-friendly products and services and make investments in consumer engagement, reduce our cost structure and compete successfully with new entrants into our businesses. If we are unsuccessful, our future growth and profitability may be adversely affected.

Historically, employers have been the most significant customers driving purchases of our Pharmacy Services and Health Care Benefits segments. However, decisions to buy our Pharmacy Services and Health Care Benefits products and services increasingly are made or influenced by consumers, either through direct purchasing (for example, Medicare Advantage plans and PDPs) or through Insurance Exchanges that allow individual choice. Similarly, consumers increasingly seek to access health care products and services locally and through other direct channels such as mobile devices and our websites. In response to this demand, we are expanding our consumer focus. To compete effectively in the consumer-driven marketplace, we will be required to develop or acquire new capabilities, attract new talent and develop new service and distribution relationships that respond to consumer needs and preferences.

We also will have to respond to pricing and other actions taken by existing competitors as well as potentially disruptive new entrants. Regulatory and participation requirements for Insurance Exchange-based plans tend to emphasize price and make competitive differentiation of our Health Care Benefits products and services based on other attributes more difficult. Price competition from existing and potentially new disruptive competitors in the industries in which each of our segments compete also continues to increase. Accordingly, we face competitive pricing pressures from existing and new competitors (including our vendors and others who may have lower cost structures than we do), and these pressures may reduce our operating margins or limit sales of our products and services. Our competitors may bring their consumer-oriented products and services to market more quickly, have greater experience marketing to consumers and/or may be targeting the higher margin portions of our businesses. These risks may be enhanced if employers shift to defined contribution health care benefits plans and make greater utilization of Private Exchanges or encourage their employees to purchase health insurance on the Public Exchanges. We can provide no assurance that we will be able to develop or operate successful or profitable consumer-oriented products and services, or that our Health Care Benefits segment will be able to compete successfully or profitably on Public Exchanges or Private Exchanges or benefit from any opportunities presented by Public Exchanges or Private Exchanges, or that we will be able to benefit from opportunities available to any of our segments in the industries in which we operate. If we do not develop and expand competitive and profitable consumer products, are not competitive in the industries in which we operate, or are unsuccessful in reducing our cost structure, our future growth and profitability may be adversely affected.

Risks Related to Our Relationships with Manufacturers, Providers, Suppliers and Vendors

Our results of operations may be adversely affected if we are unable to contract with manufacturers, providers, suppliers and vendors on competitive terms and develop and maintain attractive networks with high quality providers.

Our PBM business generates revenues primarily by contracting with clients to provide prescription drugs and related health care services to plan members. As a result, we are dependent on our relationships with prescription drug manufacturers and suppliers. We acquire a substantial amount of our mail order and specialty pharmacies' prescription drug supply from a limited number of suppliers. Our agreements with these suppliers often are short-term and easily cancelable by either party without cause. In addition, these agreements may limit our ability to provide services for competing drugs during the term of the

agreement and may allow the supplier to distribute through channels other than the Company. A termination or modification to any of these relationships could have a material adverse effect on our businesses, financial condition and results of operations.

We are seeking to enhance our health care provider networks by entering into joint ventures and other collaborative risk-sharing arrangements with health care providers. Providers' willingness to enter these arrangements with us depends upon, among other things, our ability to provide them with up to date quality of care data to support these value-based contracts. These arrangements are designed to give providers incentives to engage in population health management and optimize delivery of health care to our members. These arrangements also may allow us to expand into new geographies, target new customer groups, increase membership and reduce medical costs and, if we provide technology or other services to the relevant health system or provider organization, may contribute to our revenue and earnings from alternative sources. If such arrangements do not result in the lower medical costs that we project or if we fail to attract health care providers to such arrangements, or are less successful at implementing such arrangements than our competitors, our medical costs may not be competitive and may be higher than we project, our attractiveness to customers may be reduced, we may lose or be unable to grow membership, and our ability to profitably grow our business and/or our results of operations may be adversely affected.

While we believe joint ventures, ACOs and other non-traditional health care provider organizational structures present opportunities for us, the implementation of our joint ventures and other non-traditional structure strategies may not achieve the intended results, which could adversely affect our results of operations and cash flows. Among other things, joint ventures require us to maintain collaborative relationships with our counterparties, continue to gain access to provider rates that make the joint ventures economically sustainable and devote significant management time to the operation and management of the joint venture. We may not be able to achieve these objectives in one or more of our joint ventures, which could adversely affect our results of operations and cash flows.

If our service providers fail to meet their contractual obligations to us or to comply with applicable laws or regulations, we may be exposed to brand and reputational harm, litigation or regulatory action. This risk is particularly high in our Medicare, Medicaid, dual eligible and dual eligible special needs plan programs.

We contract with various third parties to perform certain functions and services and provide us with certain information technology systems. Our arrangements with these third parties may expose us to public scrutiny, adversely affect our brand and reputation, expose us to litigation or regulatory action, and otherwise make our operations vulnerable if we fail to adequately oversee, monitor and regulate their performance or if they fail to meet their contractual obligations to us or to comply with applicable laws or regulations. For example, certain of our vendors have been responsible for releases of sensitive information of our members and employees, which has caused us to incur additional expenses and given rise to litigation against us.

These risks are particularly high in our Medicare, Medicaid, dual eligible and dual eligible special needs plan programs, where third parties perform PBM, medical management and other member related services for us. Any failure of our or these third parties' prevention, detection or control systems related to regulatory compliance, compliance with our internal policies, data security and/or cybersecurity or any incident involving the theft, misappropriation, loss or other unauthorized disclosure of, or access to, members', customers' or other constituents' sensitive information could require us to expend significant resources to remediate any damage, interrupt our operations and adversely affect our brand and reputation and also expose us to whistleblower, class action and other litigation, other proceedings, prohibitions on marketing or active or passive enrollment of members, corrective actions, fines, sanctions and/or penalties, any of which could adversely affect our businesses, cash flows, results of operations and/or financial condition.

Continuing consolidation and integration among providers and other suppliers may increase our medical and other covered benefits costs, make it difficult for us to compete in certain geographies and create new competitors.

Hospitals and other providers and health systems continue to consolidate across the health care industry. While this consolidation could increase efficiency and has the potential to improve the delivery of health care services, it also reduces competition and the number of potential contracting parties in certain geographies. These health systems also are increasingly forming and considering forming health plans to directly offer health insurance in competition with us, a process that has been accelerated by the ACA. In addition, ACOs (including commercial and Medicaid-only ACOs

developed as a result of state Medicaid laws), practice management companies, consolidation among and by integrated health systems and other changes in the organizational structures that physicians, hospitals and other health care providers adopt continues to change the way these providers interact with us and the competitive landscape in which we operate. These changes may increase our medical and other covered benefits costs, may affect the way we price our products and services and estimate our medical and other covered benefits costs and may require us to change our operations, including by withdrawing from certain geographies where we do not have a significant presence across our businesses or are unable to collaborate or contract with providers on acceptable terms. Each of these changes may adversely affect our businesses and results of operations.

We may experience increased medical and other benefit costs, litigation risk and customer and member dissatisfaction when providers that do not have contracts with us render services to our Health Care Benefits members.

Some providers that render services to our Health Care Benefits members do not have contracts with us. In those cases, we do not have a pre-established understanding with these providers as to the amount of compensation that is due to them for services rendered to our members. In some states, the amount of compensation due to these nonparticipating providers is defined by law or regulation, but in most instances it is either not defined or it is established by a standard that is not clearly translatable into dollar terms. In such instances providers may believe that they are underpaid for their services and may either litigate or arbitrate their dispute with us or try to recover the difference between what we have paid them and the amount they charged us from our members, which may result in customer and member dissatisfaction. For example, on October 15, 2018, an arbitrator awarded certain claimant hospitals approximately $150 million in a proceeding relating to Aetna's out-of-network benefit payment and administration practices. Such disputes may cause us to pay higher medical or other benefit costs than we projected.

Risks Related to Our Operations

Customers, particularly large sophisticated customers, expect us to implement their contracts and onboard their employees and members efficiently and effectively. Failure to do so could adversely affect our reputation, businesses, results of operations, cash flows and prospects. If we or our vendors fail to provide our customers with quality service that meets their expectations, our ability to retain and grow our membership and customer base will be adversely affected.

Our ability to attract and retain customers and members is dependent upon providing cost effective, quality customer service operations (such as call center operations, PBM functions, retail pharmacy and LTC services, home delivery pharmacy prescription delivery, specialty pharmacy prescription delivery, claims processing, customer case installation and online access and tools) that meet or exceed our customers' and members' expectations. As we seek to reduce general and administrative expenses, we must balance the potential impact of cost-saving measures on our customer and other service and performance. If we misjudge the effects of such measures, customer and other service may be adversely affected. We depend on third parties for certain of our customer service, PBM and prescription delivery operations. If we or our vendors fail to provide service that meets our customers' and members' expectations, we may have difficulty retaining or profitable growing our customer base and/or membership, which can adversely affect our results of operations. For example, noncompliance with any privacy or security laws or regulations or any security breach involving one of our third party vendors could have a material adverse effect on our businesses, results of operations, brand and reputation.

We are subject to payment-related risks that could increase our operating costs, expose us to fraud or theft, subject us to potential liability and disrupt our business operations.

We accept payments using a variety of methods, including cash, checks, credit cards, debit cards, gift cards, mobile payments and potentially other technologies in the future. Acceptance of these payment methods subjects us to rules, regulations, contractual obligations and compliance requirements, including payment network rules and operating guidelines, data security standards and certification requirements, and rules governing electronic funds transfers. These requirements may change in the future, which could make compliance more difficult or costly. For certain payment options, including credit and debit cards, we pay interchange and other fees, which could increase periodically thereby raising our operating costs. We rely on third parties to provide payment processing services, including the processing of credit cards, debit cards, and various other forms of electronic payment. If these vendors are unable to provide these services to us, or if their systems are compromised, our operations could be disrupted. The payment methods that we offer also expose us to potential fraud and theft by persons seeking to obtain unauthorized access to, or exploit any weaknesses in, the payment systems we use. If we fail to abide by applicable rules or requirements, or if data relating to our payment systems is compromised due to a breach or misuse, we may be responsible for any costs incurred by payment card issuing banks and other third parties or subject to fines and higher transaction fees. In addition, our reputation and ability to accept certain types of payments could each be harmed resulting in reduced sales and adverse effects on our results of operations.

Our and our vendors' operations are subject to a variety of business continuity hazards and risks, any of which could interrupt our operations or otherwise adversely affect our performance and results of operations.

We and our vendors are subject to business continuity hazards and other risks, including natural disasters, utility and other mechanical failures, acts of war or terrorism, disruption of communications, data security and preservation, disruption of supply or distribution, safety regulation and labor difficulties. The occurrence of any of these or other events to the Company or our vendors might disrupt or shut down our operations or otherwise adversely affect our operations. We may also be subject to certain liability claims in the event of an injury or loss of life, or damage to property, resulting from such events. Although we

have developed procedures for crisis management and disaster recovery and business continuity plans and maintain insurance policies that we believe are customary and adequate for our size and industry, our insurance policies include limits and, as such, our coverage may be insufficient to protect against all potential hazards and risks incident to our businesses. In addition, our crisis management and disaster recovery procedures and business continuity plans may not be effective. Should any such hazards or risks occur, or should our insurance coverage be inadequate or unavailable, our businesses, financial condition and results of operations could be adversely affected.

We and our vendors have experienced cyber attacks. We can provide no assurance that we or our vendors will be able to detect, prevent or contain the effects of such attacks or other information security (including cybersecurity) risks or threats in the future.

We and our vendors have experienced and continue to experience a variety of cyber attacks, and we and our vendors expect to continue to experience cyber attacks going forward. Among other things, we and our vendors have experienced automated attempts to gain access to our public facing networks, brute force, SYN flood and distributed denial of service attacks, attempted malware infections, vulnerability scanning, ransomware attacks, spear-phishing campaigns, mass reconnaissance attempts, injection attempts, phishing, PHP injection and cross-site scripting. We also have seen an increase in attacks designed to obtain access to consumers' accounts using illegally obtained demographic information. Although the impact of such attacks has not been material to our operations or results of operations through December 31, 2018, we can provide no assurance that we or our vendors will be able to detect, prevent or contain the effects of such attacks or other information security (including cybersecurity) risks or threats in the future. As we expand our consumer-oriented products and services, increase the amount and types of data we acquire, generate and use, increase the amount of information we make available to members, consumers and providers on mobile devices, expand our use of vendors, expand internationally and expand our use of social media, our exposure to these data security and related cybersecurity risks, including the risk of undetected attacks, damage, loss or unauthorized disclosure or access to and/or disruption of our systems and the customer, member, provider, employee, ACO, joint venture, vendor and other third party information they contain, increases, and the cost of attempting to protect against these risks also increases.

Although we deploy a layered approach to address information security (including cybersecurity) threats and vulnerabilities that is designed to protect confidential information against data security breaches, a compromise of our information security controls or of those businesses with whom we interact, which results in confidential information being accessed, obtained, damaged, or used by unauthorized or improper persons, could harm our reputation and expose us to regulatory actions and claims from customers and clients, financial institutions, payment card associations and other persons, any of which could adversely affect our businesses, financial condition, and results of operations. Because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and may not immediately produce signs of intrusion, we may be unable to anticipate these techniques or to implement adequate preventative measures. Moreover, a data security breach could require that we expend significant resources related to our information systems and infrastructure, and could distract management and other key personnel from performing their primary operational duties. We also could be adversely affected by any significant disruption in the systems of third parties we interact with, including key payors and vendors.

The costs of attempting to protect against the foregoing risks and the costs of responding to a cyber-incident are significant. Large scale data breaches at other entities increase the challenge we and our vendors face in maintaining the security of our information technology systems and proprietary information and of our members' and customers' sensitive information. Following a cyber-incident, our and/or our vendors' remediation efforts may not be successful, and a cyber-incident could result in interruptions, delays or cessation of service, and loss of existing or potential customers and members. In addition, breaches of our and/or our vendors' security measures and the unauthorized dissemination of sensitive personal information or proprietary information or confidential information about us, our customers, our members or other third-parties, could expose our customers' and members' private information and our customers and members to the risk of financial or medical identity theft, or expose us or other third parties to a risk of loss or misuse of this information, and result in investigations, regulatory enforcement actions, material fines and penalties, loss of customers, litigation or other actions which could have a material adverse effect on our businesses, brand, reputation, cash flows and results of operations.

The failure or disruption of our information technology systems or the failure of our information technology infrastructure to support our businesses could adversely affect our reputation, businesses, results of operations and cash flows.

Our information systems are subject to damage or interruption from power outages, facility damage, computer and telecommunications failures, computer viruses, security breaches (including credit card or personally identifiable information breaches), cyber attacks, vandalism, catastrophic events and human error. If our information systems are damaged, fail to work properly or otherwise become unavailable, or if we are unable to successfully complete our planned consolidation of our PBM

claims adjudication platforms, we may incur substantial costs to repair or replace them, and may experience reputational damage, loss of critical information, customer disruption and interruptions or delays in our ability to perform essential functions and implement new and innovative services. In addition, compliance with changes in United States and foreign privacy and information security laws and standards may result in considerable expense due to increased investment in technology and the development of new operational processes.

Our business success and results of operations depend in part on effective information technology systems and on continuing to develop and implement improvements in technology. Pursuing multiple initiatives simultaneously could make this continued development and implementation significantly more challenging.

Many aspects of our operations are dependent on our information systems and the information collected, processed, stored, and handled by these systems. We rely heavily on our computer systems to manage our ordering, pricing, point-of-sale, pharmacy fulfillment, inventory replenishment, claims processing, ExtraCare customer loyalty program, finance and other processes. Throughout our operations, we receive, retain and transmit certain confidential information, including PII and PHI, that our customers and clients provide to purchase products or services, enroll in programs or services, register on our websites, interact with our personnel, or otherwise communicate with us. In addition, for these operations, we depend in part on the secure transmission of confidential information over public networks.

We have many different information and other technology systems supporting our businesses (including as a result of our acquisitions). Our businesses depend in large part on these systems to adequately price our products and services; accurately establish reserves, process claims and report results of operations; and interact with providers, employer plan sponsors, members and vendors in an efficient and uninterrupted fashion. In addition, recent trends toward greater consumer engagement in health care require new and enhanced technologies, including more sophisticated applications for mobile devices. Certain of our technology systems (including software) are older, legacy systems that are less flexible, less efficient and require a significant ongoing commitment of capital and human resources to maintain, protect and enhance them and to integrate them with our other systems. We must re-engineer and reduce the number of these systems to meet changing consumer and vendor preferences and needs, improve our productivity and reduce our operating expenses. We also need to develop or acquire new technology systems, contract with new vendors or modify certain of our existing systems to support the consumer-oriented products and services we are developing, operating and expanding and/or to meet current and developing industry and regulatory standards, including to keep pace with continuing changes in information processing technology and emerging cybersecurity risks and threats. If we fail to achieve these objectives, our ability to profitably grow our business and/or our results of operations may be adversely affected.

Our business strategy involves providing customers with differentiated, easy to use, secure products and solutions that use information to meet customer needs. The types of technology and levels of service that are acceptable to customers and members today will not necessarily be acceptable in the future, requiring us to anticipate and meet marketplace demands for technology. Our success therefore is dependent in large part on our ability, within the context of a limited budget of human resources and capital and our existing and future business relationships, to timely secure, integrate, develop, redesign and enhance our (or contract with vendors to provide) technology systems that support our business strategy initiatives and processes in a compliant, secure, and cost and resource efficient manner. Integration of our acquisitions increases these challenges, and we may not be successful in integrating various systems in a timely or cost-effective manner.

Information technology projects frequently are long-term in nature and may take longer to complete and cost more than we expect and may not deliver the benefits we project once they are complete. If we do not effectively and efficiently secure, manage, integrate and enhance our technology portfolio (including vendor sourced systems), we could, among other things, have problems determining health care and other benefit cost estimates and/or establishing appropriate pricing, meeting the needs of customers, providers and members, developing and expanding our consumer-oriented products and services or keeping pace with industry and regulatory standards, and our results of operations may be adversely affected.

Sales of our products and services are dependent on our ability to attract and motivate internal sales personnel and independent third-party brokers, consultants and agents. New distribution channels create new disintermediation risk. We may be subject to penalties or other regulatory actions as a result of the marketing practices of brokers and agents selling our products.

Our products are sold primarily through our sales personnel, who frequently work with independent brokers, consultants and agents who assist in the production and servicing of business. The independent brokers, consultants and agents generally are not dedicated to us exclusively and may frequently recommend and/or market health care benefits products of our competitors. Accordingly, we must compete intensely for their services and allegiance. Our sales could be adversely affected if we are unable to attract, retain or motivate sales personnel and third-party brokers, consultants and agents, or if we do not adequately

provide support, training and education to this sales network regarding our complex product portfolio, or if our sales strategy is not appropriately aligned across distribution channels. This risk is heightened as we develop, operate and expand our Consumer Health Products and Services products and services and our business model evolves to include a greater focus on consumers and direct-to-consumer sales, such as competing for sales on Insurance Exchanges.

New distribution channels for our products and services continue to emerge, including Private Exchanges operated by health care consultants and technology companies. These channels may make it more difficult for us to directly engage consumers and other customers in the selection and management of their health care benefits, in health care utilization and in the effective navigation of the health care system. We also may be challenged by new technologies and marketplace entrants that could interfere with our existing relationships with customers and health plan members in these areas.

In addition, there have been a number of investigations regarding the marketing practices of brokers and agents selling health care and other insurance products and the payments they receive. These investigations have resulted in enforcement actions against companies in our industry and brokers and agents marketing and selling those companies' products. For example, CMS and state departments of insurance have increased their scrutiny of the marketing practices of brokers and agents who market Medicare products. These investigations and enforcement actions could result in penalties and the imposition of corrective action plans and/or changes to industry practices, which could adversely affect our ability to market our products.

We also face other risks that could adversely affect our businesses, results of operations, financial condition and/or cash flows, which include:

- Failure of our corporate governance policies or procedures, for example significant financial decisions being made at an inappropriate level in our organization;
- Inappropriate application of accounting principles or a significant failure of internal control over financial reporting, which could lead to a restatement of our results of operations and/or a deterioration in the soundness and accuracy of our reported results of operations; and
- Failure to adequately manage our run-off businesses and/or our regulatory and financial exposure to businesses we have sold, including Aetna's divested standalone Medicare Part D, domestic group life insurance, group disability insurance and absence management businesses.

Financial Risks

Goodwill and other intangible assets could, in the future, become impaired.

As of December 31, 2018, we had $115.2 billion of goodwill and other intangible assets. During the year ended December 31, 2018, we took $6.1 billion of goodwill impairment charges related to our LTC reporting unit. Goodwill and indefinitely-lived intangible assets are subject to annual impairment reviews, or more frequent reviews if events or circumstances indicate that the carrying value may not be recoverable. When evaluating goodwill for potential impairment, we compare the fair value of our reporting units to their respective carrying amounts. We estimate the fair value of our reporting units using a combination of a discounted cash flow method and a market multiple method. If the carrying amount of a reporting unit exceeds its estimated fair value, a goodwill impairment loss is recognized in an amount equal to the excess to the extent of the goodwill balance. Estimated fair values could change if, for example, there are changes in the business climate, changes in the competitive environment, adverse legal or regulatory actions or developments, changes in capital structure, cost of debt, interest rates, capital expenditure levels, operating cash flows or market capitalization. Because of the significance of our goodwill and intangible assets, any future impairment of these assets could require material noncash charges to our results of operations, which could have a material adverse effect on our financial condition and results of operations.

We would be adversely affected if we do not effectively deploy our capital. Downgrades or potential downgrades in our credit ratings, should they occur, could adversely affect our brand and reputation, businesses, cash flows, financial condition and results of operations.

Our operations generate significant capital, and we have the ability to raise additional capital. The manner in which we deploy our capital, including investments in our businesses, our operations (such as information technology and other strategic and capital projects), dividends, acquisitions, share and/or debt repurchases, repayment of debt, reinsurance or other capital uses, impacts our financial strength, claims paying ability and credit ratings issued by recognized rating organizations. Credit ratings issued by nationally-recognized organizations are broadly distributed and generally used throughout our industries. Our ratings reflect each rating organization's opinion of our financial strength, operating performance and ability to meet our debt obligations or obligations to our insureds. We believe our credit ratings and the financial strength and claims paying ability of

our principal insurance and HMO subsidiaries are important factors in marketing our Health Care Benefits products to certain of our customers.

Each of the ratings organizations reviews our ratings periodically, and there can be no assurance that our current ratings will be maintained in the future. In connection with the completion of the Aetna Acquisition, each of Standard & Poor's, Moody's and Fitch downgraded certain of our debt, financial strength and/or other credit ratings. Downgrades in our ratings could adversely affect our businesses, cash flows, financial condition and results of operations.

Adverse conditions in the U.S. and global capital markets can significantly and adversely affect the value of our investments in debt and equity securities, mortgage loans, alternative investments and other investments, our results of operations and/or our financial condition.

The global capital markets, including credit markets, continue to experience volatility and uncertainty. As an insurer, we have a substantial investment portfolio that supports our policy liabilities and surplus and is comprised largely of debt securities of issuers located in the United States. As a result, the income we earn from our investment portfolio is largely driven by the level of interest rates in the United States, and to a lesser extent the international financial markets; and volatility, uncertainty and/or disruptions in the global capital markets, particularly the United States credit markets, and governments' monetary policy, particularly United States monetary policy, can significantly and adversely affect the value of our investment portfolio, our results of operations and/or our financial condition by:

- Significantly reducing the value and/or liquidity of the debt securities we hold in our investment portfolio and creating realized capital losses that reduce our results of operations and/or unrealized capital losses that reduce our shareholders' equity;
- Keeping interest rates low on high-quality short-term or medium-term debt securities (such as we have experienced during recent years) and thereby materially reducing our net investment income and results of operations as the proceeds from securities in our investment portfolio that mature or are otherwise disposed of continue to be reinvested in lower yielding securities;
- Reducing the fair values of our investments if interest rates rise;
- Causing non-performance or defaults on their obligations to us by third parties, including customers, issuers of securities in our investment portfolio, mortgage borrowers and/or reinsurance and/or derivatives counterparties;
- Making it more difficult to value certain of our investment securities, for example if trading becomes less frequent, which could lead to significant period-to-period changes in our estimates of the fair values of those securities and cause period-to-period volatility in our net income and shareholders' equity;
- Reducing our ability to issue short-term debt securities at attractive interest rates, thereby increasing our interest expense and decreasing our results of operations; and
- Reducing our ability to issue other securities.

Although we seek, within guidelines we deem appropriate, to match the duration of our assets and liabilities and to manage our credit and counterparty exposures, a failure adequately to do so could adversely affect our net income and our financial condition and, in extreme circumstances, our cash flows.

Risks Relating to Our Acquisition of Aetna

We have limited experience in the insurance and managed health care industry, which may hinder our ability to achieve our objectives as a combined company.

We have limited experience operating an insurance and managed health care business, and are relying in large part on the existing management of Aetna to continue to manage our Health Care Benefits business. However, there is no assurance that we will be able to continue to retain the services of such management. If we fail to retain the existing management of Aetna, our ability to realize the anticipated benefits of the transaction may be adversely affected.

The Aetna Acquisition may not be accretive, and may be dilutive, to our earnings per share, which may adversely affect our stock price.

Although we currently project that the Aetna Acquisition will result in a number of benefits, including that it will be accretive to our earnings per share, changes in the estimates we use for these projections and the impact of future events and conditions, some of which we do not control, could cause actual results to be lower than these projections. In addition, future events and

conditions could decrease or delay the accretion that is currently projected or could result in dilution. These events and conditions include adverse changes in market conditions, changes in the regulatory environment, additional transaction and integration-related costs and other factors such as the failure to realize some or all of the anticipated benefits of the Aetna Acquisition. Any dilution of, decrease in or delay of any accretion to, our earnings per share could cause our stock price to decline or grow at a reduced rate.

We may fail to successfully combine the businesses and operations of CVS Health and Aetna to realize the anticipated benefits and cost savings of the Aetna Acquisition within the anticipated timeframe or at all, which could adversely affect our stock price.

The success of the Aetna Acquisition will depend, in part, on our ability to realize the anticipated benefits and cost savings from combining the businesses of CVS Health and Aetna. Our ability to realize these anticipated benefits and cost savings is subject to certain risks, including:

- Our ability to successfully combine the businesses of CVS Health and Aetna;
- whether the combined businesses will perform as expected;
- the possibility that we paid more for Aetna than the value we will derive from the acquisition;
- the reduction of our cash available for operations and other uses and the incurrence of indebtedness to finance the acquisition; and
- the assumption of known and unknown liabilities of Aetna.

If we are not able to successfully combine the businesses of CVS Health and Aetna within the anticipated time frame, the anticipated cost savings and other benefits of the Aetna Acquisition may not be realized fully or may take longer to realize than expected, the combined businesses may not perform as expected, and our stock price may be adversely affected.

Until the completion of the Aetna Acquisition, we and Aetna operated independently, and there can be no assurances that our respective businesses can be integrated successfully. It is possible that the integration process could result in the loss of key CVS Health or Aetna employees, the disruption of either company's or both companies' ongoing businesses or in unexpected integration issues, higher than expected integration costs and an overall post-completion integration process that takes longer than originally anticipated. Specifically, issues that must be addressed in integrating the operations of CVS Health and Aetna in order to realize the anticipated benefits of the Aetna Acquisition so the combined business performs as expected include, among other things:

- combining the companies' separate operational, financial, reporting and corporate functions;
- integrating the companies' technologies, products and services;
- identifying and eliminating redundant and underperforming operations and assets;
- harmonizing the companies' operating practices, employee development, compensation and benefit programs, internal controls and other policies, procedures and processes;
- addressing possible differences in business backgrounds, corporate cultures and management philosophies;
- consolidating the companies' corporate, administrative and information technology infrastructure;
- coordinating sales, distribution and marketing efforts;
- managing the movement of certain businesses and positions to different locations;
- maintaining existing agreements with customers, providers and vendors and avoiding delays in entering into new agreements with prospective customers, providers and vendors;
- operating in industry sectors in which we and our current management may have little or no experience;
- coordinating geographically dispersed organizations;
- consolidating offices of CVS Health and Aetna that are currently in or near the same location; and
- effecting the actions that are required by regulatory approvals we obtained in connection with completing the Aetna Acquisition.

In addition, at times, the attention of certain members of our management and our resources will be focused on the integration of the businesses of the two companies and diverted from day-to-day business operations, which may adversely affect our businesses.

Our future results may be adversely impacted if we do not effectively manage our expanded operations following completion of the Aetna Acquisition.

Following completion of the Aetna Acquisition our business is significantly larger than the size of either CVS Health's or Aetna's respective pre-transaction businesses. The combined company's ability to successfully manage this expanded business will depend, in part, upon management's ability to implement an effective integration of the two companies and its ability to manage a combined business with significantly larger size and scope with the associated increased costs and complexity. There can be no assurances that the management of the combined company will be successful or that the combined company will realize the expected operating efficiencies, cost savings and other benefits currently anticipated from the Aetna Acquisition. If we are not able to fully realize the expected operating efficiencies, cost savings and other benefits anticipated from the Aetna Acquisition, or such benefits take longer to realize than expected, our combined businesses may not perform as expected and our stock price may be adversely affected.

We may have difficulty attracting, motivating and retaining executives and other key employees following completion of the Aetna Acquisition.

Our future success will depend in part on our ability to retain key executives and other employees of Aetna. Uncertainty about the effect of the Aetna Acquisition on CVS Health and Aetna employees may have an adverse effect on the combined company and consequently the combined business. This uncertainty may impair our ability to attract, retain and motivate key personnel. Employee retention may be particularly challenging during the integration process, as employees of CVS Health and Aetna may experience uncertainty about their future roles in the combined business.

Furthermore, if key employees of CVS Health or Aetna depart or are at risk of departing, including because of issues relating to the uncertainty and difficulty of integration, financial security or a desire not to remain as employees of the combined business, we may have to incur significant costs in retaining such individuals or in identifying, hiring and retaining replacements for departing employees and may lose significant expertise and talent relating to the business of Aetna, and our ability to realize the anticipated benefits of the Aetna Acquisition may be materially and adversely affected. Accordingly, no assurance can be given that we will be able to attract or retain key employees of Aetna to the same extent that Aetna was able to attract or retain employees in the past.

The Aetna integration process could disrupt our ongoing businesses and/or operations.

Parties with which we do business may experience uncertainty associated with the Aetna Acquisition and/or the post-closing integration process, including with respect to current or future business relationships with the combined business. Our business relationships (including business relationships of our Health Care Benefits segment) may be subject to disruption as customers, members, manufacturers, providers, vendors and others may attempt to negotiate changes in existing business relationships or consider entering into business relationships with parties other than the combined business. These disruptions could have a material adverse effect on the businesses, financial condition, results of operations or prospects of one or more of the combined company's businesses, including a material adverse effect on our ability to realize the anticipated benefits of the Aetna Acquisition.

Our indebtedness following completion of the Aetna Acquisition is substantially greater than our indebtedness on a stand-alone basis and greater than the combined indebtedness of CVS Health and Aetna existing prior to the announcement of the transaction. This increased level of indebtedness could adversely affect our business flexibility and increase our borrowing costs.

In order to complete the Aetna Acquisition, we incurred acquisition-related debt financing of approximately $45.0 billion and assumed Aetna's existing indebtedness with a fair value of approximately $8.1 billion. Our substantially increased indebtedness and higher debt-to-equity ratio following completion of the Aetna Acquisition in comparison to that of CVS Health prior to the Aetna Acquisition has the effect, among other things, of reducing our flexibility to respond to changing business and economic conditions and increases our interest expense compared to pre Aetna Acquisition periods. In addition, the amount of cash required to service our increased indebtedness levels and thus the demands on our cash resources are greater than the amount of cash flows required to service the indebtedness of CVS Health or Aetna individually prior to the Aetna Acquisition. The increased levels of indebtedness could also reduce funds available to fund our efforts to combine our business with Aetna and realize expected benefits of the Aetna Acquisition and/or engage in

investments in product development, capital expenditures, dividend payments, share repurchases and other activities and may create competitive disadvantages for us relative to other companies with lower debt levels.

We will continue to incur significant integration-related costs in connection with the Aetna Acquisition.

We expect to continue to incur significant non-recurring costs associated with combining the operations of CVS Health and Aetna. We expect to continue to incur significant integration-related costs related to formulating and implementing integration plans, including facilities and systems consolidation costs and employment-related costs. We continue to assess the magnitude of these costs, and additional unanticipated costs may be incurred in the integration of the two companies' businesses. We may not achieve the net benefit of such expenditures that we project associated with the elimination of duplicative costs, as well as the realization of other efficiencies related to the integration of our businesses in the near term, or at all. If we fail to realize the expected expense and other efficiencies we project, our results of operations, cash flows and stock price may be adversely affected.

Risks Related to Our Acquisitions, Joint Ventures and International Operations

We expect to continue to pursue acquisitions, joint ventures, strategic alliances and other inorganic growth opportunities, which may be unsuccessful, cause us to assume unanticipated liabilities, disrupt our existing businesses, be dilutive or lead us to assume significant debt, among other things.

We expect to continue to pursue acquisitions, joint ventures, strategic alliances and other inorganic growth opportunities as part of our growth strategy. In addition to integration risks, some other risks we face with respect to acquisitions and other inorganic growth strategies include:

- We frequently compete with other firms, some of which may have greater financial and other resources and a greater tolerance for risk, to acquire attractive companies;
- The acquired, alliance and/or joint venture businesses may not perform as projected;
- The goodwill or other intangible assets established as a result of our acquisitions may be incorrectly valued or may become non-recoverable;
- We may assume unanticipated liabilities, including those that were not disclosed to us or which we underestimated;
- The acquired businesses, or the pursuit of other inorganic growth strategies, could disrupt or compete with our existing businesses, distract management, result in the loss of key employees, divert resources, result in tax costs or inefficiencies and make it difficult to maintain our current business standards, controls, information technology systems, policies, procedures and performance;
- We may finance future acquisitions and other inorganic growth strategies by issuing common stock for some or all of the purchase price, which would dilute the ownership interests of our shareholders;
- We may incur significant debt in connection with acquisitions (whether to finance acquisitions or by assuming debt from the businesses we acquire);
- We may not have the expertise to manage and profitably grow the businesses we acquire, and we may need to rely on the retention of key personnel and other suppliers of businesses we acquire, which may be difficult or impossible to accomplish;
- We may enter into merger or purchase agreements but, due to reasons within or outside our control, fail to complete the related transactions, which could result in termination fees or other penalties that could be material, material disruptions to our businesses and operations and adversely affect our brand and reputation;
- In order to complete a proposed acquisition, we may be required to divest certain portions of our business;
- We may be involved in litigation related to mergers or acquisitions, including for matters which occurred prior to the applicable closing, which may be costly to defend and may result in adverse rulings against us that could be material; and
- The integration into our businesses of the businesses and entities we acquire may affect the way in which existing laws and regulations apply to us, including subjecting us to laws and regulations that did not previously apply to us.

We expect joint ventures to be an important part of our business model transformation and inorganic growth strategies. Joint ventures present risks that are different from acquisitions, including selection of appropriate joint venture parties, initial and ongoing governance of the joint venture, joint venture compliance activities (including compliance with applicable CMS requirements), growing the joint venture's business in a manner acceptable to all the parties, including

other providers in the networks that include joint ventures, maintaining positive relationships among the joint venture parties and the customers, and member and business disruption that may occur upon joint venture termination.

We may be unable to successfully integrate companies we acquire.

Upon the closing of any acquisition we complete, we will need to successfully integrate the products, services and related assets, as well as internal controls into our business operations. If an acquisition is consummated, the integration of the acquired business, its products, services and related assets into our company may also be complex and time-consuming and, if the integration is not fully successful, we may not achieve the anticipated benefits, operating and cost synergies or growth opportunities of an acquisition. Potential difficulties that may be encountered in the integration process include the following:

- Integrating personnel, operations and systems (including internal control environments and compliance policies), while maintaining focus on producing and delivering consistent, high quality products and services;
- Coordinating geographically dispersed organizations;
- Disruption of management's attention from our ongoing business operations;
- Retaining existing customers and attracting new customers; and
- Managing inefficiencies associated with integrating our operations.

An inability to realize the full extent of the anticipated benefits, operating and cost synergies, innovations and operations efficiencies or growth opportunities of an acquisition, as well as any delays or additional expenses encountered in the integration process, could have a material adverse effect on our businesses and results of operations. Furthermore, acquisitions, even if successfully integrated, may fail to further our business strategy as anticipated, expose us to increased competition or challenges with respect to our products, services or geographic markets, and expose us to additional liabilities associated with an acquired business including risks and liabilities associated with litigation involving the acquired business. Any one of these challenges or risks could impair our ability to realize any benefit from our acquisitions after we have expended resources on them.

As a result of our expanded international operations, we face political, legal and compliance, operational, regulatory, economic and other risks that we do not face or are more significant than in our domestic operations.

We significantly expanded our international operations as a result of the closing of the Aetna Acquisition in November 2018. As a result of our expanded international operations, we face political, legal, compliance, operational, regulatory, economic and other risks that we do not face or that are more significant than in our domestic operations. These risks vary widely by country and include varying regional and geopolitical business conditions and demands, government intervention and censorship, discriminatory regulation, nationalization or expropriation of assets and pricing constraints. Our international products need to meet country-specific customer and member preferences as well as country-specific legal requirements, including those related to licensing, privacy, data storage, location, protection and security.

Our international operations increase our exposure to, and require us to devote significant management resources to implement controls and systems to comply with, the privacy and data protection laws of non-U.S. jurisdictions and the anti-bribery, anti-corruption and anti-money laundering laws of the United States (including the FCPA) and the United Kingdom (including the UK Bribery Act) and similar laws in other jurisdictions. Implementing our compliance policies, internal controls and other systems upon our expansion into new countries and geographies may require the investment of considerable management time and management, financial and other resources over a number of years before any significant revenues or profits are generated. Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers or employees, restrictions or outright prohibitions on the conduct of our business, and significant brand and reputational harm. We must regularly reassess the size, capability and location of our global infrastructure and make appropriate changes, and must have effective change management processes and internal controls in place to address changes in our businesses and operations. Our success depends, in part, on our ability to anticipate these risks and manage these difficulties, and the failure to do so could have a material adverse effect on our businesses, results of operations, financial condition, brand, reputation and/or long-term growth.

Our international operations require us to overcome logistical and other challenges based on differing languages, cultures, legal and regulatory schemes and time zones. Our international operations encounter labor laws, standards and customs that can be difficult and make employee relationships less flexible than in our domestic operations and expensive to

modify or terminate. In some countries we are required to, or choose to, operate with local business associates, which requires us to manage our relationships with these third parties and may reduce our operational flexibility and ability to quickly respond to business challenges.

In some countries we may be exposed to currency exchange controls or other restrictions that prevent us from transferring funds internationally or converting local currencies into U.S. dollars or other currencies. Fluctuations in foreign currency exchange rates may adversely affect our revenues, results of operations and cash flows from our international operations. Some of our operations are, and are increasingly likely to be, in emerging markets where these risks are heightened. Any measures we may implement to reduce the effect of volatile currencies and other risks on our international operations may not be effective.

Item 1B. Unresolved Staff Comments

There are no unresolved SEC Staff Comments.

Item 2. Properties

The Company's principal office is an owned building complex located in Woonsocket, Rhode Island, which totals approximately one million square feet. In addition, the Company leases corporate offices in Arizona, Illinois, Ohio, Pennsylvania, Texas, and Brazil.

Pharmacy Services Segment

As of December 31, 2018, the Pharmacy Services segment had the following properties:

- An owned mail service dispensing pharmacy located in Texas;
- Leased mail order dispensing pharmacies located in Hawaii, Illinois and Pennsylvania;
- Leased call centers located in California, Missouri, Pennsylvania, Tennessee and Texas;
- Approximately 40 leased on-site pharmacy stores, approximately 25 leased retail specialty pharmacy stores, approximately 20 specialty mail order pharmacies and approximately 90 branches for infusion and enteral services.

Retail/LTC Segment

As of December 31, 2018, the Retail/LTC segment had the following properties:

- Approximately 8,200 retail stores, of which approximately 4% were owned. Net selling space for retail stores was approximately 80.5 million square feet as of December 31, 2018. Approximately 25% of the store base was opened or significantly remodeled within the last five years;
- Approximately 1,700 retail pharmacies and approximately 80 clinics in Target stores;
- Nine owned distribution centers located in eight states and 13 leased distribution facilities located in twelve additional states and Brazil. The 22 distribution centers totaled approximately 10.4 million square feet as of December 31, 2018; and
- Six owned LTC pharmacies, approximately 150 leased LTC pharmacies in 46 states and one owned LTC repackaging facility.

In connection with certain business dispositions completed between 1991 and 1997, the Company continues to guarantee lease obligations for approximately 85 former stores. The Company is indemnified for these guarantee obligations by the respective purchasers. These guarantees generally remain in effect for the initial lease term and any extension thereof pursuant to a renewal option provided for in the lease prior to the time of the disposition. For additional information on these guarantees, see "Lease Guarantees" in Note 16 "Commitments and Contingencies" contained in the "Notes to Consolidated Financial Statements" in the Annual Report, which is incorporated by reference herein.

Health Care Benefits Segment

The Health Care Benefits segment's principal office is an owned building complex that is approximately 1.7 million square feet in size and is located in Hartford, Connecticut. The Health Care Benefits segment also owns or leases other space in the greater Hartford area, Maryland, Pennsylvania, and various field locations in the United States and several other countries.

Management believes that the Company's owned and leased facilities are suitable and adequate to meet the Company's anticipated needs. At the end of the existing lease terms, management believes the leases can be renewed or replaced by

alternative space. For additional information on the amount of rental obligations for the Company's leases, see Note 6 ''Leases'' contained in the "Notes to Consolidated Financial Statements" in the Annual Report, which is incorporated by reference herein.

Item 3. Legal Proceedings

I. Legal Proceedings

The information contained in Note 16 ''Commitments and Contingencies'' of the "Notes to Consolidated Financial Statements" in the Annual Report is incorporated by reference herein.

II. Environmental Matters

Item 103 of SEC Regulation S-K requires disclosure of environmental legal proceedings with a governmental authority if management reasonably believes that the proceedings involve potential monetary sanctions of $100,000 or more. The Company is in the process of negotiating with the New York State Department of Environmental Conservation to resolve claims of alleged historical noncompliance with hazardous waste regulations in connection with LTC pharmacies in the State of New York. These proceedings are not material to the Company's business or financial condition.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market information

The Company's common stock is listed on the New York Stock Exchange under the symbol "CVS."

Holders of common stock

The information under the heading "Holders of Common Stock" in the Annual Report is incorporated by reference herein.

Dividends

The quarterly cash dividend declared by the Company's Board of Directors (the "Board") was $0.50 per share in 2018 and 2017.

CVS Health has paid cash dividends every quarter since becoming a public company. Future dividends will depend on the Company's earnings, capital requirements, financial condition and other factors considered relevant by the Board.

Issuer purchases of equity securities

The following share repurchase programs were authorized by the Board:

In billions			Remaining as of
Authorization Date		**Authorized**	**December 31, 2018**
November 2, 2016 ("2016 Repurchase Program")	$	15.0	$ 13.9
December 15, 2014 ("2014 Repurchase Program")		10.0	—

The share Repurchase Programs, each of which was effective immediately, permit the Company to effect repurchases from time to time through a combination of open market repurchases, privately negotiated transactions, accelerated share repurchase transactions, and/or other derivative transactions. The 2016 Repurchase Program can be modified or terminated by the Board at any time. During the three months ended December 31, 2018 the Company did not repurchase any shares of common stock.

See Note 12 ''Shareholders' Equity'' of the "Notes to Consolidated Financial Statements" in the Annual Report, which is incorporated by reference herein, for additional information regarding the Company's share repurchases.

Item 6. Selected Financial Data

The selected consolidated financial data of CVS Health Corporation as of and for the periods indicated in the five-year period ended December 31, 2018, have been derived from the consolidated financial statements of CVS Health Corporation and is incorporated herein by reference to the information contained in the Annual Report under the heading "Five-Year Financial Summary." The selected consolidated financial data should be read in conjunction with the consolidated financial statements and the audit reports of Ernst & Young LLP, which are incorporated by reference elsewhere in this Annual Report on Form 10-K.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The information contained in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Annual Report, which includes the "Cautionary Statement Concerning Forward-Looking Statements" at the end of such section, is incorporated by reference herein.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The information contained in "Management's Discussion and Analysis of Financial Condition and Results of Operations — Quantitative and Qualitative Disclosures About Market Risk" in the Annual Report is incorporated by reference herein.

Item 8. Financial Statements and Supplementary Data

The information contained in "Consolidated Statements of Operations," "Consolidated Statements of Comprehensive Income (Loss)," "Consolidated Balance Sheets," "Consolidated Statements of Shareholders' Equity," "Consolidated Statements of Cash Flows," "Notes to Consolidated Financial Statements," and "Report of Independent Registered Public Accounting Firm" in the Annual Report, is incorporated by reference herein.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of disclosure controls and procedures

The Company's Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rules 13a-15 (f) and 15d-15(f) under the Securities Exchange Act of 1934) as of December 31, 2018, have concluded that as of such date the Company's disclosure controls and procedures were adequate and effective at a reasonable assurance level and designed to ensure that material information relating to the Company and its consolidated subsidiaries would be made known to such officers on a timely basis.

Internal control over financial reporting

The "Management's Report on Internal Control Over Financial Reporting" and "Report of Independent Registered Public Accounting Firm" sections of the Annual Report are incorporated by reference herein. These sections contain management's report on the Company's internal control over financial reporting and the Independent Registered Public Accounting Firm's report with respect to the effectiveness the Company's internal control over financial reporting.

Changes in internal control over financial reporting

On November 28, 2018, the Company completed its acquisition of Aetna. In conducting its assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2018, management has elected to exclude Aetna from that assessment, as permitted under SEC rules. The Company is in the process of integrating the historical internal control over financial reporting of Aetna with the rest of the Company. Aetna's

operations are included in the Company's 2018 consolidated financial statements for the period from November 28, 2018 to December 31, 2018 and represented 21% of the Company's consolidated total assets as of December 31, 2018 and 3% of the Company's consolidated total revenues for the year ended December 31, 2018.

Other than the foregoing, there has been no change in the Company's internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Rule 13a-15 or Rule 15d-15 that occurred during the fourth quarter ended December 31, 2018 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information

No events have occurred during the fourth quarter ended December 31, 2018 that would require disclosure under this item.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The sections of the Proxy Statement under the captions "Committees of the Board," "Code of Conduct," "Audit Committee Report," "Biographies of our Incumbent Board Nominees," and "Section 16(a) Beneficial Ownership Reporting Compliance" are incorporated by reference herein.

Executive Officers of the Registrant

The following sets forth the name, age and biographical information for each of the Registrant's executive officers as of February 28, 2019. In each case the officer's term of office extends to the date of the board of directors meeting following the next annual meeting of stockholders of the Company. Previous positions and responsibilities held by each of the executive officers over the past five years or more are indicated below:

Lisa G. Bisaccia, age 62, Executive Vice President of CVS Health Corporation since March 2016 and Chief Human Resources Officer of CVS Health Corporation since January 2010; Senior Vice President of CVS Health Corporation from January 2010 through February 2016; Vice President, Human Resources of CVS Pharmacy, Inc. from September 2004 through December 2009. Ms. Bisaccia is also a member of the board of directors of Aramark, a leading global provider of food, facilities and uniform services.

Eva C. Boratto, age 52, Executive Vice President and Chief Financial Officer of CVS Health Corporation since November 2018; Executive Vice President - Controller and Chief Accounting Officer of CVS Health Corporation from March 2017 through November 2018; Senior Vice President - Controller and Chief Accounting Officer of CVS Health Corporation from July 2013 through February 2017; Senior Vice President of PBM Finance from July 2010 through June 2013.

Troyen A. Brennan, M.D., age 64, Executive Vice President and Chief Medical Officer of CVS Health Corporation since November 2008; Executive Vice President and Chief Medical Officer of Aetna Inc. from February 2006 through November 2008.

James D. Clark, age 54, Senior Vice President - Controller and Chief Accounting Officer of CVS Health Corporation since November 2018; Vice President - Finance and Accounting of CVS Pharmacy, Inc. from September 2009 through October 2018.

Joshua M. Flum, age 49, Executive Vice President, Enterprise Strategy and Digital since November 2018; Executive Vice President, Corporate Strategy and Business Development of CVS Pharmacy, Inc. from June 2016 through October 2018; Executive Vice President - Pharmacy Services of CVS Pharmacy, Inc. from March 2015 through May 2016; Senior Vice President of Retail Pharmacy of CVS Pharmacy, Inc. from December 2010 through February 2015. Mr. Flum is a member of the board of directors of CreditRiskMonitor.com, Inc., a company that facilitates the analysis of corporate financial risk, mostly in the context of the extension of trade credit from one business to another.

Kevin P. Hourican, age 45, Executive Vice President of CVS Health Corporation and President of CVS Pharmacy since April 2018; Executive Vice President - Retail Pharmacy and Supply Chain of CVS Pharmacy, Inc. from June 2016 through March 2018; Senior Vice President, Field Operations and Supply Chain of CVS Pharmacy, Inc. from June 2014 through May 2016; Senior Vice President, Field Operations of CVS Pharmacy, Inc. from June 2012 through May 2014.

Alan M. Lotvin, M.D., age 57, Executive Vice President - Transformation of CVS Health Corporation since June 2018; Executive Vice President - Specialty Pharmacy, CVS Caremark from November 2012 through May 2018.

Karen S. Lynch, age 56, Executive Vice President of CVS Health Corporation and President of Aetna since November 2018; President of Aetna from January 2015 to the present; Executive Vice President, Local and Regional Businesses of Aetna from February 2013 through December 2014; Executive Vice President, Head of Specialty Products of Aetna from July 2012 through January 2013. Ms. Lynch is a member of the board of directors of U.S. Bancorp, a banking and financial services company.

Larry J. Merlo, age 63, President and Chief Executive Officer of CVS Health Corporation since March 2011; President and Chief Operating Officer of CVS Health Corporation from May 2010 through March 2011; President of CVS Pharmacy from January 2007 through August 2011; Executive Vice President of CVS Health Corporation from January 2007 through May 2010; also a director of CVS Health Corporation since May 2010.

Thomas M. Moriarty, age 55, Executive Vice President and General Counsel of CVS Health Corporation since October 2012 and Chief Policy and External Affairs Officer since March 2017; Chief Strategy Officer from March 2014 through February 2017.

Derica W. Rice, age 54, Executive Vice President of CVS Health Corporation and President of CVS Caremark since March 2018; Executive Vice President of Global Services and Chief Financial Officer of Eli Lilly & Co. from May 2006 through December 2017. Mr. Rice was formerly a director of Target Corporation from September 2007 until January 2018, and is a candidate for election to the board of directors of The Walt Disney Company in March 2019.

Jonathan C. Roberts, age 63, Executive Vice President and Chief Operating Officer of CVS Health Corporation since March 2017; Executive Vice President of CVS Health Corporation and President of CVS Caremark from September 2012 through February 2017; Executive Vice President of CVS Health Corporation and Chief Operating Officer of CVS Caremark from October 2010 through August 2011.

Item 11. Executive Compensation

The sections of the Proxy Statement under the captions “Non-Employee Director Compensation” and “Executive Compensation and Related Matters,” including “Compensation Discussion and Analysis,” “Letter from the Management Planning and Development Committee,” “Compensation Committee Report” and “Executive Compensation Tables” are incorporated by reference herein.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The sections of the Proxy Statement under the captions “Share Ownership of Directors and Certain Executive Officers” and “Share Ownership of Principal Stockholders” are incorporated by reference herein. Those sections contain information concerning security ownership of certain beneficial owners and management and related stockholder matters.

The following table summarizes information about the Company’s common stock that may be issued upon the exercise of options, warrants and rights under all of equity compensation plans as of December 31, 2018.

	Number of securities to be issued upon exercise of outstanding options, warrants and rights [1][2] (a)	Weighted average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in first column) [1] (c)
Equity compensation plans approved by stockholders [3]	27,102	$ 77.51	25,927
Equity compensation plans not approved by stockholders [4][5]	5,136	43.01	31,633

Total	32,238	$ 75.04	57,560

(1) Shares in thousands.
(2) Consists of: (i) 18,597 shares of common stock underlying outstanding options, (ii) 1,435 shares of common stock issuable upon the exercise of outstanding stock appreciation rights ("SARs") and (iii) 12,206 shares of common stock issuable on the vesting of outstanding restricted stock units, deferred stock units and performance stock units, assuming target level performance in the case of performance stock units. The number of shares included with respect to

outstanding SARs is the number of shares of the Company's common stock that would have been issued had the SARs been exercised based on the closing price per share of the Company's common stock on December 31, 2018, as reported on the NYSE, which was $65.52.

(3) Consists of the CVS Health 2017 Incentive Compensation Plan.
(4) Consists of the Amended Aetna Inc. 2010 Stock Incentive Plan (the "Aetna Stock Plan").
(5) Amount in column (c) consists of the maximum number of shares of the Company's common stock available for future issuance under the Aetna Stock Plan as of December 31, 2018.

The Aetna Stock Plan was last approved by Aetna's shareholders at Aetna's 2017 Annual Meeting on May 19, 2017. The Company elected to continue to grant awards under the Aetna Stock Plan to employees of Aetna and its subsidiaries following the completion of the Aetna Acquisition. The Aetna Stock Plan is designed to promote the Company's interests and those of its stockholders and to further align the interests of stockholders and employees by tying awards to total return to stockholders, enabling plan participants to acquire additional equity interests in the Company and providing compensation opportunities dependent upon the Company's performance. The Aetna Stock Plan has not been submitted to the Company's stockholders and will expire on May 21, 2020.

Under the Aetna Stock Plan, eligible participants can be granted stock options to purchase shares of the Company's common stock, SARs, time vesting and/or performance vesting incentive stock or incentive units and other stock based awards. As of December 31, 2018, the maximum number of shares of the Company's common stock that may be issued under the awards outstanding under the Aetna Stock Plan was 5.1 million shares, subject to adjustment for corporate transactions and 31.6 million shares remained available for future awards. If an award under the Aetna Stock Plan is paid solely in cash, no shares are deducted from the number of shares available for issuance under the Aetna Stock Plan.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The sections of the Proxy Statement under the captions "Independence Determinations for Directors" and "Related Person Transaction Policy" are incorporated by reference herein.

Item 14. Principal Accounting Fees and Services

The section of the Proxy Statement under the caption "Item 2: Ratification of Appointment of Independent Registered Public Accounting Firm" is incorporated by reference herein.

PART IV

Item 15. Exhibits, Financial Statement Schedules

The following documents are filed as part of this Annual Report on Form 10-K:

1. Financial Statements. The following financial statements, related notes and report are incorporated by reference from the Annual Report in Item 8 hereof:

Consolidated Statements of Operations for the Years Ended December 31, 2018, 2017 and 2016
Consolidated Statements of Comprehensive Income (Loss) for the Years Ended December 31, 2018, 2017 and 2016
Consolidated Balance Sheets as of December 31, 2018 and 2017
Consolidated Statements of Cash Flows for the Years Ended December 31, 2018, 2017 and 2016
Consolidated Statements of Shareholders' Equity for the Years Ended December 31, 2018, 2017 and 2016
Notes to Consolidated Financial Statements
Report of Independent Registered Public Accounting Firm

2. Financial Statement Schedules. All financial statement schedules are omitted because they are not applicable, not required under the instructions, or the information is included in the consolidated financial statements or related notes.

3. Exhibits. The exhibits listed in the "Index to Exhibits" in this Item 15 are filed or incorporated by reference as part of this Annual Report on Form 10-K. Exhibits marked with an asterisk (*) are management contracts or compensatory plans or arrangements. Exhibits other than those listed are omitted because they are not required to be listed or are not applicable. Pursuant to Item 601(b)(4)(iii) of Regulation S-K, the Registrant hereby agrees to furnish to the Securities and Exchange Commission a copy of any omitted instrument that is not required to be listed.

INDEX TO EXHIBITS

Exhibit	Description
2	**Plan of acquisition, reorganization, arrangement, liquidation or succession**
2.1	Agreement and Plan of Merger, dated as of May 20, 2015, among CVS Pharmacy, Inc., Tree Merger Sub, Inc. and Omnicare, Inc. (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed May 21, 2015; Commission File No. 001-01011).
2.2	Agreement and Plan of Merger, dated as of December 3, 2017, among CVS Health Corporation, Hudson Merger Sub Corp. and Aetna Inc. (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed December 5, 2017; Commission File No. 001-01011).
2.3	Master Transaction Agreement by and between Aetna Inc. and Hartford Life and Accident Insurance Company dated as of October 22, 2017.
3	**Articles of Incorporation and Bylaws**
3.1	Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1C of Registrant's Current Report on Form 8-K filed June 5, 2018; Commission File No. 001-01011).
3.2	By-laws of the Registrant, as amended and restated (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K filed June 5, 2018; Commission File No. 001-01011).
4	**Instruments defining the rights of security holders, including indentures**
4.1	Specimen common stock certificate (incorporated by reference to Exhibit 4.1 to the Registration Statement of the Registrant ((then known as CVS Corporation) as successor to Melville Corporation) on Form 8-B filed November 4, 1996; Commission File No. 001-01011).
4.2	

	Senior Indenture dated August 15, 2006, between the Registrant and The Bank of New York Mellon Trust Company, N.A., as trustee (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed August 15, 2006; Commission File No. 001-01011).
4.3	Form of the Registrant's 2020 Floating Rate Note (incorporated by reference to Exhibit 4.1 to the Registrant's Current Report on Form 8-K filed March 12, 2018; Commission File No. 001-01011).
4.4	Form of the Registrant's 2021 Floating Rate Note (incorporated by reference to Exhibit 4.2 to the Registrant's Current Report on Form 8-K filed March 12, 2018; Commission File No. 001-01011).

4.5	Form of the Registrant's 2020 Note (incorporated by reference to Exhibit 4.3 to the Registrant's Current Report on Form 8-K filed March 12, 2018; Commission File No. 001-01011).
4.6	Form of the Registrant's 2021 Note (incorporated by reference to Exhibit 4.4 to the Registrant's Current Report on Form 8-K filed March 12, 2018; Commission File No. 001-01011).
4.7	Form of the Registrant's 2023 Note (incorporated by reference to Exhibit 4.5 to the Registrant's Current Report on Form 8-K filed March 12, 2018; Commission File No. 001-01011).
4.8	Form of the Registrant's 2025 Note (incorporated by reference to Exhibit 4.6 to the Registrant's Current Report on Form 8-K filed March 12, 2018; Commission File No. 001-01011).
4.9	Form of the Registrant's 2028 Note (incorporated by reference to Exhibit 4.7 to the Registrant's Current Report on Form 8-K filed March 12, 2018; Commission File No. 001-01011).
4.10	Form of the Registrant's 2038 Note (incorporated by reference to Exhibit 4.8 to the Registrant's Current Report on Form 8-K filed March 12, 2018; Commission File No. 001-01011).
4.11	Form of the Registrant's 2048 Note (incorporated by reference to Exhibit 4.9 to the Registrant's Current Report on Form 8-K filed March 12, 2018; Commission File No. 001-01011).
10	**Material Contracts**
10.1	Credit Agreement dated as of July 1, 2015, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2015 (Commission File No. 001-01011).
10.2	Amendment No. 1 to Credit Agreement dated as of December 15, 2017, to the Credit Agreement dated as of July 1, 2015, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.5 to the Registrant's Current Report on Form 8-K filed December 19, 2017; Commission File No. 001-01-011).
10.3	Amendment No. 2 to Credit Agreement dated as of May 17, 2018, to the Credit Agreement dated as of July 1, 2015, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2018; Commission File No. 001-01-011).
10.4	Five Year Credit Agreement, dated as of May 18, 2017, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2017; Commission File No. 001-01011).
10.5	Amendment No. 1 to Five Year Credit Agreement dated as of December 15, 2017, to the Five Year Credit Agreement dated as of May 18, 2017, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K filed December 19, 2017; Commission File No. 001-01011).
10.6	Amendment No. 2 to Five Year Credit Agreement dated as of May 17, 2018, to the Five Year Credit Agreement dated as of May 18, 2017, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2018; Commission File No. 001-01011).
10.7	Term Loan Agreement dated as of December 15, 2017, by and among the Registrant, the lenders party thereto and Barclays Bank PLC, as administrative agent (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed December 19, 2017; Commission File No. 001-01011).
10.8	Amendment No. 1 to Term Loan Agreement dated as of May 17, 2018, to the Term Loan Agreement dated as of December 15, 2017, by and among the Registrant, the lenders party thereto and Barclays Bank PLC, as Administrative Agent (incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2018; Commission File No. 001-01011).
10.9	364-Day Credit Agreement dated as of May 17, 2018, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2018; Commission File No. 001-01011).

10.10	Five Year Credit Agreement dated as of May 17, 2018, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2018; Commission File No. 001-01011).
10.11	Bridge Facility Commitment Letter dated December 3, 2017, by and among the Registrant, Barclays Bank PLC, Goldman Sachs Bank USA, Goldman Sachs Lending Partners LLC, Bank of America, N.A., and Merrill Lynch, Pierce Fenner & Smith Incorporated (incorporated by reference to Exhibit 2.2 to the Registrant's Current Report on Form 8-K filed December 5, 2017; Commission File No. 001-01011).

10.12	Joinder to Bridge Facility Commitment Letter dated as of December 15, 2017, by and among the Registrant, Barclays Bank PLC, Goldman Sachs Bank USA, Goldman Sachs Lending Partners LLC, Bank of America, N.A., Merrill Lynch, Pierce, Fenner & Smith Incorporated, and each of the Additional Commitment Parties party thereto (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K filed December 19, 2017; Commission File No. 001-01011).
10.13	364-Day Bridge Term Loan Agreement, dated October 26, 2018, by and among the Registrant, the lenders party thereto and Barclays Bank PLC, as Administrative Agent (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed October 26, 2018; Commission File No. 001-010011).
10.14*	The Registrant's 1996 Directors Stock Plan, as amended and restated November 5, 2002 (incorporated by reference to Exhibit 10.18 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 28, 2002; Commission File No. 001-01011).
10.15*	Caremark Rx, Inc. 2004 Incentive Stock Plan (incorporated by reference to Exhibit 99.2 of the Registrant's Registration Statement No. 333-141481 on Form S-8 filed March 22, 2007; Commission File No. 011-01011).
10.16*	The Registrant's Supplemental Retirement Plan I for Select Senior Management, as amended and restated as of December 31, 2008 (incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2009; Commission File No. 011-01011).
10.17*	The Registrant's 1997 Incentive Compensation Plan, as amended through December 31, 2008 (incorporated by reference to Exhibit 10.8 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2009; Commission File No. 011-01011).
10.18*	Form of Enterprise Non-Competition, Non-Disclosure and Developments Agreement between the Registrant and certain of the Registrant's executive officers (incorporated by reference to Exhibit 10.25 of the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2013; Commission File No. 001-01011).
10.19*	The Registrant's 2010 Incentive Compensation Plan, as amended through January 15, 2013 (incorporated by reference to Exhibit A to the Registrant's Definitive Proxy Statement on Form 14A filed March 27, 2015; Commission File No. 001-01011).
10.20*	The Registrant's Deferred Stock Compensation Plan, as amended (incorporated by reference to Exhibit 10.17 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015; Commission File No. 001-01011).
10.21*	The Registrant's 2007 Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 10.20 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015; Commission File No. 001-01011).
10.22*	Universal 409A Definition Document, as amended (incorporated by reference to Exhibit 10.28 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015; Commission File No. 001-01011).
10.23*	The Registrant's Deferred Compensation Plan, as amended (incorporated by reference to Exhibit 10.19 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.24*	The Registrant's Partnership Equity Program, as amended (incorporated by reference to Exhibit 10.25 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.25*	The Registrant's Performance-Based Restricted Stock Unit Plan, as amended (incorporated by reference to Exhibit 10.27 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.26*	The Registrant's 2017 Incentive Compensation Plan (incorporated by reference to Exhibit A to the Registrant's Definitive Proxy Statement on Form 14A filed March 31, 2017; Commission File No. 001-01011).
10.27*	The Registrant's Executive Incentive Plan, as amended (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2017; Commission File No. 001-01011).
10.28*	

	The Registrant's Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2017; Commission File No. 001-01011).
10.29*	Form of Non-Qualified Stock Option Agreement between the Registrant and selected employees of the Registrant (incorporated by reference to Exhibit 10.29 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.30*	Form of Restricted Stock Unit Agreement - Annual Grant - between the Registrant and selected employees of the Registrant (incorporated by reference to Exhibit 10.30 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).

10.31*	Form of Performance-Based Restricted Stock Unit Agreement between the Registrant and selected employees of the Registrant (incorporated by reference to Exhibit 10.31 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.32*	Form of Partnership Equity Program Participant Purchased RSUs, Company Matching RSUs and Company Matching Options Agreement (Pre-Tax) (incorporated by reference to Exhibit 10.32 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.33*	Form of Partnership Equity Program Participant Purchased RSUs, Company Matching RSUs and Company Matching Options Agreement (Post-Tax) (incorporated by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.34*	Form of Performance Stock Unit Agreement - Annual Grant between the Registrant and selected employees of the Registrant (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2018; Commission File No. 001-01011).
10.35*	Form of Performance Stock Unit Agreement (LTIP) - Annual Grant between the Registrant and selected employees of the Registrant (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2018; Commission File No. 001-01011).
10.36*	The Registrant's 2018 Management Incentive Plan.
10.37*	The Registrant's Severance Plan for Non-Store Employees amended as of November 28, 2018.
10.38*	The Registrant's Performance-Based Restricted Stock Unit Program, as amended.
10.39*	Form of Non-Qualified Stock Option Agreement between the Registrant and selected employees of the Registrant.
10.40*	Form of Restricted Stock Unit Agreement - Annual Grant - between the Registrant and selected employees of the Registrant.
10.41*	Form of Performance-Based Restricted Stock Unit Agreement between the Registrant and selected employees of the Registrant.
10.42*	Form of Partnership Equity Program Participant Purchased RSUs, Company Matching RSUs and Company Matching Options Agreement (Pre-Tax).
10.43*	Form of Partnership Equity Program Participant Purchased RSUs, Company Matching RSUs and Company Matching Options Agreement (Post-Tax) (incorporated by reference to Exhibit 10.31 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2013; Commission File No. 001-01011).
10.44*	Amended Aetna Inc. 2010 Stock Incentive Plan, as amended May 19, 2017 (incorporated by reference to Exhibit 99.1 to the Registrant's Registration Statement on Form S-8 filed November 30, 2018; Commission File No. 001-01011).
10.45*	Form of Aetna Inc. 2010 Stock Incentive Plan - Market Stock Unit Terms of Award.
10.46*	Form of Aetna Inc. 2010 Stock Incentive Plan - Performance Stock Unit Terms of Award (2015).
10.47*	Form of Aetna Inc. 2010 Stock Incentive Plan - Executive Restricted Stock Unit Terms of Award (2015).
10.48*	Form of Aetna Inc. 2010 Stock Incentive Plan - Stock Appreciation Right Terms of Award (2015).
10.49*	Amended and Restated Employment Agreement dated as of December 21, 2012 between the Registrant and Larry Merlo (incorporated by reference to Exhibit 10.31 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012; Commission File No. 001-01011).
10.50*	Form of Non-Qualified Stock Option Agreement - Annual Grant between the Registrant and Larry Merlo (incorporated by reference to Exhibit 10.37 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.51*	Form of Restricted Stock Unit Agreement - Annual Grant between the Registrant and Larry Merlo (incorporated by reference to Exhibit 10.38 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.52*	Amendment dated January 22, 2015 to Nonqualified Stock Option Agreements between the Registrant and Larry Merlo (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K filed January 23, 2015; Commission File No. 001-01011).

10.53*	Change in Control Agreement dated December 22, 2008 between the Registrant and David Denton (incorporated by reference to Exhibit 10.39 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2010; Commission File No. 001-01011).
10.54*	Amendment dated as of December 31, 2012 to the Change in Control Agreement dated December 22, 2008 between the Registrant and David Denton (incorporated by reference to Exhibit 10.32 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012; Commission File No. 001-01011).
10.55*	Confidential Separation Agreement effective as of June 25, 2018, between the Registrant and David Denton (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2018; Commission File No. 001-01011).

10.56*	Change in Control Agreement dated December 22, 2008 between the Registrant and Jonathan Roberts (incorporated by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012; Commission File No. 001-01011).
10.57*	Amendment dated as of December 31, 2012 to the Change in Control Agreement dated December 22, 2008 between the Registrant and Jonathan Roberts (incorporated by reference to Exhibit 10.34 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012; Commission File No. 001-01011).
10.58*	Restricted Stock Unit Agreement - Annual Grant dated April 1, 2016 between the Registrant and Jonathan C. Roberts (incorporated by reference to Exhibit 10.44 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.59*	Restrictive Covenant Agreement dated May 20, 2016 between the Registrant and Jonathan C. Roberts (incorporated by reference to Exhibit 10.45 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.60*	Change in Control Agreement dated December 22, 2008 between the Registrant and Helena Foulkes (incorporated by reference to Exhibit 10.43 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.61*	Amendment dated as of December 31, 2012 to the Change in Control Agreement between the Registrant and Helena Foulkes (incorporated by reference to Exhibit 10.44 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.62*	Change in Control Agreement dated October 1, 2012 between the Registrant and Thomas Moriarity (incorporated by reference to Exhibit 10.1 of the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2015; Commission File No. 001-01011).
10.63*	Restrictive Covenant Agreement dated June 1, 2014 between the Registrant and Thomas Moriarity (incorporated by reference to Exhibit 10.2 of the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2015; Commission File No. 001-01011).
13	**Annual Report to security holders, Form 10-Q or quarterly report to security holders**
13.1	Portions of the 2018 Annual Report to Stockholders of CVS Health Corporation, which are specifically designated in this Annual Report on Form 10-K as being incorporated by reference.
21	**Subsidiaries of the registrant**
21.1	Subsidiaries of CVS Health Corporation.
23	**Consents of experts and counsel**
23.1	Consent of Ernst & Young LLP.
31	**Rule 13a-14(a)/15d-14(a) Certifications**
31.1	Certification by the Chief Executive Officer.
31.2	Certification by the Chief Financial Officer.
32	**Section 1350 Certifications**
32.1	Certification by the Chief Executive Officer.
32.2	Certification by the Chief Financial Officer.
101	**Interactive Data File**
101	The following materials from the CVS Health Corporation Annual Report on Form 10-K for the fiscal year ended December 31, 2018 formatted in Extensible Business Reporting Language (XBRL): (i) the Consolidated Statements of Operations, (ii) the Consolidated Statements of Comprehensive Income, (iii) the Consolidated Balance Sheets, (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Shareholders' Equity and (vi) the related Notes to Consolidated Financial Statements.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CVS HEALTH CORPORATION

Date: February 28, 2019 By: /s/ EVA C. BORATTO

Eva C. Boratto

Executive Vice President and Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title(s)	Date
/s/ FERNANDO AGUIRRE **Fernando Aguirre**	Director	February 28, 2019
/s/ MARK T. BERTOLINI **Mark T. Bertolini**	Director	February 28, 2019
/s/ RICHARD M. BRACKEN **Richard M. Bracken**	Director	February 28, 2019
/s/ C. DAVID BROWN II **C. David Brown II**	Director	February 28, 2019
/s/ EVA C. BORATTO **Eva C. Boratto**	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 28, 2019
/s/ JAMES D. CLARK **James D. Clark**	Senior Vice President - Controller and Chief Accounting Officer (Principal Accounting Officer)	February 28, 2019
/s/ ALECIA A. DECOUDREAUX **Alecia A. DeCoudreaux**	Director	February 28, 2019
/s/ NANCY-ANN M. DEPARLE **Nancy-Ann M. DeParle**	Director	February 28, 2019
/s/ DAVID W. DORMAN **David W. Dorman**	Chair of the Board and Director	February 28, 2019
/s/ ROGER N. FARAH **Roger N. Farah**	Director	February 28, 2019
/s/ ANNE M. FINUCANE **Anne M. Finucane**	Director	February 28, 2019
/s/ EDWARD J. LUDWIG **Edward J. Ludwig**	Director	February 28, 2019
/s/ LARRY J. MERLO **Larry J. Merlo**	President and Chief Executive Officer (Principal Executive Officer) and Director	February 28, 2019
/s/ JEAN-PIERRE MILLON **Jean-Pierre Millon**	Director	February 28, 2019

/s/ MARY L. SCHAPIRO	Director	February 28, 2019
Mary L. Schapiro		
/s/ RICHARD J. SWIFT	Director	February 28, 2019
Richard J. Swift		
/s/ WILLIAM C. WELDON	Director	February 28, 2019
William C. Weldon		
/s/ TONY L. WHITE	Director	February 28, 2019
Tony L. White		

10-K 1 cvs-20171231x10k.htm 10-K

Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

☒ **Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the fiscal year ended December 31, 2017

OR

☐ **Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the transition period from to

Commission file number 001-01011

CVS HEALTH CORPORATION
(Exact name of Registrant as specified in its charter)

Delaware	**05-0494040**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
One CVS Drive, Woonsocket, Rhode Island	**02895**
(Address of principal executive offices)	(Zip Code)

(401) 765-1500
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Exchange Act:

Common Stock, par value $0.01 per share	**New York Stock Exchange**
Title of each class	Name of each exchange on which registered

Securities registered pursuant to Section 12(g) of the Exchange Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b−2 of the Exchange Act.

Large accelerated filer ☒	Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐
	Emerging growth company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the registrant's common stock held by non-affiliates was approximately $81,440,458,676 as of June 30, 2017, based on the closing price of the common stock on the New York Stock Exchange. For purposes of this calculation, only executive officers and directors are deemed to be the affiliates of the registrant.

As of February 9, 2018, the registrant had 1,014,532,157 shares of common stock issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Filings made by companies with the Securities and Exchange Commission sometimes "incorporate information by reference." This means that the company is referring you to information that was previously filed or is to be filed with the SEC, and this information is considered to be part of the filing you are reading. The following materials are incorporated by reference into this Form 10-K:

Portions of our Annual Report to Stockholders for the fiscal year ended December 31, 2017 are incorporated by reference in our response to Items 7, 8 and 9 of Part II.

Information contained in our Proxy Statement for the 2018 Annual Meeting of Stockholders is incorporated by reference in our response to Items 10 through 14 of Part III.

Table of Contents

TABLE OF CONTENTS

Table of Contents

PART I

Item 1. Business

Overview

CVS Health Corporation, together with its subsidiaries (collectively, "CVS Health," the "Company," "we," "our" or "us"), is a pharmacy innovation company helping people on their path to better health. At the forefront of a changing health care landscape, the Company has an unmatched suite of capabilities and the expertise needed to drive innovations that will help shape the future of health care.

We are currently the only integrated pharmacy health care company with the ability to impact consumers, payors, and providers with innovative, channel-agnostic solutions. We have a deep understanding of their diverse needs through our unique integrated model, and we are bringing them innovative solutions that help increase access to quality care, deliver better health outcomes and lower overall health care costs.

Through more than 9,800 retail locations, more than 1,100 walk-in health care clinics, a leading pharmacy benefits manager with more than 94 million plan members, a dedicated senior pharmacy care business serving more than one million patients per year, expanding specialty pharmacy services and a leading stand-alone Medicare Part D prescription drug plan, we enable people, businesses, and communities to manage health in more affordable, effective ways. We are delivering break-through products and services, from advising patients on their medications at our CVS Pharmacy® locations, to introducing unique programs to help control costs for our clients at CVS Caremark®, to innovating how care is delivered to our patients with complex conditions through CVS Specialty®, to improving pharmacy care for the senior community through Omnicare®, or by expanding access to high-quality, low-cost care at CVS MinuteClinic®.

We have three reportable segments: Pharmacy Services, Retail/LTC and Corporate.

Proposed Acquisition of Aetna

On December 3, 2017, we entered into a definitive merger agreement to acquire all of the outstanding shares of Aetna Inc. ("Aetna") for a combination of cash and stock (the "Aetna Acquisition"). Under the terms of the merger agreement, Aetna shareholders will receive $145.00 per share in cash and 0.8378 CVS Health shares for each Aetna share. The transaction values Aetna at approximately $207 per share or approximately $69 billion based on the Company's 5-day volume weighted average price ending December 1, 2017 of $74.21 per share. Including the assumption of Aetna's debt, the total value of the transaction is approximately $77 billion. The final purchase price will be determined based on the Company's stock price on the date of closing of the transaction.

The proposed acquisition is currently projected to close in the second half of 2018 and remains subject to approval by CVS Health and Aetna shareholders and customary closing conditions, including the expiration of the waiting period under the federal Hart-Scott-Rodino Antitrust Improvements Act of 1976 ("HSR Act") and approvals of state departments of insurance and U.S. and international regulators.

Pharmacy Services Segment

The Pharmacy Services Segment provides a full range of pharmacy benefit management ("PBM") solutions, as described more fully below, to clients consisting primarily of employers, insurance companies, unions, government employee groups, health plans, Medicare Part D plans, Managed Medicaid plans, plans offered on the public and private exchanges, other sponsors of health benefit plans and individuals throughout the United States. In addition, through our SilverScript Insurance Company ("SilverScript") subsidiary, we are a national provider of drug benefits to eligible beneficiaries under the federal government's Medicare Part D program. The Pharmacy Services Segment operates under the CVS Caremark Pharmacy Services, Caremark®, CVS Specialty®, AccordantCare™, SilverScript®, Wellpartner®, NovoLogix®, Coram®, Navarro® Health Services and ACS Pharmacy names. As of December 31, 2017, the Pharmacy Services Segment operated 23 retail specialty pharmacy stores, 18 specialty mail order pharmacies and four mail order dispensing pharmacies, and 83 branches for infusion and enteral services, including approximately 73 ambulatory infusion suites and three centers of excellence, located in 42 states, Puerto Rico and the District of Columbia. During the year ended December 31, 2017, our PBM filled or managed approximately 1.8 billion prescriptions on a 30-day equivalent basis.

Table of Contents

Pharmacy Services Business Strategy - Our pharmacy services business strategy centers on providing innovative tools and strategies, as well as quality client service, in order to help improve clinical outcomes for our clients' plan members while assisting them with better managing pharmacy and overall health care costs. Our goal is to produce superior results for our clients and their plan members by leveraging our expertise in core PBM services, including: plan design offerings and administration, formulary management, Medicare Part D services, mail order, specialty pharmacy and infusion services, retail pharmacy network management services, prescription management systems, clinical services, disease management services and medical spend management.

In addition, as a fully integrated pharmacy services company that helps clients improve quality and lower their pharmacy costs, we offer our clients and their plan members a variety of programs and tools, including plan design offerings, that benefit from our integrated systems and the ability of our almost 36,000 pharmacists, nurses, nurse practitioners and physician assistants to interact personally with the many plan members we serve. Through our multiple member touch points (retail stores, mail order, infusion, long-term care and specialty pharmacies, retail clinics, digital resources and cost management tools), we seek to engage plan members in behaviors that help lower cost and improve health care outcomes. Examples of these programs and services include: Maintenance Choice®, a program where eligible client plan members can elect to fill their maintenance prescriptions through delivery to their home or business or at our CVS Pharmacy retail stores for the same price as mail order; Pharmacy Advisor®, a program that facilitates face-to-face and telephone counseling by our pharmacists to help participating plan members with certain chronic diseases, such as diabetes and cardiovascular conditions, to identify gaps in care, adhere to their prescribed medications and manage their health conditions; enhanced disease management programs, such as our TransformCare™ offerings, that are targeted at managing chronic disease states; Specialty Connect®, our specialty pharmacy offering that integrates specialty mail and retail capabilities, providing members with disease-state specific counseling from our experienced specialty pharmacists and the convenience of picking up their prescriptions at their local CVS Pharmacy or having them delivered to their home or office and an ExtraCare® Health Card program that offers discounts to eligible plan members on certain over-the-counter health care products sold in our CVS Pharmacy stores. In addition, CVS MinuteClinic ("MinuteClinic") is an important and differentiated part of the enterprise that offers

certain capabilities to PBM clients and their members. For example, we offer plan-sponsored co-pay reductions to encourage use of MinuteClinic, thereby helping to reduce emergency room visits and to lower overall health care costs. We also partner with our health plan clients sponsoring patient-centered medical homes, biometric screenings for plan members, closing gaps in care, and onsite clinics at client corporate headquarters.

PBM Services - Our PBM solutions are described more fully below.

Plan Design Offerings and Administration - We administer pharmacy benefit plans for clients who contract with us to facilitate prescription coverage and claims processing for their eligible plan members. We assist our clients in designing pharmacy benefit plans that help improve health outcomes while minimizing the costs to the client. We also assist clients in monitoring the effectiveness of their plans through frequent, informal communications, their use of our proprietary software, as well as through formal annual, quarterly and sometimes monthly performance reviews.

We make recommendations to help clients design benefit plans that promote the use of the lower cost, clinically appropriate drugs. We help our clients control costs by recommending plan designs that encourage the use of generic equivalents of brand name drugs when such equivalents are available. Our clients also have the option, through plan design, to further lower their pharmacy benefit plan costs by setting different member payment levels for different products on their drug lists or "formularies," which helps guide members to choose lower cost alternatives through appropriate financial incentives.

Formulary Management - We utilize an independent panel of doctors, pharmacists and other medical experts, referred to as our CVS Caremark National Pharmacy and Therapeutics Committee, to review and approve the selection of drugs that meet our high standards of safety and efficacy for inclusion on one of our template formularies. Our formularies provide recommended products in numerous drug classes to help ensure member access to clinically appropriate drugs with alternatives within a class under the client's pharmacy benefit plan, while helping to drive the lowest net cost for our clients that select one of our formularies. To help improve clinical outcomes for members and clients, we conduct ongoing, independent reviews of all drugs, including, but not limited to, those appearing on the formularies and generic equivalent products. Many of our clients choose to adopt one of our template formulary offerings as part of their plan design. Beginning in 2018, clients will have new capabilities to offer real time benefits information for a member's specific plan design, provided digitally at the point of prescribing, at the pharmacy and directly to members.

Table of Contents

Medicare Part D Services - We participate in the administration of the drug benefit added to the Medicare program under Part D of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 ("MMA") through the provision of PBM services to those of our health plan clients and other clients that have qualified as a Medicare Part D prescription drug plans ("PDP") or as a Medicare Advantage prescription drug plan ("MA-PD") and by offering Medicare Part D pharmacy benefits through SilverScript, a PDP that has contracted with the United States Centers for Medicare and Medicaid Services ("CMS"). We also assist employer, union and other health plan clients that qualify for the retiree drug subsidy made available under the MMA by collecting and submitting eligibility and/or drug cost data to CMS in order for them

to obtain the subsidy and offer Medicare Part D pharmacy benefits to such clients' retirees through SilverScript-sponsored Employer Group Waiver Plans (“EGWPs”).

Mail Order Pharmacy - As of December 31, 2017, we operated four mail order dispensing pharmacies in the United States. Plan members or their prescribers submit prescriptions or refill requests, primarily for maintenance medications, to these pharmacies via mail, telephone, fax, e-prescribing or the Internet. We also operate a network of smaller mail order specialty pharmacies described below. Our staff pharmacists review mail order prescriptions and refill requests with the assistance of our prescription management systems. This review may involve communications with the prescriber and, with the prescriber’s approval when required, can result in generic substitution, therapeutic interchange or other actions designed to help reduce cost and/or improve quality of treatment. These pharmacies have been awarded Mail Order Pharmacy accreditation from Utilization Review Accreditation Commission (“URAC”), a Washington DC-based health care accrediting organization that establishes quality standards for the health care industry.

Specialty Pharmacy - Our specialty pharmacies support individuals who require complex and expensive drug therapies. As of December 31, 2017, our specialty pharmacy operations included 18 specialty mail order pharmacies located throughout the United States, including Puerto Rico, that are used for delivery of advanced medications to individuals with chronic or genetic diseases and disorders. These pharmacies have also been awarded Specialty Pharmacy accreditation from URAC. As of December 31, 2017, the Company operated a network of 23 retail specialty pharmacy stores, which operate under the CVS Pharmacy specialty services and Navarro® Health Services names. These stores average 1,100 square feet in size and sell prescription drugs and a limited assortment of front store items such as alternative medications, homeopathic remedies and vitamins. Our care management program, AccordantCare, is a differentiated clinical model that focuses on whole patient care, including comorbidity management. It embeds specially trained nurses into the CVS Specialty CareTeam for members who fill their specialty medications through CVS Specialty helping deliver better care and improved outcomes. Through our affiliate Coram LLC and its subsidiaries (collectively, “Coram”), one of the nation’s largest providers of comprehensive infusion services, we care for approximately 165,000 patients annually, providing specialty infusion and enteral nutrition services. Our Specialty Connect® offering integrates our specialty pharmacy mail and retail capabilities, providing members with disease-state specific counseling from our experienced specialty pharmacists and the convenience of picking-up their prescriptions at their local CVS Pharmacy, or having them delivered to their preferred address. Whether submitted through our specialty mail order pharmacy or at a CVS Pharmacy, all prescriptions are filled through our specialty mail order pharmacies, so all revenue from this specialty prescription services program is recorded within the Pharmacy Services Segment. Members then can choose to pick up their medication at their local CVS Pharmacy, or have it sent to their home through the mail. Specialty Connect is available where allowed by law. Innovative digital tools for specialty pharmacy provide a more accessible, connected, and personal health experience. Members can manage all their specialty medications in real-time using the CVS Specialty app and more than 60 percent have opted in to receive email and text messages including refill reminders and order status. Patients can also use secure messaging to contact their Specialty CareTeam with any questions. Additionally, with the acquisition of Omnicare, Inc. (“Omnicare”), we expanded our specialty pharmacy to include the specialty pharmacy operations of Omnicare which operates under the name ACS Pharmacy.

Retail Pharmacy Network Management - We maintain a national network of more than 68,000 retail pharmacies, consisting of approximately 41,000 chain pharmacies (which includes our CVS Pharmacy locations) and 27,000 independent pharmacies, in the United States, including Puerto Rico, the District of Columbia, Guam and the U.S. Virgin Islands. When a customer fills a prescription in a retail pharmacy, the pharmacy sends prescription data electronically to us from the point-of-sale. This data interfaces with our proprietary prescription management systems, which verify relevant plan member data and eligibility, while also performing a drug utilization review to help evaluate clinical appropriateness and safety and confirming that the pharmacy will receive payment for the prescription. We are also able to build client-specific networks and managed network solutions to further drive savings for our clients. These include a performance-based pharmacy network with approximately 30,000 stores that will be anchored by CVS

Pharmacy and Walgreens, along with up to 10,000 community-based, independently owned pharmacies across the United States. The network is designed to deliver unit cost savings and to improve clinical outcomes that will help to lower overall health

Table of Contents

care costs for participating payors and their members. This network will be available beginning March 2018 to eligible commercial and Medicaid clients.

Prescription Management Systems - We dispense prescription drugs both directly, through one of our mail order or specialty pharmacies, or through a network of retail pharmacies, described above. All prescriptions processed through our systems, whether they are filled through one of our mail order or specialty dispensing pharmacies or through a pharmacy in our retail network, are analyzed, processed and documented by our proprietary prescription management systems. These systems provide essential features and functionality to allow a plan member to use their prescription drug benefit. These systems also streamline the process by which prescriptions are processed by staff and network pharmacists, by enhancing review of various items through automation, including, but not limited to, plan eligibility, early refills, duplicate dispensing, appropriateness of dosage, drug interactions or allergies, over-utilization and potential fraud.

Clinical Services - We offer multiple clinical programs and services to help clients manage overall pharmacy and health care costs in a clinically appropriate manner. Our programs are primarily designed to promote good health outcomes, and to help target inappropriate utilization and non-adherence to medication, each of which may result in adverse medical events that negatively impact member health and client pharmacy and medical spend. In this regard, we offer various utilization management (“UM”), medication management, quality assurance, adherence and counseling programs to complement the client’s plan design and clinical strategies. To help address the opioid epidemic, we introduced an industry-leading UM approach that limits to seven days the supply of opioids dispensed for certain acute prescriptions for patients who are new to therapy; limits the daily dosage of opioids dispensed based on the strength of the opioid; and requires the use of immediate-release formulations of opioids before extended-release opioids are dispensed. To support improved adherence, our Pharmacy Advisor program facilitates pharmacist counseling, both face-to-face and over the telephone, to help participating plan members with certain chronic diseases, such as diabetes and cardiovascular conditions, to identify gaps in care, adhere to their prescribed medications and manage their health conditions. We also have digital connectivity that helps to lower drug costs for patients by providing expanded visibility to lower cost alternatives through enhanced analytics and data sharing.

Disease Management Programs - Our clinical services utilize advanced protocols and offer clients convenience in working with health care providers and other third parties. Our AccordantCare programs include integrated rare disease management programs, which cover diseases such as rheumatoid arthritis, Parkinson’s disease, seizure disorders and multiple sclerosis. The majority of these integrated programs are accredited by the National Committee for Quality Assurance (“NCQA”), a private, not-for-profit organization that evaluates, accredits and certifies a wide range of health care organizations. They have also been awarded Case Management accreditation from URAC.

Medical Benefit Management - We offer a technology platform, NovoLogix®, an online preauthorization tool that helps identify and capture cost savings opportunities for specialty drugs

billed under the medical benefit by identifying outliers to appropriate dosages and costs, and helps to ensure clinically appropriate use of these drugs.

Pharmacy Services Information Systems - We currently operate and support a small number of claim adjudication platforms to support our Pharmacy Services Segment. However, the majority of our clients have migrated to one platform. These information systems incorporate architecture that centralizes the data generated from filling mail order prescriptions, adjudicating retail pharmacy claims and delivering other solutions to our PBM clients. Our Health Engagement Engine® technology and proprietary clinical algorithms help connect the various parts of the enterprise and serves an essential role in cost management and health improvement. This capability responsibly transforms pharmacy data into actionable interventions at key points of care such as our mail and specialty pharmacists to help provide quality care, and our enterprise digital strategy and integrated digital offerings help patients seamlessly manage mail, specialty and retail prescriptions.

Pharmacy Services Clients - Our clients are primarily employers, insurance companies, unions, government employee groups, health plans, Medicare Part D plans, Managed Medicaid plans and plans offered on public and private exchanges, other sponsors of health benefit plans and individuals located throughout the United States. We provide pharmaceuticals to eligible members in benefit plans maintained by our clients and utilize our information systems, among other things, to help perform safety checks, drug interaction screening and identify opportunities for generic substitution. We generate substantially all of our Pharmacy Services Segment net revenue from dispensing and managing prescription drugs to eligible members in benefit plans maintained by our clients. In 2017, 2016 and 2015, net revenues from Aetna accounted for approximately 12.3%, 11.7% and 10.0%, respectively, of our consolidated net revenues.

Table of Contents

Pharmacy Services Seasonality - The majority of our Pharmacy Services Segment revenues are not seasonal in nature. However, our quarterly earnings and operating cash flows are impacted by the Medicare Part D benefit design and changes in the composition of our membership. The Medicare Part D standard benefit design results in coverage that varies with a member's cumulative annual out-of-pocket costs. The benefit design generally results in plan sponsors sharing a greater portion of the responsibility for total prescription drug costs in the early part of the year. As a result, the PDP pay percentage or benefit ratio generally decreases and operating profit generally increases as the year progresses.

Pharmacy Services Competition - We believe the primary competitive factors in the industry include: (i) the ability to negotiate favorable discounts from drug manufacturers as well as to negotiate favorable discounts from, and access to, retail pharmacy networks; (ii) the ability to identify and apply effective cost management programs utilizing clinical strategies including the development and utilization of preferred formularies; (iii) the ability to market PBM products and services; (iv) the commitment to provide flexible, clinically-oriented services to clients and be responsive to clients' needs; (v) the quality, scope and costs of products and services offered to clients and their members including satisfaction of experience; and (vi) operational excellence in delivering services. The Pharmacy Services Segment has a significant number of competitors (e.g., Express Scripts, OptumRx, Prime Therapeutics, MedImpact, and Humana) offering PBM services including large, national PBM companies, PBMs owned by large national health plans and smaller standalone PBMs.

Retail/LTC Segment

As of December 31, 2017, the Retail/LTC Segment included 9,803 retail locations (of which 8,060 were our stores that operated a pharmacy and 1,695 were our pharmacies located within Target Corporation ("Target") stores), our online retail pharmacy websites, CVS.com®, Navarro.com™ and Onofre.com.br™, 37 onsite pharmacy stores, our long-term care pharmacy operations and our retail health care clinics. The retail locations are in 49 states, the District of Columbia, Puerto Rico and Brazil, operating primarily under the CVS Pharmacy®, CVS®, CVS Pharmacy y más®, Longs Drugs®, Navarro Discount Pharmacy® and Drogaria Onofre™ names. Including the pharmacies within Target, we currently operate in all of the top 100 United States drugstore markets. Existing retail stores range in size from approximately 5,000 to 30,000 square feet, although most new stores range in size from approximately 11,000 to 15,000 square feet and typically include a drive-thru pharmacy. The pharmacies within Target stores range in size from approximately 450 to 1,100 square feet. During 2017, our Retail/LTC Segment filled approximately 1.2 billion prescriptions (counting 90-day prescriptions as three prescriptions), and we held approximately 23.6% of the United States retail pharmacy market.

Our acquisition of Omnicare broadened our base of pharmacy care to an additional dispensing channel, long-term care pharmacy. Omnicare's LTC operations include the distribution of pharmaceuticals, related pharmacy consulting and other ancillary services to chronic care facilities and other care settings. Omnicare also provided commercialization services under the name RxCrossroads until January 2, 2018, when we completed the sale of RxCrossroads. LTC is comprised of 145 spoke pharmacies that primarily handle new prescription orders, of which 30 are also hub pharmacies that use automation to support spoke pharmacies with refill prescriptions. LTC primarily operates under the Omnicare® and NeighborCare® names. With the addition of the LTC operations, we are continuing to enhance our service offerings to further address the needs of an aging population throughout the continuum of senior care.

Retail Pharmacy Business Strategy - Our integrated pharmacy services model has enhanced the ability of our retail pharmacy stores to expand customer access to care while helping to lower overall health care costs and improve health outcomes. In that regard, the role of our retail pharmacist is shifting from primarily dispensing prescriptions to also providing services, including flu vaccinations as well as face-to-face patient counseling with respect to adherence to drug therapies, closing gaps in care and recommending more cost effective drug therapies. We also provide a broad assortment of quality merchandise at competitive prices using a retail format that emphasizes service, innovation and convenience. One of the keys to our strategy is technology, which allows us to focus on constantly improving service and exploring ways to provide more personalized product offerings and services. We are continuing to leverage digital to empower our customers and patients by making the full breadth of health care and pharmacy services available to them anytime, anywhere. We are continuing to introduce digital tools to make it easier for people to save time and money and to live healthier lives. In 2017, we rolled out CVS Pay® nationwide, an end-to-end mobile payment solution that integrates payment, prescription pick-up and our ExtraCare® loyalty program into one spot at checkout. We believe that continuing to innovate with new and unique products and services, using innovative marketing and adjusting our mix of merchandise to match our customers' needs and preferences is very important to our ability to continue to improve customer satisfaction.

Retail/LTC Products and Services - A typical retail store sells prescription drugs and a wide assortment of high-quality, nationally advertised brand name and proprietary brand merchandise. Front store categories include over-the-counter drugs, beauty products and cosmetics, personal care products, convenience foods, photo finishing services, seasonal merchandise and greeting cards. The pharmacies within Target stores sell prescription drugs and over-the-counter drugs that are required to be held behind the counter. The LTC operations include distribution of pharmaceuticals and related consulting and ancillary services. We purchase our merchandise from numerous manufacturers and distributors. We believe that competitive sources are readily available for substantially all of the products we carry and the loss of any one supplier would not likely have a material effect on the business. Our clinics offer a variety of health care services by nurse practitioners and physician assistants.

Retail/LTC net revenues by major product group are as follows:

	Percentage of Net Revenues		
	2017	2016	2015
Pharmacy [(1)]	75.0 %	75.0 %	72.9 %
Front store and other [(2)]	25.0	25.0	27.1
	100.0 %	100.0 %	100.0 %

(1) Pharmacy includes LTC sales and sales in pharmacies within Target stores.
(2) "Other" represents less than 5% of the "Front store and other" net revenue category.

Pharmacy - Pharmacy revenues represented approximately three-fourths of the Retail Pharmacy Segment revenues in each of 2017, 2016 and 2015. We believe that our retail pharmacy operations will continue to represent a critical part of our business due to industry demographics, e.g., an aging American population consuming a greater number of prescription drugs, pharmaceuticals being used more often as the first line of defense for managing illness, the introduction of new pharmaceutical products, and Medicare Part D. We believe our retail pharmacy business benefits from our investment in both people and technology, as well as our innovative partnerships with health plans, PBMs and providers. Given the nature of prescriptions, people want their prescriptions filled accurately by professional pharmacists using the latest tools and technology, and ready when promised. Consumers need medication management programs and better information to help them get the most out of their health care dollars. To assist our customers with these needs, we have introduced integrated pharmacy health care services that provide an earlier, easier and more effective approach to engaging them in behaviors that can help lower costs, improve health, and save lives. Examples include: our Patient Care Initiative, an enhanced medication adherence program; Maintenance Choice®, a program where eligible client plan members can elect to fill their maintenance prescriptions through delivery to their home or business or at our CVS Pharmacy retail stores for the same price as mail order; Pharmacy Advisor®, our program that facilitates pharmacist counseling, both face-to-face and over the telephone, to help participating plan members with certain chronic diseases, such as diabetes and cardiovascular conditions, to identify gaps in care, adhere to their prescribed medications and manage their health conditions; Specialty Connect®, which integrates our specialty pharmacy mail and retail capabilities, providing members with disease-state specific counseling from our experienced specialty pharmacists and the convenience of picking-up their prescriptions at their local CVS Pharmacy, or having them delivered to their preferred address; ScriptSync®, a service that enables patients with multiple medications to pick up their eligible maintenance prescriptions in a single monthly CVS Pharmacy visit; ScriptPath™ Prescription Schedule, a new capability for CVS Pharmacy patients, who manage multiple prescription medications, which features all of a patient's current CVS Pharmacy prescription information in one place – including which medications the patient takes, when the patient should take them and how much of each medication should be taken in each dose; and HealthTag®, an integrated communications platform that can be leveraged to communicate healthcare opportunities to members that provides unmatched ability to reach and connect with members as well as industry-leading data integration to improve coordination of member care. Each of these are programs that demonstrate our ability to enhance the customer experience through our integrated enterprise products and services. Further evidencing our belief in the importance of pharmacy service is our continuing investment in technology, such as our Drug

Utilization Review system that helps check for harmful interactions between prescription drugs and patient identified over-the-counter products, vitamins and herbal remedies; RxConnect, our proprietary pharmacy system that integrates our product delivery and clinical workflows as well as advanced patient safety functionality such as drug utilization review; our prescription refill program, ReadyFill®; and our online retail businesses, CVS.com, Navarro.com and Onofre.com.br. Our Health Engagement Engine enables patient-specific opportunities to be prioritized and delivered at each key moment of care relevant to that specific patient. In December 2015, we expanded our pharmacy offering with the acquisition of the

Table of Contents

pharmacies within Target stores. We offer all the same pharmacy services available in our retail drugstores and online at our pharmacies within Target stores.

Front Store - Front store revenues benefited from our strategy to innovate with new and unique products and services, using innovative personalized marketing and adjusting our mix of merchandise to match our customers' needs and preferences. A key component of our front store strategy is our ExtraCare® card program, which is helping us continue to build our loyal customer base. The ExtraCare program is one of the largest and most successful retail loyalty programs in the United States. The ExtraCare program allows us to balance our marketing efforts so we can reward our best customers by providing them automatic sale prices, customized coupons, ExtraBucks® rewards and other benefits. We continue to launch and enhance new and exclusive brands to create unmatched offerings in beauty. Another component of our front store strategy is our unique product offerings, which include a full range of high-quality CVS Pharmacy® and proprietary brand products that are only available through CVS Pharmacy stores. We currently carry approximately 7,000 CVS Pharmacy and proprietary brand products, which accounted for approximately 23% of our front store revenues during 2017. These products include expanded offerings of healthy foods and vitamins. Furthermore, we are tailoring certain groups of stores, such as suburban area stores, to better meet the needs of our customers.

MinuteClinic - As of December 31, 2017, we operated 1,134 MinuteClinic® locations in 33 states and the District of Columbia, of which 1,050 were located in our retail pharmacy stores, and 79 were located in Target stores. We opened 15 new clinics during 2017. Our clinics are staffed by nurse practitioners and physician assistants who utilize nationally established guidelines to diagnose and treat minor health conditions, perform health screenings, monitor chronic conditions, provide wellness services and deliver vaccinations. Payors value our clinics because they provide convenient, high-quality, cost-effective care, in many cases offering an attractive alternative to more expensive sites of care. As a result, visits paid for by employers, health insurers or other third parties accounted for approximately 91% of MinuteClinic's total revenues in 2017. MinuteClinic is collaborating with our Pharmacy Services Segment to help meet the needs of CVS Caremark's client plan members by offering programs that can improve member health and lower costs. MinuteClinic is now affiliated with more than 75 major health systems and continues to build a platform that supports primary care.

Long-term Care - Through our Omnicare business, we provide the distribution of pharmaceuticals, related pharmacy consulting and other ancillary services to chronic care facilities and other care settings. Omnicare's customers consist of skilled nursing facilities, assisted living facilities, independent living communities, hospitals, correctional facilities, and other health care service providers. We provide pharmacy consulting, including monthly patient drug therapy evaluations, assist in compliance with state and federal regulations and provide proprietary clinical and health management programs. We also provide pharmaceutical case

management services for retirees, employees and dependents who have drug benefits under corporate-sponsored health care programs.

Onsite Pharmacies - We also operate a limited number of small pharmacies located at client sites, typically under the CarePlus®, CarePlus CVS Pharmacy® or CVS Pharmacy® name, which provide certain health plan members and customers with a convenient alternative for filling their prescriptions.

Retail Pharmacy Drugstore Development - The addition of new stores has played, and will continue to play, a key role in our continued growth and success. Our store development program focuses on three areas: entering new markets, adding stores within existing markets and relocating stores to more convenient sites. During 2017, we opened 175 new retail locations, relocated 30 stores and closed 81 locations. During the last five years, we opened approximately 1,000 new and relocated locations, and acquired 1,880 locations including the pharmacies acquired from Target. We believe that continuing to grow our store base and locating stores in more accessible markets are essential components to compete effectively in the current health care environment. As a result, we believe that our store development program is an integral part of our ability to maintain our leadership position given the changing health care landscape and to meet the increasing needs of our customers.

Retail/LTC Information Systems - We have continued to invest in information systems to enable us to deliver exceptional customer service, enhance safety and quality, and expand our patient care services while lowering operating costs. Our proprietary WeCARE Workflow supports our pharmacy teams by prioritizing work to meet customer expectations, facilitating prescriber outreach, and seamlessly integrating our clinical programs. This solution delivers improved efficiency and enhances the customer experience, as well as providing a framework to accommodate the evolution of pharmacy practice and the expansion of our clinical programs. Our Health Engagement Engine technology and proprietary clinical algorithms enable us to help identify opportunities for our pharmacists to deliver face-to-face

Table of Contents

counseling regarding patient health and safety matters, including adherence issues, gaps in care and management of certain chronic health conditions. Our digital strategy empowers the consumer to navigate their pharmacy experience and manage their condition through our on-line and mobile tools that offer utility and convenience. This includes the ability to schedule an appointment at MinuteClinic, get next-in line alerts or health reminders and appointment updates via text messages. Our integrated digital offerings help patients seamlessly manage retail, mail and specialty prescriptions dispensed by a CVS Pharmacy or LTC location and enhance front store personalization to drive value for customers. We continue to experience strong adoption of our digital solutions with our mobile app receiving critical acclaim for ease of use and our text message program experiencing significant growth. LTC's digital technology suite, Omniview®, improves the efficiency of customers' operations with tools that include executive dashboards, pre-admission pricing, electronic ordering of prescription refills, proof-of-delivery tracking, access to patient profiles, receipt and management of facility bills, and real-time validation of Medicare Part D coverage, among other capabilities.

Retail/LTC Customers - The success of our retail drugstore and LTC businesses is dependent upon our ability to establish and maintain contractual relationships with pharmacy benefit managers and other payors on acceptable terms. Pharmacy benefit managers, managed care organizations, government-funded health care programs, commercial employers and other third

party payors accounted for 99.2% of our 2017 pharmacy revenues. No single Retail/LTC payor accounts for 10% or more of our annual consolidated net revenues.

Retail/LTC Seasonality - The majority of our revenues, particularly pharmacy revenues, are generally not seasonal in nature. However, retail front store revenues tend to be higher during the December holiday season. In addition, both pharmacy and retail front store revenues are affected by the timing and severity of the cough, cold and flu season. For additional information, we refer you to "Risks related to the seasonality of our business" in Item 1A. Risk Factors.

Retail/LTC Competition - The retail drugstore business is highly competitive. We believe that we compete principally on the basis of: (i) store location and convenience, (ii) customer service and satisfaction, (iii) product selection and variety, and (iv) price. In the markets we serve, we compete with other drugstore chains (e.g., Walgreens and Rite Aid), supermarkets, discount retailers (e.g., Wal-Mart), independent pharmacies, restrictive pharmacy networks, membership clubs, Internet companies, and retail health clinics (including urgent care centers), as well as other mail order pharmacies.

LTC pharmaceutical services are highly regional or local in nature and within a given geographic area of operation, highly competitive. Our largest competitor nationally is PharMerica. We also compete with numerous local and regional institutional pharmacies, pharmacies owned by long-term care facilities and local retail pharmacies. Some states have enacted "freedom of choice" or "any willing provider" requirements as part of their state Medicaid programs or in separate legislation, which may increase the competition that we face in providing services to long-term care facility residents in these states.

Corporate Segment

Our Corporate Segment provides management and administrative services to support the overall operations of the Company. The Corporate Segment consists of certain aspects of our executive management, corporate relations, legal, compliance, human resources, information technology and finance departments.

Generic Sourcing Venture

The Company and Cardinal Health, Inc. ("Cardinal") each have a 50% ownership in Red Oak Sourcing, LLC ("Red Oak"), a generic pharmaceutical sourcing entity. Under this arrangement, the Company and Cardinal contributed their sourcing and supply chain expertise to Red Oak and agreed to source and negotiate generic pharmaceutical supply contracts for both companies through Red Oak; however, Red Oak does not own or hold inventory on behalf of either company.

Working Capital Practices

We fund the growth of our business through a combination of cash flow from operations, commercial paper and other short-term borrowings, proceeds from sale-leaseback transactions and long-term borrowings. For additional information on our working capital practices, we refer you to the caption "Management's Discussion and Analysis - Liquidity and Capital Resources" in our Annual Report to Stockholders for the year ended December 31, 2017, which section is

incorporated by reference herein. The majority of our non-pharmacy revenues are paid in cash, or with debit or credit cards. Managed care organizations, pharmacy benefit managers, government-funded health care programs, commercial employers and other third party insurance programs, which represent the vast majority of our consolidated pharmacy revenues, typically settle in less than 30 days. With the exception of our Medicare Part D services, the remainder of our consolidated pharmacy revenues are paid in cash, or with debit or credit cards. As a provider of Medicare Part D services, we contract annually with CMS. Utilization of services each plan year results in the accumulation of either a receivable from or a payable to CMS. The timing of settlement of the receivable or payable with CMS takes several quarters which impacts our working capital from year to year.

Colleague Development

As of December 31, 2017, we employed approximately 246,000 colleagues in 50 states, the District of Columbia, Puerto Rico and Brazil, which included approximately 36,000 pharmacists, nurses, nurse practitioners and physician assistants. The total included approximately 86,000 part-time colleagues who work less than 30 hours per week. To deliver the highest levels of service to our customers, we devote considerable time and attention to our people and service standards. We emphasize attracting and training knowledgeable, friendly and helpful associates to work in our organization.

Intellectual Property

We have registered and/or applied to register a variety of our trademarks and service marks used throughout our business, as well as domain names, and rely on a combination of copyright, patent, trademark and trade secret laws, in addition to contractual restrictions, to establish and protect our proprietary rights. We regard our intellectual property as having significant value in our Pharmacy Services and Retail/LTC segments. We are not aware of any facts that could materially impact our continuing use of any of our intellectual property.

Government Regulation

Overview - Much of our business is subject to federal and state laws and regulations. In addition, many of our PBM clients and our payors in the Retail/LTC Segment, including insurers, Medicare Part D plans, Managed Medicaid plans and managed care organizations ("MCOs"), are themselves subject to extensive regulations that affect the design and implementation of prescription drug benefit plans that they sponsor. Similarly, our LTC clients, such as skilled nursing facilities, are subject to government regulations, including many of the same government regulations to which we are subject. The application of these complex legal and regulatory requirements to the detailed operation of our business creates areas of uncertainty. Further, there are numerous proposed health care laws and regulations at the federal and state levels, some of which could adversely affect our business if they are enacted. We are unable to predict what federal or state legislation or regulatory initiatives may be enacted in the future relating to our business or the health care industry in general, or what effect any such legislation or regulations might have on our business. Any failure or alleged failure to comply with applicable laws and regulations as summarized below, or any adverse applications of, or changes in, the laws and regulations affecting our business, could have a material adverse effect on our operating results and/or financial condition. See Item 3, "Legal Proceedings" for further information.

Although we believe that we are in material compliance with existing laws and regulations applicable to our various business lines, we cannot give any assurances that our business, financial condition and results of operations will not be materially adversely affected, or that we will not be required to materially change our business practices, based on: (i) future enactment of new health care or other laws or regulations; (ii) the interpretation or application of existing laws or regulations, including the laws and regulations described in this Government Regulation section, as they may relate to our business, the pharmacy services, retail pharmacy, long-term care or retail clinic industry or to the health care industry generally; (iii) pending or future federal or state governmental investigations of our business or the pharmacy services, retail pharmacy, long-term care or retail clinic industry or of the health care industry generally; (iv) institution of

government enforcement actions against us; (v) adverse developments in any pending *qui tam* lawsuit against us, whether sealed or unsealed, or in any future *qui tam* lawsuit that may be filed against us; or (vi) adverse developments in other pending or future legal proceedings against us or affecting the pharmacy services, retail pharmacy, long-term care or retail clinic industry or the health care industry generally.

Table of Contents

Laws and Regulations Related to Each Operating Segment of Our Business

Laws Related to Reimbursement by Government Programs - We are subject to various state and federal laws concerning our submission of claims for reimbursement by Medicare, Medicaid and other government-sponsored health care programs. Potential sanctions for violating these laws include recoupment or reduction of government reimbursement amounts, civil penalties, multiples damages, and exclusion from participation in government health care programs. Such laws include the federal False Claims Act ("FCA"), the federal Anti-Kickback statute, various state false claims acts and anti-kickback statutes, the federal "Stark Law" and related state laws. In particular, the FCA prohibits intentionally submitting, conspiring to submit, or causing to be submitted, false claims, records, or statements to the federal government, or intentionally failing to return overpayments, in connection with reimbursement by federal government programs. As part of the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act (collectively, "ACA"), the federal Anti-Kickback Statute was amended in 2010 to provide that any claim for government reimbursement violates the FCA where it results from a violation of the Anti-Kickback Statute. Most states have enacted false claims laws analogous to the FCA, and both federal and state false claims laws permit private individuals to file *qui tam* or "whistleblower" lawsuits on behalf of the federal or state government. Further, the federal Stark Law generally prohibits physicians from referring Medicare or Medicaid beneficiaries for certain services, including outpatient prescription drugs, to any entity with which the physician, or an immediate family member of the physician, has a financial relationship. The Stark Law further prohibits the entity receiving a prohibited referral from presenting a claim for reimbursement by Medicare or Medicaid for services furnished pursuant to the prohibited referral. Various states have enacted similar laws.

Anti-Remuneration Laws - Federal law prohibits, among other things, an entity from knowingly and willfully offering, paying, soliciting or receiving, subject to certain exceptions and "safe harbors," any remuneration to induce the referral of individuals or the purchase, lease or order of items or services for which payment may be made under Medicare, Medicaid or certain other federal health care programs. A number of states have similar laws, some of which are not limited to services paid for with government funds. Sanctions for violating these federal and state anti-remuneration laws may include imprisonment, criminal and civil fines, and exclusion from participation in Medicare, Medicaid and other government-sponsored health care programs.

Antitrust and Unfair Competition - The Federal Trade Commission ("FTC") has authority under Section 5 of the Federal Trade Commission Act ("FTCA") to investigate and prosecute practices that are "unfair trade practices" or "unfair methods of competition." Numerous lawsuits have been filed throughout the United States against pharmaceutical manufacturers, retail pharmacies and/or PBMs under various state and federal antitrust and unfair competition laws challenging, among other things: (i) brand drug pricing practices of pharmaceutical manufacturers, (ii) the maintenance of retail or specialty pharmacy networks by PBMs, and

(iii) various other business practices of PBMs and retail pharmacies. To the extent that we appear to have actual or potential market power in a relevant market or CVS Pharmacy or CVS Specialty plays a unique or expanded role in a PBM product offering, our business arrangements and uses of confidential information may be subject to heightened scrutiny from an anti-competitive perspective and possible challenge by state or federal regulators or private parties.

Privacy and Confidentiality Requirements - Many of our activities involve the receipt, use and disclosure by us of personally identifiable information ("PII") as permitted in accordance with applicable federal and state privacy and data security laws, which require organizations to provide appropriate privacy and security safeguards for such information. In addition to PII, we use and disclose de-identified data for analytical and other purposes when permitted. Additionally, there are industry standards for handling credit card data known as the Payment Card Industry Data Security Standard, which are a set of requirements designed to help ensure that entities that process, store or transmit credit card information maintain a secure environment. Certain states have recently incorporated these requirements into state laws.

The federal Health Insurance Portability and Accountability Act of 1996 and the regulations issued thereunder (collectively, "HIPAA") impose extensive requirements on the way in which health plans, health care providers, health care clearinghouses (known as "covered entities") and their business associates use, disclose and safeguard protected health information ("PHI"). Criminal penalties and civil sanctions may be imposed for failing to comply with HIPAA standards. The Health Information Technology for Economic and Clinical Health Act (the "HITECH Act"), enacted as part of the American Recovery and Reinvestment Act of 2009, amended HIPAA to impose additional restrictions on third-party funded communications using PHI and the receipt of remuneration in exchange for PHI. It also extended HIPAA privacy and security requirements and penalties directly to business associates. In addition to HIPAA, state health privacy laws apply to the extent they are more protective of individual privacy than is HIPAA.

Table of Contents

Finally, the Health Insurance Marketplaces (formerly known as the "exchanges") are required to adhere to privacy and security standards with respect to PII, and to impose privacy and security standards that are at least as protective of PII as those the Health Insurance Marketplace has implemented for itself or non-Health Insurance Marketplace entities, which include insurers offering plans through the Health Insurance Marketplaces and their designated downstream entities, including PBMs and other business associates. These standards may differ from, and be more stringent than, HIPAA.

Consumer Protection Laws - The federal government has many consumer protection laws, such as the FTCA, the Federal Postal Service Act and the FTC's Telemarketing Sales Rule. Most states also have similar consumer protection laws. These laws have been the basis for investigations, lawsuits and multi-state settlements relating to, among other matters, the marketing of loyalty programs and health care services, pricing accuracy, expired front store products, financial incentives provided by drug manufacturers to pharmacies in connection with therapeutic interchange programs and disclosures related to how personal data is used and protected.

Government Agreements and Mandates - The Company and/or its various affiliates are subject to certain consent decrees, settlement agreements, corrective action plans and corporate

integrity agreements with various federal, state and local authorities relating to such matters as privacy practices, controlled substances, Medicare Part D prescription drug plans, expired products, environmental and safety matters, marketing and advertising practices, PBM, long term care and pharmacy operations and various other business practices. These agreements may contain certain ongoing reporting, monitoring or other compliance requirements for the Company. Failure to meet the Company's obligations under these agreements could result in civil or criminal remedies, financial penalties, administrative remedies, and/or exclusion from participation in federal health care programs.

Environmental and Safety Regulation - Our business is subject to various federal, state and local laws, regulations and other requirements pertaining to protection of the environment, public health and employee safety, including, for example, regulations governing the management of hazardous substances, the cleaning up of contaminated sites, and the maintenance of safe working conditions in our stores, distribution centers and other facilities. Governmental agencies on the federal, state and local levels have, in recent years, increasingly focused on the retail and health care sectors' compliance with such laws and regulations, and have at times pursued enforcement activities. Any failure to comply with these regulations could result in fines or other sanctions by government authorities.

Health Reform Legislation - Passed in 2010, ACA affects virtually every aspect of health care in the country. In addition to establishing the framework for every individual to have health coverage, ACA enacted a number of significant health care reforms. Many of these reforms affect the coverage and plan designs that are provided by our health plan clients. As a result, these reforms impact a number of our services and business practices. Some significant ACA provisions are still being finalized (e.g., implementation of the excise tax on high-cost employer-sponsored health coverage has been delayed by Congress) and parts of ACA may still face potential Congressional changes, so the full impact of ACA on our Company is still uncertain.

Pharmacy and Professional Licensure and Regulation - We are subject to a variety of intersecting state and federal statutes and regulations that govern the wholesale distribution of drugs; operation of retail, specialty, infusion, LTC and mail order pharmacies; licensure of facilities and professionals, including pharmacists, technicians and nurses; registration of facilities with the United States Drug Enforcement Administration ("DEA") and analogous state agencies that regulate controlled substances; packaging, storing, shipping and tracking of pharmaceuticals; repackaging of drug products; labeling, medication guides and other consumer disclosures; interactions with prescribers and health care professionals; compounding of prescription medications; dispensing of controlled and non-controlled substances; counseling of patients; transfers of prescriptions; advertisement of prescription products and pharmacy services; security; inventory control; recordkeeping; reporting to Boards of Pharmacy, the United States Food and Drug Administration ("FDA"), the Consumer Product Safety Commission, the DEA and related state agencies; and other elements of pharmacy practice. Pharmacies are highly regulated and have contact with a wide variety of local, state and federal agencies, with various powers to investigate, inspect, audit or solicit information, including Boards of Pharmacy and Nursing, the DEA, the FDA, the United States Department of Justice, the United States Department of Health and Human Services ("HHS") and others. Many of these agencies have broad enforcement powers, conduct audits on a regular basis, can impose substantial fines and penalties, and may revoke the license, registration or program enrollment of a facility or professional.

Table of Contents

Telemarketing and Other Outbound Contacts - Certain federal and state laws, such as the Telephone Consumer Protection Act, give the FTC, Federal Communications Commission ("FCC") and state attorneys general the ability to regulate, and bring enforcement actions relating to, telemarketing practices and certain automated outbound contacts such as phone calls, texts or emails. Under certain circumstances, these laws may provide consumers with a private right of action. Violations of these laws could result in substantial statutory penalties and other sanctions.

Laws and Regulations Related to Our Pharmacy Services Segment

In addition to the laws and regulations discussed above that may affect our business as a whole, we are subject to federal, state and local statutes and regulations governing the operation of our Pharmacy Services Segment specifically. Among these are the following:

PBM Laws and Regulation - Legislation seeking to regulate PBM activities in a comprehensive manner has been introduced or enacted in a number of states. This legislation could adversely impact our ability to conduct business on commercially reasonable terms in states where the legislation is in effect.

In addition, certain quasi-regulatory organizations, including the National Association of Boards of Pharmacy and the National Association of Insurance Commissioners ("NAIC") have issued model regulations or may propose future regulations concerning PBMs and/or PBM activities. Similarly, credentialing organizations such as NCQA and URAC may establish voluntary standards regarding PBM, mail or specialty pharmacy activities. While the actions of these quasi-regulatory or standard-setting organizations do not have the force of law, they may influence states to adopt their requirements or recommendations and influence client requirements for PBM or specialty pharmacy services. Moreover, any standards established by these organizations could also impact our health plan clients and/or the services we provide to them.

Medicare Part D - The Medicare Part D program, which makes prescription drug coverage available to eligible Medicare beneficiaries through private insurers, regulates all aspects of the provision of Medicare drug coverage, including enrollment, formularies, pharmacy networks, marketing, and claims processing. The Medicare Part D program has undergone significant legislative and regulatory changes since its inception, and continues to attract a high degree of legislative and regulatory scrutiny. The applicable government rules and regulations continue to evolve. CMS has imposed restrictions and issued new requirements to protect Medicare Part D beneficiaries and has used its authority to sanction and impose civil monetary penalties on plans for non-compliance.

Network Access Legislation - Medicare Part D and a majority of states now have some form of legislation affecting the ability to limit access to a pharmacy provider network or remove network providers. For example, certain "any willing provider" legislation may require us or our clients to admit a non-participating pharmacy if such pharmacy is willing and able to meet the plan's price and other applicable terms and conditions for network participation. These laws could negatively impact the services and economic benefits achievable through a limited pharmacy provider network.

Also, a majority of states now have some form of legislation affecting our ability (and the health plans' ability) to conduct audits of network pharmacies regarding claims submitted to us for payment. These laws could negatively impact our ability to recover overpayments in health care payments stemming from pharmacy audits. Lastly, several states have passed legislation regulating our ability to manage and establish maximum allowable costs ("MAC") for generic prescription drugs. MAC methodology is a common cost management practice used by private and public payors (including CMS) to pay pharmacies for dispensing generic prescription drugs. MAC prices specify the allowable reimbursement by a PBM for a particular strength and dosage of a generic drug that is available from multiple manufacturers but sold at different prices. State legislation can regulate the disclosure of MAC prices and MAC price methodologies, the kinds of drugs that a PBM can pay at a MAC price, and the rights of pharmacies to appeal a MAC price established by a PBM. These laws could negatively impact our ability to establish MAC prices for generic drugs.

Contract Audits - We are subject to audits of many of our contracts, including our PBM client contracts, our PBM rebate contracts, our PBM network contracts, our contracts relating to Medicare Part D and the agreements our pharmacies enter into with other payors. Because some of our contracts are with state or federal governments or with entities contracted with state or federal agencies, audits of these agreements are often regulated by the federal or state agencies responsible for administering federal or state benefits programs, including those which operate Medicaid fee for service plans, Managed Medicaid plans, Medicare Part D plans or Medicare Advantage organizations.

Table of Contents

Federal Employee Health Benefits Program - We have a contractual arrangement with carriers for the Federal Employee Health Benefits ("FEHB") Program, such as the BlueCross BlueShield Association, to provide pharmacy services to federal employees, postal workers, annuitants, and their dependents under the Government-wide Service Benefit Plan, as authorized by the FEHB Act and as part of the FEHB Program. These arrangements subjects us to certain aspects of FEHB Act, and other federal regulations, such as the FEHB Acquisition Regulation, that otherwise are not applicable to us.

State Insurance Laws - PDPs and our PBM service contracts, including those in which we assume certain risks under performance guarantees or similar arrangements, are generally not subject to insurance regulation by the states. However, state departments of insurance are increasing their oversight of PBM activities due to legislation passing in several states requiring PBMs to register or obtain a license with the department. Rulemaking is either underway or has already taken place in a few states with the areas of focus on licensure requirements, pharmacy reimbursement for generics (MAC reimbursement) and pharmacy audits - most of which fall under the state insurance code. Additionally, some states have laws that prohibit submitting a false claim or making a false record or statement in order to secure reimbursement from an insurance company. These state laws vary, and violation of them may lead to the imposition of civil or criminal penalties.

As a PDP, SilverScript is subject to state insurance laws limited to licensure and solvency. In addition, PBM offerings of prescription drug coverage under certain risk arrangements may be subject to laws and regulations in various states. Such laws may require that the party at risk become licensed as an insurer, establish reserves or otherwise demonstrate financial viability. Laws that may apply in such cases include insurance laws and laws governing MCOs and limited prepaid health service plans.

ERISA Regulation - The Employee Retirement Income Security Act of 1974, as amended ("ERISA"), provides for comprehensive federal regulation of certain employee pension and benefit plans, including private employer and union sponsored health plans and certain other plans that contract with us to provide PBM services. In general, we assist plan sponsors in the administration of the prescription drug portion of their health benefit plans in accordance with the plan designs adopted by the plan sponsors. We do not believe that the conduct of our business subjects us to the fiduciary obligations of ERISA, except when we have specifically contracted with a plan sponsor to accept limited fiduciary responsibility, such as for the adjudication of initial prescription drug benefit claims and/or the appeals of denied claims under a plan, and with respect to the Contraceptive Coverage Mandate, one of the health reforms presently included in ACA.

In addition to its fiduciary provisions, ERISA imposes civil and criminal liability on service providers to health plans and certain other persons if certain forms of illegal remuneration are made or received. These provisions of ERISA are broadly written and their application to specific business practices is often uncertain.

Formulary and Plan Design Regulation - A number of government entities regulate the administration of prescription drug benefits. HHS regulates how Medicare Part D formularies are developed and administered, including requiring the inclusion of all drugs in certain classes and categories, subject to limited exceptions. Under ACA, CMS imposes drug coverage requirements for health plans required to cover essential health benefits, including plans offered through federal or state exchanges. Additionally, NAIC and health care accreditation agencies like NCQA and URAC have developed model acts and standards for formulary development that are often incorporated into government requirements. Many states regulate the scope of prescription drug coverage, as well as the delivery channels to receive such prescriptions, for insurers, MCOs and Medicaid managed care plans. The increasing government regulation of formularies could significantly affect our ability to develop and administer formularies, networks and other plan design features on behalf of our insurer, MCO and other clients. Similarly, some states prohibit health plan sponsors from implementing certain restrictive design features. This regulation could limit or preclude (i) limited networks, (ii) a requirement to use particular providers, (iii) copayment differentials among providers and (iv) formulary tiering practices.

Managed Care Reform - In addition to health reforms enacted by ACA, proposed legislation has been considered at the state level, and legislation has been enacted in several states, aimed primarily at providing additional rights and access to drugs to individuals enrolled in managed care plans. This legislation may impact the design and implementation of prescription drug benefit plans sponsored by our PBM health plan clients and/or the services we provide to them. Both the scope of the managed care reform proposals considered by state legislatures and reforms enacted by states to date vary greatly, and the scope of future legislation that may be enacted is uncertain.

Table of Contents

Disease Management Services Regulation - We provide disease management programs to PBM plan members for rare medical conditions and arrange for them to receive disease management programs for common medical conditions. State laws regulate the practice of medicine, the practice of pharmacy and the practice of nursing. Clinicians engaged in a professional practice in connection with the provision of disease management services must satisfy applicable state licensing requirements and must act within their scope of practice.

Third Party Administration and Other State Licensure Laws - Many states have licensure or registration laws governing certain types of administrative organizations, such as preferred provider organizations, third party administrators and companies that provide utilization review services. Several states also have licensure or registration laws governing the organizations that provide or administer consumer card programs (also known as cash card or discount card programs).

Laws and Regulations Related to Our Retail/LTC Segment

In addition to the laws and regulations discussed above that may affect our business as a whole, we are subject to federal, state and local statutes and regulations governing the operation of our Retail/LTC Segment specifically. Among these are the following:

Specific FDA Regulation - The FDA generally has authority to, among other things, regulate the manufacture, distribution, sale and labeling of many products sold through retail pharmacies, including prescription drugs, over-the-counter medications, medical devices (including mobile medical devices), cosmetics, dietary supplements and certain food items.

Retail Clinics - States regulate retail clinics operated by nurse practitioners or physician assistants through physician oversight, lab licensing and the prohibition of the corporate practice of medicine. A number of states have implemented or proposed laws or regulations that impact certain components of retail clinic operations such as physician oversight, signage, third party contracting requirements, bathroom facilities, and scope of services. These laws and regulations may affect the operation and expansion of our owned and managed retail clinics.

Available Information

CVS Health Corporation is a Delaware corporation. Our corporate office is located at One CVS Drive, Woonsocket, Rhode Island 02895, telephone (401) 765-1500. Our common stock is listed on the New York Stock Exchange under the trading symbol "CVS." General information about CVS Health is available through the Company's Web site at *http://www.cvshealth.com*. Our financial press releases and filings with the United States Securities and Exchange Commission ("SEC") are available free of charge within the Investors section of our Web site at *http://www.cvshealth.com/investors*. In addition, the SEC maintains an internet site that contains reports, proxy and information statements and other information regarding issuers, such as the Company, that file electronically with the SEC. The address of that Web site is *http://www.sec.gov*.

Item 1A. Risk Factors

Our business is subject to various industry, economic, regulatory and other risks and uncertainties. Our business, financial condition, results of operations, cash flows and prospects could be materially adversely affected by any one or more of the following risk factors and by additional risks and uncertainties not presently known to us or that we currently deem to be immaterial:

Risks of declining gross margins in the PBM, retail pharmacy and LTC pharmacy industries.

The PBM industry has been experiencing margin pressure as a result of competitive pressures and increased client demands for lower prices, increased revenue sharing, enhanced service offerings and/or higher service levels. In that regard, we maintain contractual relationships with generic pharmaceutical manufacturers and brand name pharmaceutical manufacturers that provide for purchase discounts and/or rebates on drugs dispensed by pharmacies in our retail network and by our specialty and mail order pharmacies (all or a portion of which may be passed on to clients). Manufacturer rebates often depend on a PBM's ability to meet contractual market share or other requirements, including in some cases the placement of a manufacturer's products on the PBM's formularies. If we lose our relationship with one

Table of Contents

or more pharmaceutical manufacturers, or if the discounts or rebates provided by pharmaceutical manufacturers decline, our business and financial results could be adversely affected. Further, competitive pressures in the PBM industry have resulted in our clients sharing in a larger portion of rebates and/or discounts received from pharmaceutical manufacturers. Market dynamics and regulatory changes have impacted our ability to offer plan sponsors pricing that includes the use of retail "differential" or "spread", which could negatively impact our future profitability. Further, changes in existing federal or state laws or regulations or the adoption of new laws or regulations relating to patent term extensions, purchase discount and rebate arrangements with pharmaceutical manufacturers, or to formulary management or other PBM services could also reduce the discounts or rebates we receive. In addition, changes in federal or state laws or regulations or the adoption of new laws or regulations relating to claims processing and billing, including our ability to use MAC lists and collect transmission fees, could adversely impact our profitability.

Our retail pharmacy, specialty pharmacy and LTC pharmacy operations have also been affected by the margin pressures described above, including client demands for lower prices, generic pricing and network reimbursement pressure. In addition, as competition increases in the markets in which we operate, a significant increase in general pricing pressures could occur, and this could require us to reevaluate our pricing structures to remain competitive. A shift in the mix of our pharmacy prescription volume towards programs offering lower reimbursement rates could adversely affect our margins, including the shift in pharmacy mix towards 90-day prescriptions at retail and the shift in pharmacy mix towards Medicare Part D prescriptions. Finally, the margins of our LTC business are further affected by the increased efforts of health care payors to negotiate reduced or capitated pricing arrangements. These actions could also adversely affect the margins of our LTC business.

Efforts to reduce reimbursement levels and alter health care financing practices.

The continued efforts of health maintenance organizations, managed care organizations, PBMs, government entities, and other third party payors to reduce prescription drug costs and pharmacy reimbursement rates, as well as litigation and other legal proceedings relating to how drugs are priced, may impact our profitability. In particular, increased utilization of generic pharmaceuticals (which normally yield a higher gross profit rate than equivalent brand named drugs) has resulted in pressure to decrease reimbursement payments to retail, specialty, LTC and mail order pharmacies for generic drugs, causing a reduction in the generic profit rate. Historically, the effect of this trend on generic profitability has been mitigated by our efforts to negotiate reduced acquisition costs of generic pharmaceuticals with manufacturers. However, in recent years, there has been significant consolidation within the generic manufacturing industry, and it is possible that this and other external factors may enhance the ability of manufacturers to sustain or increase pricing of generic pharmaceuticals and diminish our ability to negotiate reduced acquisition costs. Any inability to offset increased costs or to modify our activities to lessen the impact could have a significant adverse effect on our results of operations.

In addition, during the past several years, the United States health care industry has been subject to an increase in governmental regulation and audits at both the federal and state levels. Efforts to control health care costs, including prescription drug costs, are continuing at the federal and state government levels. Changing political, economic and regulatory influences may significantly affect health care financing and reimbursement practices. For example, we anticipate that federal and state governments will continue to review and assess alternative health care delivery systems, payment methodologies and operational requirements for health care providers, including LTC facilities and pharmacies. A change in the composition of pharmacy prescription volume toward programs offering lower reimbursement rates could negatively impact our profitability. Any action taken to repeal or replace all or significant parts of ACA could also impact our profitability, though it is unclear at this time what the full effects will be.

ACA made several significant changes to Medicaid rebates and to reimbursement. One of these changes was to revise the definition of the Average Manufacturer Price, a pricing element common to most payment formulas, and the reimbursement formula for multi-source (i.e., generic) drugs. This change has negatively affected our reimbursement. In addition, ACA made

other changes that affect the coverage and plan designs that are or will be provided by many of our health plan clients, including the requirement for health insurers to meet a minimum medical loss ratio to avoid having to pay rebates to enrollees. These ACA changes may not affect our business directly, but they could indirectly impact our services and/or business practices.

A highly competitive business environment.

Each of our retail pharmacy, LTC pharmacy, retail health clinic and pharmacy services operations currently operates in a highly competitive and evolving health care environment.

Table of Contents

The competitive success of our retail pharmacy business, as well as our specialty pharmacy operations with non-Caremark payors, is derived by their ability to establish and maintain contractual relationships with PBMs and other payors on acceptable terms in an environment where some PBM clients are considering adopting narrow or restricted retail pharmacy networks. As a pharmacy retail business, we compete with other drugstore chains, supermarkets, on-line and other discount retailers, independent pharmacies, membership clubs, convenience stores and mass merchants, some of which are aggressively expanding into markets we serve. We also face competition from other retail health clinics, as well as other mail order pharmacies and PBMs. Disruptive innovation by existing or new competitors could alter the competitive landscape in the future and require us to accurately identify and assess such changes and make timely and effective changes to our strategies and business model to compete effectively. Competition may also come from other sources in the future. Changes in market dynamics or the actions of competitors or manufacturers, including industry consolidation, the emergence of new competitors and strategic alliances, and the exclusion from new narrow or restricted networks, could materially and adversely impact us.

We could also be adversely affected if we fail to identify or effectively respond to changes in market dynamics. For example, specialty pharmacy represents a significant and growing proportion of prescription drug spending in the United States, a significant portion of which is dispensed outside of traditional retail pharmacies. Because our specialty pharmacy operations focuses on complex and high-cost medications that serve a relatively limited universe of patients, the future growth of this business depends to a significant extent upon expanding our ability to access key drugs and successfully penetrate key treatment categories.

The competitive success of our LTC pharmacy operations is dependent upon our ability to compete in each geographic region where we have operations. In the geographic regions we serve, we compete with PharMerica, our largest competitor, as well as with numerous local and regional institutional pharmacies, pharmacies owned by long-term care facilities and local retail pharmacies. Our long-term care customers consist of skilled nursing facilities, assisted living facilities, independent living communities, hospitals, correctional facilities, and other health care service providers. We believe that the assisted living segment, where residents can choose which pharmacy will provide them with pharmaceuticals, is projected to grow the most as a percentage of the total LTC sector over the near term. The ability of a resident of an assisted living facility to select the pharmacy that supplies him or her with pharmaceuticals could adversely affect our business, financial condition and results of operations because there can be no assurance that such resident will select us.

The competitive success of our pharmacy services business is impacted by its ability to establish and maintain contractual relationships with network pharmacies in an environment where some PBM clients are considering adopting narrow or restricted retail pharmacy networks. Competitors in the PBM industry (e.g., Express Scripts, OptumRx, Prime Therapeutics, MedImpact and Humana), include large, national PBM companies, PBMs owned by large national health plans and smaller standalone PBMs. Competition may also come from other sources in the future. In addition, changes in the overall composition of our pharmacy networks, or reduced pharmacy access under our networks, could adversely affect our claims volume and/or our competitiveness generally.

Competitors in each of our business areas may offer services and pricing terms that we may not be willing or able to offer. Strong competition in the PBM marketplace has generated greater client demand for lower pricing, increased revenue sharing and enhanced product and service offerings. Unless we can demonstrate enhanced value to our clients through innovative product and service offerings, particularly in a rapidly changing health care industry, we may be unable to remain competitive.

Changes in U.S. policy, laws and regulations, including reform of the United States health care system.

The results of the November 2016 elections continue to generate some uncertainty with respect to, and could result in, significant changes in legislation, regulation and government policy that could significantly impact our business and the health care and retail industries. While it is not possible to predict whether and when any such changes will occur or what form any such changes may take (including through the use of Executive Orders), specific proposals discussed by the Presidential Administration could have a material adverse effect on our business, liquidity and results of operations include, but are not limited to, immigration policies, the modification of ACA. Other significant changes to health care system legislation or regulation as well as changes with respect to tax and trade policies, tariffs and other government regulations affecting trade between the United States and other countries are also possible.

Table of Contents

Potential modification to ACA, significant changes to Medicaid funding or even significant destabilization of the Health Insurance Marketplaces could impact the number of Americans with health insurance and, consequently, prescription drug coverage. Further changes to ACA are possible and we cannot predict the effect, if any, on future changes to ACA, the implementation or failure to implement the outstanding provisions of ACA, or the enactment of new health care system legislation to replace current legislation may have on our retail pharmacy, LTC pharmacy, specialty pharmacy and pharmacy services operations.

In addition, much of the branded and generic drug product that we sell in our retail, mail and specialty pharmacies, and much of the other merchandise we sell, is manufactured in whole or in substantial part outside of the United States. In most cases, the products or merchandise are imported by others and sold to us. As a result, significant changes in tax or trade policies, tariffs or trade relations between the United States and other countries, such as the imposition of unilateral tariffs on imported products, could result in significant increases in our costs, restrict our access to suppliers, depress economic activity, and have a material impact on our business, liquidity and results of operations. In addition, other countries may change their business and trade policies and such changes, as well as any negative sentiments towards the United States in

response to increased import tariffs and other changes in U.S. trade regulations, could adversely affect our business.

Risks related to compliance with a broad and complex regulatory framework.

Our business is subject to numerous federal, state and local laws and regulations. See "Business - Government Regulation." In addition, during the past several years, the United States health care industry has been subject to an increase in governmental regulation and enforcement activity at both the federal and state levels. Further, uncertainties exist regarding the application of many of these legal requirements to our business. In addition, it is possible that certain provisions of the current health care reform legislation may be modified, repealed or otherwise invalidated. Changes in these laws and regulations and the related interpretations and enforcement practices may require extensive system and operating changes that may be difficult to implement. Untimely compliance or noncompliance with applicable laws and regulations could adversely affect the continued operation of our business, including, but not limited to: imposition of civil or criminal penalties; significant fines or monetary penalties; suspension or disgorgement of payments from government programs; loss of required government certifications or approvals; loss of authorizations to participate in or exclusion from government reimbursement programs, such as the Medicare and Medicaid programs; or loss of registrations or licensure. The regulations to which we are subject include, but are not limited to: the laws and regulations described in the Government Regulation section; accounting standards; financial disclosure; securities laws and regulations; federal anti-trust laws; tax laws and regulations and their possible reform; laws and regulations relating to the protection of the environment and health and safety matters, including those governing exposure to, and the management and disposal of, hazardous materials and wastes; and laws and regulations of the FTC, the FCC, and the Consumer Product Safety Commission, as well as state regulatory authorities, governing the sale, advertisement and promotion of products that we sell, such as Boards of Pharmacy. The FDA, DEA and various states regulate the distribution of pharmaceuticals and controlled substances. We are required to hold valid DEA and state-level registrations and licenses, meet various security and operating standards and comply with the federal and various states' controlled substances acts and their accompanying regulations governing the sale, marketing, packaging, holding and distribution of controlled substances. The DEA, FDA and state regulatory authorities have broad enforcement powers, including the ability to suspend our registrations and licenses, seize or recall products and impose significant criminal, civil and administrative sanctions for violations of these laws and regulations. In addition, our business interests outside of the United States are subject to the Foreign Corrupt Practices Act and other applicable domestic and international laws and regulations. We are also subject to the terms of various government agreements and mandates, including those described in the Government Regulation section. In that regard, our business, financial position and results of operations could be adversely affected by existing and new government legislative, regulatory action and enforcement activity, including, without limitation, any one or more of the following:

- federal and state laws and regulations concerning the submission of claims for reimbursement by Medicare, Medicaid and other government programs, whether at retail, mail, specialty or LTC;
- federal and state laws and regulations governing the purchase, distribution, tracking, management, compounding, dispensing and reimbursement of prescription drugs and related services, whether at retail, mail, specialty or LTC, and applicable registration or licensing requirements;
- heighted enforcement of controlled substances regulations;
- the effect of the expiration of patents covering brand name drugs and the introduction of generic products;

Table of Contents

- the frequency and rate of approvals by the FDA of new brand name and generic drugs, or of over-the-counter status for brand name drugs;
- rules and regulations issued pursuant to HIPAA and the HITECH Act; and other federal and state laws affecting the collection, use, disclosure and transmission of health or other personal information, such as federal laws on information privacy precipitated by concerns about information collection through the Internet, state security breach laws and state laws limiting the use and disclosure of prescriber information;
- health care fraud and abuse laws regulations;
- consumer protection laws affecting our health care services, our loyalty programs, our drug discount card programs, the products we sell, the informational calls we make and/or the marketing of our goods and services;
- federal, state and local environmental, health and safety laws and regulations applicable to our business, including the management of hazardous substances, storage and transportation of hazardous materials, and various recordkeeping disclosure and procedure requirements promulgated by the Occupational Safety and Health Administration that may apply to our operations;
- health care reform, managed care reform and plan design legislation;
- laws against the corporate practice of medicine;
- FDA regulation affecting the retail, LTC, specialty or PBM industry;
- government regulation of the development, administration, review and updating of formularies and drug lists including requirements and/or limitations around formulary tiering and patient cost sharing;
- state laws and regulations related to increased oversight of PBM activities by state departments of insurance pharmacy reimbursement for generics and pharmacy audits;
- drug pricing legislation, including “most favored nation” pricing;
- federal and state laws and regulations establishing or changing prompt payment requirements for payments to retail pharmacies;
- impact of network access legislation or regulations, including “any willing provider” laws, on our ability to manage pharmacy networks;
- ERISA and related regulations;
- administration of Medicare Part D, including legislative changes and/or CMS rulemaking and interpretation;
- Medicare and Medicaid regulations applicable to our business, in particular our LTC pharmacies and those of our client’s facilities;
- ongoing compliance with consent decrees, corporate integrity agreements, corrective action plans and other agreements with government agencies;
- insurance licensing and other insurance regulatory requirements applicable to offering Medicare Part D programs and services or other health care services; and
- direct regulation of pharmacies or PBMs by regulatory and quasi-regulatory bodies.

The possibility of client losses and/or the failure to win new business.

Our PBM business generates net revenues primarily by contracting with clients to provide prescription drugs and related health care services to plan members. PBM client contracts often have terms of approximately three years in duration, so approximately one third of a PBM’s client base typically is subject to renewal each year. In some cases, however, PBM clients may negotiate a shorter or longer contract term or may require early or periodic renegotiation of pricing prior to expiration of a contract. Our clients are generally well informed and organized, can move between our competitors and often seek competing bids prior to expiration of their contracts. In addition, the reputational impact of a service-related incident could negatively affect our business. These factors, together with the impact of competitive pressures, could make it difficult for us to attract new clients, retain existing clients and cross-sell additional services. Further, the PBM industry has been affected by consolidation activity that may continue in the

future. In the event one or more of our PBM clients is acquired by an entity that is not also our client, we may be unable to retain all or a portion of the acquired business. These circumstances, either individually or in the aggregate, could result in an adverse effect on our business and financial results. Therefore, we continually face challenges in competing for new PBM business and retaining or renewing our existing PBM business. With respect to our LTC business, reimbursement from skilled nursing facilities for prescriptions we dispense is determined pursuant to our agreements with those skilled nursing facilities. The termination of these agreements generally causes our ability to provide services to any of the residents of that facility to cease, resulting in the loss of revenue from any source for those residents. There can be no assurance that we will be able to win new business or secure renewal business on terms as favorable to us as the present terms.

Table of Contents

Additionally, with respect to our retail and LTC pharmacy businesses, reimbursement under Medicare Part D, as well as reimbursement from certain private third-party payors, is determined pursuant to agreements that we negotiate with those payors or their pharmacy benefit manager representatives. The loss of those agreements, or a material change in the terms of those agreements, could negatively impact the Company. In addition, restricted networks that exclude our retail or specialty pharmacies negatively impact those businesses.

Risks relating to the market availability, suppliers and safety profiles of prescription drugs that we purchase and sell.

We dispense significant volumes of brand-name and generic drugs from our retail, LTC, specialty and mail-order pharmacies and through our PBM's network of retail pharmacies. When increased safety risk profiles or manufacturing or other supply issues of specific drugs or classes of drugs occur, or drugs become subject to greater restrictions as controlled substances, physicians may cease writing prescriptions for these drugs or the utilization of these drugs may be otherwise reduced.

Additionally, adverse publicity regarding drugs with higher safety risk profiles may result in reduced consumer demand for such drugs. On occasion, products are withdrawn by their manufacturers or transition to over-the-counter products, which can result in lower prescription utilization. In addition, future FDA rulings could restrict the supply or increase the cost of products sold to our customers. Our volumes, net revenues, profitability and cash flows may decline as a result of such regulatory rulings or market changes.

Further, we acquire a substantial amount of our mail and specialty pharmacies' prescription drug supply from a limited number of suppliers. Our agreements with these suppliers are often short-term and easily cancelable by either party without cause. In addition, these agreements may limit our ability to provide services for competing drugs during the term of the agreement and may allow the supplier to distribute through channels other than ours. Certain of these agreements also allow pricing and other terms to be adjusted periodically for changing market conditions or required service levels. A termination or modification to any of these relationships could have a material adverse effect on our business, financial condition and results of operations. Moreover, many products distributed by our specialty pharmacy business are manufactured with ingredients that are susceptible to supply shortages. In some cases, we depend upon a single source of supply.

In addition, our suppliers are independent entities subject to their own operational and financial risks that are outside our control. If our current suppliers were to stop selling prescription drugs to us or delay delivery, including as a result of supply shortages, supplier production disruptions, supplier quality issues, closing or bankruptcies of our suppliers, or for other reasons, we may be unable to procure alternatives from other suppliers in a timely and efficient manner and on acceptable terms, or at all.

A disruption in our business operations could occur as a result of contamination of drugs, a failure to maintain necessary shipment and storage conditions, errors in mail order processing, the unavailability of prescription drugs provided by suppliers, labor disruptions or other unanticipated disruptions at our mail order facilities, call centers, data centers or corporate facilities, among other factors. Such disruption could reduce our ability to process and dispense prescriptions and provide products and services to our customers.

In the event any products we distribute are in limited supply for significant periods of time, our financial condition and results of operations could be materially and adversely affected.

Risks related to the frequency and rate of the introduction and pricing of generic drugs and brand name prescription products.

The profitability of our business is dependent upon the utilization of prescription drug products. Utilization trends are affected by, among other factors, the introduction of new and successful prescription pharmaceuticals as well as lower-priced generic alternatives to existing brand name products, as the sale of generic alternatives normally yield higher gross margins than brand name equivalents. In addition, inflation in the price of the brand name drugs can affect utilization, particularly given the increase in high deductible health plans. Accordingly, our business could be impacted by a slowdown or delay in the number or magnitude of new and successful prescription pharmaceuticals and/or generic alternatives, as well as the pricing of brand name drugs.

Table of Contents

The health of the economy in general and in the markets we serve.

Our business is affected by the economy and consumer confidence in general, including various economic factors, inflation and changes in consumer purchasing power, preferences and/or spending patterns. It is possible that an unfavorable, uncertain or volatile economic environment will cause a decline in drug and health care services utilization and dampen demand for pharmacy benefit management services as well as consumer demand for products sold in our retail stores. Further economic conditions including interest rate fluctuations, changes in capital market conditions and regulatory changes may affect our ability to obtain necessary financing on acceptable terms, our ability to secure suitable store locations under acceptable terms and our ability to execute sale-leaseback transactions under acceptable terms. These changes in conditions could result in an adverse effect on our business and financial results. This could be further exacerbated by the increasing prevalence of high deductible health plans and health plan designs favoring co-insurance over co-payments.

The failure or disruption of our information technology systems, our information security systems and our infrastructure to support our business and to protect the privacy and security of sensitive customer and business information.

Many aspects of our operations are dependent on our information systems and the information collected, processed, stored, and handled by these systems. We rely heavily on our computer systems to manage our ordering, pricing, point-of-sale, pharmacy fulfillment, inventory replenishment, claims processing, ExtraCare customer loyalty program, finance, human resource and other processes. Throughout our operations, we receive, retain and transmit certain confidential information, including PII that our customers and clients provide to purchase products or services, enroll in programs or services, register on our websites, interact with our personnel, or otherwise communicate with us. In addition, for these operations, we depend in part on the secure transmission of confidential information over public networks. Our information systems are subject to damage or interruption from power outages, facility damage, computer and telecommunications failures, computer viruses, security breaches including credit card or personally identifiable information breaches, coordinated cyber attacks, vandalism, catastrophic events and human error. Although we deploy a layered approach to address information security threats and vulnerabilities, including ones from a cyber security standpoint, designed to protect confidential information against data security breaches, a compromise of our information security controls or of those businesses with whom we interact, which results in confidential information being accessed, obtained, damaged, or used by unauthorized or improper persons, could harm our reputation and expose us to regulatory actions and claims from customers and clients, financial institutions, payment card associations and other persons, any of which could adversely affect our business, financial position, and results of operations. Because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and may not immediately produce signs of intrusion, we may be unable to anticipate these techniques or to implement adequate preventative measures. Moreover, a data security breach could require that we expend significant resources related to our information systems and infrastructure, and could distract management and other key personnel from performing their primary operational duties. We also could be adversely affected by any significant disruption in the systems of third parties we interact with, including key payors and vendors.

If our information systems are damaged, fail to work properly or otherwise become unavailable, or if we are unable to successfully complete our planned consolidation of our PBM claims adjudication platforms, we may incur substantial costs to repair or replace them, and may experience reputational damage, loss of critical information, customer disruption and interruptions or delays in our ability to perform essential functions and implement new and innovative services. In addition, compliance with changes in privacy and information security laws and standards may result in considerable expense due to increased investment in technology and the development of new operational processes.

Failure to adequately protect receipt and use of confidential health information concerning individuals.

Many aspects of our business involve the collection, transmission and use of an individual's protected health information or other sensitive personal information. In some cases, we also use aggregated and de-identified data as defined by HIPAA for analytical and research purposes, particularly data related to improving the quality of the care we provide. In other cases, we may provide de-identified data to pharmaceutical manufacturers and to third-party data aggregators where permitted by our contracts. These activities are subject to federal and state privacy and security laws and regulations and, in the future, may be subject to international regulatory requirements such as the General Data Protection Regulation, a new European Union privacy regulation that takes effect on May 25, 2018. At the federal level, HIPAA imposes extensive privacy and security requirements governing the transmission, use and disclosure of health

Table of Contents

information by all participants in the health care industry, whether directly as a covered entity or as a business associate. Our business encompasses both situations and includes our pharmacists, nurse practitioners and PBM operations. In addition, industry requirements, such as Generally Accepted Privacy Principles may be imposed on us by our contracts with our PBM clients or other customers. Many of our businesses are also subject to the Payment Card Industry Data Security Standard, which is a security standard mandated by the credit card industry for the purpose of protecting credit card account data. These increasingly complex laws, regulations and industry requirements are subject to change and compliance with them may result in significant expenses associated with increased operational and compliance costs, particularly as we continue to collect and retain large amounts of information. To the extent that either we or our vendors with whom we share information are found to be out of compliance with applicable laws and regulations or experience a data security breach, we could be subject to additional litigation, regulatory risks and reputational harm. For example, the privacy and security of the information we maintain may be compromised by the actions of outside parties, by employee errors or by malfeasance. Such risks may result in an unauthorized party obtaining access to our data systems thereby threatening the privacy of protected health information or other sensitive personal information we use and maintain. Failure to comply with federal or state statutes or regulations may result in criminal penalties and civil sanctions. In addition, failure to comply with our own privacy or security policies may result in sanctions by the FTC or other federal oversight agencies. Future regulations and legislation that severely restrict or prohibit our use of patient, member or customer identifiable or other information could limit our ability to use information critical to the operation of our business. Furthermore, if we violate a patient's privacy or are found to have violated any federal or state statute or regulation with regard to confidentiality or dissemination or use of PHI, we could be liable for significant damages, fines or penalties and suffer reputational harm, any one of which could have a material adverse effect on our business and results of operations.

Regulatory and business changes relating to our participation in Medicare Part D.

Medicare Part D has resulted in increased utilization and puts pressure on pharmacy gross margin rates due to regulatory and competitive pressures. Further, as a result of ACA and changes to the retiree drug subsidy rules, our PBM clients could decide to discontinue providing prescription drug benefits to their Medicare-eligible members. To the extent this occurs, the adverse effects of increasing customer migration into Medicare Part D may outweigh the benefits we realize from growth of our Medicare Part D business. In addition, if the cost and complexity of Medicare Part D exceed management's expectations or prevent effective program implementation or administration; if changes to the regulations regarding how drug costs are reported for Medicare Part D are implemented in a manner that impacts the profitability of our Medicare Part D business; if changes to the regulations impact our ability to retain fees from third parties including network pharmacies; if the government alters Medicare program requirements or reduces funding because of the higher-than-anticipated cost to taxpayers of Medicare Part D or for other reasons; if the government mandates the use of point-of-sale manufacturer rebates or makes changes to how pharmacy pay-for-performance is calculated; if Congress acts to reduce reinsurance thresholds from 80% to 20%; if we fail to design and maintain programs that are attractive to Medicare participants; if CMS imposes restrictions on our Medicare Part D business as a result of audits or other regulatory actions; if we fail to successfully implement corrective action or other remedial measures sufficient to prevent or remove any applicable restrictions that may be imposed by CMS; or if we are not successful in retaining enrollees, or winning contract renewals or new contracts under Medicare Part D's competitive bidding process, our Medicare Part D services and the ability to expand our Medicare Part D services could be negatively impacted.

Possible changes in industry pricing benchmarks and drug pricing generally.

It is possible that the pharmaceutical industry or regulators may evaluate and/or develop an alternative pricing reference to replace Average Wholesale Price ("AWP") or Wholesale Acquisition Cost ("WAC"), which are the pricing references used for many of our PBM and LTC client contracts, pharmaceutical purchase agreements, retail network contracts, specialty payor agreements and other contracts with third party payors in connection with the reimbursement of drug payments. In addition, many state Medicaid fee-for-service programs ("FFS Medicaid") have established pharmacy network payments on the basis of Actual Acquisition Cost ("AAC"). The use of an AAC basis in FFS Medicaid could have an impact in reimbursement practices in other commercial and government segments. Future changes to the use of AWP, WAC or to other published pricing benchmarks used to establish pharmaceutical pricing, including changes in the basis for calculating reimbursement by federal and state health programs and/or other payors, could impact the reimbursement we receive from Medicare and Medicaid programs, the reimbursement we receive from PBM clients and other payors and/or our ability to negotiate rebates and/or discounts with pharmaceutical manufacturers, wholesalers, PBMs and retail pharmacies. A failure or inability to fully offset any increased prices or costs or to modify our operations to mitigate the impact of such increases could have an adverse effect on our results of operations.

Table of Contents

Additionally, any future changes in drug prices could be significantly different than our projections. The effect of these possible changes on our business cannot be predicted at this time.

Product liability, product recall or personal injury issues could damage our reputation; failure to maintain adequate liability insurance coverage.

The products that we sell could become subject to contamination, product tampering, mislabeling, recall or other damage. In addition, errors in the dispensing and packaging of pharmaceuticals could lead to serious injury or death. Product liability or personal injury claims may be asserted against us with respect to any of the products or pharmaceuticals we sell or services we provide. Our business involves the provision of professional services including by pharmacists, nurses and nurse practitioners that exposes us to professional liability claims. Should a product or other liability issue arise, the coverage limits under our insurance programs and the indemnification amounts available to us may not be adequate to protect us against claims. We also may not be able to maintain this insurance on acceptable terms in the future. Damage to our reputation in the event of a product liability or personal injury issue or judgment against us or a product recall could have a significant adverse effect on our business, financial condition and results of operations.

Relationship with our retail and specialty pharmacy customers and the demand for our products and services, including propriety brands.

The success of our business depends in part on customer loyalty, superior customer service and our ability to persuade customers to frequent our retail stores and online sites and to purchase products in additional categories and our proprietary brands. Failure to timely identify or effectively respond to changing consumer preferences and spending patterns, and evolving demographic mixes in our markets, an inability to expand the products being purchased by our clients and customers, or the failure or inability to obtain or offer particular categories of products could negatively affect our relationship with our clients and customers and the demand for our products and services and could result in excess inventories of products.

We offer our retail customers proprietary brand products that are available exclusively at our retail stores and through our online retail sites. The sale of proprietary products subjects us to unique risks including potential product liability risks and mandatory or voluntary product recalls, potential supply chain and distribution chain disruptions for raw materials and finished products, our ability to successfully protect our intellectual property rights and the rights of applicable third parties, and other risks generally encountered by entities that source, market and sell private-label products. Any failure to adequately address some or all of these risks could have an adverse effect on our business, results of operations and financial condition. Additionally, an increase in the sales of our proprietary brands may negatively affect our sales of products owned by our suppliers which, consequently, could adversely impact certain of our supplier relationships. Our ability to locate qualified, economically stable suppliers who satisfy our requirements, and to acquire sufficient products in a timely and effective manner, is critical to ensuring, among other things, that customer confidence is not diminished. Any failure to develop sourcing relationships with a broad and deep supplier base could adversely affect our financial performance and erode customer loyalty.

Finally, our specialty pharmacy business focuses on complex and high-cost medications, many of which are made available by manufacturers to a limited number of pharmacies (so-called limited distribution drugs), that serve a relatively limited universe of patients. As a result, the future growth of our specialty pharmacy business is dependent largely upon expanding our base of drugs or penetration in certain treatment categories. Any contraction of our base of patients or reduction in demand for the prescriptions we currently dispense could have an adverse effect on our business, financial condition and results of operations.

Risks related to developing and maintaining a relevant omni-channel experience for our customers.

Our business has evolved from a retail store experience to interaction with customers across numerous channels, including in-store, online, mobile and social media, among others. Omni-channel retailing is rapidly evolving and we must keep pace with changing customer expectations and new developments by our competitors. Our customers are increasingly using computers, tablets, mobile phones, and other devices to comparison shop, determine product availability and complete purchases through mobile commerce applications. As a result, the portion of total consumer expenditures with all retailers occurring online and through mobile commerce applications is increasing and the pace of this increase could accelerate. We must compete by offering a consistent and convenient shopping experience for our customers regardless of the ultimate sales channel and by investing in, providing and maintaining mobile commerce

Table of Contents

applications for our customers that have the right features and are reliable and easy to use. If we are unable to make, improve, or develop relevant customer-facing technology in a timely manner that keeps pace with technological developments and dynamic customer expectations, our ability to compete and our results of operations could be materially and adversely affected. In addition, if our online activities or our other customer-facing technology systems do not function as designed, we may experience a loss of customer confidence, data security breaches, lost sales, or be exposed to fraudulent purchases, any of which could materially and adversely affect our business operations, reputation and results of operations.

We are subject to payment-related risks that could increase our operating costs, expose us to fraud or theft, subject us to potential liability and disrupt our business operations.

We accept payments using a variety of methods, including cash, checks, credit cards, debit cards, gift cards, mobile payments and potentially other technologies in the future. Acceptance of these payment methods subjects us to rules, regulations, contractual obligations and compliance requirements, including payment network rules and operating guidelines, data security standards and certification requirements, and rules governing electronic funds transfers. These requirements may change in the future, which could make compliance more difficult or costly. For certain payment options, including credit and debit cards, we pay interchange and other fees, which could increase periodically thereby raising our operating costs. We rely on third parties to provide payment processing services, including the processing of credit cards, debit cards, and various other forms of electronic payment. If these companies are unable to provide these services to us, or if their systems are compromised, our operations could be disrupted. The payment methods that we offer also expose us to potential fraud and theft by persons seeking to obtain unauthorized access to, or exploit any weaknesses in, the payment systems. If we fail to abide by applicable rules or requirements, or if data relating to our payment systems is compromised due to a breach or misuse, we may be responsible for any costs incurred by payment card issuing banks and other third parties or subject to fines and higher transaction fees. In addition, our reputation and ability to accept certain types of payments could each be harmed resulting in reduced sales and adverse effects on our results of operations.

Solvency of our customers.

In the event that our customers' operating and financial performance deteriorates, or they are unable to make scheduled payments or obtain adequate financing, our customers may not be able to pay timely, or may delay payment of, amounts owed to us. Any inability of our customers to pay us for our products and services may adversely affect our business, financial condition and results of operations. In addition, both state and federal government sponsored payers, as a result of budget deficits or reductions, may suspend payments or seek to reduce their healthcare expenditures resulting in our customers delaying payments to us or renegotiating their contracts with us. Any delay or reduction in payments by such government sponsored payers may adversely affect our business, financial condition and results of operations.

Our outstanding debt and associated payment obligations could significantly increase in the future if we incur additional debt and do not retire existing debt.

Our current debt service costs associated with our increased debt levels may negatively impact our ability to make important investments in our business and limit our flexibility to respond to industry changes and market conditions. In addition, our debt levels and related debt service obligations could make it more difficult or expensive for us to obtain financing for working capital, capital expenditures, acquisitions or other purposes in the future. These circumstances could have a material adverse effect on our business operations and financial condition.

Further, we may incur and assume significantly more debt in the future, including in connection with the Aetna Acquisition or other acquisitions, strategic investments or joint ventures. For example, in connection with the Aetna Acquisition, if it is completed, we expect to incur approximately, $45.0 billion of new indebtedness and assume approximately $8.2 billion of existing indebtedness of Aetna. If we do not retire our existing debt or debt we assume in acquisitions or other strategic transactions, the risks described above could increase. We also could be adversely impacted by any failure to renew or replace, on terms acceptable to us or at all, existing indebtedness when it expires, and by any failure to satisfy applicable covenants.

We may be unable to refinance existing indebtedness or otherwise access the capital markets for any reason, whether due to market conditions or otherwise. Our continued access to the capital markets, and the terms of such access, depend on multiple factors including the condition of debt capital markets, our operating performance, the amount of our

Table of Contents

indebtedness and debt service obligations and our credit ratings. Any disruptions or turmoil in the capital markets or any downgrade of our credit ratings could have a material adverse effect on our cost of funds, liquidity, competitive position and access to capital markets, which could materially and adversely affect our business operations, financial condition, and results of operations.

Our long-term debt obligations include covenants that limit our ability and the ability of our subsidiaries to secure indebtedness with a security interest on certain property or stock or engage in certain sale and leaseback transactions with respect to certain properties. In addition, our existing credit agreements require us to maintain a ratio of consolidated debt to total capitalization not to exceed specified levels. Our ability to comply with these restrictions and covenants may be affected by events beyond our control, and if we fail to comply with such restrictions or covenants, our outstanding indebtedness could be declared immediately due and payable. This could have a material adverse effect on our business operations and financial condition.

We may be unable to successfully integrate companies acquired by us.

Upon the closing of any acquisition we complete, we will need to successfully integrate the products, services and related assets, as well as internal controls into our business operations. If an acquisition is consummated, the integration of the acquired business, its products, services and related assets into our company may also be complex and time-consuming and, if the integration is not fully successful, we may not achieve the anticipated benefits, operating and cost synergies or growth opportunities of an acquisition. Potential difficulties that may be encountered in the integration process include the following:

- Integrating personnel, operations and systems, while maintaining focus on producing and delivering consistent, high quality products and services;
- Coordinating geographically dispersed organizations;
- Disruption of management’s attention from our ongoing business operations;
- Retaining existing customers and attracting new customers; and
- Managing inefficiencies associated with integrating our operations.

An inability to realize the full extent of the anticipated benefits, operating and cost synergies, innovations and operations efficiencies or growth opportunities of an acquisition, as well as any delays encountered in the integration process, could have a material adverse effect on our business and results of operation. Furthermore, these acquisitions, even if successfully integrated, may fail to further our business strategy as anticipated, expose us to increased competition or challenges with respect to our products, services or geographic markets, and expose us to additional liabilities associated with an acquired business including risks and liabilities associated with litigation involving the acquired business. Any one of these challenges or risks could impair our ability to realize any benefit from our acquisitions after we have expended resources on them.

Risks related to the seasonality of our business.

Although the majority of our revenues, particularly pharmacy revenues, are generally not seasonal in nature, front store revenues tend to be higher during the December holiday season. Uncharacteristic or extreme weather conditions can adversely impact consumer shopping patterns as well. This could lead to lost sales, as well as increased snow removal and other costs, thereby negatively affecting our short-term results of operations. In addition, both pharmacy and front store revenues are affected by the timing and severity of the cough, cold and flu season, which is susceptible to large fluctuations from year to year, and our quarterly earnings and

operating cash flows are impacted by the Medicare Part D benefit design and changes in the composition of our membership. See “Business - Pharmacy Services Seasonality.”

Our operations are subject to a variety of business continuity hazards and risks, any of which could interrupt operations or otherwise adversely affect our performance and results.

We are subject to business continuity hazards and other risks, including natural disasters, utility and other mechanical failures, acts of war or terrorism, disruption of communications, data security and preservation, disruption of supply or distribution, safety regulation and labor difficulties. The occurrence of any of these or other events might disrupt or shut down operations, or otherwise adversely impact our operations. We may also be subject to certain liability claims in the event of an injury or loss of life, or damage to property, resulting from such events. Although we have developed business continuity plans and maintain insurance policies that we believe are customary and adequate for our size and

Table of Contents

industry, our insurance policies include limits and, as such, our coverage may be insufficient to protect against all potential hazards and risks incident to our business. Should any such hazards or risks occur, or should our insurance coverage be inadequate or unavailable, our business financial condition and results of operations could be adversely affected.

Risks related to litigation and other legal proceedings.

Pharmacy services, retail pharmacy and LTC pharmacy are highly regulated and litigious industries. We are currently subject to various litigation matters, investigations, audits, inspections, government inquiries, and regulatory and legal proceedings. Litigation, and particularly securities and collective or class action litigation, is often expensive and disruptive. Further, under the *qui tam* or “whistleblower” provisions of the federal and various state false claims acts, private citizens may bring lawsuits alleging that a violation of the federal anti-kickback statute or similar laws has resulted in the submission of “false” claims to federal and/or state health care programs, including Medicare and Medicaid. Litigation related to our provision of professional services in our pharmacies, specialty pharmacies, clinics and LTC facilities has also increased as we expand our services along the continuum of health care. We cannot predict the outcome of any of these matters, and the costs incurred may be substantial regardless of outcome. Our business, financial condition and results of operations may be adversely affected, or we may be required to materially change our business practices, as a result of such proceedings. We refer you to Item 3, “Legal Proceedings” for additional information.

We face significant competition in attracting and retaining talented employees. Further, managing succession for, and retention of, key executives is critical to our success, and our failure to do so could have an adverse impact on our future performance.

Our ability to attract and retain qualified and experienced employees is essential to meet current and future goals and objectives and there is no guarantee we will be able to attract and retain such employees or that competition among potential employers will not result in increased salaries or other benefits. An inability to retain existing employees or attract additional employees, or an unexpected loss of leadership, could have a material adverse effect on our business and results of operations.

In addition, our failure to adequately plan for succession of senior management and other key management roles or the failure of key employees to successfully transition into new roles could have a material adverse effect on our business and results of operations. While we have succession plans in place and employment arrangements with certain key executives, these do not guarantee the services of these executives will continue to be available to us.

Goodwill and other intangible assets could, in the future, become impaired.

As of December 31, 2017, we had $52.1 billion of goodwill and other intangible assets. Goodwill and indefinitely-lived intangible assets are subject to annual impairment reviews, or more frequent reviews if events or circumstances indicate that the carrying value may not be recoverable. When evaluating goodwill for potential impairment, we first compare the fair value of our reporting units to their respective carrying amounts. We estimate the fair value of our reporting units using a combination of a discounted cash flow model and a comparable market multiple model. If the estimated fair value of the reporting unit is less than its carrying amount, an impairment loss calculation is prepared. The impairment loss calculation compares the fair value of a reporting unit to its carrying amount. If the carrying amount of the reporting unit exceeds the fair value, a goodwill impairment loss is recognized in an amount equal to the excess to the extent of the goodwill balance. Estimated fair values could change if, for example, there are changes in the business climate, changes in the competitive environment, adverse legal or regulatory actions or developments, changes in capital structure, cost of debt, interest rates, capital expenditure levels, operating cash flows, or market capitalization. Because of the significance of our goodwill and intangible assets, any future impairment of these assets could require material noncash charges to our results of operations, which could have a material adverse effect on our financial condition and results of operations.

The foregoing is not a comprehensive listing of all possible risks and there can be no assurance that we have correctly identified and appropriately assessed all factors affecting the business. As such, we refer you to “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” which includes our “Cautionary Statement Concerning Forward-Looking Statements” at the end of such section, of our Annual Report to Stockholders for the year ended December 31, 2017, which section is incorporated by reference herein.

Table of Contents

Aetna-Related Risk Factors In addition to the risk factors described above that could materially adversely affect our business, financial condition, results of operations, cash flows and prospects, the following risk factors, and additional risks not presently known to us or that we currently deem to be immaterial, could also materially adversely affect us and the Aetna Acquisition.

In order to complete the merger, we and Aetna must obtain certain governmental authorizations, and if such authorizations are not granted or are granted with conditions that become applicable to the parties, completion of the merger may be jeopardized or prevented or the anticipated benefits of the merger could be reduced.

Completion of the merger is conditioned upon the expiration or early termination of the waiting period relating to the merger under the HSR Act and certain other applicable laws or regulations and the required governmental authorizations having been obtained and being in full force and effect. Although we and Aetna have agreed in the merger agreement to use our reasonable best efforts, subject to certain limitations, to make certain governmental filings or obtain the

governmental authorizations required to complete the merger (the "required governmental authorizations"), as the case may be, there can be no assurance that the relevant waiting periods will expire or authorizations will be obtained and no assurance that the merger will be completed.

In addition, the governmental authorities from which these authorizations are required have broad discretion in administering the governing laws and regulations, and may take into account various facts and circumstances in their consideration of the merger, including other potential transactions in the health care industry or other industries. These governmental authorities may initiate proceedings seeking to prevent, or otherwise seek to prevent, the merger. As a condition to authorization of the merger or related transactions, these governmental authorities also may impose requirements, limitations or costs, require divestitures or place restrictions on the conduct of our business after completion of the merger. Under the terms of the merger agreement, we are not required, and Aetna is not permitted without our consent, to take any actions or agree to any terms or conditions in connection with (i) the expiration or early termination of the waiting period relating to the merger under the HSR Act, (ii) any other antitrust law or (iii) the required governmental authorizations, in each case if such action, term or condition would have, or would reasonably be expected to have, individually or in the aggregate, a regulatory material adverse effect on us or Aetna.

However, notwithstanding the provisions of the merger agreement, either we or Aetna could become subject to terms or conditions in connection with such waiting periods, laws or other authorizations (whether because such term or condition does not rise to the specified level of materiality or we otherwise consent to its imposition) the imposition of which could adversely affect our ability to integrate Aetna's operations with our operations, reduce the anticipated benefits of the merger or otherwise materially and adversely affect our business and results of operations after completion of the merger.

In addition to receipt of certain governmental authorizations, completion of the merger is subject to a number of other conditions, and if these conditions are not satisfied or waived, the merger will not be completed.

Our obligations and the obligations of Aetna to complete the merger are subject to satisfaction or waiver of a number of conditions in addition to receipt of certain governmental authorizations, including, among other conditions: (i) approval and adoption of the merger agreement by Aetna shareholders at an Aetna special meeting, (ii) approval of the stock issuance by our stockholders at the CVS Health special meeting, (iii) approval for the listing on the New York Stock Exchange of the shares of CVS Health common stock to be issued in the merger, (iv) absence of any applicable law or order that prohibits completion of the transaction, (v) accuracy of the representations and warranties made in the merger agreement by the other party, subject to certain materiality qualifications, (vi) performance in all material respects by the other party of the material obligations required to be performed by it at or prior to completion of the transaction, and (vii) the absence of a material adverse effect on the other party. There can be no assurance that the conditions to completion of the merger will be satisfied or waived or that the merger will be completed.

In addition, the CVS Health special meeting and the Aetna special meeting may take place before certain governmental authorizations have been obtained and, therefore, before the terms on which such governmental authorizations may be obtained, or the conditions to obtaining such governmental authorizations that may be imposed, are known. As a result, if CVS Health stockholders approve the stock issuance at the CVS Health special meeting, or Aetna shareholders approve and adopt the merger agreement at the Aetna special meeting, we and Aetna may make decisions after the respective meetings to waive a condition as to the receipt of certain governmental authorizations or to take certain

Table of Contents

actions required to obtain such governmental authorizations without seeking further stockholder or shareholder approval, as applicable, and such actions could have an adverse effect on the combined company.

After completion of the merger, we may fail to realize the anticipated benefits and cost savings of the merger, which could adversely affect the value of shares of our common stock.

The success of the merger will depend, in part, on our ability to realize the anticipated benefits and cost savings from combining the businesses of CVS Health and Aetna. Our ability to realize these anticipated benefits and cost savings is subject to certain risks, including:

- Our ability to successfully combine the businesses of CVS Health and Aetna;
- whether the combined businesses will perform as expected;
- the possibility that we paid more for Aetna than the value we will derive from the acquisition;
- the reduction of our cash available for operations and other uses and the incurrence of indebtedness to finance the acquisition; and
- the assumption of known and unknown liabilities of Aetna.

If we are not able to successfully combine the businesses of CVS Health and Aetna within the anticipated time frame, or at all, the anticipated cost savings and other benefits of the merger may not be realized fully or may take longer to realize than expected, the combined businesses may not perform as expected and the value of the shares of our common stock may be adversely affected.

We and Aetna have operated and, until completion of the merger will continue to operate, independently, and there can be no assurances that our respective businesses can be integrated successfully. It is possible that the integration process could result in the loss of key CVS Health or Aetna employees, the disruption of either company's or both companies' ongoing businesses or in unexpected integration issues, higher than expected integration costs and an overall post-completion integration process that takes longer than originally anticipated. Specifically, issues that must be addressed in integrating the operations of Aetna and CVS Health in order to realize the anticipated benefits of the merger so the combined business performs as expected include, among other things:

- combining the companies' separate operational, financial, reporting and corporate functions;
- integrating the companies' technologies, products and services;
- identifying and eliminating redundant and underperforming operations and assets;
- harmonizing the companies' operating practices, employee development, compensation and benefit programs, internal controls and other policies, procedures and processes;
- addressing possible differences in business backgrounds, corporate cultures and management philosophies;
- consolidating the companies' corporate, administrative and information technology infrastructure;
- coordinating sales, distribution and marketing efforts;
- managing the movement of certain businesses and positions to different locations;
- maintaining existing agreements with customers, providers and vendors and avoiding delays in entering into new agreements with prospective customers, providers and vendors;
- operating in industry sectors in which we and our current management may have little or no experience;
- coordinating geographically dispersed organizations;
-

consolidating offices of Aetna and CVS Health that are currently in or near the same location; and
- effecting potential actions that may be required in connection with obtaining regulatory approvals.

In addition, at times, the attention of certain members of each company's management and each company's resources may be focused on completion of the merger and the integration of the businesses of the two companies and diverted from day-to-day business operations, which may disrupt each company's ongoing business and the business of the combined company.

We have limited experience in the insurance and managed health care industry, which may hinder our ability to achieve the combined company's objectives.

We have limited experience operating an insurance and managed health care business, and will rely in large part on the existing management of Aetna to continue to manage the Aetna business following the merger. However, there is no

Table of Contents

assurance that we will be able to retain the services of such management. If we fail to retain the existing management of Aetna, our ability to realize the anticipated benefits of the transaction may be adversely affected.

We and Aetna may have difficulty attracting, motivating and retaining executives and other key employees in light of the merger.

As we will be operating in industry sectors for which our existing management team has little or no experience, our success after the transaction will depend in part on our ability to retain key executives and other employees of Aetna. Uncertainty about the effect of the merger on CVS Health and Aetna employees may have an adverse effect on each of us and Aetna separately and consequently the combined business. This uncertainty may impair our and/or Aetna's ability to attract, retain and motivate key personnel. Employee retention may be particularly challenging during the pendency of the merger, as employees of CVS Health and Aetna may experience uncertainty about their future roles in the combined business.

Additionally, Aetna's officers and employees may hold Aetna common shares, as well as Aetna stock appreciation rights, Aetna restricted stock units ("Aetna RSUs") and Aetna performance stock units ("Aetna PSUs") that are subject to accelerated vesting on a change in control, and, if the merger is completed, these officers and employees may be entitled to cash and/or the consideration payable under the merger agreement in respect of such Aetna common shares, stock appreciation rights, Aetna RSUs and Aetna PSUs. These payouts could also make retention of these officers and employees more difficult. Additionally, pursuant to employment agreements and/or other agreements or arrangements with Aetna, certain key employees of Aetna are entitled to receive severance payments upon a termination without cause and/or a resignation for "good reason" following completion of the merger. Under these agreements, certain key employees of Aetna potentially could resign from his or her employment following specified circumstances set forth in his or her applicable agreement, including an adverse change in his or her title, authority or responsibilities, compensation and benefits or primary office location.

Furthermore, if key employees of CVS Health or Aetna depart or are at risk of departing, including because of issues relating to the uncertainty and difficulty of integration, financial

security or a desire not to become employees of the combined business, we may have to incur significant costs in retaining such individuals or in identifying, hiring and retaining replacements for departing employees and may lose significant expertise and talent relating to the business of Aetna, and our ability to realize the anticipated benefits of the merger may be materially and adversely affected. Accordingly, no assurance can be given that we will be able to attract or retain key employees of Aetna to the same extent that Aetna has been able to attract or retain employees in the past.

Our and Aetna's business relationships may be subject to disruption due to uncertainty associated with the merger.

Parties with which we or Aetna do business may experience uncertainty associated with the merger, including with respect to current or future business relationships with us, Aetna or the combined business. Our and Aetna's business relationships may be subject to disruption as customers, providers, vendors and others may attempt to negotiate changes in existing business relationships or consider entering into business relationships with parties other than us, Aetna or the combined business. These disruptions could have a material adverse effect on the businesses, financial condition, results of operations or prospects of CVS Health, Aetna and/or the combined business, including a material adverse effect on our ability to realize the anticipated benefits of the merger. The risk and adverse effect of such disruptions could be exacerbated by a delay in completion of the merger or termination of the merger agreement.

The merger agreement contains provisions that may make it more difficult for us and Aetna to pursue alternatives to the merger.

The merger agreement contains provisions that make it more difficult for Aetna to sell its business to a party other than us, or for us to sell its business. These provisions include a general prohibition on each party soliciting any acquisition proposal. Further, there are only limited exceptions to each party's agreement that its board of directors will not withdraw or modify in a manner adverse to the other party the recommendation of its board of directors in favor of the approval and adoption of the merger agreement, in the case of Aetna, or the approval of the stock issuance, in our case, and the other party generally has a right to match any acquisition proposal that may be made. However, at any time prior to the approval and adoption of the merger agreement by Aetna shareholders, in the case of Aetna, or the approval of the stock issuance by CVS Health stockholders, in our case, such party's board of directors is permitted to take certain of

Table of Contents

these actions if it determines in good faith that the failure to take such action would be reasonably likely to be inconsistent with its fiduciary duties under applicable law.

While we believe these provisions are reasonable and not preclusive of other offers, these restrictions might discourage a third party that has an interest in acquiring all or a significant part of either Aetna or CVS Health from considering or proposing that acquisition, even if that party were prepared to pay consideration with a higher per-share value than the currently proposed merger consideration, in the case of Aetna, or that party were prepared to enter into an agreement that may be favorable to us or our stockholders, in our case. Furthermore, the termination fees described below may result in a potential competing acquirer proposing to pay a lower per-share price to acquire the applicable party than it might otherwise have proposed to pay because of the

added expense of the termination fee that may become payable by such party in certain circumstances.

Failure to complete the merger could negatively impact our stock price and our future business and financial results.

If the merger is not completed for any reason, including as a result of Aetna shareholders failing to approve and adopt the merger agreement or CVS Health stockholders failing to approve the stock issuance, our ongoing business may be materially and adversely affected and, without realizing any of the benefits of having completed the merger, we would be subject to a number of risks, including the following:

- we may experience negative reactions from the financial markets, including negative impacts on the trading price of our common stock and other securities, and from our customers, providers, vendors, regulators and employees;
- we may be required to pay Aetna a termination fee of $2.1 billion if the merger agreement is terminated under certain circumstances;
- we will be required to pay certain transaction expenses and other costs incurred in connection with the merger, whether or not the merger is completed;
- the merger agreement places certain restrictions on the conduct of our businesses prior to completion of the merger, and such restrictions, the waiver of which is subject to the consent of Aetna, may prevent us from making certain acquisitions, taking certain other specified actions or otherwise pursuing business opportunities during the pendency of the merger that we would have made, taken or pursued if these restrictions were not in place; and
- matters relating to the merger (including arranging permanent financing and integration planning) will require substantial commitments of time and resources by our management and the expenditure of significant funds in the form of fees and expenses, which would otherwise have been devoted to day-to-day operations and other opportunities that may have been beneficial to us as an independent company.

There can be no assurance that the risks described above will not materialize. If any of those risks materialize, they may materially and adversely affect our businesses, financial condition, financial results, ratings, stock prices and/or bond prices.

In addition, we could be subject to litigation related to any failure to complete the merger or related to any proceeding to specifically enforce our obligation to perform our obligations under the merger agreement. If the merger is not completed, these risks may materialize and may materially and adversely affect our businesses, financial condition, financial results, ratings, stock prices and/or bond prices.

We and Aetna may be targets of securities class action and derivative lawsuits which could result in substantial costs and may delay or prevent the merger from being completed.

Securities class action lawsuits and derivative lawsuits are often brought against public companies that have entered into merger agreements. Even if the lawsuits are without merit, defending against these claims can result in substantial costs and divert management time and resources. An adverse judgment could result in monetary damages, which could have a negative impact on our and Aetna's respective liquidity and financial condition. Additionally, if a plaintiff is successful in obtaining an injunction prohibiting completion of the merger, then that injunction may delay or prevent the merger from being completed, which may adversely affect our and Aetna's respective business, financial position and results of operation. Since the filing with the SEC of the preliminary joint proxy statement/prospectus relating to the proposed merger, a number of class action lawsuits in connection with the merger have been filed against us, Aetna and Aetna's

Table of Contents

directors and officers. Neither we nor Aetna presently believe that there is any merit to any such lawsuit. We and Aetna intend to defend them vigorously.

Our indebtedness following completion of the merger will be substantially greater than our indebtedness on a stand-alone basis and greater than the combined indebtedness of CVS Health and Aetna existing prior to the announcement of the transaction. This increased level of indebtedness could adversely affect our business flexibility, and increase our borrowing costs. Downgrades in our ratings could adversely affect our business, cash flows, financial condition and operating results.

In order to complete the merger, we expect to incur acquisition-related debt financing of approximately $45.0 billion and assume Aetna's existing indebtedness of approximately $8.2 billion. Our substantially increased indebtedness and higher debt-to-equity ratio following completion of the merger in comparison to that of CVS Health prior to the merger will have the effect, among other things, of reducing our flexibility to respond to changing business and economic conditions and will increase our borrowing costs. In addition, the amount of cash required to service our increased indebtedness levels and thus the demands on our cash resources will be greater than the amount of cash flows required to service the indebtedness of CVS Health or Aetna individually prior to the merger. The increased levels of indebtedness could also reduce funds available to fund our efforts to combine our business with Aetna and realize expected benefits of the merger and/or engage in investments in product development, capital expenditures, dividend payments, share repurchases and other activities and may create competitive disadvantages for us relative to other companies with lower debt levels.

In addition, our credit ratings impact the cost and availability of future borrowings, and, as a result, our cost of capital. Our ratings reflect each rating organization's opinion of our financial strength, operating performance and ability to meet our debt obligations or, following completion of the merger, obligations to the combined company's insureds. Each of the ratings organizations reviews our ratings periodically, and there can be no assurance that our current ratings will be maintained in the future. Following the announcement of the merger agreement, each of Standard & Poor's and Moody's placed certain of our debt, financial strength and other credit ratings under review for a possible downgrade. Following the announcement of the merger agreement, Standard & Poor's, A.M. Best and Fitch placed Aetna's debt, financial strength and other credit ratings under review with negative implications. Downgrades in our ratings could adversely affect our business, cash flows, financial condition and operating results. In addition, if the merger is completed and, in certain circumstances, Aetna's debt securities are rated below investment grade, this may constitute a change of control triggering event under the indentures governing such debt. Upon the occurrence of a change of control triggering event, Aetna, as the surviving corporation of the merger, would be required to offer to repurchase most of Aetna's outstanding notes at 101% of the principal amount thereof plus accrued and unpaid interest if any, to, but not including, the date of repurchase. However, it is possible that Aetna (or us) would not have sufficient funds at the time of the change of control triggering event to make the required repurchase of notes or that restrictions in other debt instruments would not allow such repurchases. We cannot provide any assurance that there will be sufficient funds available for Aetna (or us) to make any required repurchases of the notes upon a change of control triggering event.

We will incur significant transaction and integration-related costs in connection with the merger.

We expect to incur a number of non-recurring costs associated with the merger and combining the operations of the two companies. We will incur significant transaction costs related to the merger, including with respect to the financing for the cash consideration to be paid to Aetna

shareholders. We also will incur significant integration-related fees and costs related to formulating and implementing integration plans, including facilities and systems consolidation costs and employment-related costs. We continue to assess the magnitude of these costs, and additional unanticipated costs may be incurred in the merger and the integration of the two companies' businesses. Although we expect that the elimination of duplicative costs, as well as the realization of other efficiencies related to the integration of the businesses, should allow us to offset integration-related costs over time, this net benefit may not be achieved in the near term, or at all.

Table of Contents

The merger may not be accretive, and may be dilutive, to our earnings per share, which may negatively affect the market price of shares of our common stock.

We currently project that the merger will result in a number of benefits, including enhanced competitive positioning and a platform from which to accelerate growth, and that it will be accretive to earnings per share in the second full year after the close of the transaction. This projection is based on preliminary estimates that may materially change. In addition, future events and conditions could decrease or delay the accretion that is currently projected or could result in dilution, including adverse changes in market conditions, additional transaction and integration-related costs and other factors such as the failure to realize some or all of the anticipated benefits of the merger. Any dilution of, decrease in or delay of any accretion to, our earnings per share could cause the price of shares of our common stock to decline or grow at a reduced rate.

The future results of the combined company may be adversely impacted if the combined company does not effectively manage its expanded operations following completion of the merger.

Following completion of the merger, the size of the combined company's business will be significantly larger than the current size of either our or Aetna's respective businesses. The combined company's ability to successfully manage this expanded business will depend, in part, upon management's ability to implement an effective integration of the two companies and its ability to manage a combined business with significantly larger size and scope with the associated increased costs and complexity. There can be no assurances that the management of the combined company will be successful or that the combined company will realize the expected operating efficiencies, cost savings and other benefits currently anticipated from the merger.

Additional information concerning these risks, uncertainties and assumptions can be found in the section entitled "Risk Factors" beginning on page 62 of our preliminary joint proxy statement/prospectus filed February 9, 2018 with the SEC on Form S-4/A.

Item 1B. Unresolved Staff Comments

There are no unresolved SEC Staff Comments.

Item 2. Properties

We lease most of our stores under long-term leases that vary as to rental amounts, expiration dates, renewal options and other rental provisions. For additional information on the amount of our rental obligations for our leases, we refer you to Note 7 “Leases” in our Annual Report to Stockholders for the year ended December 31, 2017, which section is incorporated by reference herein.

As of December 31, 2017, we owned approximately 4% of our 8,108 retail stores. Net selling space for our retail stores was approximately 79.5 million square feet as of December 31, 2017. Approximately 20% of our store base was opened or significantly remodeled within the last five years.

We lease 1,695 retail pharmacies and 79 clinics in Target stores located in 47 states and the District of Columbia.

We own nine distribution centers located in Alabama, California, Hawaii, New York, Rhode Island, South Carolina, Tennessee and Texas and lease 13 additional distribution facilities located in Arizona, Florida, Indiana, Michigan, Missouri, New Jersey, Pennsylvania, Texas, Virginia and Brazil. The 22 distribution centers total approximately 10.4 million square feet as of December 31, 2017.

As of December 31, 2017, we owned six and leased 139 LTC pharmacies in 44 states and owned one LTC repackaging facility in Kentucky.

As of December 31, 2017, we owned one mail service dispensing pharmacy located in Texas and leased three additional mail order dispensing pharmacies located in Hawaii, Illinois and Pennsylvania; we leased call centers located in California, Missouri, Pennsylvania, Tennessee and Texas; we leased 37 onsite pharmacy stores and 23 specialty pharmacy stores, and leased 18 specialty mail order pharmacies; we leased 83 branches for infusion and enteral services, including approximately 73 ambulatory infusion suites and three centers of excellence.

Table of Contents

We own our corporate offices located in Woonsocket, Rhode Island, which totals approximately one million square feet. In addition, we lease corporate offices in Scottsdale, Arizona, Northbrook, Illinois, Cincinnati, Ohio, Monroeville, Pennsylvania, Irving, Texas, and Sao Paulo, Brazil.

In connection with certain business dispositions completed between 1991 and 1997, we continue to guarantee lease obligations for approximately 85 former stores. We are indemnified for these guarantee obligations by the respective purchasers. These guarantees generally remain in effect for the initial lease term and any extension thereof pursuant to a renewal option provided for in the lease prior to the time of the disposition. For additional information, we refer you to Note 12 “Commitments and Contingencies” in our Annual Report to Stockholders for the year ended December 31, 2017, which section is incorporated by reference herein.

Management believes that the Company’s owned and leased facilities are suitable and adequate to meet the Company’s anticipated needs. At the end of the existing lease terms, management believes the leases can be renewed or replaced by alternative space.

Table of Contents

The following is a breakdown by state, District of Columbia, Puerto Rico and Brazil of our retail stores, pharmacies and clinics in Target stores, LTC hub and spoke pharmacies, onsite pharmacy stores, specialty pharmacy stores, specialty mail order pharmacies, mail order dispensing pharmacies and branches and centers of excellence for infusion and enteral services as of December 31, 2017:

	Retail Stores [1]	Pharmacies within Target [1]	LTC Hub & Spoke Pharmacies	Onsite Pharmacy Stores	Specialty Pharmacy Stores	Specialty Mail Order Pharmacies	Mail Order Dispensing Pharmacies	Infusion & Enteral Services Locations	Total
United States:									
Alabama	160	22	2	1	1	—	—	1	187
Alaska	3	3	—	—	—	—	—	—	6
Arizona	152	46	2	—	1	1	—	2	204
Arkansas	15	8	1	—	—	—	—	1	25
California	886	260	8	—	3	1	—	8	1,166
Colorado	3	39	3	—	1	—	—	1	47
Connecticut	154	20	1	1	—	—	—	1	177
Delaware	17	3	—	—	—	—	—	—	20
District of Columbia	58	1	—	—	1	—	—	—	60
Florida	754	121	5	1	1	2	—	7	891
Georgia	311	41	1	3	1	—	—	1	358
Hawaii	64	7	—	—	1	—	1	—	73
Idaho	—	2	1	—	—	—	—	1	4
Illinois	282	90	7	2	—	1	1	3	386
Indiana	309	30	4	—	—	—	—	3	346
Iowa	20	18	2	—	—	—	—	1	41
Kansas	39	14	2	—	—	1	—	2	58
Kentucky	70	9	9	—	—	1	—	—	89
Louisiana	119	14	3	—	—	—	—	1	137
Maine	22	5	1	—	—	—	—	1	29
Maryland	185	39	2	5	—	—	—	1	232
Massachusetts	376	40	5	2	2	1	—	1	427
Michigan	248	50	4	1	—	1	—	2	306
Minnesota	61	75	6	1	—	—	—	2	145
Mississippi	52	5	1	1	—	—	—	1	60
Missouri	97	33	5	—	—	—	—	1	136
Montana	14	2	1	—	—	—	—	—	17
Nebraska	19	11	1	—	—	—	—	1	32
Nevada	86	15	2	—	—	—	—	2	105
New Hampshire	40	9	1	—	—	—	—	—	50
New Jersey	291	45	3	4	—	1	—	1	345
New Mexico	19	6	1	—	—	—	—	1	27
New York	489	75	5	—	1	—	—	7	577
North Carolina	314	51	3	1	1	1	—	3	374
North Dakota	6	—	—	—	—	—	—	—	6
Ohio	329	59	7	—	—	—	—	4	399
Oklahoma	62	15	2	—	—	—	—	1	80
Oregon	—	18	2	—	1	1	—	1	23
Pennsylvania	410	66	6	2	1	1	1	2	489
Puerto Rico	25	—	—	—	—	1	—	—	26
Rhode Island	62	4	1	1	1	—	—	1	70
South Carolina	191	19	3	1	1	—	—	2	217
South Dakota	—	3	1	—	—	—	—	—	4
Tennessee	136	27	3	1	1	3	—	3	174
Texas	695	135	10	3	2	1	1	5	852
Utah	12	13	2	—	—	—	—	1	28
Vermont	10	—	—	—	—	—	—	—	10

Virginia	286	58	6	5	1	—	—	2	358
Washington	12	30	3	—	1	—	—	2	48
West Virginia	51	6	2	—	—	—	—	—	59
Wisconsin	50	33	5	1	—	—	—	1	90
Wyoming	—	—	—	—	—	—	—	1	1
Total United States	8,066	1,695	145	37	23	18	4	83	10,071
Brazil	42	—	—	—	—	—	—	—	42
Total	8,108	1,695	145	37	23	18	4	83	10,113

(1) The Retail Stores above include 1,050 in-store MinuteClinic locations and the Target stores with CVS pharmacies also include 79 MinuteClinic locations.

Table of Contents

Item 3. Legal Proceedings

I. Legal Proceedings

We refer you to the Note 12 “Commitments and Contingencies” contained in the “Notes to the Consolidated Financial Statements” of our Annual Report to Stockholders for the year ended December 31, 2017, which section is incorporated by reference herein.

II. Environmental Matters

Item 103 of SEC Regulation S-K requires disclosure of certain environmental legal proceedings if management reasonably believes that the proceedings involve potential monetary sanctions of $100,000 or more. The Company is in the process of negotiating with the New York State Department of Environmental Conservation to resolve claims of alleged historical noncompliance with hazardous waste regulations in connection with long-term care pharmacies in the State of New York. These proceedings are not material to the Company's business or financial position.

Item 4. Mine Safety Disclosures

Not applicable.

Table of Contents

Executive Officers of the Registrant

Executive Officers of the Registrant

The following sets forth the name, age and biographical information for each of our executive officers as of February 14, 2018. In each case the officer's term of office extends to the date of the board of directors meeting following the next annual meeting of stockholders of the Company. Previous positions and responsibilities held by each of the executive officers over the past five years are indicated below:

Lisa G. Bisaccia, age 61, Executive Vice President of CVS Health Corporation since March 2016 and Chief Human Resources Officer of CVS Health Corporation since January 2010; Senior Vice President of CVS Health Corporation from January 2010 through February 2016; Vice President, Human Resources of CVS Pharmacy, Inc. from September 2004 through December 2009. Ms. Bisaccia is also a member of the Board of Directors of Aramark, a leading global provider of food, facilities and uniform services.

Eva C. Boratto, age 51, Executive Vice President - Controller and Chief Accounting Officer of CVS Health Corporation since March 2017; Senior Vice President - Controller and Chief Accounting Officer of CVS Health Corporation from July 2013 through February 2017; Senior Vice President of PBM Finance from July 2010 through June 2013; Vice President, U.S. Market Finance Leader of Merck & Co., Inc. from June 2009 through June 2010.

Troyen A. Brennan, M.D., age 63, Executive Vice President and Chief Medical Officer of CVS Health Corporation since November 2008; Executive Vice President and Chief Medical Officer of Aetna, Inc. from February 2006 through November 2008.

David M. Denton, age 52, Executive Vice President and Chief Financial Officer of CVS Health Corporation since January 2010; Senior Vice President and Controller and Chief Accounting Officer of CVS Health Corporation from March 2008 until December 2009; Senior Vice President, Financial Administration of CVS Health Corporation and CVS Pharmacy, Inc. from April 2007 to March 2008. Mr. Denton is also a member of the Board of Directors of Tapestry, Inc. (formerly known as Coach, Inc.), a leading retailer of premium bags and luxury accessories.

Larry J. Merlo, age 62, President and Chief Executive Officer of CVS Health Corporation since March 2011; President and Chief Operating Officer of CVS Health Corporation from May 2010 through March 2011; President of CVS Pharmacy from January 2007 through August 2011; Executive Vice President of CVS Health Corporation from January 2007 through May 2010; also a director of CVS Health Corporation since May 2010.

Thomas M. Moriarty, age 54, Executive Vice President and General Counsel of CVS Health Corporation since October 2012 and Chief Policy and External Affairs Officer since March 2017; Chief Strategy Officer from March 2014 through February 2017; General Counsel of Celgene Corporation, a global biopharmaceutical company, from May 2012 through September 2012; General Counsel and Corporate Secretary of Medco Health Solutions, Inc. ("Medco"), a pharmacy benefit management company, from March 2008 through April 2012; also President of Global Pharmaceutical Strategies of Medco from March 2011 through April 2012.

Jonathan C. Roberts, age 62, Executive Vice President and Chief Operating Officer of CVS Health Corporation since March 2017; Executive Vice President of CVS Health Corporation and President of CVS Caremark from September 2012 through February 2017; Executive Vice President of CVS Health Corporation and Chief Operating Officer of CVS Caremark from October 2010 through August 2011; Executive Vice President, Rx Purchasing, Pricing and Network Relations of CVS Health Corporation from January 2009 through October 2010.

Table of Contents

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Our common stock is listed on the New York Stock Exchange under the symbol "CVS." The table below sets forth the high and low closing prices of our common stock on the New York Stock Exchange Composite Tape and the quarterly cash dividends declared per share of common stock during the periods indicated.

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
2017 High	$ 83.92	$ 82.79	$ 83.31	$ 80.91	$ 83.92
Low	$ 74.80	$ 75.95	$ 75.35	$ 66.80	$ 66.80
Cash dividends per common share	$ 0.50	$ 0.50	$ 0.50	$ 0.50	$ 2.00
2016 High	$ 104.05	$ 106.10	$ 98.06	$ 88.80	$106.10
Low	$ 89.65	$ 93.21	$ 88.99	$ 73.53	$ 73.53
Cash dividends per common share	$ 0.425	$ 0.425	$ 0.425	$ 0.425	$ 1.70

CVS Health has paid cash dividends every quarter since becoming a public company. Future dividend payments will depend on the Company's earnings, capital requirements, financial condition and other factors considered relevant by the Company's Board of Directors. As of February 9, 2018, there were 21,453 registered shareholders according to the records maintained by our transfer agent.

The following share repurchase programs were authorized by the Company's Board of Directors:

In billions Authorization Date	Authorized	Remaining as of December 31, 2017
November 2, 2016 ("2016 Repurchase Program")	$ 15.0	$ 13.9
December 15, 2014 ("2014 Repurchase Program")	10.0	—
December 17, 2013 ("2013 Repurchase Program")	6.0	—

The share Repurchase Programs, each of which was effective immediately, permit the Company to effect repurchases from time to time through a combination of open market repurchases, privately negotiated transactions, accelerated share repurchase ("ASR") transactions, and/or other derivative transactions. The 2016 Repurchase Program can be modified or terminated by the Board of Directors at any time.

Pursuant to the authorization under the 2014 Repurchase Program, in August 2016, the Company entered into two fixed dollar ASRs with Barclays Bank PLC ("Barclays") for a total of $3.6 billion. Upon payment of the $3.6 billion purchase price in January 2017, the Company received a number of shares of its common stock equal to 80% of the $3.6 billion notional amount of the ASRs or approximately 36.1 million shares, which were placed into treasury stock in January 2017. The ASRs were accounted for as an initial treasury stock transaction for $2.9 billion and a forward contract for $0.7 billion. In April 2017, the Company received 9.9 million shares of common stock, representing the remaining 20% of the $3.6 billion notional amount of the ASRs, thereby concluding the ASRs. The remaining 9.9 million shares of common stock delivered to the Company by Barclays were placed into treasury stock and the forward contract was reclassified from capital surplus to treasury stock in April 2017.

In the ASR transactions described above, the initial repurchase of the shares and delivery of the remainder of the shares to conclude the ASR, resulted in an immediate reduction of the outstanding shares used to calculate the weighted average common shares outstanding for basic and diluted earnings per share.

During the year ended December 31, 2017, the Company repurchased an aggregate of 55.4 million shares of common stock for approximately $4.4 billion under the 2014 and 2016 Repurchase Programs. As of December 31, 2017, there remained an aggregate of approximately $13.9 billion available for future repurchases under the 2016 Repurchase Program and the 2014 Repurchase Program was complete. During the fourth quarter of 2017, the Company suspended share repurchase activity in connection with the Aetna Acquisition.

Table of Contents

Fiscal Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
October 1, 2017 through October 31, 2017	—	$ —	—	$ 13,869,392,446
November 1, 2017 through November 30, 2017	—	$ —	—	$ 13,869,392,446
December 1, 2017 through December 31, 2017	—	$ —	—	$ 13,869,392,446
	—		—	

Item 6. Selected Financial Data

The selected consolidated financial data of CVS Health Corporation as of and for the periods indicated in the five-year period ended December 31, 2017, have been derived from the consolidated financial statements of CVS Health Corporation. The selected consolidated financial data should be read in conjunction with the consolidated financial statements and the audit reports of Ernst & Young LLP, which are incorporated elsewhere herein.

In millions, except per share amounts	2017	2016	2015	2014	2013
Statement of operations data:					
Net revenues	$184,765	$177,526	$153,290	$139,367	$126,761
Gross profit	28,545	28,857	26,528	25,367	23,783
Operating expenses [1]	19,028	18,491	17,053	16,545	15,713
Operating profit	9,517	10,366	9,475	8,822	8,070
Interest expense, net	1,041	1,058	838	600	509
Loss on early extinguishment of debt	—	643	—	521	—
Other expense [1]	208	28	21	23	33
Income tax provision	1,637	3,317	3,386	3,033	2,928
Income from continuing operations	6,631	5,320	5,230	4,645	4,600
Income (loss) from discontinued operations, net of tax	(8)	(1)	9	(1)	(8)
Net income	6,623	5,319	5,239	4,644	4,592

Net income attributable to noncontrolling interest	(1)	(2)	(2)	—	—
Net income attributable to CVS Health	$ 6,622	$ 5,317	$ 5,237	$ 4,644	$ 4,592
Per common share data:					
Basic earnings per common share:					
Income from continuing operations attributable to CVS Health	$ 6.48	$ 4.93	$ 4.65	$ 3.98	$ 3.78
Income (loss) from discontinued operations attributable to CVS Health	$ (0.01)	$ —	$ 0.01	$ —	$ (0.01)
Net income attributable to CVS Health	$ 6.47	$ 4.93	$ 4.66	$ 3.98	$ 3.77
Diluted earnings per common share:					
Income from continuing operations attributable to CVS Health	$ 6.45	$ 4.91	$ 4.62	$ 3.96	$ 3.75
Income (loss) from discontinued operations attributable to CVS Health	$ (0.01)	$ —	$ 0.01	$ —	$ (0.01)
Net income attributable to CVS Health	$ 6.44	$ 4.90	$ 4.63	$ 3.96	$ 3.74
Cash dividends per common share	$ 2.00	$ 1.70	$ 1.40	$ 1.10	$ 0.90
Balance sheet and other data:					
Total assets	$ 95,131	$ 94,462	$ 92,437	$ 73,202	$ 70,550
Long-term debt	$ 22,181	$ 25,615	$ 26,267	$ 11,630	$ 12,767
Total shareholders' equity	$ 37,695	$ 36,834	$ 37,203	$ 37,963	$ 37,938
Number of stores (at end of year)	9,846	9,750	9,681	7,866	7,702

(1) As of January 1, 2017, the Company adopted Accounting Standards Update ("ASU") 2017-07, *Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*, which resulted in a retrospective reclassification of $28 million, $21 million, $23 million and $33 million of net benefit costs from operating expenses to other expense in the years ended December 31, 2016, 2015, 2014, and 2013, respectively.

Table of Contents

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

We refer you to "Management's Discussion and Analysis of Financial Condition and Results of Operations," which includes our "Cautionary Statement Concerning Forward-Looking Statements" at the end of such section of our Annual Report to Stockholders for the year ended December 31, 2017, which section is incorporated by reference herein.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

As of December 31, 2017, the Company had outstanding interest rate derivative instruments and believes that as of December 31, 2017, its exposure to interest rate risk (inherent in the

Company's debt portfolio) is not material. We refer you to Note 1 “Significant Accounting Policies” contained in the “Notes to the Consolidated Financial Statements” of our Annual Report to Stockholders for the year ended December 31, 2017, which section is incorporated by reference herein.

As of December 31, 2017, the Company did not have any foreign currency exchange rate or commodity derivative instruments in place and believes that as of December 31, 2017, its exposure to foreign currency exchange rate risk and commodity price risk is not material

Item 8. Financial Statements and Supplementary Data

We refer you to the “Consolidated Statements of Income,” “Consolidated Statements of Comprehensive Income,” “Consolidated Balance Sheets,” “Consolidated Statements of Shareholders’ Equity,” “Consolidated Statements of Cash Flows,” “Notes to Consolidated Financial Statements,” and “Report of Independent Registered Public Accounting Firm” of our Annual Report to Stockholders for the year ended December 31, 2017, which sections are incorporated by reference herein.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of disclosure controls and procedures: The Company’s Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of the design and operation of the Company’s disclosure controls and procedures (as defined in Rules 13a-15 (f) and 15d-15(f) under the Securities Exchange Act of 1934) as of December 31, 2017, have concluded that as of such date the Company’s disclosure controls and procedures were adequate and effective at a reasonable assurance level and designed to ensure that material information relating to the Company and its subsidiaries would be made known to such officers on a timely basis.

Internal control over financial reporting: We refer you to “Management’s Report on Internal Control Over Financial Reporting” and “Report of Independent Registered Public Accounting Firm” of our Annual Report to Stockholders for the fiscal year ended December 31, 2017, which are incorporated by reference herein, for management’s report on the Company’s internal control over financial reporting and the Independent Registered Public Accounting Firm’s report with respect to the effectiveness of internal control over financial reporting.

Changes in internal control over financial reporting: There have been no changes in our internal controls over financial reporting identified in connection with the evaluation required by paragraph (d) of Rule 13a-15 or Rule 15d-15 that occurred during the fourth quarter ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

No events have occurred during the fourth quarter that would require disclosure under this item.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

We refer you to our Proxy Statement for the 2018 Annual Meeting of Stockholders under the captions "Committees of the Board," "Code of Conduct," "Director Nominations," "Audit Committee Report," "Biographies of our Board Nominees," and "Section 16(a) Beneficial Ownership Reporting Compliance," which sections are incorporated by reference herein. Biographical information on our executive officers is contained in Part I of this Annual Report on Form 10-K.

Item 11. Executive Compensation

We refer you to our Proxy Statement for the 2018 Annual Meeting of Stockholders under the captions "Executive Compensation and Related Matters," including "Compensation Discussion & Analysis" and "Management Planning and Development Committee Report," which sections are incorporated by reference herein.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

We refer you to our Proxy Statement for the 2018 Annual Meeting of Stockholders under the captions "Share Ownership of Directors and Certain Executive Officers," and "Share Ownership of Principal Stockholders" which sections are incorporated by reference herein, for information concerning security ownership of certain beneficial owners and management and related stockholder matters.

The following table summarizes information about the Company's common stock that may be issued upon the exercise of options, warrants and rights under all of our equity compensation plans as of December 31, 2017.

	Number of securities to be issued upon exercise of outstanding options, warrants and rights[1]	Weighted average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in first column) [1]
Equity compensation plans approved by stockholders	32,219	$ 75.32	20,530
Equity compensation plans not approved by stockholders	—	—	—
Total	32,219	$ 75.32	20,530

(1) Shares in thousands.

Item 13. Certain Relationships and Related Transactions and Director Independence

We refer you to our Proxy Statement for the 2018 Annual Meeting of Stockholders under the caption "Independence Determinations for Directors" and "Certain Transactions with Directors and Officers," which sections are incorporated by reference herein.

Item 14. Principal Accountant Fees and Services

We refer you to our Proxy Statement for the 2018 Annual Meeting of Stockholders under the caption "Item 2: Ratification of Appointment of Independent Registered Public Accounting Firm," which section is incorporated by reference herein.

Table of Contents

PART IV

Item 15. Exhibits and Financial Statement Schedules

A. Documents filed as part of this report:

1. Financial Statements:

The following financial statements are incorporated by reference from our Annual Report to Stockholders for the fiscal year ended December 31, 2017, as provided in Item 8 hereof:

Consolidated Statements of Income for the Years Ended December 31, 2017, 2016 and 2015
Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2017, 2016 and 2015
Consolidated Balance Sheets as of December 31, 2017 and 2016
Consolidated Statements of Cash Flows for the Years Ended December 31, 2017, 2016 and 2015
Consolidated Statements of Shareholders' Equity for the Years Ended December 31, 2017, 2016 and 2015
Notes to Consolidated Financial Statements
Report of Independent Registered Public Accounting Firm

2. Financial Statement Schedules

All financial statement schedules are omitted because they are not applicable, not required under the instructions, or the information is included in the consolidated financial statements or related notes.

B. Exhibits

Exhibits marked with an asterisk (*) are hereby incorporated by reference to exhibits or appendices previously filed by the Registrant as indicated in brackets following the description of the exhibit.

Exhibit	Description
2.1*	Agreement and Plan of Merger dated as of November 1, 2006 among, the Registrant, Caremark Rx, Inc. and Twain MergerSub Corp. (incorporated by reference to Exhibit 2.1 to the Registrant's Registration Statement No. 333-139470 on Form S-4 filed December 19, 2006).
2.2*	Amendment No. 1 dated as of January 16, 2007 to the Agreement and Plan of Merger dated as of November 1, 2006 among the Registrant, Caremark Rx, Inc. and Twain Merger Sub Corp. (incorporated by reference to Exhibit 2.2 to the Registrant's Registration Statement No. 333-139470 on Form S-4/A filed January 16, 2007).
2.3*	Waiver Agreement dated as of January 16, 2007 between the Registrant and Caremark Rx, Inc. with respect to the Agreement and Plan Merger dated as of November 1, 2006 by and between Registrant and Caremark Rx, Inc (incorporated

by reference to Exhibit 2.3 to the Registrant's Registration Statement No. 333-139470 on Form S-4/A filed January 16, 2007).

2.4* Amendment to Waiver Agreement, dated as of February 12, 2007, between Registrant and Caremark Rx, Inc. (incorporated by reference to Exhibit 99.2 to the Registrant's Current Report on Form 8-K dated February 13, 2007; Commission File No. 001-01011).

2.5* Amendment to Waiver Agreement, dated as of March 8, 2007, between Registrant and Caremark Rx, Inc. (incorporated by reference to Exhibit 99.2 to the Registrant's Current Report on Form 8-K dated March 8, 2007; Commission File No. 001-01011).

2.6* Agreement and Plan of Merger dated as of August 12, 2008, among the Registrant, Longs Drug Stores Corporation and Blue MergerSub Corp. (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K dated August 13, 2008; Commission File No. 001-01011).

Table of Contents

2.7* Agreement and Plan of Merger, dated as of May 20, 2015, among CVS Pharmacy, Inc., Tree Merger Sub, Inc. and Omnicare, Inc. (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K dated May 21, 2015; Commission File No. 001-01011).

2.8* Agreement and Plan of Merger, dated as of December 3, 2017, among CVS Health Corporation, Hudson Merger Sub Corp. and Aetna Inc. (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K dated December 5, 2017; Commission File No. 001-01011).

2.9* Bridge Facility Commitment Letter dated December 3, 2017, by and among the Registrant, Barclays Bank PLC, Goldman Sachs Bank USA, Goldman Sachs Lending Partners LLC, Bank of America, N.A., and Merrill Lynch, Pierce Fenner & Smith Incorporated (incorporated by reference to Exhibit 2.2 to the Registrant's Current Report on Form 8-K dated December 5, 2017; Commission File No. 001-01011).

2.10* Joinder to Bridge Facility Commitment Letter dated as of December 15, 2017, by and among the Registrant, Barclays Bank PLC, Goldman Sachs Bank USA, Goldman Sachs Lending Partners LLC, Bank of America, N.A., Merrill Lynch, Pierce, Fenner & Smith Incorporated, and each of the Additional Commitment Parties party thereto (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K dated December 19, 2017; Commission File No. 001-01011).

3.1* Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 of Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1996; Commission File No. 001-01011).

3.1A* Certificate of Amendment to the Amended and Restated Certificate of Incorporation, effective May 13, 1998 (incorporated by reference to Exhibit 4.1A to Registrant's Registration Statement No. 333-52055 on Form S-3/A dated May 18, 1998).

3.1B*	Certificate of Amendment to the Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K dated March 22, 2007; Commission File No. 001-01011).
3.1C*	Certificate of Merger dated May 9, 2007 (incorporated by reference to Exhibit 3.1C to Registrant's Quarterly Report on Form 10-Q dated November 1, 2007; Commission File No. 001-01011).
3.1D*	Certificate of Amendment to the Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K dated May 13, 2010; Commission File No. 001-01011).
3.1E*	Certificate of Amendment to the Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report On Form 8-K dated May 10, 2012; Commission File No. 001-01011).
3.1F*	Certificate of Amendment to the Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report On Form 8-K dated May 13, 2013; Commission File No. 001-01011).
3.1G*	Certificate of Amendment to the Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K dated September 3, 2014 (Commission File No. 001-01011)).
3.2*	By-laws of the Registrant, as amended and restated (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K dated January 26, 2016; Commission File No. 001-01011).
4	Pursuant to Regulation S-K, Item 601(b)(4)(iii)(A), no instrument which defines the rights of holders of long-term debt of the Registrant and its subsidiaries is filed with this report. The Registrant hereby agrees to furnish a copy of any such instrument to the Securities and Exchange Commission upon request.

Table of Contents

4.1*	Specimen common stock certificate (incorporated by reference to Exhibit 4.1 to the Registration Statement of the Registrant on Form 8-B dated November 4, 1996; Commission File No. 001-01011).
10.1*	Stock Purchase Agreement dated as of October 14, 1995 between The TJX Companies, Inc. and Melville Corporation, as amended November 17, 1995 (incorporated by reference to Exhibits 2.1 and 2.2 to Melville's Current Report on Form 8-K dated December 4, 1995; Commission File No. 001-01011).
10.2*	Stock Purchase Agreement dated as of March 25, 1996 between Melville Corporation and Consolidated Stores Corporation, as amended May 3, 1996 (incorporated by reference to Exhibits 2.1 and 2.2 to Melville's Current Report on Form 8-K dated May 5, 1996; Commission File No. 001-01011).

10.3*	Distribution Agreement dated as of September 24, 1996 among Melville Corporation, Footstar, Inc. and Footstar Center, Inc. (incorporated by reference to Exhibit 99.1 to Melville's Current Report on Form 8-K dated October 28, 1996; Commission File No. 001-01011).
10.4*	Tax Disaffiliation Agreement dated as of September 24, 1996 among Melville Corporation, Footstar, Inc. and certain subsidiaries named therein (incorporated by reference to Exhibit 99.2 to Melville's Current Report on Form 8-K dated October 28, 1996; Commission File No. 001-01011).
10.5*	Stockholder Agreement dated as of December 2, 1996 between the Registrant, Nashua Hollis CVS, Inc. and Linens 'n Things, Inc. (incorporated by reference to Exhibit 10(i)(6) to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1997; Commission File No. 001-01011).
10.6*	Tax Disaffiliation Agreement dated as of December 2, 1996 between the Registrant and Linens 'n Things, Inc. and certain of their respective affiliates (incorporated by reference to Exhibit 10(i)(7) to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1997; Commission File No. 001-01011).
10.7*	Second Amended and Restated Credit Agreement, dated as of July 24, 2014, by and among the Registrant, the lenders party thereto, Barclays Bank PLC and JPMorgan Chase Bank, N.A., as Co-Syndication Agents, Bank of America, N.A. and Wells Fargo Bank, N.A., as Co-Documentation Agents, and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014 (Commission File No. 001-01011).
10.8*	Amendment No. 1 to Second Amended and Restated Credit Agreement, dated as of December 15, 2017, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as administrative agent (incorporated by reference to Exhibit 10.4 to the Registrant's Current Report on Form 8-K dated December 19, 2017; Commission File No. 001-01011).
10.9*	Five Year Credit Agreement dated as of July 1, 2015, by and among the Registrant, the lenders party thereto, Barclays Bank PLC and JPMorgan Chase Bank, N.A., as Co-Syndication Agents, Bank of America, N.A. and Wells Fargo Bank, N.A., as Co-Documentation Agents, and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2015 (Commission File No. 001-01011).
10.10*	Amendment No. 1, dated as of December 15, 2017, to Five Year Credit Agreement dated as of July 1, 2015, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as administrative agent (incorporated by reference to Exhibit 10.5 to the Registrant's Current Report on Form 8-K dated December 19, 2017; Commission File No. 001-01011).
10.11*	364-Day Credit Agreement, dated as of May 18, 2017, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as administrative agent (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2017; Commission File No. 001-01011).

Table of Contents

10.12*	Amendment No. 1, dated as of December 15, 2017, to 364-Day Credit Agreement dated as of May 18, 2017, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as administrative agent (incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K dated December 19, 2017; Commission File No. 001-01011).
10.13*	Five Year Credit Agreement, dated as of May 18, 2017, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as administrative agent (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2017; Commission File No. 001-01011).
10.14*	Amendment No. 1 dated as of December 15, 2017, to Five Year Credit Agreement dated as of May 18, 2017, by and among the Registrant, the lenders party thereto and The Bank of New York Mellon, as administrative agent (incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K dated December 19, 2017; Commission File No. 001-01011).
10.15*	Term Loan Agreement dated as of December 15, 2017, by and among the Registrant, the lenders party thereto and Barclays Bank PLC, as administrative agent (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated December 19, 2017; Commission File No. 001-01011).
10.16*	The Registrant's Supplemental Retirement Plan for Select Senior Management I as amended and restated in December 2008 (incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009; Commission File No. 001-01011).
10.17*	The Registrant's 1996 Directors Stock Plan, as amended and restated November 5, 2002 (incorporated by reference to Exhibit 10.18 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 28, 2002; Commission File No. 001-01011).
10.18*	The Registrant's 1997 Incentive Compensation Plan as amended through December 2008 (incorporated by reference to Exhibit 10.8 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009; Commission File No. 001-01011).
10.19*	Caremark Rx, Inc. 2004 Incentive Stock Plan (incorporated by reference to Exhibit 99.2 of the Registrant's Registration Statement No. 333-141481 on Form S-8 filed March 22, 2007; Commission File No. 011-01011).
10.20*	The Registrant's Deferred Stock Compensation Plan, as amended (incorporated by reference to Exhibit 10.17 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015; Commission File No. 001-01011).
10.21*	The Registrant's Deferred Compensation Plan, as amended (incorporated by reference to Exhibit 10.19 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.22*	The Registrant's 2010 Incentive Compensation Plan, as amended through January 15, 2013 (incorporated by reference to Exhibit A to the Registrant's Definitive Proxy Statement on Form 14A filed March 27, 2015; Commission File No. 001-01011).

10.23*	The Registrant's 2017 Incentive Compensation Plan (incorporated by reference to Exhibit A to the Registrant's Definitive Proxy Statement on Form 14A filed March 31, 2017; Commission File No. 001-01011).
10.24*	The Registrant's 2007 Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 10.20 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015; Commission File No. 001-01011).

Table of Contents

10.25*	The Registrant's Management Incentive Plan (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2017; Commission File No. 001-01011).
10.26*	The Registrant's Executive Incentive Plan (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2017; Commission File No. 001-01011).
10.27*	The Registrant's Long-Term Incentive Plan (incorporated by reference to Exhibit 10.5 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2017; Commission File No. 001-01011).
10.28*	The Registrant's Partnership Equity Program, as amended (incorporated by reference to Exhibit 10.25 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.29*	The Registrant's Severance Plan for Non-Store Employees amended as of January 2016 (incorporated by reference to Exhibit 10.25 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.30*	The Registrant's Performance-Based Restricted Stock Unit Plan, as amended (incorporated by reference to Exhibit 10.27 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.31*	Form of Enterprise Non-Competition, Non-Disclosure and Developments Agreement between the Registrant and certain of the Registrant's executive officers (incorporated by reference to Exhibit 10.25 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2013; Commission File No. 001-01011).
10.32*	Universal 409A Definition Document, as amended (incorporated by reference to Exhibit 10.28 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015; Commission File No. 001-01011).
10.33*	Form of Non-Qualified Stock Option Agreement between the Registrant and selected employees of the Registrant (incorporated by reference to Exhibit 10.29 to the

	Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.34*	Form of Restricted Stock Unit Agreement - Annual Grant - between the Registrant and selected employees of the Registrant (incorporated by reference to Exhibit 10.30 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.35*	Form of Performance-Based Restricted Stock Unit Agreement between the Registrant and selected employees of the Registrant (incorporated by reference to Exhibit 10.31 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.36*	Form of Partnership Equity Program Participant Purchased RSUs, Company Matching RSUs and Company Matching Options Agreement (Pre-Tax) (incorporated by reference to Exhibit 10.32 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.37*	Form of Partnership Equity Program Participant Purchased RSUs, Company Matching RSUs and Company Matching Options Agreement (Post-Tax) (incorporated by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).

Table of Contents

10.38*	Amended and Restated Employment Agreement dated as of December 22, 2008 between the Registrant and the Registrant's President and Chief Executive Officer (incorporated by reference to Exhibit 10.38 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2008; Commission File No. 001-01011).
10.39*	Amendment dated December 21, 2012 to the Amended and Restated Employment Agreement dated as of December 22, 2008 between the Registrant and the Registrant's President and Chief Executive Officer (incorporated by reference to Exhibit 10.31 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012; Commission File No. 001-01011).
10.40*	Form of Non-Qualified Stock Option Agreement between the Registrant and the Registrant's President and Chief Executive Officer (incorporated by reference to Exhibit 10.37 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.41*	Form of Restricted Stock Unit Agreement between the Registrant and the Registrant's President and Chief Executive Officer (incorporated by reference to Exhibit 10.38 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).
10.42*	Amendment dated January 22, 2015 to Nonqualified Stock Option Agreements between the Registrant and the Registrant's President and Chief Executive Officer

(incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated January 23, 2015; Commission File No. 001-01011).

10.43* Change in Control Agreement dated December 22, 2008 between the Registrant and the Registrant's Executive Vice President and Chief Financial Officer (incorporated by reference to Exhibit 10.39 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2010; Commission File No. 001-01011).

10.44* Amendment dated as of December 31, 2012 to the Change in Control Agreement dated December 22, 2008 between the Registrant and the Registrant's Executive Vice President and Chief Financial Officer (incorporated by reference to Exhibit 10.32 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012; Commission File No. 001-01011).

10.45* Change in Control Agreement dated December 22, 2008 between the Registrant and the Registrant's Executive Vice President and Chief Operating Officer (incorporated by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012; Commission File No. 001-01011).

10.46* Amendment dated as of December 31, 2012 to the Change in Control Agreement dated December 22, 2008 between the Registrant and the Registrant's Executive Vice President and Chief Operating Officer (incorporated by reference to Exhibit 10.34 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012; Commission File No. 001-01011).

10.47* Restricted Stock Unit Agreement dated April 1, 2017 between the Registrant and the Registrant's Executive Vice President and Chief Operating Officer (incorporated by reference to Exhibit 10.44 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).

10.48* Restrictive Covenant Agreement dated May 20, 2017 between the Registrant and the Registrant's Executive Vice President and Chief Operating Officer (incorporated by reference to Exhibit 10.45 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016; Commission File No. 001-01011).

10.49* Change in Control Agreement dated December 22, 2008 between the Registrant and the Registrant's Executive Vice President and President of CVS Pharmacy (incorporated by reference to Exhibit 10.43 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).

Table of Contents

10.50* Amendment dated as of December 31, 2012 to the Change in Control Agreement between the Registrant and the Registrant's Executive Vice President and President of CVS Pharmacy (incorporated by reference to Exhibit 10.44 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).

10.51*

	Change in Control Agreement dated October 1, 2012 between the Registrant and the Registrant's Executive Vice President, Chief Policy and External Affairs Officer and General Counsel (incorporated by reference to Exhibit 10.1 of the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2015; Commission File No. 001-01011).
10.52*	Restrictive Covenant Agreement dated June 1, 2014 between the Registrant and the Registrant's Executive Vice President, Chief Policy and External Affairs Officer and General Counsel (incorporated by reference to Exhibit 10.2 of the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2015; Commission File No. 001-01011).
12	Computation of Ratios of Earnings to Fixed Charges.
13	Portions of the 2018 Annual Report to Stockholders of CVS Health Corporation, which are specifically designated in this Form 10-K as being incorporated by reference.
21	Subsidiaries of the Registrant.
23	Consent of Ernst & Young LLP.
31.1	Certification by the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification by the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification by the Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification by the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following materials from the CVS Health Corporation Annual Report on Form 10-K for the year ended December 31, 2017 formatted in Extensible Business Reporting Language (XBRL): (i) the Consolidated Statements of Income, (ii) the Consolidated Balance Sheets, (iii) the Consolidated Statements of Cash Flows and (iv) related notes.

Table of Contents

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

CVS HEALTH CORPORATION

Date: February 14, 2018 By: /s/ DAVID M. DENTON

David M. Denton
Executive Vice President and Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title(s)	Date
/s/ RICHARD M. BRACKEN **Richard M. Bracken**	Director	February 14, 2018
/s/ C. DAVID BROWN II **C. David Brown II**	Director	February 14, 2018
/s/ EVA C. BORATTO **Eva C. Boratto**	Executive Vice President - Controller and Chief Accounting Officer (Principal Accounting Officer)	February 14, 2018
/s/ ALECIA A. DECOUDREAUX **Alecia A. DeCoudreaux**	Director	February 14, 2018
/s/ DAVID M. DENTON **David M. Denton**	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 14, 2018
/s/ NANCY-ANN M. DEPARLE **Nancy-Ann M. DeParle**	Director	February 14, 2018
/s/ DAVID W. DORMAN **David W. Dorman**	Chairman of the Board and Director	February 14, 2018
/s/ ANNE M. FINUCANE **Anne M. Finucane**	Director	February 14, 2018
/s/ LARRY J. MERLO **Larry J. Merlo**	President and Chief Executive Officer (Principal Executive Officer) and Director	February 14, 2018
/s/ JEAN-PIERRE MILLON **Jean-Pierre Millon**	Director	February 14, 2018
/s/ MARY L. SCHAPIRO **Mary L. Schapiro**	Director	February 14, 2018
/s/ RICHARD J. SWIFT **Richard J. Swift**	Director	February 14, 2018
/s/ WILLIAM C. WELDON **William C. Weldon**	Director	February 14, 2018
/s/ TONY L. WHITE **Tony L. White**	Director	February 14, 2018

10-K 1 cvs-20161231x10k.htm 10-K

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

☒ **Annual Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the fiscal year ended December 31, 2016
OR
☐ **Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**
For the transition period from to
Commission file number 001-01011

CVSHealth

CVS HEALTH CORPORATION
(Exact name of Registrant as specified in its charter)

Delaware	**05-0494040**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
One CVS Drive, Woonsocket, Rhode Island	**02895**
(Address of principal executive offices)	(Zip Code)

(401) 765-1500
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Exchange Act:

Common Stock, par value $0.01 per share	**New York Stock Exchange**
Title of each class	Name of each exchange on which registered

Securities registered pursuant to Section 12(g) of the Exchange Act: **None**
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer, or a smaller reporting company. See definition of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒	Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒
The aggregate market value of the registrant's common stock held by non-affiliates was approximately $101,661,618,666 as of June 30, 2016, based on the closing price of the common stock on the New York Stock Exchange. For purposes of this calculation, only executive officers and directors are deemed to be the affiliates of the registrant.

As of February 3, 2017, the registrant had 1,025,699,605 shares of common stock issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Filings made by companies with the Securities and Exchange Commission sometimes "incorporate information by reference." This means that the company is referring you to information that was previously filed or is to be filed with the SEC, and this information is considered to be part of the filing you are reading. The following materials are incorporated by reference into this Form 10-K:

- Portions of our Annual Report to Stockholders for the fiscal year ended December 31, 2016 are incorporated by reference in our response to Items 7, 8 and 9 of Part II.
- Information contained in our Proxy Statement for the 2017 Annual Meeting of Stockholders is incorporated by reference in our response to Items 10 through 14 of Part III.

TABLE OF CONTENTS

PART I

Item 1. Business

Overview

CVS Health Corporation, together with its subsidiaries (collectively "CVS Health," the "Company," "we," "our" or "us"), is a pharmacy innovation company helping people on their path to better health. At the forefront of a changing health care landscape, the Company has an unmatched suite of capabilities and the expertise needed to drive innovations that will help shape the future of health care.

We are currently the only integrated pharmacy health care company with the ability to impact consumers, payors, and providers with innovative, channel-agnostic solutions to complex challenges managing costs and care. We have a deep understanding of their diverse needs through our unique integrated model, and we are bringing them innovative solutions that help increase access to quality care, deliver better health outcomes and lower overall health care costs.

Through more than 9,700 retail locations, more than 1,100 walk-in health care clinics, a leading pharmacy benefits manager with nearly 90 million plan members, a dedicated senior pharmacy care business serving more than one million patients per year, expanding specialty pharmacy services and a leading stand-alone Medicare Part D prescription drug plan, we enable people, businesses, and communities to manage health in more affordable, effective ways. We are delivering break-through products and services, from advising patients on their medications at our CVS Pharmacy® locations, to introducing unique programs to help control costs for our clients at CVS Caremark®, to innovating how care is delivered to our patients with complex conditions through CVS Specialty™, to improving pharmacy care for the senior community through Omnicare®, or by expanding access to high-quality, low-cost care at CVS MinuteClinic®.

We have three reportable segments: Pharmacy Services, Retail/LTC and Corporate.

Pharmacy Services Segment

The Pharmacy Services Segment provides a full range of pharmacy benefit management ("PBM") solutions, as described more fully below, to our clients consisting primarily of employers, insurance companies, unions, government employee groups, health plans, Medicare Part D plans, Managed Medicaid plans, plans offered on the public and private exchanges, other sponsors of health benefit plans and individuals throughout the United States. In addition, through our SilverScript Insurance Company ("SilverScript") subsidiary, we are a national provider of drug benefits to eligible beneficiaries under the federal government's Medicare Part D program. The Pharmacy Services Segment operates under the CVS Caremark® Pharmacy Services, Caremark®, CVS Caremark®, CarePlus CVS Pharmacy™, CVS Specialty™, Accordant®, SilverScript®, NovoLogix®, Coram®, Navarro® Health Services and ACS Pharmacy names. As of December 31, 2016, the Pharmacy Services Segment operated 23 retail specialty pharmacy stores, 13 specialty mail order pharmacies and four mail order dispensing pharmacies, and 84 branches for infusion and enteral services, including approximately 73 ambulatory infusion suites and three centers of excellence, located in 41 states, Puerto Rico and the District of Columbia. During the year ended December 31, 2016, our PBM filled or managed approximately 1.2 billion prescriptions (which equates to 1.6 billion prescriptions when counting 90-day prescriptions as three prescriptions).

Pharmacy Services Business Strategy - Our business strategy centers on providing innovative tools and strategies, as well as quality client service in order to help improve clinical outcomes for our clients' health benefit plan members while assisting our clients and their plan members in better managing overall health care costs. Our goal is to produce superior results for our clients and their plan members by leveraging our expertise in core PBM services, including: plan design offerings and administration, formulary management, Medicare Part D services, mail order, specialty pharmacy and infusion services, retail pharmacy network management services, prescription management systems, clinical services, disease management services and medical spend management.

In addition, as a fully integrated pharmacy services company, we are able to offer our clients and their plan members a variety of programs and tools, including plan design offerings, that benefit from our integrated systems and the ability of our almost 36,000 pharmacists, nurses, nurse practitioners and physician assistants to interact personally with the many plan members. Through our multiple member touch points (retail stores, mail order, infusion, long-term care and specialty pharmacies, retail clinics, digital resources and cost management tools), we seek to engage plan members in behaviors that

help lower cost and improve health care outcomes. Examples of these programs and services include: Maintenance Choice®, a program where eligible client plan members can elect to fill their maintenance prescriptions at our CVS Pharmacy retail stores for the same price as mail order; Pharmacy Advisor®, a program that facilitates face-to-face and telephone counseling by our pharmacists to help participating plan members with certain chronic diseases, such as diabetes and cardiovascular conditions, to

identify gaps in care, adhere to their prescribed medications and manage their health conditions; compliance and persistency programs designed to help ensure that patients take their medications in the proper manner; enhanced disease management programs that are targeted at managing chronic disease states; Specialty Connect®, our integrated specialty pharmacy offering which integrates specialty mail and retail capabilities, providing members with disease-state specific counseling from our experienced specialty pharmacists and the choice to bring their specialty prescriptions to a CVS Pharmacy location or submit it through our specialty mail order pharmacies; and an ExtraCare® Health Card program which offers discounts to eligible plan members on certain over-the-counter health care products sold in our CVS Pharmacy stores. In addition, MinuteClinic® is an important and differentiated part of the enterprise that offers certain capabilities to PBM clients and their members. For example, we offer plan-sponsored co-pay reductions to encourage use of MinuteClinic, thereby helping to reduce emergency room visits and to lower overall health care costs. Other ways we are working with our clients include partnerships with health plan clients sponsoring patient centered medical homes, biometric screenings for plan members, closing gaps in care, and onsite clinics at client corporate headquarters.

PBM Services - Our PBM solutions are described more fully below.

Plan Design Offerings and Administration - Our clients sponsor pharmacy benefit plans that facilitate the ability of eligible members in these plans to receive prescribed medications. We assist our clients in designing pharmacy benefit plans that help minimize the costs to the client while helping improve health outcomes. We also administer these benefit plans selected by our clients and assist them in monitoring the effectiveness of these plans through frequent, informal communications, their use of our proprietary software, as well as through a formal annual client review.

We make recommendations to our clients helping them to design benefit plans promoting the use of the lower cost, clinically appropriate drugs. We help our clients control costs by recommending plan designs that encourage the use of generic equivalents of brand name drugs when such equivalents are available. Our clients also have the option, through plan design, to further lower their pharmacy benefit plan costs by setting different member payment levels for different products on their drug lists or “formularies”.

Formulary Management - We utilize an independent panel of doctors, pharmacists and other medical experts, referred to as our Pharmacy and Therapeutics Committee, to review and approve the selection of drugs that meet our high standards of safety and efficacy for inclusion on one of our template formularies. Our formularies provide recommended products in numerous drug classes to help ensure member access to clinically appropriate alternatives under the client’s pharmacy benefit plan, while helping to drive the lowest net cost for our clients that select one of our formularies. To help improve clinical outcomes for members and clients, we conduct ongoing, independent reviews of all drugs, including, but not limited to, those appearing on the formularies and generic equivalent products, as well as our clinical programs. Many of our clients choose to adopt one of our template formulary offerings as part of their plan design.

Medicare Part D Services - We participate in the administration of the drug benefit added to the Medicare program under Part D of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (“MMA”) through the provision of PBM services to those of our health plan clients and other clients that have qualified as a Medicare Part D prescription drug plans (“PDP”) or as a Medicare Advantage prescription drug plan (“MA-PD”) and by offering Medicare Part D pharmacy benefits through SilverScript, a PDP that has contracted with the United States Centers for Medicare and Medicaid Services (“CMS”). We also assist employer, union and other health plan clients that qualify for the retiree drug subsidy made available under the MMA by collecting and submitting eligibility and/or drug cost data to CMS in order for them to obtain the subsidy and offer Medicare Part D pharmacy benefits to such clients' retirees through SilverScript-sponsored Employer Group Waiver Plans (“EGWPs”).

Mail Order Pharmacy - As of December 31, 2016, we operated four mail order dispensing pharmacies in the United States. Plan members or their prescribers submit prescriptions or refill requests, primarily for maintenance medications, to these pharmacies via mail, telephone, fax, e-prescribing or the Internet. We also offer Maintenance Choice®, a program in which eligible client plan members in most states can elect to fill their maintenance prescriptions at our CVS Pharmacy retail stores for the same price as mail order, and operate a network of smaller mail order specialty pharmacies described below. Our staff pharmacists review mail order prescriptions and refill requests with the assistance of our prescription management systems. This review may involve communications with the prescriber and, with the prescriber’s approval when required, can result in generic substitution, therapeutic interchange or other actions designed to help reduce cost and/or improve quality of treatment. These pharmacies have been awarded Mail Order Pharmacy accreditation from

Utilization Review Accreditation Commission ("URAC"), a Washington DC-based health care accrediting organization that establishes quality standards for the health care industry.

Specialty Pharmacy - Our specialty pharmacies support individuals who require complex and expensive drug therapies. As of December 31, 2016, our specialty pharmacy operations included 13 specialty mail order pharmacies located throughout the United States that are used for delivery of advanced medications to individuals with chronic or genetic diseases and disorders. These pharmacies have also been awarded Specialty Pharmacy accreditation from URAC. As of December 31, 2016, the Company operated a network of 23 retail specialty pharmacy stores, which operate under the CarePlus CVS Pharmacy™ and Navarro® Health Services names. These stores average 1,100 square feet in size and sell prescription drugs and a limited assortment of front store items such as alternative medications, homeopathic remedies and vitamins. Through our affiliate Coram LLC and its subsidiaries (collectively, "Coram"), one of the nation's largest providers of comprehensive infusion services, we care for approximately 146,000 patients annually, providing specialty infusion and enteral nutrition services. Our Specialty Connect® product, which integrates our specialty pharmacy mail and retail capabilities, provides members with disease-state specific counseling from our experienced specialty pharmacists and the choice to bring their specialty prescriptions to a CVS Pharmacy location. Whether submitted through our specialty mail order pharmacy or at a CVS Pharmacy, all prescriptions are filled through our specialty mail order pharmacies, so all revenue from this specialty prescription services program is recorded within the Pharmacy Services Segment. Members then can choose to pick up their medication at their local CVS Pharmacy, except in three states that do not allow retail pick-up, or have it sent to their home through the mail. Additionally, with the acquisition of Omnicare, Inc. ("Omnicare"), we expanded our specialty pharmacy to include the specialty pharmacy operations of Omnicare which operates under the name ACS Pharmacy.

Retail Pharmacy Network Management - We maintain a national network of more than 68,000 retail pharmacies, consisting of approximately 41,000 chain pharmacies (which includes our CVS Pharmacy locations) and 27,000 independent pharmacies, in the United States, Puerto Rico, District of Columbia, Guam and the Virgin Islands. When a customer fills a prescription in a retail pharmacy, the pharmacy sends prescription data electronically to us from the point-of-sale. This data interfaces with our proprietary prescription management systems, which verify relevant plan member data and eligibility, while also performing a drug utilization review to help evaluate clinical appropriateness and safety and confirming that the pharmacy will receive payment for the prescription. We are also able to build client-specific networks and narrow networks to further drive savings for our clients.

Prescription Management Systems - We dispense prescription drugs both directly, through one of our mail order or specialty pharmacies, or through a network of retail pharmacies, described above. All prescriptions processed through our systems, whether they are filled through one of our mail order or specialty dispensing pharmacies or through a pharmacy in our retail network, are analyzed, processed and documented by our proprietary prescription management systems. These systems provide essential features and functionality to allow a plan member to use their prescription drug benefit. These systems also streamline the process by which prescriptions are processed by staff and network pharmacists, by enhancing review of various items through automation, including, but not limited to, plan eligibility, early refills, duplicate dispensing, appropriateness of dosage, drug interactions or allergies, over-utilization and potential fraud.

Clinical Services - We offer multiple clinical programs and services to help clients manage overall pharmacy and health care costs in a clinically appropriate manner. Our programs are primarily designed to promote good health outcomes, and to help target inappropriate utilization and non-adherence to medication, each of which may result in adverse medical events that negatively impact member health and client pharmacy and medical spend. In this regard, we offer various utilization management, medication management, quality assurance, adherence and counseling programs to complement the client's plan design and clinical strategies.

Disease Management Programs - Our clinical services utilize advanced protocols and offer clients convenience in working with health care providers and other third parties. Our Accordant® programs include integrated rare disease management programs, which cover diseases such as rheumatoid arthritis, Parkinson's disease, seizure disorders and multiple sclerosis. The majority of these integrated programs are accredited by the National Committee for Quality Assurance ("NCQA"), a private, not-for-profit organization that evaluates, accredits and certifies a wide range of health care organizations. They have also been awarded Case Management Accreditation from URAC.

Medical Pharmacy Management - We offer a technology platform, NovoLogix®, an online preauthorization tool that helps identify and capture cost savings opportunities for specialty drugs billed under the medical benefit by identifying outliers to appropriate dosages and costs, and helps to ensure appropriate clinical use of these drugs.

Pharmacy Services Information Systems - We currently operate and support a small number of claim adjudication platforms to support our Pharmacy Services Segment. However, the majority of our clients have migrated to one platform. These information systems incorporate architecture that centralizes the data generated from filling mail order prescriptions, adjudicating retail pharmacy claims and delivering other solutions to our PBM clients. Our Health Engagement Engine™ technology and proprietary clinical algorithms help enable our mail and specialty pharmacists provide quality care, and our

enterprise digital strategy and integrated digital offerings help patients seamlessly manage mail, specialty and retail prescriptions.

Pharmacy Services Clients - Our clients are primarily employers, insurance companies, unions, government employee groups, health plans, Medicare Part D plans, Managed Medicaid plans and plans offered on public and private exchanges, other sponsors of health benefit plans and individuals located throughout the United States. We provide pharmaceuticals to eligible members in benefit plans maintained by our clients and utilize our information systems, among other things, to help perform safety checks, drug interaction screening and identify opportunities for generic substitution. We generate substantially all of our Pharmacy Services Segment net revenue from dispensing and managing prescription drugs to eligible members in benefit plans maintained by our clients. In 2016, net revenues from Aetna accounted for approximately 11.2% of our consolidated net revenues. In 2015 and 2014, no single PBM client accounted for 10% or more of our consolidated net revenues.

Pharmacy Services Seasonality - The majority of our Pharmacy Services Segment revenues are not seasonal in nature. However, our quarterly earnings and operating cash flows are impacted by the Medicare Part D benefit design and changes in the composition of our membership. The Medicare Part D standard benefit design results in coverage that varies with a member's cumulative annual out-of-pocket costs. The benefit design generally results in plan sponsors sharing a greater portion of the responsibility for total prescription drug costs in the early part of the year. As a result, the PDP plan pay percentage or benefit ratio generally decreases and operating profit generally increases as the year progresses.

Pharmacy Services Competition - We believe the primary competitive factors in the industry include: (i) the ability to negotiate favorable discounts from drug manufacturers as well as to negotiate favorable discounts from, and access to, retail pharmacy networks; (ii) the ability to identify and apply effective cost management programs utilizing clinical strategies including the development and utilization of preferred formularies; (iii) the ability to market PBM products and services; (vii) the commitment to provide flexible, clinically-oriented services to clients and be responsive to clients' needs; and the quality, scope and costs of products and services offered to clients and their members, as well as operational excellence in delivering services. The Pharmacy Services Segment has a significant number of competitors offering PBM services including large, national PBM companies, PBMs owned by large national health plans and smaller standalone PBMs (e.g., Express Scripts, OptumRx, Humana, Prime Therapeutics and MedImpact).

Retail/LTC Segment

As of December 31, 2016, the Retail/LTC Segment included 9,709 retail locations (of which 7,980 were our stores that operated a pharmacy and 1,674 were our pharmacies located within Target Corporation ("Target") stores), our online retail pharmacy websites, CVS.com®, Navarro.com™ and Onofre.com.br™, 38 onsite pharmacy stores, our long-term care pharmacy operations and our retail health care clinics. The retail locations are in 49 states, the District of Columbia, Puerto Rico and Brazil operating primarily under the CVS Pharmacy®, CVS®, CVS Pharmacy y más®, Longs Drugs®, Navarro Discount Pharmacy® and Drogaria Onofre™ names. With the addition of the pharmacies of Target, we currently operate in all of the top 100 United States drugstore markets. The CVS Pharmacy retail drugstores sell prescription drugs and a wide assortment of over-the-counter and personal care products, beauty and cosmetic products, and general merchandise, which we refer to as "front store" products. The pharmacies within Target stores sell prescription drugs and over-the-counter drugs that are required to be held behind the counter. Existing retail stores range in size from approximately 5,000 to 30,000 square feet, although most new stores range in size from approximately 11,000 to 15,000 square feet and typically include a drive-thru pharmacy. The pharmacies within Target stores range in size from approximately 450 to 1,100 square feet. During 2016, our Retail/LTC Segment filled approximately 1.2 billion prescriptions (counting 90-day prescriptions as three prescriptions), and we held approximately 23.8% of the United States retail pharmacy market.

Our acquisition of Omnicare broadened our base of pharmacy care to an additional dispensing channel, long-term care pharmacy. Omnicare's long-term care ("LTC") operations include the distribution of pharmaceuticals, related pharmacy consulting and other ancillary services to chronic care facilities and other care settings. Omnicare also provides commercialization services under the name RxCrossroads®. LTC is comprised of 152 spoke pharmacies that primarily handle new prescription orders, of which 32 are also hub pharmacies that use automation to support spoke pharmacies with refill prescriptions. LTC primarily operates under the Omnicare® and NeighborCare® names. With the addition of the

LTC operations, we are continuing to enhance our service offerings to further address the needs of an aging population throughout the continuum of senior care.

Retail Pharmacy Business Strategy - Our integrated pharmacy services model has enhanced the ability of our retail pharmacy stores to expand customer access to care while helping to lower overall health care costs and improve health outcomes. In that regard, the role of our retail pharmacist is shifting from primarily dispensing prescriptions to also providing services, including flu vaccinations as well as face-to-face patient counseling with respect to adherence to drug therapies, closing gaps in care and

recommending more cost effective drug therapies. We also provide a broad assortment of quality merchandise at competitive prices using a retail format that emphasizes service, innovation and convenience. One of the keys to our strategy is technology, which allows us to focus on constantly improving service and exploring ways to provide more personalized product offerings and services. We are leveraging digital to empower our customers and patients by making the full breadth of health care and pharmacy services available to them anytime, anywhere. We are introducing digital tools to make it easier for people to save time and money and to live healthier lives. In 2016, we rolled out CVS Pay™ nationwide, an end-to-end mobile payment solution that integrates payment, prescription pick-up and our ExtraCare® loyalty program into one spot at checkout. We believe that continuing to innovate with new and unique products and services, using innovative marketing and adjusting our mix of merchandise to match our customers' needs and preferences is very important to our ability to continue to improve customer satisfaction.

Retail/LTC Products and Services - A typical retail store sells prescription drugs and a wide assortment of high-quality, nationally advertised brand name and proprietary brand merchandise. Front store categories include over-the-counter drugs, beauty products and cosmetics, personal care products, convenience foods, photo finishing services, seasonal merchandise and greeting cards. The pharmacies within Target stores sell prescription drugs and over-the-counter drugs that are required to be held behind the counter. The LTC operations include distribution of pharmaceuticals and related consulting and ancillary services. We purchase our merchandise from numerous manufacturers and distributors. We believe that competitive sources are readily available for substantially all of the products we carry and the loss of any one supplier would not likely have a material effect on the business. Our clinics offer a variety of health care services by nurse practitioners and physician assistants.

Retail/LTC net revenues by major product group are as follows:

	Percentage of Net Revenues[1]		
	2016	2015	2014
Prescription drugs[2]	75.0%	72.9%	70.7%
Over-the-counter and personal care	10.0	10.9	11.0
Beauty/cosmetics	4.2	4.5	4.7
General merchandise and other	10.8	11.7	13.6
	100.0%	100.0%	100.0%

(1) Percentages are estimates based on store point-of-sale data for the stores and revenue system data for sales outside the stores.
(2) In 2016 and 2015, prescription drugs include LTC sales and sales in pharmacies within Target stores.

Pharmacy - Pharmacy revenues represented more than two-thirds of Retail Pharmacy revenues in each of 2016, 2015 and 2014. We believe that our pharmacy operations will continue to represent a critical part of our business due to industry demographics, e.g., an aging American population consuming a greater number of prescription drugs, pharmaceuticals being used more often as the first line of defense for managing illness, the introduction of new pharmaceutical products, and Medicare Part D. We believe our pharmacy business benefits from our investment in both people and technology, as well as our innovative partnerships with health plans, PBMs and providers. Given the nature of prescriptions, people want their prescriptions filled accurately by professional pharmacists using the latest tools and technology, and ready when promised. Consumers need medication management programs and better information to help them get the most out of their health care dollars. To assist our customers with these needs, we have introduced integrated pharmacy health care services that provide an earlier, easier and more effective approach to engaging them in behaviors that can help lower costs, improve health, and save lives. Examples include: our Patient Care Initiative, an enhanced medication adherence program; Maintenance Choice®, a program where eligible client plan members can elect to fill their maintenance prescriptions at our retail pharmacy stores for the same price as mail order; Pharmacy Advisor®, our program that facilitates pharmacist counseling, both face-to-face and over the telephone, to help participating plan members with certain chronic diseases, such as diabetes and cardiovascular conditions, to identify gaps in care, adhere to their prescribed medications and manage their health conditions; Specialty Connect®, our integrated specialty pharmacy offering which integrates specialty mail and retail capabilities, providing members with disease-state specific counseling from our experienced specialty pharmacists and the choice to bring their specialty prescriptions to a CVS Pharmacy location or submit it through our specialty mail order pharmacies; as well as ScriptSync®, a service that enables patients with multiple medications to pick up their eligible maintenance prescriptions in a single monthly CVS Pharmacy visit. Maintenance

Choice, Pharmacy Advisor, Specialty Connect and ScriptSync are all programs that demonstrate our ability to enhance the customer experience through our integrated enterprise products and services. Further evidencing our belief in the importance of pharmacy service is our continuing investment in technology, such as our Drug Utilization Review system that helps check for harmful interactions between prescription drugs and patient identified over-the-counter products, vitamins and herbal remedies; RxConnect, our proprietary pharmacy system that integrates our product delivery and clinical workflows as well as advanced patient safety functionality such as drug utilization review; our prescription refill program, ReadyFill®; and our online retail businesses, CVS.com, Navarro.com and Onofre.com.br. In December 2015, we expanded our pharmacy offering with the

acquisition of the pharmacies within Target stores. Now that the system integration is complete, we will offer all the same pharmacy services available in our retail drugstores and online at our pharmacies within Target stores.

Front Store - Front store revenues benefited from our strategy to innovate with new and unique products and services, using innovative personalized marketing and adjusting our mix of merchandise to match our customers' needs and preferences. A key component of our front store strategy is our ExtraCare® card program, which is helping us continue to build our loyal customer base. The ExtraCare program is one of the largest and most successful retail loyalty programs in the United States. The ExtraCare program allows us to balance our marketing efforts so we can reward our best customers by providing them automatic sale prices, customized coupons, ExtraBucks® rewards and other benefits. We continue to launch and enhance new and exclusive brands to create unmatched offerings in beauty. Another component of our front store strategy is our unique product offerings, which include a full range of high-quality CVS Pharmacy® and proprietary brand products that are only available through CVS Pharmacy stores. We currently carry approximately 7,000 CVS Pharmacy and proprietary brand products, which accounted for approximately 22.6% of our front store revenues during 2016. These products include expanded offerings of healthy foods and vitamins. Furthermore, we are tailoring certain groups of stores, such as suburban area stores, to better meet the needs of our customers. This includes the launch of CVS Curbside in late 2016. Developed in partnership with industry leader Curbside, customers can use the CVS Pharmacy app to have front store purchases delivered to their car when they pull up to our store.

MinuteClinic - As of December 31, 2016, we operated 1,139 MinuteClinic® locations in 33 states and the District of Columbia, of which 1,053 were located in our retail pharmacy stores, 79 were located in Target stores and seven were located in corporate campuses or other locations. We opened seven new clinics during 2016. Our clinics are staffed by nurse practitioners and physician assistants who utilize nationally established guidelines to diagnose and treat minor health conditions, perform health screenings, monitor chronic conditions, provide wellness services and deliver vaccinations. Insurers value our clinics because they provide convenient, high-quality, cost-effective care, in many cases offering an attractive alternative to more expensive sites of care. As a result, visits paid for by employers, health insurers or other third parties accounted for approximately 91% of MinuteClinic's total revenues in 2016. MinuteClinic is collaborating with our Pharmacy Services Segment to help meet the needs of CVS Caremark's client plan members by offering programs that can improve member health and lower costs. MinuteClinic is now affiliated with more than 70 major health systems and continues to build a platform that supports primary care.

Long-term Care - Through our Omnicare business, we provide the distribution of pharmaceuticals, related pharmacy consulting and other ancillary services to chronic care facilities and other care settings. LTC's customers consist of skilled nursing facilities, assisted living facilities, independent living communities, hospitals, correctional facilities, and other health care service providers. We provide pharmacy consulting, including monthly patient drug therapy evaluations, assist in compliance with state and federal regulations and provide proprietary clinical and health management programs. We also provide pharmaceutical case management services for retirees, employees and dependents who have drug benefits under corporate-sponsored health care programs.

Onsite Pharmacies - We also operate a limited number of small pharmacies located at client sites, typically under the CarePlus®, CarePlus CVS Pharmacy™ or CVS Pharmacy® name, which provide certain health plan members and customers with a convenient alternative for filling their prescriptions.

Retail Pharmacy Drugstore Development - The addition of new stores has played, and will continue to play, a key role in our continued growth and success. Our store development program focuses on three areas: entering new markets, adding stores within existing markets and relocating stores to more convenient sites. During 2016, we opened 130 new and acquired retail stores, relocated 50 stores and closed 46 stores. During the last five years, we opened more than 1,100 new and relocated stores, and acquired 1,841 stores including the pharmacies acquired from Target. We believe that continuing to grow our store base and locating stores in more accessible markets are essential components to compete effectively in the current health care environment. As a result, we believe that our store development program is an integral part of our ability to maintain our leadership position given the changing health care landscape and to meet the increasing needs of our customers.

Retail/LTC Information Systems - We have continued to invest in information systems to enable us to deliver exceptional customer service, enhance safety and quality, and expand our patient care services while lowering operating costs. Leveraging our retail pharmacy fulfillment system, RxConnect and our proprietary WeCARE Workflow, supports

our pharmacy teams by prioritizing work to meet customer expectations, facilitating prescriber outreach, and seamlessly integrating our clinical programs. This solution delivers improved efficiency and enhances the customer experience, as well as providing a framework to accommodate the evolution of pharmacy practice and the expansion of our clinical programs. Our Health Engagement Engine™ technology and proprietary clinical algorithms enable us to help identify opportunities for our pharmacists to deliver face-to-face counseling regarding patient health and safety matters, including adherence issues, gaps in care and management

of certain chronic health conditions. Our digital strategy empowers the consumer to navigate their pharmacy experience and manage their condition through our on-line and mobile tools that offer utility and convenience. This includes the ability to schedule an appointment at MinuteClinic, get next-in line alerts or health reminders and appointment updates via text messages. Our integrated digital offerings help patients seamlessly manage retail, mail and specialty prescriptions dispensed by a CVS Pharmacy or long-term care location and enhance front store personalization to drive value for customers. We experienced strong adoption of our digital solutions with our mobile app receiving critical acclaim for ease of use and our text message program experiencing significant growth. LTC's Digital Technology suite, Omniview®, improves the efficiency of customers' operations with tools that include executive dashboards, pre-admission pricing, electronic ordering of prescription refills, proof-of-delivery tracking, access to patient profiles, receipt and management of facility bills, and real-time validation of Medicare Part D coverage, among other capabilities.

Retail/LTC Customers - The success of our retail drugstore and long-term care businesses is dependent upon our ability to establish and maintain contractual relationships with pharmacy benefit managers and other payors on acceptable terms. Pharmacy benefit managers, managed care organizations, government-funded health care programs, commercial employers and other third party payors accounted for 98.9% of our 2016 pharmacy revenues. No single Retail/LTC payor accounts for 10% or more of our annual consolidated net revenues.

Retail/LTC Seasonality - The majority of our revenues, particularly pharmacy revenues, are generally not seasonal in nature. However, retail front store revenues tend to be higher during the December holiday season. In addition, both pharmacy and retail front store revenues are affected by the timing and severity of the cough, cold and flu season. For additional information, we refer you to "Risks related to the seasonality of our business" in Item 1A. Risk Factors.

Retail/LTC Competition - The retail drugstore business is highly competitive. We believe that we compete principally on the basis of: (i) store location and convenience, (ii) customer service and satisfaction, (iii) product selection and variety, and (iv) price. In the markets we serve, we compete with other drugstore chains (e.g., Walgreens and Rite Aid), supermarkets, discount retailers (e.g., Wal-Mart), independent pharmacies, restrictive pharmacy networks, membership clubs, Internet companies, and retail health clinics (including urgent care centers), as well as other mail order pharmacies.

LTC pharmaceutical services are highly regional or local in nature and within a given geographic area of operation, highly competitive. Our largest competitor nationally is PharMerica. We also compete with numerous local and regional institutional pharmacies, pharmacies owned by long-term care facilities and local retail pharmacies. Some states have enacted "freedom of choice" or "any willing provider" requirements as part of their state medicaid programs or in separate legislation, which may increase the competition that we face in providing services to long-term care facility residents in these states.

Corporate Segment

Our Corporate Segment provides management and administrative services to support the overall operations of the Company. The Corporate Segment consists of certain aspects of our executive management, corporate relations, legal, compliance, human resources, information technology and finance departments.

Generic Sourcing Venture

In 2014, the Company and Cardinal Health, Inc. ("Cardinal") established Red Oak Sourcing, LLC ("Red Oak"), a generic pharmaceutical sourcing entity in which the Company and Cardinal each own 50%. Under this arrangement, the Company and Cardinal contributed their sourcing and supply chain expertise to Red Oak and agreed to source and negotiate generic pharmaceutical supply contracts for both companies through Red Oak; however, Red Oak does not own or hold inventory on behalf of either company.

Working Capital Practices

We fund the growth of our business through a combination of cash flow from operations, commercial paper and other short-term borrowings, proceeds from sale-leaseback transactions and long-term borrowings. For additional information on our working capital practices, we refer you to the caption "Management's Discussion and Analysis - Liquidity and Capital Resources" in our Annual Report to Stockholders for the year ended December 31, 2016, which section is

incorporated by reference herein. The majority of our non-pharmacy revenues are paid in cash, or with debit or credit cards. Managed care organizations, pharmacy benefit managers, government-funded health care programs, commercial employers and other third party insurance programs, which represent the vast majority of our consolidated pharmacy revenues, typically settle in less than 30 days. With the exception of our Medicare Part D services, the remainder of our consolidated pharmacy revenues are paid in cash, or with debit or credit cards. As a provider of Medicare Part D services, we contract annually with CMS. Utilization of

services each plan year results in the accumulation of either a receivable from or a payable to CMS. The timing of settlement of the receivable or payable with CMS may take several quarters which impacts our working capital from year to year.

Colleague Development

As of December 31, 2016, we employed approximately 250,000 colleagues, which included approximately 36,000 pharmacists, nurses, nurse practitioners and physician assistants. The total included approximately 92,000 part-time colleagues who work less than 30 hours per week. To deliver the highest levels of service to our customers, we devote considerable time and attention to our people and service standards. We emphasize attracting and training knowledgeable, friendly and helpful associates to work in our organization.

Intellectual Property

We have registered and/or applied to register a variety of our trademarks and service marks used throughout our business, as well as domain names, and rely on a combination of copyright, patent, trademark and trade secret laws, in addition to contractual restrictions, to establish and protect our proprietary rights. We regard our intellectual property as having significant value in our Pharmacy Services and Retail/LTC segments. We are not aware of any facts that could materially impact our continuing use of any of our intellectual property.

Government Regulation

Overview - Much of our business is subject to federal and state laws and regulations. In addition, many of our PBM clients and our payors in the Retail/LTC Segment, including insurers, Medicare Part D plans, Managed Medicaid plans and managed care organizations ("MCOs"), are themselves subject to extensive regulations that affect the design and implementation of prescription drug benefit plans that they sponsor. Similarly, our LTC clients, such as skilled nursing facilities, are subject to government regulations, including many of the same government regulations to which we are subject. The application of these complex legal and regulatory requirements to the detailed operation of our business creates areas of uncertainty. Further, there are numerous proposed health care laws and regulations at the federal and state levels, some of which could adversely affect our business if they are enacted. We are unable to predict what federal or state legislation or regulatory initiatives may be enacted in the future relating to our business or the health care industry in general, or what effect any such legislation or regulations might have on our business. Any failure or alleged failure to comply with applicable laws and regulations as summarized below, or any adverse applications of, or changes in, the laws and regulations affecting our business, could have a material adverse effect on our operating results and/or financial condition. See Item 3, "Legal Proceedings" for further information.

Although we believe that we are in material compliance with existing laws and regulations applicable to our various business lines, we cannot give any assurances that our business, financial condition and results of operations will not be materially adversely affected, or that we will not be required to materially change our business practices, based on: (i) future enactment of new health care or other laws or regulations; (ii) the interpretation or application of existing laws or regulations, including the laws and regulations described in this Government Regulation section, as they may relate to our business, the pharmacy services, retail pharmacy, long-term care or retail clinic industry or to the health care industry generally; (iii) pending or future federal or state governmental investigations of our business or the pharmacy services, retail pharmacy, long-term care or retail clinic industry or of the health care industry generally; (iv) institution of government enforcement actions against us; (v) adverse developments in any pending *qui tam* lawsuit against us, whether sealed or unsealed, or in any future *qui tam* lawsuit that may be filed against us; or (vi) adverse developments in other pending or future legal proceedings against us or affecting the pharmacy services, retail pharmacy, long-term care or retail clinic industry or the health care industry generally.

Laws and Regulations Related to Each Operating Segment of Our Business

Laws Related to Reimbursement by Government Programs - We are subject to various state and federal laws concerning our submission of claims for reimbursement by Medicare, Medicaid and other government-sponsored health care programs. Potential sanctions for violating these laws include recoupment or reduction of government reimbursement amounts, civil penalties, multiples damages, and exclusion from participation in government health care programs. Such

laws include the federal False Claims Act ("FCA"), the federal Anti-Kickback statute, various state false claims acts and anti-kickback statutes, the federal "Stark Law" and related state laws. In particular, the FCA prohibits intentionally submitting, conspiring to submit, or causing to be submitted, false claims, records, or statements to the federal government, or intentionally failing to return overpayments, in connection with reimbursement by federal government programs. As part of the Patient Protection and Affordable Care Act and the Health Care and Education Reconciliation Act (collectively, "ACA"), the federal Anti-Kickback Statute was amended in 2010 to provide that any claim for government reimbursement violates the FCA where it results from a

violation of the Anti-Kickback Statute. Most states have enacted false claims laws analogous to the FCA, and both federal and state false claims laws permit private individuals to file *qui tam* or "whistleblower" lawsuits on behalf of the federal or state government. Further, the federal Stark Law generally prohibits physicians from referring Medicare or Medicaid beneficiaries for certain services, including outpatient prescription drugs, to any entity with which the physician, or an immediate family member of the physician, has a financial relationship. The Stark Law further prohibits the entity receiving a prohibited referral from presenting a claim for reimbursement by Medicare or Medicaid for services furnished pursuant to the prohibited referral. Various states have enacted similar laws.

The 21st Century Cures Act ("Cures Act"), enacted in December 2016, among other things shifted payment for Medicare Part B durable medical equipment ("DME") infused drugs from one pricing benchmark to another as of January 1, 2017. This change, depending upon the particular drug, is expected to cause both increases and decreases in reimbursement, although the overall impact is expected to be negative. In addition, the change in presidential administration has caused uncertainty regarding the implementation of the Cures Act, meaning that the full impact of this new law on the Company is uncertain.

Anti-Remuneration Laws - Federal law prohibits, among other things, an entity from knowingly and willfully offering, paying, soliciting or receiving, subject to certain exceptions and "safe harbors," any remuneration to induce the referral of individuals or the purchase, lease or order of items or services for which payment may be made under Medicare, Medicaid or certain other federal health care programs. A number of states have similar laws, some of which are not limited to services paid for with government funds. Sanctions for violating these federal and state anti-remuneration laws may include imprisonment, criminal and civil fines, and exclusion from participation in Medicare, Medicaid and other government-sponsored health care programs.

Antitrust and Unfair Competition - The Federal Trade Commission ("FTC") has authority under Section 5 of the Federal Trade Commission Act ("FTCA") to investigate and prosecute practices that are "unfair trade practices" or "unfair methods of competition." Numerous lawsuits have been filed throughout the United States against pharmaceutical manufacturers, retail pharmacies and/or PBMs under various state and federal antitrust and unfair competition laws challenging, among other things: (i) brand drug pricing practices of pharmaceutical manufacturers, (ii) the maintenance of retail or specialty pharmacy networks by PBMs, and (iii) various other business practices of PBMs and retail pharmacies. To the extent that we appear to have actual or potential market power in a relevant market or CVS Pharmacy or CVS Specialty plays a unique or expanded role in a PBM product offering, our business arrangements and uses of confidential information may be subject to heightened scrutiny from an anti-competitive perspective and possible challenge by state or federal regulators or private parties.

Privacy and Confidentiality Requirements - Many of our activities involve the receipt, use and disclosure by us of personally identifiable information ("PII") as permitted in accordance with applicable federal and state privacy and data security laws, which require organizations to provide appropriate privacy and security safeguards for such information. In addition to PII, we use and disclose de-identified data for analytical and other purposes when permitted. Additionally, there are industry standards for handling credit card data known as the Payment Card Industry Data Security Standard, which are a set of requirements designed to help ensure that entities that process, store or transmit credit card information maintain a secure environment. Certain states have recently incorporated these requirements into state laws.

The federal Health Insurance Portability and Accountability Act of 1996 and the regulations issued thereunder (collectively, "HIPAA") impose extensive requirements on the way in which health plans, health care providers, health care clearinghouses (known as "covered entities") and their business associates use, disclose and safeguard protected health information ("PHI"). Criminal penalties and civil sanctions may be imposed for failing to comply with HIPAA standards. The Health Information Technology for Economic and Clinical Health Act (the "HITECH Act"), enacted as part of the American Recovery and Reinvestment Act of 2009, amended HIPAA to impose additional restrictions on third-party funded communications using PHI and the receipt of remuneration in exchange for PHI. It also extended HIPAA privacy and security requirements and penalties directly to business associates. In addition to HIPAA, state health privacy laws apply to the extent they are more protective of individual privacy than is HIPAA.

Finally, the Health Insurance Marketplaces (formerly known as the "exchanges") are required to adhere to privacy and security standards with respect to PII, and to impose privacy and security standards that are at least as protective of PII as those the Health Insurance Marketplace has implemented for itself or non-Health Insurance Marketplace entities, which

include insurers offering plans through the Health Insurance Marketplaces and their designated downstream entities, including PBMs and other business associates. These standards may differ from, and be more stringent than, HIPAA.

Consumer Protection Laws - The federal government has many consumer protection laws, such as the FTCA, the Federal Postal Service Act and the FTC's Telemarketing Sales Rule. Most states also have similar consumer protection laws. These laws have been the basis for investigations, lawsuits and multi-state settlements relating to, among other matters, the marketing

of loyalty programs and health care services, pricing accuracy, expired front store products, financial incentives provided by drug manufacturers to pharmacies in connection with therapeutic interchange programs and disclosures related to how personal data is used and protected.

Government Agreements and Mandates - The Company and/or its various affiliates are subject to certain consent decrees, settlement agreements, corrective action plans and corporate integrity agreements with various federal, state and local authorities relating to such matters as privacy practices, controlled substances, Medicare Part D prescription drug plans, expired products, environmental and safety matters, marketing and advertising practices, PBM, long term care and pharmacy operations and various other business practices. These agreements may contain certain ongoing reporting, monitoring or other compliance requirements for the Company. Failure to meet the Company's obligations under these agreements could result in civil or criminal remedies, financial penalties, administrative remedies, and/or exclusion from participation in federal health care programs.

Environmental and Safety Regulation - Our business is subject to various federal, state and local laws, regulations and other requirements pertaining to protection of the environment, public health and employee safety, including, for example, regulations governing the management of hazardous substances, the cleaning up of contaminated sites, and the maintenance of safe working conditions in our stores, distribution centers and other facilities. Governmental agencies on the federal, state and local levels have, in recent years, increasingly focused on the retail and health care sectors' compliance with such laws and regulations, and have at times pursued enforcement activities. Any failure to comply with these regulations could result in fines or other sanctions by government authorities.

Health Reform Legislation - Passed in 2010, ACA affects virtually every aspect of health care in the country. In addition to establishing the framework for every individual to have health coverage, ACA enacted a number of significant health care reforms. Many of these reforms affect the coverage and plan designs that are provided by our health plan clients. As a result, these reforms impact a number of our services and business practices. Some significant ACA provisions are still being finalized (e.g., nondiscrimination in health programs and activities, excise tax on high-cost employer-sponsored health coverage) and all or parts of ACA may be repealed or replaced, so the full impact of ACA on our Company is still uncertain.

Pharmacy and Professional Licensure and Regulation - We are subject to a variety of intersecting state and federal statutes and regulations that govern the wholesale distribution of drugs; operation of retail, specialty, infusion, LTC and mail order pharmacies; licensure of facilities and professionals, including pharmacists, technicians and nurses; registration of facilities with the United States Drug Enforcement Administration ("DEA") and analogous state agencies that regulate controlled substances; packaging, storing, shipping and tracking of pharmaceuticals; repackaging of drug products; labeling, medication guides and other consumer disclosures; interactions with prescribers and health care professionals; compounding of prescription medications; dispensing of controlled and non-controlled substances; counseling of patients; transfers of prescriptions; advertisement of prescription products and pharmacy services; security; inventory control; recordkeeping; reporting to Boards of Pharmacy, the United States Food and Drug Administration ("FDA"), the Consumer Product Safety Commission, the DEA and related state agencies; and other elements of pharmacy practice. Pharmacies are highly regulated and have contact with a wide variety of local, state and federal agencies, with various powers to investigate, inspect, audit or solicit information, including Boards of Pharmacy and Nursing, the DEA, the FDA, the United States Department of Justice, the United States Department of Health and Human Services ("HHS") and others. Many of these agencies have broad enforcement powers, conduct audits on a regular basis, can impose substantial fines and penalties, and may revoke the license, registration or program enrollment of a facility or professional.

Telemarketing and Other Outbound Contacts - Certain federal and state laws, such as the Telephone Consumer Protection Act, give the FTC, Federal Communications Commission ("FCC") and state attorneys general the ability to regulate, and bring enforcement actions relating to, telemarketing practices and certain automated outbound contacts such as phone calls, texts or emails. Under certain circumstances, these laws may provide consumers with a private right of action. Violations of these laws could result in substantial statutory penalties and other sanctions.

Laws and Regulations Related to Our Pharmacy Services Segment

In addition to the laws and regulations discussed above that may affect our business as a whole, we are subject to federal, state and local statutes and regulations governing the operation of our Pharmacy Services Segment specifically. Among these are the following:

PBM Laws and Regulation - Legislation seeking to regulate PBM activities in a comprehensive manner has been introduced or enacted in a number of states. This legislation could adversely impact our ability to conduct business on commercially reasonable terms in states where the legislation is in effect.

In addition, certain quasi-regulatory organizations, including the National Association of Boards of Pharmacy and the National Association of Insurance Commissioners ("NAIC") have issued model regulations or may propose future regulations concerning PBMs and/or PBM activities. Similarly, credentialing organizations such as NCQA and URAC may establish voluntary standards regarding PBM, mail or specialty pharmacy activities. While the actions of these quasi-regulatory or standard-setting organizations do not have the force of law, they may influence states to adopt their requirements or recommendations and influence client requirements for PBM or specialty pharmacy services. Moreover, any standards established by these organizations could also impact our health plan clients and/or the services we provide to them.

Medicare Part D - The Medicare Part D program, which makes prescription drug coverage available to eligible Medicare beneficiaries through private insurers, regulates all aspects of the provision of Medicare drug coverage, including enrollment, formularies, pharmacy networks, marketing, and claims processing. The Medicare Part D program has undergone significant legislative and regulatory changes since its inception, and continues to attract a high degree of legislative and regulatory scrutiny. The applicable government rules and regulations continue to evolve. CMS has imposed restrictions and issued new requirements to protect Medicare Part D beneficiaries and has used its authority to sanction and impose civil monetary penalties on plans for non-compliance.

Network Access Legislation - Medicare Part D and a majority of states now have some form of legislation affecting the ability to limit access to a pharmacy provider network or remove network providers. For example, certain "any willing provider" legislation may require us or our clients to admit a non-participating pharmacy if such pharmacy is willing and able to meet the plan's price and other applicable terms and conditions for network participation. These laws could negatively impact the services and economic benefits achievable through a limited pharmacy provider network.

Also, a majority of states now have some form of legislation affecting our ability (and the health plans' ability) to conduct audits of network pharmacies regarding claims submitted to us for payment. These laws could negatively impact our ability to recover overpayments in health care payments stemming from pharmacy audits. Lastly, several states have passed legislation regulating our ability to manage and establish maximum allowable costs ("MAC") for generic prescription drugs. MAC methodology is a common cost management practice used by private and public payors (including CMS) to pay pharmacies for dispensing generic prescription drugs. MAC prices specify the allowable reimbursement by a PBM for a particular strength and dosage of a generic drug that is available from multiple manufacturers but sold at different prices. State legislation can regulate the disclosure of MAC prices and MAC price methodologies, the kinds of drugs that a PBM can pay at a MAC price, and the rights of pharmacies to appeal a MAC price established by a PBM. These laws could negatively impact our ability to establish MAC prices for generic drugs.

Contract Audits - We are subject to audits of many of our contracts, including our PBM client contracts, our PBM rebate contracts, our PBM network contracts, our contracts relating to Medicare Part D and the agreements our pharmacies enter into with other payors. Because some of our contracts are with state or federal governments or with entities contracted with state or federal agencies, audits of these agreements are often regulated by the federal or state agencies responsible for administering federal or state benefits programs, including those which operate Medicaid fee for service plans, Managed Medicaid plans, Medicare Part D plans or Medicare Advantage organizations.

Federal Employee Health Benefits Program - We have a contractual arrangement with carriers for the Federal Employee Health Benefits Program, such as the BlueCross BlueShield Association, to provide pharmacy services to federal employees, postal workers, annuitants, and their dependents under the Government-wide Service Benefit Plan, as authorized by the Federal Employees Health Benefits Act ("FEHBA") and as part of the Federal Employees Health

Benefits Program. These arrangements subjects us to certain aspects of FEHBA, and other federal regulations, such as the Federal Employees Health Benefits Acquisition Regulation, that otherwise are not applicable to us.

State Insurance Laws - PDPs and our PBM service contracts, including those in which we assume certain risks under performance guarantees or similar arrangements, are generally not subject to insurance regulation by the states. However, state

departments of insurance are increasing their oversight of PBM activities due to legislation passing in several states requiring PBMs to register or obtain a license with the department. Rulemaking is either underway or has already taken place in a few states with the areas of focus on licensure requirements, pharmacy reimbursement for generics (MAC reimbursement) and pharmacy audits - most of which fall under the state insurance code. Additionally, some states have laws that prohibit submitting a false claim or making a false record or statement in order to secure reimbursement from an insurance company. These state laws vary, and violation of them may lead to the imposition of civil or criminal penalties.

As a PDP, SilverScript is subject to state insurance laws limited to licensure and solvency. In addition, PBM offerings of prescription drug coverage under certain risk arrangements may be subject to laws and regulations in various states. Such laws may require that the party at risk become licensed as an insurer, establish reserves or otherwise demonstrate financial viability. Laws that may apply in such cases include insurance laws and laws governing MCOs and limited prepaid health service plans.

ERISA Regulation - The Employee Retirement Income Security Act of 1974, as amended ("ERISA"), provides for comprehensive federal regulation of certain employee pension and benefit plans, including private employer and union sponsored health plans and certain other plans that contract with us to provide PBM services. In general, we assist plan sponsors in the administration of the prescription drug portion of their health benefit plans in accordance with the plan designs adopted by the plan sponsors. We do not believe that the conduct of our business subjects us to the fiduciary obligations of ERISA, except when we have specifically contracted with a plan sponsor to accept limited fiduciary responsibility, such as for the adjudication of initial prescription drug benefit claims and/or the appeals of denied claims under a plan, and with respect to the Contraceptive Coverage Mandate, one of the health reforms presently included in ACA.

In addition to its fiduciary provisions, ERISA imposes civil and criminal liability on service providers to health plans and certain other persons if certain forms of illegal remuneration are made or received. These provisions of ERISA are broadly written and their application to specific business practices is often uncertain.

Formulary and Plan Design Regulation - A number of government entities regulate the administration of prescription drug benefits. HHS regulates how Medicare Part D formularies are developed and administered, including requiring the inclusion of all drugs in certain classes and categories, subject to limited exceptions. Under ACA, CMS imposes drug coverage requirements for health plans required to cover essential health benefits, including plans offered through federal or state exchanges. Additionally, NAIC and health care accreditation agencies like NCQA and URAC have developed model acts and standards for formulary development that are often incorporated into government requirements. Many states regulate the scope of prescription drug coverage, as well as the delivery channels to receive such prescriptions, for insurers, MCOs and Medicaid managed care plans. The increasing government regulation of formularies could significantly affect our ability to develop and administer formularies, networks and other plan design features on behalf of our insurer, MCO and other clients. Similarly, some states prohibit health plan sponsors from implementing certain restrictive design features. This regulation could limit or preclude (i) limited networks, (ii) a requirement to use particular providers, (iii) copayment differentials among providers and (iv) formulary tiering practices.

Managed Care Reform - In addition to health reforms enacted by ACA, proposed legislation has been considered at the state level, and legislation has been enacted in several states, aimed primarily at providing additional rights and access to drugs to individuals enrolled in managed care plans. This legislation may impact the design and implementation of prescription drug benefit plans sponsored by our PBM health plan clients and/or the services we provide to them. Both the scope of the managed care reform proposals considered by state legislatures and reforms enacted by states to date vary greatly, and the scope of future legislation that may be enacted is uncertain.

Disease Management Services Regulation - We provide disease management programs to PBM plan members for rare medical conditions and arrange for them to receive disease management programs for common medical conditions. State laws regulate the practice of medicine, the practice of pharmacy and the practice of nursing. Clinicians engaged in a professional practice in connection with the provision of disease management services must satisfy applicable state licensing requirements and must act within their scope of practice.

Third Party Administration and Other State Licensure Laws - Many states have licensure or registration laws governing certain types of administrative organizations, such as preferred provider organizations, third party

administrators and companies that provide utilization review services. Several states also have licensure or registration laws governing the organizations that provide or administer consumer card programs (also known as cash card or discount card programs).

Laws and Regulations Related to Our Retail/LTC Segment

In addition to the laws and regulations discussed above that may affect our business as a whole, we are subject to federal, state and local statutes and regulations governing the operation of our Retail/LTC Segment specifically. Among these are the following:

Specific FDA Regulation - The FDA generally has authority to, among other things, regulate the manufacture, distribution, sale and labeling of many products sold through retail pharmacies, including prescription drugs, over-the-counter medications, medical devices (including mobile medical devices), cosmetics, dietary supplements and certain food items.

Retail Clinics - States regulate retail clinics operated by nurse practitioners or physician assistants through physician oversight, lab licensing and the prohibition of the corporate practice of medicine. A number of states have implemented or proposed laws or regulations that impact certain components of retail clinic operations such as physician oversight, signage, third party contracting requirements, bathroom facilities, and scope of services. These laws and regulations may affect the operation and expansion of our owned and managed retail clinics.

Available Information

CVS Health Corporation is a Delaware corporation. Our corporate office is located at One CVS Drive, Woonsocket, Rhode Island 02895, telephone (401) 765-1500. Our common stock is listed on the New York Stock Exchange under the trading symbol "CVS." General information about CVS Health is available through the Company's Web site at *http://www.cvshealth.com*. Our financial press releases and filings with the United States Securities and Exchange Commission ("SEC") are available free of charge within the Investors section of our Web site at *http://www.cvshealth.com/investors*. In addition, the SEC maintains an internet site that contains reports, proxy and information statements and other information regarding issuers, such as the Company, that file electronically with the SEC. The address of that Web site is *http://www.sec.gov.*

Item 1A. Risk Factors

Our business is subject to various industry, economic, regulatory and other risks and uncertainties. Our business, financial condition, results of operations, cash flows and prospects could be materially adversely affected by any one or more of the following risk factors and by additional risks and uncertainties not presently known to us or that we currently deem to be immaterial:

Risks of declining gross margins in the PBM, retail pharmacy and LTC pharmacy industries.

The PBM industry has been experiencing margin pressure as a result of competitive pressures and increased client demands for lower prices, increased revenue sharing, enhanced service offerings and/or higher service levels. In that regard, we maintain contractual relationships with generic pharmaceutical manufacturers and brand name pharmaceutical manufacturers that provide for purchase discounts and/or rebates on drugs dispensed by pharmacies in our retail network and by our specialty and mail order pharmacies (all or a portion of which may be passed on to clients). Manufacturer rebates often depend on a PBM's ability to meet contractual market share or other requirements, including in some cases the placement of a manufacturer's products on the PBM's formularies. If we lose our relationship with one or more pharmaceutical manufacturers, or if the discounts or rebates provided by pharmaceutical manufacturers decline, our business and financial results could be adversely affected. Further, competitive pressures in the PBM industry have resulted in our clients sharing in a larger portion of rebates and/or discounts received from pharmaceutical manufacturers. Market dynamics and regulatory changes have impacted our ability to offer plan sponsors pricing that includes the use of retail "differential" or "spread", which could negatively impact our future profitability. Further, changes in existing federal or state laws or regulations or the adoption of new laws or regulations relating to patent term extensions, purchase discount and rebate arrangements with pharmaceutical manufacturers, or to formulary management or other PBM services could also reduce the discounts or rebates we receive. In addition, changes in federal or state laws or regulations or the adoption of new laws or regulations relating to claims processing and billing, including our ability to use MAC lists and collect transmission fees, could adversely impact our profitability.

Our retail pharmacy, specialty pharmacy and LTC pharmacy operations have also been affected by the margin pressures described above, including client demands for lower prices, generic pricing and network reimbursement pressure. In addition, as competition increases in the markets in which we operate, a significant increase in general pricing pressures could occur, and this could require us to reevaluate our pricing structures to remain competitive. A shift in the mix of our pharmacy prescription volume towards programs offering lower reimbursement rates could adversely affect our margins, including the shift in pharmacy mix towards 90-day prescriptions at retail and the shift in pharmacy mix towards Medicare Part D prescriptions.

Finally, the margins of our LTC business are further affected by the increased efforts of health care payors to negotiate reduced or capitated pricing arrangements. These actions could also adversely affect the margins of our LTC business.

Efforts to reduce reimbursement levels and alter health care financing practices.

The continued efforts of health maintenance organizations, managed care organizations, PBMs, government entities, and other third party payors to reduce prescription drug costs and pharmacy reimbursement rates, as well as litigation and other legal proceedings relating to how drugs are priced, may impact our profitability. In particular, increased utilization of generic pharmaceuticals (which normally yield a higher gross profit rate than equivalent brand named drugs) has resulted in pressure to decrease reimbursement payments to retail, specialty, LTC and mail order pharmacies for generic drugs, causing a reduction in the generic profit rate. Historically, the effect of this trend on generic profitability has been mitigated by our efforts to negotiate reduced acquisition costs of generic pharmaceuticals with manufacturers. However, in recent years, there has been significant consolidation within the generic manufacturing industry, and it is possible that this and other external factors may enhance the ability of manufacturers to sustain or increase pricing of generic pharmaceuticals and diminish our ability to negotiate reduced acquisition costs. Any inability to offset increased costs or to modify our activities to lessen the impact could have a significant adverse effect on our results of operations.

In addition, during the past several years, the United States health care industry has been subject to an increase in governmental regulation and audits at both the federal and state levels. Efforts to control health care costs, including prescription drug costs, are continuing at the federal and state government levels. Changing political, economic and regulatory influences may significantly affect health care financing and reimbursement practices. For example, we anticipate that federal and state governments will continue to review and assess alternative health care delivery systems, payment methodologies and operational requirements for health care providers, including LTC facilities and pharmacies. A change in the composition of pharmacy prescription volume toward programs offering lower reimbursement rates could negatively impact our profitability. Any action taken to repeal or replace all or significant parts of ACA could also impact our profitability, though it is unclear at this time what the full effects will be.

ACA made several significant changes to Medicaid rebates and to reimbursement. One of these changes was to revise the definition of the Average Manufacturer Price, a pricing element common to most payment formulas, and the reimbursement formula for multi-source (i.e., generic) drugs. This change has negatively affected our reimbursement. In addition, ACA made other changes that affect the coverage and plan designs that are or will be provided by many of our health plan clients, including the requirement for health insurers to meet a minimum medical loss ratio to avoid having to pay rebates to enrollees. These ACA changes may not affect our business directly, but they could indirectly impact our services and/or business practices.

A highly competitive business environment.

Each of our retail pharmacy, LTC pharmacy, retail health clinic and pharmacy services operations currently operates in a highly competitive and evolving health care environment.

The competitive success of our retail pharmacy business, as well as our specialty pharmacy operations with non-Caremark payors, is derived by their ability to establish and maintain contractual relationships with PBMs and other payors on acceptable terms in an environment where some PBM clients are considering adopting narrow or restricted retail pharmacy networks. As a pharmacy retail business, we compete with other drugstore chains, supermarkets, on-line and other discount retailers, independent pharmacies, membership clubs, convenience stores and mass merchants, some of which are aggressively expanding into markets we serve. We also face competition from other retail health clinics, as well as other mail order pharmacies and PBMs. Competition may also come from other sources in the future. Changes in market dynamics or the actions of competitors or manufacturers, including industry consolidation, the emergence of new competitors and strategic alliances, and the exclusion from new narrow or restricted networks, could materially and adversely impact us.

We could also be adversely affected if we fail to identify or effectively respond to changes in market dynamics. For example, specialty pharmacy represents a significant and growing proportion of prescription drug spending in the United States, a significant portion of which is dispensed outside of traditional retail pharmacies. Because our specialty pharmacy operations focuses on complex and high-cost medications that serve a relatively limited universe of patients, the future

growth of this business depends to a significant extent upon expanding our ability to access key drugs and successfully penetrate key treatment categories.

The competitive success of our LTC pharmacy operations is dependent upon our ability to compete in each geographic region where we have operations. In the geographic regions we serve, we compete with PharMerica Corporation, our largest

competitor, as well as with numerous local and regional institutional pharmacies, pharmacies owned by LTC facilities and local retail pharmacies.

The competitive success of our pharmacy services business is impacted by its ability to establish and maintain contractual relationships with network pharmacies in an environment where some PBM clients are considering adopting narrow or restricted retail pharmacy networks. Competitors in the PBM industry (e.g., Express Scripts, OptumRx, Prime Therapeutics, MedImpact and Humana), include large, national PBM companies, PBMs owned by large national health plans and smaller standalone PBMs. Competition may also come from other sources in the future. In addition, changes in the overall composition of our pharmacy networks, or reduced pharmacy access under our networks, could adversely affect our claims volume and/or our competitiveness generally.

Competitors in each of our business areas may offer services and pricing terms that we may not be willing or able to offer. Strong competition in the PBM marketplace has generated greater client demand for lower pricing, increased revenue sharing and enhanced product and service offerings. Unless we can demonstrate enhanced value to our clients through innovative product and service offerings, particularly in a rapidly changing health care industry, we may be unable to remain competitive.

Changes in U.S. policy, laws and regulations, including reform of the United States health care system.

The results of the November 2016 elections have generated uncertainty with respect to, and could result in, significant changes in legislation, regulation and government policy that could significantly impact our business and the health care and retail industries. While it is not possible to predict whether and when any such changes will occur or what form any such changes may take (including through the use of Executive Orders), specific proposals discussed during and after the election that could have a material adverse effect on our business, liquidity and results of operations include, but are not limited to, immigration policies, the repeal of all or part of ACA and other significant changes to health care system legislation as well as changes with respect to tax and trade policies, tariffs and other government regulations affecting trade between the United States and other countries.

The repeal of all or part of the ACA, significant changes to Medicaid funding or even significant destabilization of the Health Insurance Marketplaces could impact the number of Americans with health insurance and, consequently, prescription drug coverage. Even if ACA remains, significant provisions of ACA have not yet been finalized (e.g., nondiscrimination in health programs and activities, excise tax on high-cost employer-sponsored health coverage) and it is uncertain whether or in what form these provisions will be finalized. We cannot predict the effect, if any, a repeal of all or part of ACA, the implementation or failure to implement the outstanding provisions of ACA, or the enactment of new health care system legislation to replace current legislation may have on our retail pharmacy, LTC pharmacy and pharmacy services operations.

In addition, much of the branded and generic drug product that we sell in our retail, mail and specialty pharmacies, and much of the other merchandise we sell, is manufactured in whole or in substantial part outside of the United States. In most cases, the products or merchandise are imported by others and sold to us. As a result, significant changes in tax or trade policies, tariffs or trade relations between the United States and other countries, such as the disallowance of tax deductions for imported merchandise or the imposition of unilateral tariffs on imported products, could result in significant increases in our costs, restrict our access to suppliers, depress economic activity, and have a material impact on our business, liquidity and results of operations. In addition, other countries may change their business and trade policies and such changes as well as any negative sentiments towards the United States in response to increased import tariffs and other changes in U.S. trade regulations could adversely affect our business.

Finally, comprehensive tax reform is likely to be considered in the current political environment. We expect that tax reform, if enacted, could have a significant impact on the Company. Current proposals aim to lower the U.S. corporate tax rate from 35% to as low as 15% or 20%, but generally broaden the base to which the lower tax rate would apply. Many aspects of tax reform plans remain unknown though, and no proposed legislation has been filed. We cannot say with certainty if tax reform will be enacted, or how it would impact the Company.

Risks related to compliance with a broad and complex regulatory framework.

Our business is subject to numerous federal, state and local laws and regulations. See “Business - Government Regulation.” In addition, during the past several years, the United States health care industry has been subject to an increase in governmental regulation and enforcement activity at both the federal and state levels. Further, uncertainties exist regarding the application of many of these legal requirements to our business. In addition, it is possible that all, or certain provision of the current health care reform legislation may be modified, repealed or otherwise invalidated. Changes in these laws and regulations and the related interpretations and enforcement practices may require extensive system and operating changes that may be difficult to

implement. Untimely compliance or noncompliance with applicable laws and regulations could adversely affect the continued operation of our business, including, but not limited to: imposition of civil or criminal penalties; significant fines or monetary penalties; suspension or disgorgement of payments from government programs; loss of required government certifications or approvals; loss of authorizations to participate in or exclusion from government reimbursement programs, such as the Medicare and Medicaid programs; or loss of registrations or licensure. The regulations to which we are subject include, but are not limited to: the laws and regulations described in the Government Regulation section; accounting standards; financial disclosure; securities laws and regulations; federal anti-trust laws; tax laws and regulations and their possible reform; laws and regulations relating to the protection of the environment and health and safety matters, including those governing exposure to, and the management and disposal of, hazardous materials and wastes; and laws and regulations of the FTC, the FCC, and the Consumer Product Safety Commission, as well as state regulatory authorities, governing the sale, advertisement and promotion of products that we sell, such as Boards of Pharmacy. The FDA, DEA and various states regulate the distribution of pharmaceuticals and controlled substances. We are required to hold valid DEA and state-level registrations and licenses, meet various security and operating standards and comply with the federal and various states' controlled substances acts and their accompanying regulations governing the sale, marketing, packaging, holding and distribution of controlled substances. The DEA, FDA and state regulatory authorities have broad enforcement powers, including the ability to suspend our registrations and licenses, seize or recall products and impose significant criminal, civil and administrative sanctions for violations of these laws and regulations. In addition, our business interests outside of the United States are subject to the Foreign Corrupt Practices Act and other applicable domestic and international laws and regulations. We are also subject to the terms of various government agreements and mandates, including those described in the Government Regulation section. In that regard, our business, financial position and results of operations could be adversely affected by existing and new government legislative, regulatory action and enforcement activity, including, without limitation, any one or more of the following:

- federal and state laws and regulations concerning the submission of claims for reimbursement by Medicare, Medicaid and other government programs, whether at retail, mail, specialty or LTC;
- federal and state laws and regulations governing the purchase, distribution, tracking, management, compounding, dispensing and reimbursement of prescription drugs and related services, whether at retail, mail, specialty or LTC, and applicable registration or licensing requirements;
- heighted enforcement of controlled substances regulations;
- the effect of the expiration of patents covering brand name drugs and the introduction of generic products;
- the frequency and rate of approvals by the FDA of new brand name and generic drugs, or of over-the-counter status for brand name drugs;
- rules and regulations issued pursuant to HIPAA and the HITECH Act; and other federal and state laws affecting the collection, use, disclosure and transmission of health or other personal information, such as federal laws on information privacy precipitated by concerns about information collection through the Internet, state security breach laws and state laws limiting the use and disclosure of prescriber information;
- health care fraud and abuse laws regulations;
- consumer protection laws affecting our health care services, our loyalty programs, our drug discount card programs, the products we sell, the informational calls we make and/or the marketing of our goods and services;
- federal, state and local environmental, health and safety laws and regulations applicable to our business, including the management of hazardous substances, storage and transportation of hazardous materials, and various recordkeeping disclosure and procedure requirements promulgated by the Occupational Safety and Health Administration that may apply to our operations;
- health care reform, managed care reform and plan design legislation;
- laws against the corporate practice of medicine;
- FDA regulation affecting the retail, LTC, specialty or PBM industry;
- government regulation of the development, administration, review and updating of formularies and drug lists including requirements and/or limitations around formulary tiering and patient cost sharing;
- state laws and regulations related to increased oversight of PBM activities by state departments of insurance pharmacy reimbursement for generics and pharmacy audits;
- drug pricing legislation, including "most favored nation" pricing;
- federal and state laws and regulations establishing or changing prompt payment requirements for payments to retail pharmacies;

- impact of network access legislation or regulations, including "any willing provider" laws, on our ability to manage pharmacy networks;
- ERISA and related regulations;
- administration of Medicare Part D, including legislative changes and/or CMS rulemaking and interpretation;
- Medicare and Medicaid regulations applicable to our business, in particular our LTC pharmacies and those of our client's facilities;

- ongoing compliance with consent decrees, corporate integrity agreements, corrective action plans and other agreements with government agencies;
- insurance licensing and other insurance regulatory requirements applicable to offering Medicare Part D programs and services or other health care services; and
- direct regulation of pharmacies or PBMs by regulatory and quasi-regulatory bodies.

The possibility of client losses and/or the failure to win new business.

Our PBM business generates net revenues primarily by contracting with clients to provide prescription drugs and related health care services to plan members. PBM client contracts often have terms of approximately three years in duration, so approximately one third of a PBM's client base typically is subject to renewal each year. In some cases, however, PBM clients may negotiate a shorter or longer contract term or may require early or periodic renegotiation of pricing prior to expiration of a contract. Our clients are generally well informed and organized, can easily move between our competitors and often seek competing bids prior to expiration of their contracts. In addition, the reputational impact of a service-related incident could negatively affect our business. These factors, together with the impact of competitive pressures, could make it difficult for us to attract new clients, retain existing clients and cross-sell additional services. Further, the PBM industry has been affected by consolidation activity that may continue in the future. In the event one or more of our PBM clients is acquired by an entity that is not also our client, we may be unable to retain all or a portion of the acquired business. These circumstances, either individually or in the aggregate, could result in an adverse effect on our business and financial results. Therefore, we continually face challenges in competing for new PBM business and retaining or renewing our existing PBM business. With respect to our LTC business, reimbursement from skilled nursing facilities for prescriptions we dispense is determined pursuant to our agreements with those skilled nursing facilities. The termination of these agreements generally causes our ability to provide services to any of the residents of that facility to cease, resulting in the loss of revenue from any source for those residents. There can be no assurance that we will be able to win new business or secure renewal business on terms as favorable to us as the present terms.

Additionally, with respect to our retail and LTC pharmacy businesses, reimbursement under Medicare Part D, as well as reimbursement from certain private third-party payors, is determined pursuant to agreements that we negotiate with those payors or their pharmacy benefit manager representatives. The loss of those agreements, or a material change in the terms of those agreements, could negatively impact the Company. In addition, restricted networks that exclude our retail or specialty pharmacies negatively impact those businesses.

Risks related to the frequency and rate of the introduction and pricing of generic drugs and brand name prescription products.

The profitability of our business is dependent upon the utilization of prescription drug products. Utilization trends are affected by, among other factors, the introduction of new and successful prescription pharmaceuticals as well as lower-priced generic alternatives to existing brand name products, as the sale of generic alternatives normally yield higher gross margins than brand name equivalents. In addition, inflation in the price of the brand name drugs can affect utilization, particularly given the increase in high deductible health plans. Accordingly, our business could be impacted by a slowdown or delay in the number or magnitude of new and successful prescription pharmaceuticals and/or generic alternatives, as well as the pricing of brand name drugs.

The health of the economy in general and in the markets we serve.

Our business is affected by the economy and consumer confidence in general, including various economic factors, inflation and changes in consumer purchasing power, preferences and/or spending patterns. It is possible that an unfavorable, uncertain or volatile economic environment will cause a decline in drug and health care services utilization and dampen demand for pharmacy benefit management services as well as consumer demand for products sold in our retail stores. Further economic conditions including interest rate fluctuations, changes in capital market conditions and regulatory changes may affect our ability to obtain necessary financing on acceptable terms, our ability to secure suitable store locations under acceptable terms and our ability to execute sale-leaseback transactions under acceptable terms. These changes in conditions could result in an adverse effect on our business and financial results. This could be further exacerbated by the increasing prevalence of high deductible health plans and health plan designs favoring co-insurance over co-payments.

The failure or disruption of our information technology systems, our information security systems and our infrastructure to support our business and to protect the privacy and security of sensitive customer and business information.

Many aspects of our operations are dependent on our information systems and the information collected, processed, stored, and handled by these systems. We rely heavily on our computer systems to manage our ordering, pricing, point-of-sale, pharmacy fulfillment, inventory replenishment, claims processing, ExtraCare customer loyalty program, finance, human resource and other processes. Throughout our operations, we receive, retain and transmit certain confidential information, including PII that our customers and clients provide to purchase products or services, enroll in programs or services, register on our websites, interact with our personnel, or otherwise communicate with us. In addition, for these operations, we depend in part on the secure transmission of confidential information over public networks. Our information systems are subject to damage or interruption from power outages, facility damage, computer and telecommunications failures, computer viruses, security breaches including credit card or personally identifiable information breaches, coordinated cyber attacks, vandalism, catastrophic events and human error. Although we deploy a layered approach to address information security threats and vulnerabilities, including ones from a cyber security standpoint, designed to protect confidential information against data security breaches, a compromise of our information security controls or of those businesses with whom we interact, which results in confidential information being accessed, obtained, damaged, or used by unauthorized or improper persons, could harm our reputation and expose us to regulatory actions and claims from customers and clients, financial institutions, payment card associations and other persons, any of which could adversely affect our business, financial position, and results of operations. Because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and may not immediately produce signs of intrusion, we may be unable to anticipate these techniques or to implement adequate preventative measures. Moreover, a data security breach could require that we expend significant resources related to our information systems and infrastructure, and could distract management and other key personnel from performing their primary operational duties. We also could be adversely affected by any significant disruption in the systems of third parties we interact with, including key payors and vendors.

If our information systems are damaged, fail to work properly or otherwise become unavailable, or if we are unable to successfully complete our planned consolidation of our PBM claims adjudication platforms, we may incur substantial costs to repair or replace them, and may experience reputational damage, loss of critical information, customer disruption and interruptions or delays in our ability to perform essential functions and implement new and innovative services. In addition, compliance with changes in privacy and information security laws and standards may result in considerable expense due to increased investment in technology and the development of new operational processes.

Risks relating to the market availability, suppliers and safety profiles of prescription drugs that we purchase and sell.

We dispense significant volumes of brand-name and generic drugs from our retail, LTC, specialty and mail-order pharmacies and through our PBM's network of retail pharmacies. When increased safety risk profiles or manufacturing or other supply issues of specific drugs or classes of drugs occur, or drugs become subject to greater restrictions as controlled substances, physicians may cease writing prescriptions for these drugs or the utilization of these drugs may be otherwise reduced.

Additionally, adverse publicity regarding drugs with higher safety risk profiles may result in reduced consumer demand for such drugs. On occasion, products are withdrawn by their manufacturers or transition to over-the-counter products, which can result in lower prescription utilization. In addition, future FDA rulings could restrict the supply or increase the cost of products sold to our customers. Our volumes, net revenues, profitability and cash flows may decline as a result of such regulatory rulings or market changes.

Further, we acquire a substantial amount of our mail and specialty pharmacies' prescription drug supply from a limited number of suppliers. Our agreements with these suppliers are often short-term and easily cancelable by either party without cause. In addition, these agreements may limit our ability to provide services for competing drugs during the term of the agreement and may allow the supplier to distribute through channels other than ours. Certain of these agreements also allow pricing and other terms to be adjusted periodically for changing market conditions or required service levels. A termination or modification to any of these relationships could have a material adverse effect on our business, financial

condition and results of operations. Moreover, many products distributed by our specialty pharmacy business are manufactured with ingredients that are susceptible to supply shortages.

A disruption in our business operations could occur as a result of contamination of drugs, a failure to maintain necessary shipment and storage conditions, errors in mail order processing, the unavailability of prescription drugs provided by suppliers, labor disruptions or other unanticipated disruptions at our mail order facilities, call centers, data centers or corporate facilities, among other factors. Such disruption could reduce our ability to process and dispense prescriptions and provide products and services to our customers.

In the event any products we distribute are in limited supply for significant periods of time, our financial condition and results of operations could be materially and adversely affected.

Regulatory and business changes relating to our participation in Medicare Part D.

Medicare Part D has resulted in increased utilization and puts pressure on pharmacy gross margin rates due to regulatory and competitive pressures. Further, as a result of ACA and changes to the retiree drug subsidy rules, our PBM clients could decide to discontinue providing prescription drug benefits to their Medicare-eligible members. To the extent this occurs, the adverse effects of increasing customer migration into Medicare Part D may outweigh the benefits we realize from growth of our Medicare Part D business. In addition, if the cost and complexity of Medicare Part D exceed management's expectations or prevent effective program implementation or administration; if changes to the regulations regarding how drug costs are reported for Medicare Part D are implemented in a manner that impacts the profitability of our Medicare Part D business; if changes to the regulations impact our ability to retain fees from third parties including network pharmacies; if the government alters Medicare program requirements or reduces funding because of the higher-than-anticipated cost to taxpayers of Medicare Part D or for other reasons; if Congress acts to reduce reinsurance thresholds from 80% to 20%; if we fail to design and maintain programs that are attractive to Medicare participants; if CMS imposes restrictions on our Medicare Part D business as a result of audits or other regulatory actions; if we fail to successfully implement corrective action or other remedial measures sufficient to prevent or remove any applicable restrictions that may be imposed by CMS; or if we are not successful in retaining enrollees, or winning contract renewals or new contracts under Medicare Part D's competitive bidding process, our Medicare Part D services and the ability to expand our Medicare Part D services could be negatively impacted.

Possible changes in industry pricing benchmarks and drug pricing generally.

It is possible that the pharmaceutical industry or regulators may evaluate and/or develop an alternative pricing reference to replace Average Wholesale Price ("AWP") or Wholesale Acquisition Cost ("WAC"), which are the pricing references used for many of our PBM and LTC client contracts, pharmaceutical purchase agreements, retail network contracts, specialty payor agreements and other contracts with third party payors in connection with the reimbursement of drug payments. In addition, many state Medicaid fee-for-service programs ("FFS Medicaid") are expected to establish pharmacy network payments on the basis of Actual Acquisition Cost ("AAC") by April 1, 2017. This move to an AAC basis in FFS Medicaid could have an impact in reimbursement practices in other commercial and government segments. Future changes to the use of AWP, WAC or to other published pricing benchmarks used to establish pharmaceutical pricing, including changes in the basis for calculating reimbursement by federal and state health programs and/or other payors, could impact the reimbursement we receive from Medicare and Medicaid programs, the reimbursement we receive from PBM clients and other payors and/or our ability to negotiate rebates and/or discounts with pharmaceutical manufacturers, wholesalers, PBMs and retail pharmacies. A failure or inability to fully offset any increased prices or costs or to modify our operations to mitigate the impact of such increases could have an adverse effect on our results of operations. Additionally, any future changes in drug prices could be significantly different than our projections. The effect of these possible changes on our business cannot be predicted at this time.

Product liability, product recall or personal injury issues could damage our reputation; failure to maintain adequate liability insurance coverage.

The products that we sell could become subject to contamination, product tampering, mislabeling, recall or other damage. In addition, errors in the dispensing and packaging of pharmaceuticals could lead to serious injury or death. Product liability or personal injury claims may be asserted against us with respect to any of the products or pharmaceuticals we sell or services we provide. Our business involves the provision of professional services including by pharmacists, nurses and nurse practitioners that exposes us to professional liability claims. Should a product or other liability issue arise, the coverage limits under our insurance programs and the indemnification amounts available to us may not be adequate to protect us against claims. We also may not be able to maintain this insurance on acceptable terms in the future. Damage to our reputation in the event of a product liability or personal injury issue or judgment against us or a product recall could have a significant adverse effect on our business, financial condition and results of operations.

Relationship with our retail and specialty pharmacy customers and the demand for our products and services, including propriety brands.

The success of our business depends in part on customer loyalty, superior customer service and our ability to persuade customers to frequent our retail stores and online sites and to purchase products in additional categories and our proprietary brands. Failure to timely identify or effectively respond to changing consumer preferences and spending patterns, and evolving demographic mixes in our markets, an inability to expand the products being purchased by our clients and customers, or the

failure or inability to obtain or offer particular categories of products could negatively affect our relationship with our clients and customers and the demand for our products and services and could result in excess inventories of products.

We offer our retail customers proprietary brand products that are available exclusively at our retail stores and through our online retail sites. The sale of proprietary products subjects us to unique risks including potential product liability risks and mandatory or voluntary product recalls, potential supply chain and distribution chain disruptions for raw materials and finished products, our ability to successfully protect our intellectual property rights and the rights of applicable third parties, and other risks generally encountered by entities that source, market and sell private-label products. Any failure to adequately address some or all of these risks could have an adverse effect on our business, results of operations and financial condition. Additionally, an increase in the sales of our proprietary brands may negatively affect our sales of products owned by our suppliers which, consequently, could adversely impact certain of our supplier relationships. Our ability to locate qualified, economically stable suppliers who satisfy our requirements, and to acquire sufficient products in a timely and effective manner, is critical to ensuring, among other things, that customer confidence is not diminished. Any failure to develop sourcing relationships with a broad and deep supplier base could adversely affect our financial performance and erode customer loyalty.

Moreover, customer expectations and new technology advances from our competitors have required that our business evolve so that we are able to engage with our retail customers not only face-to-face in our stores but also online and via mobile and social media. Our customers are using computers, tablets, mobile phones and other electronic devices to shop in our stores and online, as well as to provide public reactions concerning each facet of our operation. If we fail to keep pace with dynamic customer expectations and new technology developments, our ability to compete and maintain customer loyalty could be adversely affected.

Finally, our specialty pharmacy business focuses on complex and high-cost medications, many of which are made available by manufacturers to a limited number of pharmacies (so-called limited distribution drugs), that serve a relatively limited universe of patients. As a result, the future growth of our specialty pharmacy business is dependent largely upon expanding our base of drugs or penetration in certain treatment categories. Any contraction of our base of patients or reduction in demand for the prescriptions we currently dispense could have an adverse effect on our business, financial condition and results of operations.

We are subject to payment-related risks that could increase our operating costs, expose us to fraud or theft, subject us to potential liability and disrupt our business operations.

We accept payments using a variety of methods, including cash, checks, credit cards, debit cards, gift cards, mobile payments and potentially other technologies in the future. Acceptance of these payment methods subjects us to rules, regulations, contractual obligations and compliance requirements, including payment network rules and operating guidelines, data security standards and certification requirements, and rules governing electronic funds transfers. These requirements may change in the future, which could make compliance more difficult or costly. For certain payment options, including credit and debit cards, we pay interchange and other fees, which could increase periodically thereby raising our operating costs. We rely on third parties to provide payment processing services, including the processing of credit cards, debit cards, and various other forms of electronic payment. If these companies are unable to provide these services to us, or if their systems are compromised, our operations could be disrupted. The payment methods that we offer also expose us to potential fraud and theft by persons seeking to obtain unauthorized access to, or exploit any weaknesses in, the payment systems. If we fail to abide by applicable rules or requirements, or if data relating to our payment systems is compromised due to a breach or misuse, we may be responsible for any costs incurred by payment card issuing banks and other third parties or subject to fines and higher transaction fees. In addition, our reputation and ability to accept certain types of payments could each be harmed resulting in reduced sales and adverse effects on our results of operations.

We may be unable to successfully integrate companies acquired by us.

Upon the closing of any acquisition we complete, we will need to successfully integrate the products, services and related assets, as well as internal controls into our business operations. If an acquisition is consummated, the integration of the acquired business, its products, services and related assets into our company may also be complex and time-consuming and, if the integration is not fully successful, we may not achieve the anticipated benefits, operating and cost synergies or

growth opportunities of an acquisition. Potential difficulties that may be encountered in the integration process include the following:

- Integrating personnel, operations and systems, while maintaining focus on producing and delivering consistent, high quality products and services;
- Coordinating geographically dispersed organizations;
- Disruption of management's attention from our ongoing business operations;
- Retaining existing customers and attracting new customers; and

- Managing inefficiencies associated with integrating our operations.

An inability to realize the full extent of the anticipated benefits, operating and cost synergies, innovations and operations efficiencies or growth opportunities of an acquisition, as well as any delays encountered in the integration process, could have a material adverse effect on our business and results of operation. Furthermore, these acquisitions, even if successfully integrated, may fail to further our business strategy as anticipated, expose us to increased competition or challenges with respect to our products, services or geographic markets, and expose us to additional liabilities associated with an acquired business including risks and liabilities associated with litigation involving the acquired business. Any one of these challenges or risks could impair our ability to realize any benefit from our acquisitions after we have expended resources on them.

Our outstanding debt and associated payment obligations could, among other things, limit our ability to make incremental investments in our business.

Our current debt service costs associated with our increased debt levels may dampen incremental investments in our business and limit our flexibility to respond to industry changes and market conditions. In addition, our debt level and related debt service obligations could make it more difficult or expensive for us to obtain any required future financing for working capital, capital expenditures, acquisitions or other purposes. Moreover, we may be unable to refinance existing indebtedness or otherwise access the capital markets for any reason, whether due to market conditions or otherwise. These circumstances could have a material adverse effect on our business operations and financial condition.

Risks related to the seasonality of our business.

Although the majority of our revenues, particularly pharmacy revenues, are generally not seasonal in nature, front store revenues tend to be higher during the December holiday season. Uncharacteristic or extreme weather conditions can adversely impact consumer shopping patterns as well. This could lead to lost sales, as well as increased snow removal and other costs, thereby negatively affecting our short-term results of operations. In addition, both pharmacy and front store revenues are affected by the timing and severity of the cough, cold and flu season, which is susceptible to large fluctuations from year to year, and our quarterly earnings and operating cash flows are impacted by the Medicare Part D benefit design and changes in the composition of our membership. See “Business - Pharmacy Services Seasonality.”

Risks related to litigation and other legal proceedings.

Pharmacy services, retail pharmacy and LTC pharmacy are highly regulated and litigious industries. We are currently subject to various litigation matters, investigations, audits, inspections, government inquiries, and regulatory and legal proceedings. Litigation, and particularly securities and collective or class action litigation, is often expensive and disruptive. Further, under the *qui tam* or “whistleblower” provisions of the federal and various state false claims acts, private citizens may bring lawsuits alleging that a violation of the federal anti-kickback statute or similar laws has resulted in the submission of “false” claims to federal and/or state health care programs, including Medicare and Medicaid. Litigation related to our provision of professional services in our pharmacies, specialty pharmacies, clinics and LTC facilities has also increased as we expand our services along the continuum of health care. We cannot predict the outcome of any of these matters, and the costs incurred may be substantial regardless of outcome. Our business, financial condition and results of operations may be adversely affected, or we may be required to materially change our business practices, as a result of such proceedings. We refer you to Item 3, “Legal Proceedings” for additional information.

The foregoing is not a comprehensive listing of all possible risks and there can be no assurance that we have correctly identified and appropriately assessed all factors affecting the business. As such, we refer you to “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” which includes our “Cautionary Statement Concerning Forward-Looking Statements” at the end of such section, of our Annual Report to Stockholders for the year ended December 31, 2016, which section is incorporated by reference herein.

Item 1B. Unresolved Staff Comments

There are no unresolved SEC Staff Comments.

Item 2. Properties

We lease most of our stores under long-term leases that vary as to rental amounts, expiration dates, renewal options and other rental provisions. For additional information on the amount of our rental obligations for our leases, we refer you to Note 6 “Leases” in our Annual Report to Stockholders for the year ended December 31, 2016, which section is incorporated by reference herein.

As of December 31, 2016, we owned approximately 5% of our 8,035 retail stores. Net selling space for our retail stores was approximately 79.2 million square feet as of December 31, 2016. Approximately 20% of our store base was opened or significantly remodeled within the last five years.

We lease 1,674 retail pharmacies and 79 clinics in Target stores located in 47 states and the District of Columbia.

We own nine distribution centers located in Alabama, California, Hawaii, New York, Rhode Island, South Carolina, Tennessee and Texas and lease 11 additional distribution facilities located in Arizona, Florida, Indiana, Michigan, New Jersey, Pennsylvania, Texas, Virginia and Brazil. The 20 distribution centers total approximately 9.6 million square feet as of December 31, 2016.

As of December 31, 2016, we owned five and leased 147 LTC pharmacies in 43 states and owned one LTC repackaging facility in Kentucky.

As of December 31, 2016, we owned one mail service dispensing pharmacy located in Texas and leased three additional mail order dispensing pharmacies located in Hawaii, Illinois and Pennsylvania; we leased call centers located in Missouri, Pennsylvania, Tennessee and Texas; we leased 38 onsite pharmacy stores and 23 specialty pharmacy stores, and leased 13 specialty mail order pharmacies; we leased 84 branches for infusion and enteral services, including approximately 73 ambulatory infusion suites and three centers of excellence.

We own our corporate offices located in Woonsocket, Rhode Island, which totals approximately one million square feet. In addition, we lease corporate offices in Scottsdale, Arizona, Northbrook, Illinois, Cincinnati, Ohio, Monroeville, Pennsylvania, Irving, Texas, and Sao Paulo, Brazil.

In connection with certain business dispositions completed between 1991 and 1997, we continue to guarantee lease obligations for approximately 87 former stores. We are indemnified for these guarantee obligations by the respective purchasers. These guarantees generally remain in effect for the initial lease term and any extension thereof pursuant to a renewal option provided for in the lease prior to the time of the disposition. For additional information, we refer you to Note 11 “Commitments and Contingencies” in our Annual Report to Stockholders for the year ended December 31, 2016, which section is incorporated by reference herein.

Management believes that the Company's owned and leased facilities are suitable and adequate to meet the Company’s anticipated needs. At the end of the existing lease terms, management believes the leases can be renewed or replaced by alternative space.

The following is a breakdown by state, District of Columbia, Puerto Rico and Brazil of our retail stores, pharmacies and clinics in Target stores, LTC hub and spoke pharmacies, onsite pharmacy stores, specialty pharmacy stores, specialty mail order pharmacies, mail order dispensing pharmacies and branches and centers of excellence for infusion and enteral services as of December 31, 2016:

	Retail Stores	Pharmacies within Target	LTC Hub & Spoke Pharmacies	Onsite Pharmacy Stores	Specialty Pharmacy Stores	Specialty Mail Order Pharmacies	Mail Order Dispensing Pharmacies	Infusion & Enteral Services Locations	Total
United States:									
Alabama	159	22	2	1	1	—	—	1	186
Alaska	—	3	—	—	—	—	—	—	3
Arizona	152	45	2	—	1	1	—	3	204
Arkansas	15	8	2	—	—	—	—	1	26
California	878	250	9	—	3	1	—	8	1,149
Colorado	—	39	3	—	1	—	—	1	44
Connecticut	153	20	1	1	—	—	—	1	176
Delaware	17	3		—	—	—	—	—	20
District of Columbia	59	1	—	—	1	—	—	—	61
Florida	756	121	6	1	2	2	—	7	895
Georgia	312	42	2	3	1	—	—	1	361
Hawaii	63	6	—	—	1	—	1	—	71
Idaho	—	2	1	—	—	—	—	1	4
Illinois	282	88	7	1	—	1	1	2	382
Indiana	303	30	4	—	—	—	—	3	340
Iowa	20	18	2	—	—	—	—	1	41
Kansas	40	14	2	—	—	1	—	2	59
Kentucky	68	9	9	—	—	—	—	—	86
Louisiana	119	15	3	—	—	—	—	1	138
Maine	22	5	1	—	—	—	—	1	29
Maryland	182	39	2	5	—	—	—	1	229
Massachusetts	357	39	2	2	2	1	—	1	404
Michigan	250	51	4	1	—	1	—	2	309
Minnesota	61	74	6	1	—	—	—	2	144
Mississippi	52	5	1	1	—	—	—	1	60
Missouri	95	33	6	1	—	—	—	1	136
Montana	14	2	1	—	—	—	—	—	17
Nebraska	19	11	1	—	—	—	—	1	32
Nevada	87	15	2	—	—	—	—	2	106
New Hampshire	40	9	1	—	—	—	—	—	50
New Jersey	293	45	3	4	—	1	—	1	347
New Mexico	19	6	1	—	—	—	—	1	27
New York	487	73	7	—	1	—	—	7	575
North Carolina	314	49	4	2	1	1	—	3	374
North Dakota	6	—	—	—	—	—	—	—	6
Ohio	320	59	7	1	—	—	—	4	391
Oklahoma	62	15	2	—	—	—	—	1	80
Oregon	—	18	2	—	1	—	—	1	22

Pennsylvania	410	64	6	3	1	1	1	2	488
Puerto Rico	24	—	—	—	—	1	—	—	25
Rhode Island	63	4	1	—	1	—	—	1	70
South Carolina	191	19	3	1	1	—	—	2	217
South Dakota	—	3	1	—	—	—	—	—	4
Tennessee	135	27	3	1	—	1	—	3	170
Texas	684	133	10	3	2	—	1	5	838
Utah	12	13	2	—	—	—	—	1	28
Vermont	10	—	—	—	—	—	—	—	10
Virginia	283	58	7	4	1	—	—	2	355
Washington	8	30	4	—	1	—	—	2	45
West Virginia	51	6	2	—	—	—	—	—	59
Wisconsin	51	33	5	1	—	—	—	1	91
Wyoming	—	—	—	—	—	—	—	2	2
Total United States	7,998	1,674	152	38	23	13	4	84	9,986
Brazil	37	—	—	—	—	—	—	—	37
Total	8,035	1,674	152	38	23	13	4	84	10,023

Item 3. Legal Proceedings

I. Legal Proceedings

We refer you to the Note 11 “Commitments and Contingencies” contained in the “Notes to the Consolidated Financial Statements” of our Annual Report to Stockholders for the year ended December 31, 2016, which section is incorporated by reference herein.

II. Environmental Matters

Item 103 of SEC Regulation S-K requires disclosure of certain environmental legal proceedings if management reasonably believes that the proceedings involve potential monetary sanctions of $100,000 or more. The Company is in the process of negotiating with United States Environmental Protection Agency, Region 2 and the United States Department of Justice to resolve claims of alleged historical noncompliance with hazardous waste regulations in connection with three retail pharmacy locations in Puerto Rico. These proceedings are not material to the Company's business or financial position.

Item 4. Mine Safety Disclosures

Not applicable.

Executive Officers of the Registrant

Executive Officers of the Registrant

The following sets forth the name, age and biographical information for each of our executive officers as of February 9, 2017. In each case the officer's term of office extends to the date of the board of directors meeting following the next annual meeting of stockholders of the Company. Previous positions and responsibilities held by each of the executive officers over the past five years are indicated below:

Lisa G. Bisaccia, age 60, Executive Vice President of CVS Health Corporation since March 2015 and Chief Human Resources Officer of CVS Health Corporation since January 2010; Senior Vice President of CVS Health Corporation from January 2010 through February 2015; Vice President, Human Resources of CVS Pharmacy, Inc. from September 2004 through December 2009. Ms. Bisaccia is also a member of the Board of Directors of Aramark, a leading global provider of food, facilities and uniform services.

Eva C. Boratto, age 50, Senior Vice President - Controller and Chief Accounting Officer of CVS Health Corporation since July 2013; Senior Vice President of PBM Finance from July 2010 through June 2013; Vice President, U.S. Market Finance Leader of Merck & Co., Inc. from June 2009 through June 2010.

Troyen A. Brennan, M.D., age 62, Executive Vice President and Chief Medical Officer of CVS Health Corporation since November 2008; Executive Vice President and Chief Medical Officer of Aetna, Inc. from February 2006 through November 2008.

David M. Denton, age 51, Executive Vice President and Chief Financial Officer of CVS Health Corporation since January 2010; Senior Vice President and Controller/Chief Accounting Officer of CVS Health Corporation from March 2008 until December 2009; Senior Vice President, Financial Administration of CVS Health Corporation and CVS Pharmacy, Inc. from April 2007 to March 2008. Mr. Denton is also a member of the Board of Directors of Coach, Inc., a leading retailer of premium bags and luxury accessories.

Helena B. Foulkes, age 52, Executive Vice President of CVS Health Corporation and President of CVS Pharmacy since January 2014; Executive Vice President and Chief Health Care Strategy and Marketing Officer of CVS Health Corporation from March 2011 through December 2013; Executive Vice President and Chief Marketing Officer of CVS Health Corporation from January 2009 through February 2011. Ms. Foulkes is also a member of the Board of Directors of The Home Depot, Inc., a leading home improvement retailer.

Stephen J. Gold, age 57, Executive Vice President of CVS Health Corporation since March 2015 and Chief Information Officer of CVS Health Corporation since July 2012; Senior Vice President of CVS Health Corporation from July 2012 through February 2015; Senior Vice President and Chief Information Officer of Avaya, Inc. from May 2010 through June 2012; Executive Vice President, Chief Information Officer and Chief Technology Officer of GSI Commerce, Inc. from February 2005 through April 2010.

J. David Joyner, age 52, Executive Vice President of CVS Health Corporation since March 2011 and Executive Vice President of Sales and Account Services, CVS Caremark since March 2004.

Robert O. Kraft, age 46, Executive Vice President of CVS Health Corporation and President - Omnicare since August 2015; Senior Vice President and Chief Financial Officer of Omnicare from September 2012 through August 2015; Senior Vice President - Finance of Omnicare from November 2010 through September 2012; PricewaterhouseCoopers LLP from September 1992 to November 2010, where he was a partner. Mr. Kraft is also a member of the Board of Directors of Medpace Holdings, Inc. a global clinical contract research organization providing Phase I-IV clinical development services to the biotechnology, pharmaceutical and medical device industries.

Larry J. Merlo, age 61, President and Chief Executive Officer of CVS Health Corporation since March 2011; President and Chief Operating Officer of CVS Health Corporation from May 2010 through March 2011; President of CVS Pharmacy from January 2007 through August 2011; Executive Vice President of CVS Health Corporation from January 2007 through May 2010; also a director of CVS Health Corporation since May 2010.

Thomas M. Moriarty, age 53, Executive Vice President and General Counsel of CVS Health Corporation since October 2012 and Chief Strategy Officer since March 2014; General Counsel of Celgene Corporation, a global biopharmaceutical company, from May 2012 through September 2012; General Counsel and Corporate Secretary of Medco

Health Solutions, Inc. (“Medco”), a pharmacy benefit management company, from March 2008 through April 2012; also President of Global Pharmaceutical Strategies of Medco from March 2011 through April 2012; Senior Vice President, Pharmaceutical Strategies and Solutions of Medco from September 2007 through March 2011.

Jonathan C. Roberts, age 61, Executive Vice President of CVS Health Corporation and President of CVS Caremark since September 2012; Executive Vice President of CVS Health Corporation and Chief Operating Officer of CVS Caremark from October 2010 through August 2011; Executive Vice President, Rx Purchasing, Pricing and Network Relations of CVS Health Corporation from January 2009 through October 2010.

Andrew J. Sussman, M.D., age 51, Executive Vice President of CVS Health Corporation since March 2015, Associate Chief Medical Officer of CVS Health Corporation since March 2011 and President of CVS MinuteClinic since September 2009; Senior Vice President of CVS Health Corporation from March 2011 through March 2015; Executive Vice President and Chief Operating Officer of the University of Massachusetts Memorial Medical Center, the major teaching affiliate of UMass Medical School, from May 2004 through August 2009.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Our common stock is listed on the New York Stock Exchange under the symbol "CVS." The table below sets forth the high and low closing prices of our common stock on the New York Stock Exchange Composite Tape and the quarterly cash dividends declared per share of common stock during the periods indicated.

		First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year
2016	High	$ 104.05	$ 106.10	$ 98.06	$ 88.80	$ 106.10
	Low	$ 89.65	$ 93.21	$ 88.99	$ 73.53	$ 73.53
	Cash dividends per common share	$ 0.425	$ 0.425	$ 0.425	$ 0.425	$ 1.70
2015	High	$ 104.56	$ 106.47	$ 113.45	$ 105.29	$ 113.45
	Low	$ 94.16	$ 98.74	$ 95.12	$ 91.56	$ 91.56
	Cash dividends per common share	$ 0.350	$ 0.350	$ 0.350	$ 0.350	$ 1.40

CVS Health has paid cash dividends every quarter since becoming a public company. Future dividend payments will depend on the Company's earnings, capital requirements, financial condition and other factors considered relevant by the Company's Board of Directors. As of February 3, 2017, there were 22,164 registered shareholders according to the records maintained by our transfer agent.

The following share repurchase programs were authorized by the Company's Board of Directors:

In billions Authorization Date	Authorized	Remaining
November 2, 2016 ("2016 Repurchase Program")	$ 15.0	$ 15.0
December 15, 2014 ("2014 Repurchase Program")	$ 10.0	$ 3.2
December 17, 2013 ("2013 Repurchase Program")	$ 6.0	$ —

The share Repurchase Programs, each of which was effective immediately, permit the Company to effect repurchases from time to time through a combination of open market repurchases, privately negotiated transactions, accelerated share repurchase ("ASR") transactions, and/or other derivative transactions. The 2016 and 2014 Repurchase Programs may be modified or terminated by the Board of Directors at any time.

Pursuant to the authorization under the 2014 Repurchase Program, effective August 29, 2016, the Company entered into two fixed dollar ASRs with Barclays Bank PLC ("Barclays") for a total of $3.6 billion. Upon payment of the $3.6 billion purchase price on January 6, 2017, the Company received a number of shares of its common stock equal to 80% of the $3.6 billion notional amount of the ASRs or approximately 36.1 million shares at a price of $80.34 per share, which were placed into treasury stock in January 2017. At the conclusion of the ASRs, the Company may receive additional shares equal to the remaining 20% of the $3.6 billion notional amount. The ultimate number of shares the Company may receive will fluctuate based on changes in the daily volume-weighted average price of the Company's stock over a period beginning on January 6, 2017 and ending on or before July 6, 2017. If the mean daily volume-weighted average price of the Company's common stock, less a discount (the "forward price"), during the ASRs falls below $80.34 per share, the Company will receive a higher number of shares from Barclays. If the forward price rises above $80.34 per share, the Company will either receive fewer shares from Barclays or, potentially have an obligation to Barclays which, at the Company's option, could be settled in additional cash or by issuing shares. Under the terms of the ASRs, the maximum number of shares that could be received or delivered is 90.1 million.

Pursuant to the authorization under the 2014 Repurchase Program, effective December 11, 2015, the Company entered into a $725 million fixed dollar ASR with Barclays. Upon payment of the $725 million purchase price on December 14, 2015, the Company received a number of shares of its common stock equal to 80% of the $725 million notional amount of

the ASR or approximately 6.2 million shares. The initial 6.2 million shares of common stock delivered to the Company by Barclays were placed into treasury stock in December 2015. The ASR was accounted for as an initial treasury stock transaction of $580 million and a forward contract of $145 million. The forward contract was classified as an equity instrument and was recorded

within capital surplus on the consolidated balance sheet. On January 28, 2016, the Company received 1.4 million shares of common stock, representing the remaining 20% of the $725 million notional amount of the ASR, thereby concluding the ASR. The remaining 1.4 million shares of common stock delivered to the Company by Barclays were placed into treasury stock in January 2016 and the forward contract was reclassified from capital surplus to treasury stock.

Pursuant to the authorization under the 2013 Repurchase Program, effective January 2, 2015, the Company entered into a $2.0 billion fixed dollar ASR agreement with J.P. Morgan Chase Bank ("JP Morgan"). Upon payment of the $2.0 billion purchase price on January 5, 2015, the Company received a number of shares of its common stock equal to 80% of the $2.0 billion notional amount of the ASR agreement or approximately 16.8 million shares, which were placed into treasury stock in January 2015. On May 1, 2015, the Company received approximately 3.1 million shares of common stock, representing the remaining 20% of the $2.0 billion notional amount of the ASR, thereby concluding the ASR. The remaining 3.1 million shares of common stock delivered to the Company by JP Morgan were placed into treasury stock in May 2015. The ASR was accounted for as an initial treasury stock transaction of $1.6 billion and a forward contract of $0.4 billion. The forward contract was classified as an equity instrument and was initially recorded within capital surplus on the consolidated balance sheet and was reclassified to treasury stock upon the settlement of the ASR in May 2015.

In the ASR transactions described above, the initial repurchase of the shares and delivery of the remainder of the shares to conclude the ASR, resulted in an immediate reduction of the outstanding shares used to calculate the weighted average common shares outstanding for basic and diluted earnings per share.

During the year ended December 31, 2016, the Company repurchased an aggregate of 47.5 million shares of common stock for approximately $4.5 billion under the 2014 Repurchase Program. As of December 31, 2016, there remained an aggregate of approximately $18.2 billion available for future repurchases under the 2016 and 2014 Repurchase Programs, $3.6 billion of which was used for the ASR effective January 6, 2017 described previously. As of December 31, 2015, the 2013 Repurchase Program was complete.

Fiscal Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
October 1, 2016 through October 31, 2016	—	$ —	—	$ 3,691,002,299
November 1, 2016 through November 30, 2016	5,425,000	$ 75.11	5,425,000	$ 18,283,540,767
December 1, 2016 through December 31, 2016	700,000	$ 75.91	700,000	$ 18,230,407,177
	6,125,000		6,125,000	

Item 6. Selected Financial Data

The selected consolidated financial data of CVS Health Corporation as of and for the periods indicated in the five-year period ended December 31, 2016 have been derived from the consolidated financial statements of CVS Health Corporation. The selected consolidated financial data should be read in conjunction with the consolidated financial statements and the audit reports of Ernst & Young LLP, which are incorporated elsewhere herein.

In millions, except per share amounts	2016	2015	2014	2013	2012
Statement of operations data:					
Net revenues	$177,526	$153,290	$139,367	$126,761	$123,120
Gross profit	28,857	26,528	25,367	23,783	22,488
Operating expenses	18,519	17,074	16,568	15,746	15,278
Operating profit	10,338	9,454	8,799	8,037	7,210
Interest expense, net	1,058	838	600	509	557
Loss on early extinguishment of debt	643	—	521	—	348
Income tax provision	3,317	3,386	3,033	2,928	2,436
Income from continuing operations	5,320	5,230	4,645	4,600	3,869
Income (loss) from discontinued operations, net of tax	(1)	9	(1)	(8)	(7)
Net income	5,319	5,239	4,644	4,592	3,862
Net (income) loss attributable to noncontrolling interest	(2)	(2)	—	—	2
Net income attributable to CVS Health	$ 5,317	$ 5,237	$ 4,644	$ 4,592	$ 3,864
Per common share data:					
Basic earnings per common share:					
Income from continuing operations attributable to CVS Health	$ 4.93	$ 4.65	$ 3.98	$ 3.78	$ 3.05
Income (loss) from discontinued operations attributable to CVS Health	$ —	$ 0.01	$ —	$ (0.01)	$ (0.01)
Net income attributable to CVS Health	$ 4.93	$ 4.66	$ 3.98	$ 3.77	$ 3.04
Diluted earnings per common share:					
Income from continuing operations attributable to CVS Health	$ 4.91	$ 4.62	$ 3.96	$ 3.75	$ 3.02
Income (loss) from discontinued operations attributable to CVS Health	$ —	$ 0.01	$ —	$ (0.01)	$ (0.01)
Net income attributable to CVS Health	$ 4.90	$ 4.63	$ 3.96	$ 3.74	$ 3.02
Cash dividends per common share	$ 1.70	$ 1.40	$ 1.10	$ 0.90	$ 0.65
Balance sheet and other data:					
Total assets[(1)]	$ 94,462	$ 92,437	$ 73,202	$ 70,550	$ 65,474
Long-term debt	$ 25,615	$ 26,267	$ 11,630	$ 12,767	$ 9,079
Total shareholders' equity	$ 36,834	$ 37,203	$ 37,963	$ 37,938	$ 37,653
Number of stores (at end of year)	9,750	9,681	7,866	7,702	7,508

(1) As of January 1, 2016, the Company early adopted Accounting Standard Update No. 2015-17, *Income Taxes* (Topic 740) issued by the Financial Accounting Standards Board in November 2015. The effect of the retrospective adoption on the Company's historical consolidated balance sheets is a reduction in current assets and deferred income taxes of $1.2 billion, $985 million, $902 million and $693 million as of December 31, 2015, 2014, 2013 and 2012, respectively.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

We refer you to "Management's Discussion and Analysis of Financial Condition and Results of Operations," which includes our "Cautionary Statement Concerning Forward-Looking Statements" at the end of such section of our Annual Report to Stockholders for the year ended December 31, 2016, which section is incorporated by reference herein.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

As of December 31, 2016, the Company did not have any interest rate, foreign currency exchange rate or commodity derivative instruments in place and believes that as of December 31, 2016 its exposure to interest rate risk (inherent in the Company's debt portfolio), foreign currency exchange rate risk and commodity price risk is not material.

Item 8. Financial Statements and Supplementary Data

We refer you to the "Consolidated Statements of Income," "Consolidated Statements of Comprehensive Income," "Consolidated Balance Sheets," "Consolidated Statements of Shareholders' Equity," "Consolidated Statements of Cash Flows," "Notes to Consolidated Financial Statements," and "Report of Independent Registered Public Accounting Firm" of our Annual Report to Stockholders for the year ended December 31, 2016, which sections are incorporated by reference herein.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of disclosure controls and procedures: The Company's Chief Executive Officer and Chief Financial Officer, after evaluating the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rules 13a-15 (f) and 15d-15(f) under the Securities Exchange Act of 1934) as of December 31, 2016, have concluded that as of such date the Company's disclosure controls and procedures were adequate and effective at a reasonable assurance level and designed to ensure that material information relating to the Company and its subsidiaries would be made known to such officers on a timely basis.

Internal control over financial reporting: We refer you to "Management's Report on Internal Control Over Financial Reporting" and "Report of Independent Registered Public Accounting Firm" of our Annual Report to Stockholders for the fiscal year ended December 31, 2016, which are incorporated by reference herein, for management's report on the Company's internal control over financial reporting and the Independent Registered Public Accounting Firm's report with respect to the effectiveness of internal control over financial reporting.

Changes in internal control over financial reporting: On August 18, 2015, the Company completed its acquisition of Omnicare and on December 16, 2015, the Company completed its acquisition of the pharmacies and clinics of Target. During the three months ended December 31, 2016, the Company completed the process of integrating the applicable internal controls for each business into its internal control over financial reporting for the rest of the Company. Other than the foregoing, there have been no changes in our internal control over financial reporting identified in connection with the evaluation required by paragraph (d) of Securities Exchange Act Rule 13a-15 or Rule 15d-15 that occurred in the three months ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

No events have occurred during the fourth quarter that would require disclosure under this item.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

We refer you to our Proxy Statement for the 2017 Annual Meeting of Stockholders under the captions "Committees of the Board," "Code of Conduct," "Director Nominations," "Audit Committee Report," "Biographies of our Board Nominees," and "Section 16(a) Beneficial Ownership Reporting Compliance," which sections are incorporated by reference herein. Biographical information on our executive officers is contained in Part I of this Annual Report on Form 10-K.

Item 11. Executive Compensation

We refer you to our Proxy Statement for the 2017 Annual Meeting of Stockholders under the captions "Executive Compensation and Related Matters," including "Compensation Discussion & Analysis" and "Management Planning and Development Committee Report," which sections are incorporated by reference herein.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

We refer you to our Proxy Statement for the 2017 Annual Meeting of Stockholders under the captions "Share Ownership of Directors and Certain Executive Officers," and "Share Ownership of Principal Stockholders" which sections are incorporated by reference herein, for information concerning security ownership of certain beneficial owners and management and related stockholder matters.

The following table summarizes information about the Company's common stock that may be issued upon the exercise of options, warrants and rights under all of our equity compensation plans as of December 31, 2016.

	Number of securities to be issued upon exercise of outstanding options, warrants and rights[1]	Weighted average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in first column) [1]
Equity compensation plans approved by stockholders	23,275	$ 68.60	17,645
Equity compensation plans not approved by stockholders	—	—	—
Total	23,275	$ 68.60	17,645

(1) Shares in thousands.

Item 13. Certain Relationships and Related Transactions and Director Independence

We refer you to our Proxy Statement for the 2017 Annual Meeting of Stockholders under the caption "Independence Determinations for Directors" and "Certain Transactions with Directors and Officers," which sections are incorporated by reference herein.

Item 14. Principal Accountant Fees and Services

We refer you to our Proxy Statement for the 2017 Annual Meeting of Stockholders under the caption "Item 2: Ratification of Appointment of Independent Registered Public Accounting Firm," which section is incorporated by reference herein.

PART IV

Item 15. Exhibits and Financial Statement Schedules

A. Documents filed as part of this report:

1. Financial Statements:

The following financial statements are incorporated by reference from our Annual Report to Stockholders for the fiscal year ended December 31, 2016, as provided in Item 8 hereof:

2. Financial Statement Schedules

All financial statement schedules are omitted because they are not applicable, not required under the instructions, or the information is included in the consolidated financial statements or related notes.

B. Exhibits

Exhibits marked with an asterisk (*) are hereby incorporated by reference to exhibits or appendices previously filed by the Registrant as indicated in brackets following the description of the exhibit.

Exhibit	Description
2.1*	Agreement and Plan of Merger dated as of November 1, 2006 among, the Registrant, Caremark Rx, Inc. and Twain MergerSub Corp. (incorporated by reference to Exhibit 2.1 to the Registrant's Registration Statement No. 333-139470 on Form S-4 filed December 19, 2006).
2.2*	Amendment No. 1 dated as of January 16, 2007 to the Agreement and Plan of Merger dated as of November 1, 2006 among the Registrant, Caremark Rx, Inc. and Twain Merger Sub Corp. (incorporated by reference to Exhibit 2.2 to the Registrant's Registration Statement No. 333-139470 on Form S-4/A filed January 16, 2007).
2.3*	Waiver Agreement dated as of January 16, 2007 between the Registrant and Caremark Rx, Inc. with respect to the Agreement and Plan Merger dated as of November 1, 2006 by and between Registrant and Caremark Rx, Inc (incorporated by reference to Exhibit 2.3 to the Registrant's Registration Statement No. 333-139470 on Form S-4/A filed January 16, 2007).
2.4*	Amendment to Waiver Agreement, dated as of February 12, 2007, between Registrant and Caremark Rx, Inc. (incorporated by reference to Exhibit 99.2 to the Registrant's Current Report on Form 8-K dated February 13, 2007; Commission File No. 001-01011).
2.5*	

Amendment to Waiver Agreement, dated as of March 8, 2007, between Registrant and Caremark Rx, Inc. (incorporated by reference to Exhibit 99.2 to the Registrant's Current Report on Form 8-K dated March 8, 2007; Commission File No. 001-01011).

2.6* Agreement and Plan of Merger dated as of August 12, 2008, among the Registrant, Longs Drug Stores Corporation and Blue MergerSub Corp. (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K dated August 13, 2008; Commission File No. 001-01011).

2.7* Agreement and Plan of Merger, dated as of May 20, 2015, among CVS Pharmacy, Inc., Tree Merger Sub, Inc. and Omnicare, Inc. (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report on Form 8-K dated May 21, 2015; Commission File No. 001-01011).

3.1*	Amended and Restated Certificate of Incorporation of the Registrant (incorporated by reference to Exhibit 3.1 of Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1996; Commission File No. 001-01011).
3.1A*	Certificate of Amendment to the Amended and Restated Certificate of Incorporation, effective May 13, 1998 (incorporated by reference to Exhibit 4.1A to Registrant's Registration Statement No. 333-52055 on Form S-3/A dated May 18, 1998).
3.1B*	Certificate of Amendment to the Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K dated March 22, 2007; Commission File No. 001-01011).
3.1C*	Certificate of Merger dated May 9, 2007 (incorporated by reference to Exhibit 3.1C to Registrant's Quarterly Report on Form 10-Q dated November 1, 2007; Commission File No. 001-01011).
3.1D*	Certificate of Amendment to the Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K dated May 13, 2010; Commission File No. 001-01011).
3.1E*	Certificate of Amendment to the Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report On Form 8-K dated May 10, 2012; Commission File No. 001-01011).
3.1F*	Certificate of Amendment to the Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report On Form 8-K dated May 13, 2013; Commission File No. 001-01011).
3.1G*	Certificate of Amendment to the Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K dated September 3, 2014 (Commission File No. 001-01011)).
3.2*	By-laws of the Registrant, as amended and restated (incorporated by reference to Exhibit 3.2 to the Registrant's Current Report on Form 8-K dated January 26, 2016; Commission File No. 001-01011).
4	Pursuant to Regulation S-K, Item 601(b)(4)(iii)(A), no instrument which defines the rights of holders of long-term debt of the Registrant and its subsidiaries is filed with this report. The Registrant hereby agrees to furnish a copy of any such instrument to the Securities and Exchange Commission upon request.
4.1*	Specimen common stock certificate (incorporated by reference to Exhibit 4.1 to the Registration Statement of the Registrant on Form 8-B dated November 4, 1996; Commission File No. 001-01011).
10.1*	Stock Purchase Agreement dated as of October 14, 1995 between The TJX Companies, Inc. and Melville Corporation, as amended November 17, 1995 (incorporated by reference to Exhibits 2.1 and 2.2 to Melville's Current Report on Form 8-K dated December 4, 1995; Commission File No. 001-01011).
10.2*	Stock Purchase Agreement dated as of March 25, 1996 between Melville Corporation and Consolidated Stores Corporation, as amended May 3, 1996 (incorporated by reference to Exhibits 2.1 and 2.2 to Melville's Current Report on Form 8-K dated May 5, 1996; Commission File No. 001-01011).
10.3*	

Distribution Agreement dated as of September 24, 1996 among Melville Corporation, Footstar, Inc. and Footstar Center, Inc. (incorporated by reference to Exhibit 99.1 to Melville's Current Report on Form 8-K dated October 28, 1996; Commission File No. 001-01011).

10.4* Tax Disaffiliation Agreement dated as of September 24, 1996 among Melville Corporation, Footstar, Inc. and certain subsidiaries named therein (incorporated by reference to Exhibit 99.2 to Melville's Current Report on Form 8-K dated October 28, 1996; Commission File No. 001-01011).

10.5* Stockholder Agreement dated as of December 2, 1996 between the Registrant, Nashua Hollis CVS, Inc. and Linens 'n Things, Inc. (incorporated by reference to Exhibit 10(i)(6) to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1997; Commission File No. 001-01011).

10.6* Tax Disaffiliation Agreement dated as of December 2, 1996 between the Registrant and Linens 'n Things, Inc. and certain of their respective affiliates (incorporated by reference to Exhibit 10(i)(7) to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 1997; Commission File No. 001-01011).

10.7*	Four Year Credit Agreement dated as of May 12, 2011 by and among the Registrant, the lenders party thereto, Barclays Capital and JP Morgan Chase Bank, N.A., as Co-Syndication Agents, Bank of America, N.A. and Wells Fargo Bank, N.A., as Co-Documentation Agents, and the Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2011; Commission File No. 001-01011).
10.8*	Amendment No. 1, dated as of November 22, 2011, to the Credit Agreement dated as of May 12, 2011 by and among the Registrant, the Lenders party thereto, the Co-Syndication Agents and Co-Documentation Agents named therein, and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.45 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2011; Commission File No. 001-01011).
10.9*	Credit Agreement dated as of May 23, 2013, by and among the Registrant, the lenders party thereto, Barclays Bank PLC and JPMorgan Chase Bank, N.A., as Co-Syndication Agents, Bank of America, N.A. and Wells Fargo Bank, N.A., as Co-Documentation Agents, and The Bank of New York Mellon, as Administrative Agent. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2013 (Commission File No. 001-01011).
10.10*	Amendment No. 2, dated as of May 23, 2013, to the Credit Agreement dated as of May 12, 2011, by and among the Registrant, the lenders party thereto, Barclays Capital and JPMorgan Chase Bank, N.A., as Co-Syndication Agents, Bank of America, N.A. and Wells Fargo Bank, N.A., as Co-Documentation Agents, and The Bank of America, N.A. and Wells Fargo Bank, N.A., as Co-Documentation Agents, and The Bank of New York Mellon, as Administrative Agent, as previously amended by Amendment No. 1, dated as of November 22, 2011 (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2013 (Commission File No. 001-01011).
10.11*	Second Amended and Restated Credit Agreement, dated as of July 24, 2014, by and among the Registrant, the lenders party thereto, Barclays Bank PLC and JPMorgan Chase Bank, N.A., as Co-Syndication Agents, Bank of America, N.A. and Wells Fargo Bank, N.A., as Co-Documentation Agents, and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014 (Commission File No. 001-01011).
10.12*	Five Year Credit Agreement dated as of July 1, 2015, by and among the Registrant, the lenders party thereto, Barclays Bank PLC and JPMorgan Chase Bank, N.A., as Co-Syndication Agents, Bank of America, N.A. and Wells Fargo Bank, N.A., as Co-Documentation Agents, and The Bank of New York Mellon, as Administrative Agent (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2015 (Commission File No. 001-01011).
10.13	Credit Agreement dated as of January 3, 2017, by and among the Registrant, the lenders party thereto, and Barclays Bank PLC, as Administrative Agent.
10.14*	The Registrant's Supplemental Retirement Plan for Select Senior Management I as amended and restated in December 2008 (incorporated by reference to Exhibit 10.6 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009; Commission File No. 001-01011).
10.15*	The Registrant's 1996 Directors Stock Plan, as amended and restated November 5, 2002 (incorporated by reference to Exhibit 10.18 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 28, 2002; Commission File No. 001-01011).
10.16*	The Registrant's 1997 Incentive Compensation Plan as amended through December 2008 (incorporated by reference to Exhibit 10.8 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009; Commission File No. 001-01011).

10.17*	Caremark Rx, Inc. 2004 Incentive Stock Plan (incorporated by reference to Exhibit 99.2 of the Registrant's Registration Statement No. 333-141481 on Form S-8 filed March 22, 2007; Commission File No. 011-01011).
10.18*	The Registrant's Deferred Stock Compensation Plan, as amended (incorporated by reference to Exhibit 10.17 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015; Commission File No. 001-01011).
10.19	The Registrant's Deferred Compensation Plan, as amended.

10.20*	The Registrant's 2010 Incentive Compensation Plan, as amended through January 15, 2013 (incorporated by reference to Exhibit A to the Registrant's Definitive Proxy Statement on Form 14A filed March 27, 2015; Commission File No. 001-01011).
10.21*	The Registrant's 2007 Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 10.20 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015; Commission File No. 001-01011).
10.22	The Registrant's 2016 Management Incentive Plan.
10.23	The Registrant's 2016 Executive Incentive Plan.
10.24*	The Registrant's Long-Term Incentive Plan (incorporated by reference to Exhibit 10.21 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2013; Commission File No. 001-01011).
10.25	The Registrant's Partnership Equity Program, as amended.
10.26*	The Registrant's Severance Plan for Non-Store Employees amended as of January 2015 (incorporated by reference to Exhibit 10.25 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015; Commission File No. 001-01011).
10.27	The Registrant's Performance-Based Restricted Stock Unit Plan, as amended.
10.28*	Form of Enterprise Non-Competition, Non-Disclosure and Developments Agreement between the Registrant and certain of the Registrant's executive officers (incorporated by reference to Exhibit 10.25 of the Registrant's Annual Report on Form 10-K for the year ended December 31, 2013; Commission File No. 001-01011).
10.29*	Universal 409A Definition Document, as amended (incorporated by reference to Exhibit 10.28 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015; Commission File No. 001-01011).
10.30*	Form of Non-Qualified Stock Option Agreement between the Registrant and selected employees of the Registrant (incorporated by reference to Exhibit 10.29 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.31*	Form of Restricted Stock Unit Agreement - Annual Grant - between the Registrant and selected employees of the Registrant (incorporated by reference to Exhibit 10.30 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.32*	Form of Performance-Based Restricted Stock Unit Agreement between the Registrant and selected employees of the Registrant (incorporated by reference to Exhibit 10.31 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.33*	Form of Partnership Equity Program Participant Purchased RSUs, Company Matching RSUs and Company Matching Options Agreement (Pre-Tax) (incorporated by reference to Exhibit 10.32 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.34*	

Form of Partnership Equity Program Participant Purchased RSUs, Company Matching RSUs and Company Matching Options Agreement (Post-Tax) (incorporated by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).

10.35* Amended and Restated Employment Agreement dated as of December 22, 2008 between the Registrant and the Registrant's President and Chief Executive Officer (incorporated by reference to Exhibit 10.38 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2008; Commission File No. 001-01011).

10.36* Amendment dated December 21, 2012 to the Amended and Restated Employment Agreement dated as of December 22, 2008 between the Registrant and the Registrant's President and Chief Executive Officer (incorporated by reference to Exhibit 10.31 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012; Commission File No. 001-01011).

10.37	Form of Non-Qualified Stock Option Agreement between the Registrant and the Registrant's President and Chief Executive Officer.
10.38	Form of Restricted Stock Unit Agreement between the Registrant and the Registrant's President and Chief Executive Officer.
10.39*	Amendment dated January 22, 2015 to Nonqualified Stock Option Agreements between the Registrant and the Registrant's President and Chief Executive Officer (incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated January 20, 2015; Commission File No. 001-01011).
10.40*	Change in Control Agreement dated December 22, 2008 between the Registrant and the Registrant's Executive Vice President and Chief Financial Officer (incorporated by reference to Exhibit 10.39 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2010; Commission File No. 001-01011).
10.41*	Amendment dated as of December 31, 2012 to the Change in Control Agreement dated December 22, 2008 between the Registrant and the Registrant's Executive Vice President and Chief Financial Officer (incorporated by reference to Exhibit 10.32 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012; Commission File No. 001-01011).
10.42*	Change in Control Agreement dated December 22, 2008 between the Registrant and the Registrant's Executive Vice President and President of CVS Caremark (incorporated by reference to Exhibit 10.33 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012; Commission File No. 001-01011).
10.43*	Amendment dated as of December 31, 2012 to the Change in Control Agreement dated December 22, 2008 between the Registrant and the Registrant's Executive Vice President and President of CVS Caremark (incorporated by reference to Exhibit 10.34 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2012; Commission File No. 001-01011).
10.44	Restricted Stock Unit Agreement dated April 1, 2016 between the Registrant and the Registrant's Executive Vice President and President of CVS Caremark.
10.45	Restrictive Covenant Agreement dated May 20, 2016 between the Registrant and the Registrant's Executive Vice President and President of CVS Caremark.
10.46*	Change in Control Agreement dated December 22, 2008 between the Registrant and the Registrant's Executive Vice President and President of CVS Pharmacy (incorporated by reference to Exhibit 10.43 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.47*	Amendment dated as of December 31, 2012 to the Change in Control Agreement between the Registrant and the Registrant's Executive Vice President and President of CVS Pharmacy (incorporated by reference to Exhibit 10.44 to the Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2014; Commission File No. 001-01011).
10.48*	Change in Control Agreement dated October 1, 2012 between the Registrant and the Registrant's Executive Vice President, Chief Strategy Officer and General Counsel (incorporated by reference to Exhibit 10.1 of the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2015; Commission File No. 001-01011).
10.49*	

	Restrictive Covenant Agreement dated June 1, 2014 between the Registrant and the Registrant's Executive Vice President, Chief Strategy Officer and General Counsel (incorporated by reference to Exhibit 10.2 of the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2015; Commission File No. 001-01011).
13	Portions of the 2016 Annual Report to Stockholders of CVS Health Corporation, which are specifically designated in this Form 10-K as being incorporated by reference.
21	Subsidiaries of the Registrant.
23	Consent of Ernst & Young LLP.

31.1	Certification by the Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification by the Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification by the Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification by the Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	The following materials from the CVS Health Corporation Annual Report on Form 10-K for the year ended December 31, 2016 formatted in Extensible Business Reporting Language (XBRL): (i) the Consolidated Statements of Income, (ii) the Consolidated Balance Sheets, (iii) the Consolidated Statements of Cash Flows and (iv) related notes.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized.

CVS HEALTH CORPORATION

Date: February 9, 2017

By: /s/ DAVID M. DENTON

David M. Denton

Executive Vice President and Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title(s)	Date
/s/ RICHARD M. BRACKEN **Richard M. Bracken**	Director	February 9, 2017
/s/ C. DAVID BROWN II **C. David Brown II**	Director	February 9, 2017
/s/ EVA C. BORATTO **Eva C. Boratto**	Senior Vice President - Controller and Chief Accounting Officer (Principal Accounting Officer)	February 9, 2017
/s/ ALECIA A. DECOUDREAUX **Alecia A. DeCoudreaux**	Director	February 9, 2017
/s/ DAVID M. DENTON **David M. Denton**	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	February 9, 2017
/s/ NANCY-ANN M. DEPARLE **Nancy-Ann M. DeParle**	Director	February 9, 2017
/s/ DAVID W. DORMAN **David W. Dorman**	Chairman of the Board and Director	February 9, 2017
Anne M. Finucane	Director	
/s/ LARRY J. MERLO **Larry J. Merlo**	President and Chief Executive Officer (Principal Executive Officer) and Director	February 9, 2017
/s/ JEAN-PIERRE MILLON **Jean-Pierre Millon**	Director	February 9, 2017
/s/ RICHARD J. SWIFT **Richard J. Swift**	Director	February 9, 2017
/s/ WILLIAM C. WELDON **William C. Weldon**	Director	February 9, 2017
/s/ TONY L. WHITE **Tony L. White**	Director	February 9, 2017

This page is intentionally left blank

10-K 1 prsc-12312018x10k.htm 10-K

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission file number 001-34221

The Providence Service Corporation
(Exact name of registrant as specified in its charter)

Delaware	**86-0845127**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
700 Canal Street, Third Floor, Stamford, CT	**06902**
(Address of principal executive offices)	**(Zip code)**

Registrant's telephone number, including area code: (203) 307-2800

Securities registered pursuant to Section 12(b) of the Act:

Title of each Class	**Name of each exchange on which registered**
Common Stock, $0.001 par value per share	**The NASDAQ Global Select Market**

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☒ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☒ Yes ☐ No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☒ No

The aggregate market value of the voting and non-voting common equity of the registrant held by non-affiliates based on the closing price for such common equity as reported on The NASDAQ Global Select Market on the last business day of the registrant's most recently completed second fiscal quarter (June 30, 2018) was $904.9 million.

As of February 22, 2019, there were outstanding 12,833,846 shares (excluding treasury shares of 4,973,552) of the registrant's Common Stock, $0.001 par value per share.

DOCUMENTS INCORPORATED BY REFERENCE

All or a portion of Items 10 through 14 in Part III of this Annual Report on Form 10-K are incorporated by reference to our definitive proxy statement on Schedule 14A for our 2019 stockholder meeting; provided that if such proxy statement is not filed on or before April 30, 2019, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

TABLE OF CONTENTS

Part I

In this Annual Report on Form 10-K, the words the "Company", the "registrant", "we", "our", "us", "Providence" and similar terms refer to The Providence Service Corporation and, except as otherwise specified herein, to our subsidiaries. When such terms are used in reference to the Company's common stock, $0.001 par value per share (the "Common Stock"), and the Series A Convertible Preferred Stock, $0.001 par value per share (the "Preferred Stock"), they refer specifically to The Providence Service Corporation.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains certain statements that may be deemed "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including statements related to the Company's strategies or expectations about revenues, liabilities, results of operations, cash flows, ability to fund operations, profitability, ability to meet financial covenants, contracts or market opportunities. The Company may also make forward-looking statements in other reports filed with the Securities and Exchange Commission (the "SEC"), in materials delivered to stockholders and in press releases. In addition, the Company's representatives may from time to time make oral forward-looking statements. In certain cases, you may identify forward looking-statements by words such as "may", "will", "should", "could", "expect", "plan", "project", "intend", "anticipate", "believe", "seek", "estimate", "predict", "potential", "target", "forecast", "likely", the negative of such terms or comparable terminology. In addition, statements that are not historical statements of fact should also be considered forward-looking statements. These forward-looking statements are based on the Company's current expectations, assumptions, estimates and projections about its business and industry, and involve risks, uncertainties and other factors that may cause actual events to be materially different from those expressed or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, the risks described under Item 1A in Part I of this Annual Report on Form 10-K.

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date the statement was made. The Company is under no obligation to (and expressly disclaims any such obligation to) update any of the information in any forward-looking statement if such forward-looking statement later turns out to be inaccurate, whether as a result of new information, future events or otherwise.

Item 1. ***Business.***

Overview

The Providence Service Corporation ("we", the "Company" or "Providence") owns subsidiaries and investments primarily engaged in the provision of healthcare services in the United States. The Company's NET Services segment, which primarily operates under the brands LogistiCare and Circulation, is the largest manager of non-emergency medical transportation ("NET") programs for state governments and managed care organizations ("MCOs") in the United States. On September 21, 2018, we completed the acquisition of Circulation, Inc. ("Circulation"), which offers a full suite of logistics solutions to manage NET programs across all areas of healthcare, powered by its HIPAA-compliant digital platform. Circulation's technology expands LogistiCare's capabilities to manage transportation benefits, integrating all transportation capabilities and emphasizing member convenience and satisfaction.

The Company's Matrix Investment segment consists of a minority investment in CCHN Group Holdings, Inc. and its subsidiaries ("Matrix"), a nationwide provider of home and mobile-based healthcare services for health plans in the United States, including comprehensive health assessments ("CHAs"), quality gap closure visits, "level of service" needs assessments, and post-acute and chronic care management, providing such services through a network of community-based clinicians, and a fleet of mobile health clinics with advanced diagnostics capabilities. On October 19, 2016, affiliates of Frazier Healthcare Partners purchased a controlling equity interest in Matrix, with the Company retaining a non-controlling equity interest (the "Matrix Transaction"). Matrix's financial results prior to October 19, 2016 are presented as a discontinued operation.

The Company's Corporate and Other segment includes the Company's executive, accounting, finance, internal audit, tax, legal, public reporting, and corporate development functions, as well as the results of the Company's captive insurance company. On April 11, 2018, the Company announced an organizational consolidation plan to integrate substantially all activities and functions performed at the corporate holding company level into LogistiCare (the "Organizational Consolidation"). LogistiCare will retain its name and continue to be headquartered in Atlanta, GA, and the Company will

continue to be named The Providence Service Corporation and be listed on The NASDAQ Global Select Market ("NASDAQ") under the ticker symbol "PRSC". The Organizational Consolidation process involves transferring all job responsibilities previously performed by employees of the

holding company to LogistiCare and closing the current corporate offices in Stamford, Connecticut and Tucson, Arizona. The Organizational Consolidation is expected to be complete by the end of the second quarter of 2019.

On December 21, 2018, we completed the sale of substantially all of the operating subsidiaries of our Workforce Development Services ("WD Services") segment to Advanced Personnel Management Global Pty Ltd of Australia ("APM") and APM UK Holdings Limited, an affiliate of APM, except for the segment's employment services operations in Saudi Arabia (the "WD Services Sale"). Our contractual counterparties in Saudi Arabia, including an entity owned by the Saudi Arabian government, assumed these operations beginning January 1, 2019.

On June 11, 2018, the Company entered into a Share Purchase Agreement to sell Ingeus France, which was part of our WD Services segment, for a de minimis amount. The sale was effective on July 17, 2018, after court approval. The financial results of WD Services prior to December 21, 2018 are presented as discontinued operations.

The Company is a Delaware corporation formed in 1996 and headquartered in Stamford, Connecticut.

Business Strategies

The Company's mission is to provide effective and quality NET services and logistics and to create shareholder value by pursuing and implementing six key strategies.

Centers of Excellence Operations Alignment

In January 2019, we reorganized the operational structure of our NET Services segment in order to centralize and reduce the layers in core functions that form the most significant elements of our cost base and drive performance for our clients and the members and patients they serve. Our operational structure now includes six Centers of Excellence ("COEs"): Transportation Network, Call Center Operations, Client Services, Technology, Growth and Process Improvement. We implemented this operational strategy to enhance the visibility, flexibility and control we have over our operations. The Transportation Network COE is focused on increases to capacity and improvements to quality and improvements designed to reduce cost and enhance the member experience. Within our Call Center Operations, activities such as contact center workflow standardization, cross skilling, and intensive operations management are aimed at improving employee productivity. We believe the new model for Client Services will bring a closer focus on local operations as well as holistic approaches to our customers and client retention. Our Technology COE will be coordinated and focused on the support of operations and the systematic roll out of the Circulation technology platform. Growth will continue to focus our sales, marketing and business development teams on the generation and delivery of new business. Finally, our Process Improvement COE will continue to support all of our other COE's in the pursuit of effective and efficient operations. We believe this new structure makes our scale more nimble and provides us with a competitive advantage.

Technology Transformation

On September 21, 2018, we completed the acquisition of Circulation to revolutionize our technology development capability, add to our executive team, extend our business model, and open new market opportunities. We believe that this technology allows us to reduce transportation as a barrier to care and that through the deployment of our new technology we are able to extend the size of the market that we can serve. In order to achieve our target synergies and enhance our operations, we plan to roll out Circulation's technology as our core workflow platform over the next 36 months. We have 21 operations centers that we expect to convert to the Circulation platform. Our plan is to convert several call centers in 2019, beginning in the second quarter, with a target to convert all sites by the end of 2021. Technology roll outs include a substantial amount of change management and will require careful risk mitigation policies to ensure smooth transitions. Our change management process is a core strength deeply embedded in our organization and will support a major change in the way we operate today, driving significant efficiencies and enhancing the member experience benefits to our clients.

Client and Member Satisfaction

Transportation related to care is one of the most impactful experiences contributing to our clients' members' and patients' satisfaction during their care encounter. At the core of our operational and technology strategies is a focus on driving client and member satisfaction. Our COEs' operational structure allows us to develop locally tailored network solutions with a higher level of visibility. Greater access to real time information, enabled through our technology, provides us the ability to

shorten cycle times to identify and resolve client and member issues. We expect our clients to begin to realize benefits in the near term from our new organizational model and roll out of the Circulation technology platform.

Organic Growth

Across the healthcare market, we see an increasing understanding of the benefit of removing transportation as a barrier to care and a way to improve other determinants of health, such as access to food, shelter, socialization, and pharmacy. We believe that our scale, deep experience, operational strategy, and technology migration uniquely position us to address customer needs related to transportation of vulnerable populations. We approach sales, marketing and business development in a manner that is focused on driving market share in our core Medicaid market including states and MCOs, Medicare Advantage ("MA") plans, health systems and providers. Simultaneously, we target business development efforts with partners to enter new transportation markets, including the movement of home health providers, pharmacy delivery and beneficiaries of workers compensation. We expect there will be network effects as we serve more and more healthcare constituencies within a geography.

Inorganic Growth

We closely follow our core NET market and expansion markets mentioned above for tuck-in acquisition opportunities. We believe our experience, relationships in the industry, scale and executive team gives us the strongest position to be a consolidation platform in healthcare transportation. Our acquisition strategy may include an evaluation of new entrants, which may not be able to otherwise compete without the benefits of scale and experience, and closely-held businesses that may seek a new capital structure or sale to achieve liquidity for founders. With our balance sheet, strong team and track record, we believe we are a natural consolidator.

Smart Capital Allocation

The WD Services sale was a significant milestone in our strategy to focus our capital allocation priorities on the opportunities available to our NET Services segment. The NET Services segment has historically generated positive cash flows and our strong balance sheet provides us with optionality with respect to capital allocation and how we can best drive shareholder value. Our immediate focus in 2019 is to invest in our operations, including the roll-out of the Circulation technology to enhance client and member experience and drive operational efficiency. We will also continue to assess the opportunities for capital deployment in order to create value for shareholders, which may include dividends, share repurchases and/or acquisitions.

NET Services

Services offered. NET Services provides non-emergency transportation solutions to clients, including health systems, in 40 states and the District of Columbia. As of December 31, 2018, approximately 24.5 million individuals were eligible to receive our transportation services, and during 2018, NET Services managed approximately 52.6 million trips. NET Services accounts for all of our consolidated revenue from continuing operations going forward.

NET Services primarily contracts with state Medicaid programs and MCOs, including MA plans, (collectively "NET customers") for the coordination of their members' ("NET end-users") non-emergency transportation needs. NET end-users are typically Medicaid or Medicare eligible members, whose limited mobility or financial resources hinders their ability to access necessary healthcare and social services. We believe our transportation services enable access to care that not only improves the quality of life and health of the populations we serve, but also enables many of the individuals we serve to pursue independent living in their homes rather than in more expensive institutional care settings. In addition, studies have shown that missed medical appointments lessens patient compliance with clinical guidelines and leads to complications and expensive medical services. Through provider access to medical transportation, NET Services can save state Medicaid programs and MCOs significant amounts of money when used as part of a care management strategy for individuals with chronic illness. We believe we are uniquely positioned to partner with NET customers to provide these savings while improving the lives of the populations we serve.

NET Services program delivery is dependent upon a highly-integrated technology platform and business process as well as the management of a multifaceted network of subcontracted transportation providers. Our technology platform is purpose-built for the unique needs of our industry and is highly scalable, capable of supporting substantial growth in our clients' current and future membership base. In addition, our technology platform efficiently provides a broad interconnectivity among NET end-users, NET customers, and our network of transportation providers. We believe this technological capability and our industry experience uniquely position us as a future focal point in the evolving healthcare industry to introduce valuable

population insights. In 2016 and 2017, we introduced service offerings and new technological features for NET end-users to improve service levels, lower costs and build the foundation for additional data analytics capabilities. In 2018, we acquired Circulation to provide additional technological improvements through their digital transportation platform. Circulation's technology allows for on-demand ride scheduling, eligibility assessment, benefits management, ride assignment and dispatch, real time ride tracking, network management and analytics.

To fulfill the transportation needs of NET end-users, we apply our proprietary technology platform to an extensive network of approximately 4,500 transportation resources. This includes our in-network roster of fully contracted transportation providers who operate sedans, wheelchair equipped vehicles, multi-passenger vans and ambulances. Our system also utilizes partnerships with on-demand transportation network companies, mass transit entities, mileage reimbursement programs, taxis and county-based emergency medical service providers. To promote safety, quality, and compliance, our in-network transportation providers undergo an in-depth credentialing and education process.

Our transportation management services also include fraud, waste, and abuse prevention and utilization review programs designed to monitor that our transportation services are provided in compliance with Medicaid and Medicare program rules and remediate issues that are identified. Compliance controls include ongoing monitoring, auditing and remediation efforts, such as validating NET end-user eligibility for the requested date of service and employing a series of gatekeeping questions to verify that the treatment type is covered and the appropriate mode of transportation is assigned. We also conduct post-trip confirmations of attendance directly with the healthcare providers for certain repetitive trips and we employ field monitors to inspect transportation provider vehicles and observe some transports in real time. Our claims validation process generally limits payment to trips that are properly documented, have been authorized in advance, and are billed at the pre-trip estimated amount. Our claims process is increasingly digital, which provides more protection to member protected health information and reduces the impact on the environment. Transportation providers are able to submit their bills and supporting documentation through a secured web portal directly to LogistiCare.

Revenue and customers. In 2018, contracts with state Medicaid agencies and MCOs represented 52.9% and 47.1%, respectively, of NET Services' revenue. NET Services derived 12.6%, 13.8% and 13.1% of its revenue from a single state Medicaid agency for the years ended December 31, 2018, 2017 and 2016, respectively. The next four largest NET Services customers in the aggregate comprised 21.4%, 22.3% and 22.6% of NET Services' revenue for the years ended December 31, 2018, 2017 and 2016, respectively.

Contracts with state Medicaid agencies are typically for three to five years with multiple renewal options. Contracts with MCOs continue until terminated by either party upon reasonable notice (as determined in accordance with the contract), and allow for regular price adjustments based upon utilization and transportation cost. As of December 31, 2018, 13.2% of NET Services revenue was generated under state Medicaid contracts that are subject to renewal within the next 12 months. In 2018, NET Services renewed contracts representing 32.4% of its revenue in such year.

79.2% of NET Services' revenue in 2018 was generated under capitated contracts where we assume the responsibility of meeting the covered healthcare related transportation requirements of a specific population based on per-member per-month fees for the number of members in the customer's program. Revenue is recognized based on the population served during the period. Under certain capitated contracts, known as reconciliation contracts, partial payment is received as a prepayment during the month service is provided. These partial payments may be due back to the customer, or additional payments may be due to the Company, after each reconciliation period, based on a reconciliation of actual utilization and cost compared to the prepayment made. 20.8% of NET Services' revenue was generated under other types of fee arrangements, including administrative services only, fee for service and cost plus (collectively "FFS") and flat fee contracts, under which fees are generated based upon billing rates for specific services or defined membership populations.

Seasonality. While revenue is generally fixed, primarily as a result of the capitated nature of the majority of our contracts, service expense varies based on the utilization of our services. The quarterly operating income and cash flows of NET Services normally fluctuate as a result of seasonal variations in the business, principally due to lower transportation demand during the winter season and higher demand during the summer season.

Competition. We compete with a variety of national organizations that provide similar healthcare and social services related transportation, such as Medical Transportation Management, Southeastrans, Veyo, and Access2Care, as well as local and regional providers. Most local competitors seek to win contracts for specific counties or small geographic territories whereas we and other larger competitors seek to win contracts for an entire state or large regional area. We compete based upon a number of factors, including our nationwide network, technical expertise, experience, service capability, service quality, and price.

Matrix Investment

Our Matrix Investment is comprised of our interest in Matrix. Since the completion of the Matrix Transaction, the Company has had a non-controlling equity interest in Matrix. The Company and an affiliate of Frazier Healthcare Partners (the

"Frazier Subscriber"), which holds the controlling equity interest in Matrix, are party to the Second Amended and Restated Limited Liability Company Agreement (the "Operating Agreement") of Mercury Parent, LLC, the company through which the parties hold their equity interests in Matrix. The Operating Agreement sets forth certain terms and conditions regarding the ownership by the Company

and Frazier Subscriber of interests in Mercury Parent and their indirect ownership of common stock of Matrix, and provides for, among other things, certain liquidity and governance rights and other obligations and rights, in each case, on the terms and conditions contained therein.

At December 31, 2018, the Company owned a 43.6% non-controlling interest in Matrix. Prior to the closing of the Matrix Transaction, the financial results of Matrix were included in our Health Assessment Services ("HA Services") segment. The Company's proportionate share of Matrix's net assets and financial results for the period following the closing of the Matrix Transaction are presented using the equity method. The assets, liabilities and financial results of Matrix for the period prior to the closing of the Matrix Transaction are presented within discontinued operations. For additional information regarding the Matrix Transaction, see Note 23, *Discontinued Operations,* to our consolidated financial statements.

Services offered. Matrix offers in-home care optimization services for members, including CHAs, through a national network of community-based clinicians and a fleet of mobile health clinics with advanced diagnostics capabilities. As of December 31, 2018, Matrix utilized a national network of approximately 3,500 clinical providers, including 1,800 nurse practitioners ("NPs"), located across 48 states, to provide its services primarily to members of Medicare Advantage ("MA") health plans.

Matrix expanded its provider network and service offerings through two acquisitions in 2017 and 2018. In December 2017, Matrix grew its clinical provider network through its acquisition of LP Health Services, a provider of quality and wellness visits on behalf of Medicaid/Duals managed care plans across the U.S., for a purchase price of $3.6 million. In February 2018, Matrix completed its acquisition of HealthFair, a leading operator of mobile clinics which offer preventative health assessment and advanced diagnostic testing services, including laboratory, ultrasound, EKG and mammography testing, for a purchase price of $155 million. Although to date the results of HealthFair have been below our expectations, we still believe the combination of the two organizations provides health plan members with more convenient access to important care management and preventative health services.

Matrix primarily generates revenue from CHAs, which obtain a health plan member's information related to health status, social, environmental and medical risks and help the MA plans improve the accuracy of such information. Matrix also operates a care management offering which provides additional data analytics and chronic care management services.

Matrix's services are dependent upon its technology platform which integrates the clinical provider network, operations infrastructure, call centers and clients. Matrix's platform is designed for the unique needs of its industry, is highly scalable and can support substantial growth. We believe Matrix's network and platform position Matrix as a future focal point in the evolving healthcare industry in the introduction of both additional population insights and care management services. With data provided by its health plan clients, Matrix utilizes analytics to determine which members it can most effectively lower costs and improve outcomes through face-to-face engagements with clinicians. Each program is customized and is served by a comprehensive team of case managers, nurse practitioners, registered nurses, and trained call center colleagues.

Revenue, customers and clients. As of December 31, 2018, Matrix's customers included 65 health plans, including for-profit multi-state health plans and non-profit health plans that operate in only one state or several counties within one state. For the year ended December 31, 2018, Matrix's top five customers accounted for 66.3% of its revenue, as its largest customer accounted for 31.5% of its revenue and its second largest customer accounted for 21.2% of its revenue. Matrix enters into annual or multi-annual contracts with its customers under which it is paid on a per assessment basis. However, volumes are not guaranteed under contracts and customers may choose to utilize other third party providers or in-source capabilities. A significant customer has indicated it intends to in-source certain services, which may result in a decrease in volume for Matrix.

Seasonality. Matrix attempts to perform CHAs evenly throughout the year to efficiently utilize NP capacity, although the timing of performance is driven by client demand.

Competition. We believe that Matrix and Signify Health are the largest independent providers of CHAs to the health plan market. There are many smaller competitors, such as EMSI Healthcare Services, MedXM, which was acquired by Quest Diagnostics on February 1, 2018, and Inovalon. In addition, some health plans in-source CHA services. Matrix's chronic care management competitors include Landmark Healthcare, PopHealthCare and Optum.

Employees

As of December 31, 2018, we had approximately 4,000 employees. None of our employees are members of a union. We believe we have good relationships with our employees.

Regulatory Environment

Overview

Our NET Services and Matrix Investment segments (the "Healthcare Segments") are subject to numerous U.S. federal, state and local laws, regulations and agency guidance (collectively, "Laws"). These Laws significantly affect the way in which these segments operate various aspects of their businesses. Our Healthcare Segments must also comply with state and local licensing requirements, state and federal requirements for participation in Medicare and Medicaid, requirements for contracting with MA plans, and contractual requirements imposed upon them by the federal, state and local agencies and third-party commercial customers to which they provide services. Failure to follow the rules and requirements of these programs can significantly affect our Healthcare Segments' ability to be paid for the services they provide and be authorized to provide services on an ongoing basis.

The Medicare and Medicaid programs are governed by significant and complex Laws. Both Medicare and Medicaid are financed, at least in part, with federal funds. Therefore, any direct or indirect recipients of those funds are subject to federal fraud, waste and abuse Laws. In addition, there are federal privacy and security Laws that govern the healthcare industry. State Laws primarily pertain to the licensure of certain categories of healthcare professionals and providers and the state's interest in regulating the quality of healthcare in the state, regardless of the source of payment, but may also include state Laws pertaining to fraud, waste and abuse, privacy and security Laws, and the state's regulation of its Medicaid program. Federal and state regulatory laws that may affect our Healthcare Segments' businesses, include, but are not limited to the following:

- false and other improper claims or false statements Laws pertaining to reimbursement;
- the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") and its privacy, security, breach notification and enforcement and code set regulations and guidance, along with evolving state Laws protecting patient privacy and requiring notifications of unauthorized access to, or use of, patient medical information;
- civil monetary penalties Law;
- anti-kickback Laws;
- the Stark Law and other self-referral, financial inducement, fee splitting, and patient brokering Laws;
- The Centers for Medicare and Medicaid Services ("CMS") regulations pertaining to Medicare as well as CMS releases applicable to the operation of MA plans, such as reimbursement rates, risk adjustment and data collection methodologies, adjustments to quality management measurements and other relevant factors; and
- state licensure laws.

A violation of certain of these Laws could result in civil and criminal damages and penalties, the refund of monies paid by government or private payors, our Healthcare Segments' exclusion from participation in federal healthcare payor programs, or the loss of our segments' license to conduct business within a particular state's boundaries.

Federal Law

Federal healthcare Laws apply in any case in which our Healthcare Segments are providing an item or service that is reimbursable or provide information to such segments' customers that results in reimbursement by a federal healthcare payor program to such segments or to them. The principal federal Laws that affect our Healthcare Segments' businesses include those that prohibit the filing of false or improper claims or other data with federal healthcare payor programs and those that prohibit unlawful inducements for the referral of business reimbursable under federal healthcare payor programs.

False and Other Improper Claims

Under the federal False Claims Act (31 U.S.C. §§ 3729-3733) and similar state Laws, the government may impose civil liability on our Healthcare Segments if they knowingly submit a false claim to the government or cause another to submit a false claim to the government, or knowingly make a false record or statement intended to get a false claim paid by the government. The False Claims Act defines a claim as a demand for money or property made directly to the government or to a contractor, grantee, or other recipient if the money is to be spent on the government's behalf or if the government will reimburse the contractor or grantee. Liability can be incurred for submitting (or causing another to submit) false claims with actual knowledge or for submitting false claims with reckless disregard or deliberate ignorance. Liability can also be incurred for knowingly making or using a false record or statement to receive payment from the federal government or for knowingly and improperly avoiding or decreasing an obligation to pay or transmit money or property to the government. Consequently, a

provider need not take an affirmative action to conceal or avoid an obligation to the government, but the mere retention of an overpayment from the government could lead to potential liability under the False Claims Act.

Many states also have similar false claims statutes. In addition, healthcare fraud is a priority of the U.S. Department of Justice ("DOJ"), the Department of Health and Human Services ("DHHS"), its program integrity contractors and its Office of Inspector General, the Federal Bureau of Investigation and state Attorneys General. These agencies have devoted a significant amount of resources to investigating healthcare fraud.

If our Healthcare Segments are ever found to have violated the False Claims Act, they could be required to make significant payments to the government (including damages and penalties in addition to the return of reimbursements previously collected) and could be excluded from participating in federal healthcare programs or providing services to entities which contract with those programs. Although our Healthcare Segments monitor their billing practices for compliance with applicable laws, such laws are very complex, and they might not be able to detect all errors or interpret such laws in a manner consistent with a court or an agency's interpretation. While the criminal statutes generally are reserved for instances evidencing fraudulent intent, the civil and administrative penalty statutes are being applied by the federal government in an increasingly broad range of circumstances. Examples of the types of activities giving rise to liability for filing false claims include billing for services not rendered, misrepresenting services rendered (i.e., miscoding), applications for duplicate reimbursement and providing false information that results in reimbursement or impacts reimbursement amounts. Additionally, the federal government takes the position that a pattern of claiming reimbursement for unnecessary services violates these statutes if the claimant should have known that the services were unnecessary. The federal government also takes the position that claiming reimbursement for services that are substandard is a violation of these statutes if the claimant should have known that the care was substandard. Criminal penalties also are available even in the case of claims filed with private insurers if the federal government shows that the claims constitute mail fraud or wire fraud or violate any of the federal criminal healthcare fraud statutes.

State Medicaid agencies and state Attorneys General also have authority to seek criminal or civil sanctions for fraud and abuse violations. In addition, private insurers may bring actions under state false claim laws. In certain circumstances, federal and state laws authorize private whistleblowers to bring false claim or "qui tam" suits on behalf of the government against providers and reward the whistleblower with a portion of any final recovery. In addition, the federal government has engaged a number of private audit organizations to assist it in tracking and recovering claims for healthcare services that may have been improperly submitted.

Governmental investigations and whistleblower "qui tam" suits against healthcare companies have increased significantly in recent years, and have resulted in substantial penalties and fines and exclusions of persons and entities from participating in government healthcare programs. For more information on the risks related to a failure to comply with applicable government coding and billing rules, see "Risk Factors—Regulatory Risks—Our Healthcare Segments could be subject to actions for false claims or recoupment of funds pursuant to certain audits if they do not comply with government coding and billing rules, which could have a material adverse impact on our segments' operating results."

Health Information Practices

Under HIPAA, DHHS issued rules to define and implement standards for the electronic transactions and code sets for the submission of transactions such as claims, and privacy and security of individually identifiable health information in whatever manner it is maintained.

The Final Rule on Enforcement of the HIPAA Administrative Simplification provisions, including the transaction standards, the security standards and the privacy rule, published by DHHS addresses, among other issues, DHHS's policies for determining violations and calculating civil monetary penalties, how DHHS will address the statutory limitations on the imposition of civil monetary penalties, and various procedural issues. The rule extends enforcement provisions currently applicable to the healthcare privacy regulations to other HIPAA standards, including security, transactions and the appropriate use of service code sets.

The Health Information Technology for Economic and Clinical Health Act ("HITECH"), enacted as part of the American Recovery and Reinvestment Act of 2009, extends certain of HIPAA's obligations to parties providing services to healthcare entities covered by HIPAA known as "business associates," imposes new notice of privacy breach reporting obligations, extends enforcement powers to state Attorneys General and amends the HIPAA privacy and security laws to strengthen the civil and criminal enforcement of HIPAA. HITECH establishes four categories of violations that reflect increasing levels of culpability, four corresponding tiers of penalty amounts that significantly increase the minimum penalty amount for each violation, and a maximum penalty amount of $1.5 million for all violations of an identical provision. With the additional HIPAA enforcement power under HITECH, the Office for Civil Rights of the DHHS and states are increasing their

investigations and enforcement of HIPAA compliance. Our Healthcare Segments have taken steps to ensure compliance with HIPAA and we are monitoring compliance on an ongoing basis.

Additionally, the HITECH Final Rule imposes various requirements on covered entities and business associates, and expands the definition of "business associates" to cover contractors of business associates. Even when our Healthcare Segments are not operating as covered entities, they may be deemed to be "business associates" for HIPAA rule purposes of such covered entities. Our Healthcare Segments monitor their compliance obligations under HIPAA as modified by HITECH, and implement operational and systems changes, associate training and education, conduct risk assessments and allocate resources as needed. Any noncompliance with HIPAA requirements could expose such segments to the criminal and increased civil penalties provided under HITECH and require them to incur significant costs in order to seek to comply with its requirements or to remediate potential issues that may arise.

Federal and State Anti-Kickback Laws

Federal law commonly known as the "Anti-Kickback Statute" prohibits the knowing and willful offer, solicitation, payment or receipt of anything of value (direct or indirect, overt or covert, in cash or in kind) which is intended to induce: the referral of an individual for a service for which payment may be made by Medicare, Medicaid or certain other federal healthcare programs; or the ordering, purchasing, leasing, or arranging for, or recommending the purchase, lease or order of, any service or item for which payment may be made by Medicare, Medicaid or certain other federal healthcare programs.

Interpretations of the Anti-Kickback Statute have been very broad and under current Law, courts and federal regulatory authorities have stated that the Anti-Kickback Statute is violated if even one purpose (as opposed to the sole or primary purpose) of the arrangement is to induce referrals. Even bona fide investment interests in a healthcare provider may be questioned under the Anti-Kickback Statute if the government concludes that the opportunity to invest was offered as an inducement for referrals.

This act is subject to numerous statutory and regulatory "safe harbors." Compliance with the requirements of a safe harbor offers defenses against Anti-Kickback Statute allegations. Failure of an arrangement to satisfy all of the requirements of a particular safe harbor does not mean that the arrangement is unlawful. However, it may mean that such an arrangement will be subject to scrutiny by the regulatory authorities.

Many states, including some where our Healthcare Segments do business, have adopted anti-kickback laws that are similar to the federal Anti-Kickback Statute. Some of these state laws are very closely patterned on the federal Anti-Kickback Statute; others, however, are broader and reach reimbursement by private payors. If our Healthcare Segments' activities were deemed to be inconsistent with state anti-kickback or illegal remuneration laws, they could face civil and criminal penalties or be barred from such activities, any of which could harm such segments' businesses.

If our Healthcare Segments' arrangements are found to violate the Anti-Kickback Statute or applicable state laws, these segments, along with their clients would be subject to civil and criminal penalties, and these segments' arrangements would not be legally enforceable, which could materially and adversely affect their business. For more information on the risks related to failure to comply with applicable anti-bribery and anti-corruption regulations, see "Risk Factors—Regulatory Risks—Our segments' business could be subject to civil penalties and loss of business if we fail to comply with applicable bribery, corruption and other regulations governing business with governments."

Federal and State Self-Referral Prohibitions

Our Healthcare Segments may be subject to federal and state statutes banning payments for referrals of patients and referrals by physicians to healthcare providers with whom the physicians have a financial relationship. Section 1877 of the Social Security Act, also known as the "Stark Law", prohibits physicians from making a "referral" for "designated health services" for Medicare (and in many cases Medicaid) patients from entities or facilities in which such physicians directly or indirectly hold a "financial relationship".

A financial relationship can take the form of a direct or indirect ownership, investment or compensation arrangement. A referral includes the request by a physician for, or ordering of, or the certifying or recertifying the need for, any designated health services.

Certain services that our Healthcare Segments provide may be identified as "designated health services" for purposes of the Stark Law. Such segments cannot provide assurance that future regulatory changes will not result in other services they provide becoming subject to the Stark Law's ownership, investment or compensation prohibitions in the future.

Many states, including some states where our Healthcare Segments do business, have adopted similar or broader prohibitions against payments that are intended to induce referrals of clients. Moreover, many states where such segments operate

have laws similar to the Stark Law prohibiting physician self-referrals. While our Healthcare Segments believe that they are operating in compliance with the Stark Law, there can be no guarantee that violations will not occur.

Healthcare Reform

On March 23, 2010, the President of the United States signed into law comprehensive health reform through the Patient Protection and Affordable Care Act (Pub. L. 11-148) ("PPACA"). On March 30, 2010, the President signed a reconciliation budget bill that included amendments to the PPACA (Pub. L. 11-152). These laws in combination form the "ACA" referred to herein. The changes to various aspects of the healthcare system in the ACA were far-reaching and included, among many others, substantial adjustments to Medicare reimbursement, establishment of individual mandates for healthcare coverage, extension of coverage to certain populations, expansion of Medicaid, restrictions on physician-owned hospitals, and increased efficiency and oversight provisions.

Some of the provisions of the ACA took effect immediately, while others will take effect later or will be phased in over time, ranging from a few months following approval to ten years. Due to the complexity of the ACA, it is likely that additional legislation will be considered and enacted. The ACA requires the promulgation of regulations that will likely have significant effects on the healthcare industry and third-party payors. Thus, the healthcare industry and our operations may be subjected to significant new statutory and regulatory requirements and contractual terms and conditions, and consequently to structural and operational changes and challenges.

The ACA also implemented significant changes to healthcare fraud and abuse laws that intensify the risks and consequences of enforcement actions. These included expansion of the False Claims Act by: (a) narrowing the public disclosure bar; and (b) explicitly stating that violations of the Anti-Kickback Statute trigger false claims liability. In addition, the ACA lessened the intent requirements under the Anti-Kickback Statute to provide that a person may violate the statute without knowledge or specific intent. The ACA also provided new funding and expanded powers to investigate fraud, including through expansion of the Medicare Recovery Audit Contractor ("RAC") program to Medicare Parts C and D and Medicaid and authorizing the suspension of Medicare and Medicaid payments to a provider of services pending an investigation of a credible allegation of fraud. Finally, the legislation created enhanced penalties for noncompliance, including increased criminal penalties and expansion of administrative penalties under Medicare and Medicaid. Collectively, such changes could have a material adverse impact on our Healthcare Segments' operations.

On January 20, 2017, the President of the United States issued an executive order that directed federal agencies to take steps to ensure the government's implementation of the ACA minimizes the burden on impacted parties (such as individuals and states). The underlying intent of the executive order was to take the first steps to repeal and replace the ACA. The executive order specifically instructed agencies to "waive, defer, grant exemptions from, or delay implementation of provisions" that place a "fiscal burden on any State" or that impose a "cost, fee, tax, penalty, or regulatory burden" on stakeholders including patients, providers, and insurers. The order stated that any changes should be made only to the extent "permitted by law" and should comply with the law governing administrative rule-making. The executive order did not, however, provide specifics on next steps or provisions that would be reexamined nor was it clear how the executive branch would be reconciled with Republican congressional efforts to repeal and replace the ACA or what portions of the ACA may continue in any replacement legislation. There are multiple pending legislative proposals to amend the ACA which, among other effects, could repeal all or parts of the ACA without replacing its extension of coverage to expansion populations. In addition, there are pending legislative proposals to materially restructure Medicaid and other government health care programs and there is litigation challenging, amongst other claims, the constitutionality of the ACA. Most recently, on December 14, 2018, a federal district court judge in Texas issued a widely anticipated opinion that struck down the entire ACA as unconstitutional. The judge ruled in favor of the plaintiffs by determining that the ACA's individual mandate is no longer a tax and is therefore an unconstitutional exercise of congressional authority. The judge also found that the individual mandate could not be severed from the rest of the ACA, rendering the entire ACA, not just the guaranteed issue and community rating provisions, unconstitutional. Sixteen states and the District of Columbia intervened as defendants in *Texas v. United States* to proffer a defense of the constitutionality of the ACA. The DOJ declined to defend the ACA on constitutional grounds. The intervenor defendant states have announced they will appeal the District Court's decision to the Fifth Circuit Court of Appeals. We are not able to predict the outcome of this matter nor are we able to predict the impact of a full or partial invalidation of the ACA.

In 2017, legislation was proposed in the U.S. Congress, but did not advance out of committee and was not passed, which would reduce or eliminate certain non-emergency medical transportation services provided by NET Services as a required Medicaid benefit. A similar proposal was made in 2018 by the President of the United States in a federal budget

proposal. If additional privatization initiatives are not proposed or enacted, or if previously enacted privatization initiatives are challenged, repealed or invalidated, there could be a material adverse impact on our segments' operating results.

Surveys and Audits

Our Healthcare Segments' programs are subject to periodic surveys by government authorities or their contractors to ensure compliance with various requirements. Regulators conducting periodic surveys often provide reports containing statements of deficiencies for alleged failures to comply with various regulatory requirements. In most cases, if a deficiency finding is made by a reviewing agency, our segments will work with the reviewing agency to agree upon the steps to be taken to bring our program into compliance with applicable regulatory requirements. In some cases, however, an agency may take a number of adverse actions against a program, including:

- the imposition of fines or penalties or the recoupment of amounts paid;
- temporary suspension of admission of new clients to our program's service;
- in extreme circumstances, exclusion from participation in Medicaid, Medicare or other programs;
- revocation of our license; or
- contract termination.

While our Healthcare Segments believe that our programs are in compliance with Medicare, Medicaid and other program certification requirements and state licensure requirements, failure to comply with these requirements could have a material adverse impact on such segments' businesses and their ability to enter into contracts with other agencies to provide services.

Billing/claims Reviews and Audits

Agencies and other third-party commercial payors periodically conduct pre-payment or post-payment medical reviews or other audits of our Healthcare Segments' claims or other audits in conjunction with their obligations to comply with the requirements of Medicare or Medicaid. In order to conduct these reviews, payors request documentation from our Healthcare Segments and then review that documentation to determine compliance with applicable rules and regulations, including the eligibility of clients to receive benefits, the appropriateness of the care provided to those clients, and the documentation of that care. Any determination that such segments have not complied with applicable rules and regulations could result in adjustment of payments or the incurrence of fines and penalties, or in situations of significant compliance failures review or non-renewal of related contracts.

Corporate Practice of Medicine and Fee Splitting

Some states in which our Healthcare Segments operate prohibit general business entities, such as these segments, from "practicing medicine," which definition varies from state to state and can include employing physicians, as well as engaging in fee-splitting arrangements with these healthcare providers. Among other things, our Healthcare Segments currently contract with and employ NPs to perform CHAs. We believe that such segments have structured their operations appropriately; however, they could be alleged or found to be in violation of some or all of these laws. If a state determines that some portion of our Healthcare Segments' businesses violate these laws, it may seek to have such segments discontinue or restructure those portions of their operations or subject them to increased costs, penalties, fines, certain license requirements or other measures. Any determination that such segments have acted improperly in this regard may result in liability to them. In addition, agreements between the corporation and the professional may be considered void and unenforceable.

Professional Licensure and Other Requirements

Many of our Healthcare Segments' employees are subject to federal and state laws and regulations governing the ethics and practice of their professions. For example, our mid-level practitioners (e.g., NPs) are subject to state laws requiring physician supervision and state laws governing mid-level scope of practice. As physicians' use of mid-level practitioners increases, state governing boards are implementing more robust regulations governing mid-levels and their scope of practice under physician supervision. Our Healthcare Segments' ability to provide mid-level practitioner services may be restricted by the enactment of new state laws governing mid-level scope of practice and by state agency interpretations and enforcement of such existing laws. In addition, services rendered by mid-level practitioners may not be reimbursed by payors at the same rates as payors may reimburse physicians for the same services. Lastly, professionals who are eligible to participate in Medicare and Medicaid as individual providers must not have been excluded from participation in government programs at any time. Our Healthcare Segments' ability to provide services depends upon the ability of their personnel to meet individual licensure and other requirements and maintain such licensure in good standing.

Additional Information

The Company's website at www.prscholdings.com provides access to its periodic reports, certain corporate governance documents, press releases, interim shareholder reports and links to its subsidiaries' websites. The Company makes available to the public on its website its annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after it electronically files such material with, or furnishes such material to, the SEC. Copies are also available, without charge, upon request to The Providence Service Corporation, 700 Canal Street, Third Floor, Stamford, CT 06902, (203) 307-2800, Attention: Corporate Secretary. The information contained on our website is not part of, and is not incorporated by reference in, this Annual Report on Form 10-K or any other report we file with or furnish to the SEC.

Item 1A. ***Risk Factors.***

You should consider and read carefully all of the risks and uncertainties described below, as well as other information included in this Annual Report on Form 10-K, including our consolidated financial statements and related notes. The risks described below are not the only ones facing us. The occurrence of any of the following risks or additional risks and uncertainties not presently known to us or that we currently believe to be immaterial could materially and adversely affect our business, financial condition and results of operations. This Annual Report on Form 10-K also contains forward-looking statements and estimates that involve risks and uncertainties. Our actual results could differ materially from those anticipated in any forward-looking statements as a result of specific factors, including the risks and uncertainties described below.

Risks Related to Our Business

There can be no assurance that our contracts will survive until the end of their stated terms, or that upon their expiration will be renewed or extended on satisfactory terms, if at all. Disruptions to, the early expiration of or the failure to renew our contracts could have a material adverse impact on our financial condition and results of operations.

Our NET Services contracts are subject to frequent renewal. For example, many of our state Medicaid contracts, which represented 52.9% of NET Services revenue for the year ended December 31, 2018, have terms ranging from three to five years and are typically subject to a competitive bidding process near the end of the term. NET Services also contracts with MCOs, which represented 47.1% of NET Services revenue for the year ended December 31, 2018. MCO contracts typically continue until terminated by either party upon reasonable notice (as determined in accordance with the contract). We cannot anticipate if, when or to what extent we will be successful in renewing our state Medicaid contracts or retaining our MCO contracts. As of December 31, 2018, 13.2% of NET Services revenue was generated under state Medicaid contracts that are subject to renewal within the next 12 months. Renewed contracts represented 32.4% of our NET Services revenue for the year ended December 31, 2018.

In addition, with respect to many of our state contracts, the payor may terminate the contract without cause, or for convenience, at will and without penalty to the payor, either immediately or upon the expiration of a short notice period in the event that, among other reasons, government appropriations supporting the programs serviced by the contract are reduced or eliminated.

We cannot anticipate if, when or to what extent a payor might terminate its contract with us prior to its expiration, or fail to renew or extend a contract with us. If we are unable to retain or renew our contracts, or replace lost contracts, on satisfactory terms our financial conditions and results of operations could be materially adversely affected. While we pursue new contract awards and also undertake efficiency measures, there can be no assurance that such measures will fully offset the impact of contracts that are not renewed or are canceled on our operating income and results of operations.

We obtain a significant portion of our business through responses to government requests for proposals and we may not be awarded contracts through this process in the future, or contracts we are awarded may not be profitable.

We obtain, and will continue to seek to obtain, a significant portion of our business from state government entities, which generally entails responding to a government request for proposals ("RFP"). To propose effectively, we must accurately estimate our cost structure for servicing a proposed contract, the time required to establish operations and submit the most attractive proposal with respect to both technical and price specifications. We must also assemble and submit a large volume of information within rigid and often short timetables. Our ability to respond successfully to RFPs will greatly affect our business. If we misinterpret bid requirements as to performance criteria or do not accurately estimate performance costs in a binding bid for an RFP, we will seek to correct such mistakes in the final contract. However, there can be no assurance that we will be able to modify the proposed contract and we may be required to perform under a contract that is not profitable.

If we fail to satisfy our contractual obligations, we could be liable for damages and financial penalties, which may place existing pledged performance and payment bonds at risk as well as harm our ability to keep our existing contracts or obtain new contracts and future bonds.

Our failure to comply with our contractual obligations could, in addition to providing grounds for immediate termination of the contract for cause, negatively impact our financial performance and damage our reputation, which, in turn, could have a material adverse effect on our ability to maintain current contracts or obtain new contracts. The termination of a contract for cause could, for instance, subject us to liabilities for excess costs incurred by a payor in obtaining similar services

from another source. In addition, our contracts require us to indemnify payors for our failure to meet standards of care, and some of them contain liquidated damages provisions and financial penalties that we must pay if we breach these contracts, which amounts could be material. For example, the service commitment under one of our contracts could subject us to penalties if we do not utilize the

minimum level of services specified in such agreement. The total future minimum commitment was $28.7 million as of December 31, 2018. To the extent our actual use is less than the minimum commitment for a specified period, we may be subject to significant expense, without the benefit of corresponding revenue.

Our failure to meet contractual obligations could also result in substantial actual and consequential financial damages.

Any acquisition or integration that we undertake could disrupt our business, not generate anticipated results, dilute stockholder value or have a material adverse impact on our operating results.

Our growth strategy involves the evaluation of potential entry into complementary markets and service lines through acquisition, particularly with opportunities that may leverage the advantages inherent in our large-scale technology-enabled operations and networks. We have made acquisitions and anticipate that we will continue to consider and pursue strategic acquisition opportunities the success of which depends in part on our ability to integrate an acquired company into our business operations. For example, we completed the acquisition of Circulation in September 2018 and will utilize Circulation's technology platform to service our legacy or new customers, which will result in a decrease in the usage of our existing technology. As a result of the technology evaluation, we decided to terminate the development of our legacy LCAD NextGen technology ("NextGen"), resulting in an impairment charge in the fourth quarter of 2018 of $13.5 million. While preliminary implementation is on track, the work to deploy the Circulation technology platform is ongoing, and subject to the scalability of Circulation's technology platform to process similar levels of transactions as LogistiCare. In addition, the digitization of claims processing on the Circulation platform may have unintended financial impacts related to claim costs and working capital. To the extent we are unable to successfully integrate the Circulation acquisition, our results of operations may be adversely affected and anticipated synergies may not be realized. Integration of any acquired companies will place significant demands on our management, systems, internal controls and financial and physical resources. This could require us to incur significant expense for, among other things, hiring additional qualified personnel, retaining professionals to assist in developing the appropriate control systems and expanding our information technology infrastructure. The nature of our business is such that qualified management personnel can be difficult to find. Our inability to manage growth effectively could have a material adverse effect on our financial results.

There can be no assurance that the companies acquired will generate income or incur expenses at the historical or projected levels on which we based our acquisition decisions, that we will be able to maintain or renew the acquired companies' contracts, that we will be able to realize operating and economic efficiencies upon integration of acquired companies or that the acquisitions will not adversely affect our results of operations or financial condition.

We expect to continually review opportunities to acquire other businesses that would complement our current services, expand our markets or otherwise offer prospects for growth. In connection with our acquisition strategy, we could issue stock that would dilute existing stockholders' percentage ownership, or we could incur or assume substantial debt or contingent liabilities. Acquisitions involve numerous risks, including, but not limited to, the following:

- challenges and unanticipated costs assimilating the acquired operations;
- known and unknown legal or financial liabilities associated with an acquisition;
- diversion of management's attention from our core businesses;
- adverse effects on existing business relationships with customers;
- entering markets in which we have limited or no experience;
- potential loss of key employees of purchased organizations;
- incurrence of excessive leverage in financing an acquisition;
- failure to maintain and renew contracts and other revenue streams of the acquired business;
- costs associated with litigation or other claims arising in connection with the acquired company;
- unanticipated operating, accounting or management difficulties in connection with an acquisition; and
- dilution to our earnings per share.

There can be no assurance that we will be successful in overcoming problems encountered in connection with any acquisition or integration and our inability to do so could disrupt our operations and adversely affect our business. Our failure to address these risks or other problems encountered in connection with past or future acquisitions and investments could cause us to fail to realize the anticipated benefits of such acquisitions or investments, incur unanticipated liabilities and harm our business generally.

We may be unable to realize the benefits of any strategic initiatives that are adopted by the Company.

From time to time we may launch strategic initiatives to enhance shareholder value. For example, on April 11, 2018, we announced our Organizational Consolidation, which is expected to be completed in the middle of 2019. While we expect the

Organizational Consolidation to generate annual savings upon completion, implementation of the process will negatively impact earnings. There can be no assurance that the Organizational Consolidation will be completed in a timely fashion or at all, or that it will generate the expected cost savings. In addition, part of the rationale for the acquisition of Circulation was the ability to utilize its technology platform to generate substantial cost savings. Such cost savings require the deployment of technology and substantial changes to existing business processes. There can be no assurance as to whether any other strategic initiatives will be adopted, and the outcome of any current or future strategic initiatives is uncertain, including the roll out of the Circulation technology platform across our LogistiCare business.

Our investments in any joint ventures and unconsolidated entities could be adversely affected by our lack of sole decision-making authority, our reliance on our joint venture partners' financial condition, any disputes that may arise between us and our joint venture partners and our exposure to potential losses from the actions of our joint venture partners.

We currently hold a non-controlling interest in Matrix, which constitutes 28.2% of our consolidated assets. We do not have unilateral power to direct the activities that most significantly impact such business' economic performance. Our future growth may depend, in part, on future similar arrangements, any of which could be material to our financial condition and results of operations. These arrangements involve risks not present with respect to our wholly-owned subsidiaries, which may negatively impact our financial condition and results of operations or make the arrangements less successful than anticipated, including the following:

- we may be unable to take actions that we believe are appropriate but are opposed by our joint venture partners under arrangements that require us to cede or share decision-making authority over major decisions affecting the ownership or operation of the joint venture and any property owned by the joint venture, such as the sale or financing of the business or the making of additional capital contributions for the benefit of the business;
- our joint venture partners may take actions that we oppose;
- we may be unable to sell or transfer our interest in a joint venture to a third party if we fail to obtain the prior consent of our joint venture partners;
- our joint venture partners may become bankrupt or fail to fund their share of required capital contributions, which could adversely impact the joint venture or increase our financial commitment to the joint venture;
- our joint venture partners may have business interests or goals with respect to a business that conflict with our business interests and goals, including with respect to the timing, terms and strategies for investment, which could increase the likelihood of disputes regarding the ownership, management or disposition of the business;
- disagreements with our joint venture partners could result in litigation or arbitration that increases our expenses, distracts our officers and directors, and disrupts the day-to-day operations of the business, including the delay of important decisions until the dispute is resolved; and
- we may suffer losses as a result of actions taken by our joint venture partners with respect to our joint venture investments.

We derive a significant amount of our revenues from a few payors, which puts our financial condition and results of operations at risk. Any changes in the funding, financial viability or our relationships with these payors could have a material adverse impact on our financial condition and results of operations.

We generate a significant amount of our revenue from a few payors under a small number of contracts. For example, for the years ended December 31, 2018, 2017 and 2016, we generated 51.4%, 52.4% and 51.7%, respectively, of our consolidated revenue from continuing operations from ten payors. Additionally, the top five payors represented, in the aggregate, 34.0%, 36.1% and 35.6%, respectively, of revenue from continuing operations for the years ended December 31, 2018, 2017 and 2016. Additionally, a single payor related to Matrix represented 31.5%, 30.9% and 27.8% of Matrix revenue for the years ended December 31, 2018, 2017 and 2016, respectively. The loss of, reduction in amounts generated by, or changes in methods or regulations governing payments for our services under these contracts could have a material adverse impact on our revenue and results of operations. In addition, any consolidation of any of our private payors could increase the impact that any such risks would have on our revenue and results of operations.

If we fail to estimate accurately the cost of performing certain contracts, we may experience reduced or negative margins.

During 2018, 2017 and 2016, 79.2%, 77.9% and 78.3% of our NET Services revenue, respectively, was generated under capitated contracts with the remainder generated through FFS and flat fee contracts. Under most of NET Services'

capitated contracts, we assume the responsibility of managing the needs of a specific geographic population by contracting out transportation services to local transportation companies on a per ride or per mile basis. We use “pricing models” to determine applicable contract rates, which take into account factors such as estimated utilization, state specific data, previous experience in the state or with similar services, the medically covered programs outlined in the contract, identified populations to be serviced, estimated volume,

estimated transportation provider rates and availability of mass transit. The amount of the fixed per-member, monthly fee is determined in the bidding process, but is predicated on actual historical transportation data for the subject geographic region as provided by the payor, actuarial work performed in-house as well as by third party actuarial firms and actuarial analysis provided by the payor. If the utilization of our services is more than we estimated, the contract may be less profitable than anticipated, or may not be profitable at all. Under our FFS contracts, we receive fees based on our interactions with government-sponsored clients. To earn a profit on these contracts, we must accurately estimate costs incurred in providing services. Our risk relating to these contracts is that our client population is not large enough to cover our fixed costs, such as rent and overhead. Our FFS contracts are not reimbursed on a cost basis and therefore, if we fail to estimate our costs accurately, we may experience reduced margins or losses on these contracts. Revenue under certain contracts may be adjusted prospectively if client volumes are below expectations. If we are unable to adjust our costs accordingly, our profitability may be negatively affected. In addition, certain contracts with state Medicaid agencies are renewable or extended at the state's option without an adjustment to pricing terms. If such renewed contracts require us to incur higher costs, including inflation or regulatory changes, than originally anticipated, our results of operations and financial condition may be adversely affected.

We may incur costs before receiving related revenues, which affect our liquidity.

When we are awarded a contract to provide services, we may incur expenses before we receive any contract payments. These expenses include leasing office space, purchasing office equipment, instituting information technology systems, development of supply chains and hiring personnel. As a result, in certain contracts where the payor does not fund program start-up costs, we may be required to make significant investments before receiving any related contract payments or payments sufficient to cover start-up costs. In addition, payments due to us from payors may be delayed due to billing cycles, which may adversely affect our liquidity. Moreover, any resulting mismatch in expenses and revenue could be exacerbated if we fail either to invoice the payor correctly or to collect our fee in a timely manner. Such amounts may exceed our available cash, and any resulting liquidity shortages may require additional financing, which may not be available on satisfactory terms, or at all. This could have a material adverse impact on our ongoing operations and our financial position.

Our business is subject to risks of litigation.

The services we provide are subject to lawsuits and claims. A substantial award payable by us could have a material adverse impact on our operations and cash flows, and could adversely affect our ability to continue to purchase appropriate liability insurance. We can be subject to claims for negligence or intentional misconduct (in addition to professional liability type claims) by an employee or a third party we engage to assist with the provision of services, including but not limited to claims arising out of accidents involving vehicle collisions, CHAs performed by Matrix, and various claims that could result from employees or contracted third parties driving to or from interactions with clients or while providing direct client services. We can be subject to employee-related claims such as wrongful discharge, discrimination or a violation of equal employment laws and permitting issues. While we attempt to insure against these types of claims, damages exceeding our insurance limits or outside our insurance coverage, such as a claim for fraud, certain wage and hour violations or punitive damages, could adversely affect our cash flow and financial condition.

We face risks related to attracting and retaining qualified employees and labor relations.

Our success depends, to a significant degree, on our ability to identify, attract, develop, motivate and retain highly qualified and experienced professionals who possess the skills and experience necessary to deliver high-quality services to our clients, with the continued contributions of our senior management being especially critical to our success. Our objective of providing the highest quality of service to our clients is a significant consideration when we evaluate the education, experience and qualifications of potential candidates for employment as direct care and administrative staff. A portion of our staff is professionals with requisite educational backgrounds and professional certifications. These employees are in great demand and are likely to remain a limited resource for the foreseeable future.

Our ability to attract and retain employees with the requisite experience and skills depends on several factors including, but not limited to, our ability to offer competitive wages, benefits and professional growth opportunities. While we have established programs to attract new employees and provide incentives to retain existing employees, particularly our senior management, we cannot assure you that we will be able to attract new employees or retain the services of our senior management or any other key employees in the future. Some of the companies with which we compete for experienced personnel may have greater financial, technical, political and marketing resources, name recognition and a larger number of clients and payors than we do, which may prove more attractive to employment candidates. The inability to attract and retain experienced personnel could have a material adverse effect on our business.

The performance of our business also depends on the talents and efforts of our highly skilled information technology professionals. For example, realization of the synergies related to our recent acquisition of Circulation relies heavily on our ability to deploy Circulation's technology platform across LogistiCare's existing operations, and competition for skilled information technology professionals can be intense. Our success depends on our ability to recruit, retain and motivate these individuals.

Effective succession planning is also important to our future success. If we fail to ensure the effective transfer of senior management knowledge and smooth transitions involving senior management, including the appointment of a permanent chief executive officer for the Company and the transition of several key management positions, resulting from the Organizational Consolidation, our ability to execute short and long-term strategic, financial and operating goals, as well as our business, financial condition and results of operations generally, could be adversely affected.

We may have difficulty successfully completing divestitures or exiting businesses.

As demonstrated most recently with the WD Services sale in 2018 and various other transactions involving WD Services, as well as the sale of a controlling interest in Matrix in 2016, we may dispose of all or a portion of our investments or exit businesses based on a variety of factors, including availability of alternative opportunities to deploy capital or otherwise maximize shareholder value as well as other strategic considerations. A divestiture or business termination could result in difficulties in the separation of operations, services, products and personnel, the diversion of management's attention, the disruption of our business and the potential loss of key employees and customers. A divestiture or business termination may be subject to the satisfaction of pre-closing conditions as well as to obtaining necessary regulatory approvals, which, if not satisfied or obtained, may prevent us from completing the disposition or business termination, whether or not the disposition or business termination has been publicly announced. A divestiture or business termination may also involve continued financial involvement in the divested assets and businesses, such as indemnities or other financial obligations, including continuing obligations to employees, in which the performance of the divested assets or businesses could impact our results of operations. Further, such divestitures may result in proceeds to us in an amount less than we expect or less than our assessment of the value of those assets. Any sale of our assets could result in a loss on divestiture. Any of the foregoing could adversely affect our financial condition and results of operations.

The indemnification provisions of acquisition and disposition agreements by which we have acquired or sold companies may result in liabilities.

We rely heavily on the representations and warranties and related indemnities provided to us by the sellers of acquired companies, including as they relate to creation, ownership and rights in intellectual property and compliance with laws and contractual requirements. However, the liability of the former owners is limited under the relevant acquisition agreements, and certain sellers may be unable to meet their indemnification responsibilities. Similarly, the purchasers of our divested operations may from time to time agree to indemnify us for operations of such businesses after the closing. We cannot be assured that any of these indemnification provisions will fully protect us, and as a result we may face unexpected liabilities that adversely affect our consolidated results of operations, financial condition and cash flows.

In addition, we have provided certain indemnifications in connection with the WD Services sale in 2018, the Matrix Transaction in 2016 and the Human Services Sale in 2015. To the extent we choose to divest other operations of our businesses in the future, we expect to provide certain indemnifications in connection with these divestitures. We may face liabilities in connection with these current or future indemnification obligations that may adversely affect our consolidated results of operations, financial condition and cash flows.

Our success depends on our ability to compete effectively in the marketplace.

We compete for clients and for contracts with a variety of organizations that offer similar services. Many organizations of varying sizes compete with us, including local not-for-profit organizations and community-based organizations, larger companies, organizations that currently provide or may begin to provide similar NET management services (including transportation network companies such as Uber and Lyft) and CHA providers. Some of these companies may have greater financial, technical, political, marketing, name recognition and other resources and a larger number of clients or payors than we do. In addition, some of these companies offer more services than we do. To remain competitive, we must provide superior services and performance on a cost-effective basis to our customers.

The market in which we operate is influenced by technological developments that affect cost-efficiency and quality of services, and the needs of our customers change and evolve regularly. Accordingly, our success depends on our ability to develop services that address these changing needs and to provide technology needed to deliver these services on a cost-effective basis. Our competitors may better utilize technology to change the way services in our industry are designed and delivered and they may be able to provide our customers with different or greater capabilities than we can provide, including better contract terms, technical

qualifications, price and availability of qualified professional personnel. In addition, new or disruptive technologies and methodologies by our competitors may make our services uncompetitive.

In conjunction with our ongoing efforts to improve cost-efficiency and the customer experience, in September 2018, we completed our acquisition of Circulation. We incurred costs associated with such acquisition and will also incur costs to implement the Circulation technology across LogistiCare's existing operations, but there is no guarantee that this will ultimately serve our business purposes or result in lower costs.

We have experienced, and expect to continue to experience, competition from new entrants into the markets in which we operate. Increased competition may result in pricing pressures, loss of or failure to gain market share or loss of or failure to gain clients or payors, any of which could have a material adverse effect on our operating results. Our business may also be adversely affected by the consolidation of competitors, which may result in increased pricing pressure or negotiating leverage with payors, or by the provision of our services by payors or clients directly, including through the acquisition of competitors.

We may be adversely affected by inadequacies in, or security breaches of, our information technology systems.

Our information technology systems are critically important to our operations and we must implement and maintain appropriate and sufficient infrastructure and systems to support growth and business processes. We provide services to individuals, including services that require us to maintain sensitive and personal client information, including information relating to their health, identification numbers and other identifying data. Therefore, our information technology systems store client information protected by numerous federal, state and foreign regulations. We also rely on our information technology systems (some of which are outsourced to third parties) to manage the data, communications and business processes for all other functions, including our marketing, sales, logistics, customer service, accounting and administrative functions. Further, our systems include interfaces to third-party stakeholders, often connected via the Internet. In addition, certain of our services or information related to our services are carried out or hosted within our customers' IT systems, and any failure or weaknesses in their IT systems may negatively impact our ability to deliver the services, for which we may not receive relief from contractual performance obligations or compensation for services provided. As a result of the data we maintain and third-party access, we are subject to increasing cybersecurity risks. The nature of our business, where services are often performed outside a secured location, adds additional risk.

If we do not allocate and effectively manage the resources necessary to build, sustain and protect an appropriate technology infrastructure, our business or financial results could be negatively impacted. Furthermore, computer hackers and data thieves are increasingly sophisticated and operate large scale and complex automated attacks and our information technology systems may be vulnerable to material security breaches (including the access to or acquisition of customer, employee or other confidential data), cyber-based attacks or other material system failures. Because the techniques used to obtain unauthorized access or sabotage systems change frequently and may be difficult to detect for long periods of time, we may be unable to implement adequate preventative measures sufficient to prevent a breach of our systems and protect sensitive data. Any breach of our data security could result in an unauthorized release or transfer of customer or employee information, or the loss of valuable business data or cause a disruption in our business. A failure to prevent, detect and respond in a timely manner to a major breach of our data security or to other cybersecurity threats could result in system disruption, business continuity issues or compromised data integrity. These events or any other failure to safeguard personal data could give rise to unwanted media attention, damage our reputation, damage our customer relationships and result in lost sales, fines or lawsuits. We may also be required to expend significant capital and other resources to protect against or respond to or alleviate problems caused by a security breach. If we are unable to prevent material failures, our operations may be impacted, and we may suffer other negative consequences such as reputational damage, litigation, remediation costs, a requirement not to operate our business until defects are remedied or penalties under various data privacy laws and regulations, any of which could detrimentally affect our business, financial condition and results of operations.

Failure to protect our client's privacy and confidential information could lead to legal liability, adversely affect our reputation and have a material adverse effect on our business, financial condition and results of operations.

We retain confidential information in our computer systems, including personal information about our customers, such as names, addresses, phone numbers, email addresses, identification numbers and payment account information. Malicious cyber- attacks to gain access to personal information affect many companies across various industries, including ours. Pursuant to federal and state laws, various government agencies have established rules protecting the privacy and security of personal information. In addition, most states have enacted laws, which vary significantly from jurisdiction to jurisdiction, to safeguard the privacy and security of personal information. An increasing number of states require that customers be notified if a security

breach results in the inappropriate disclosure of personally identifiable customer information. Any compromise of the security of our systems that results in the disclosure of personally identifiable customer or employee information or inadvertent disclosure of any clients' personal information could damage our reputation, deter people from using our services, expose us to litigation, increase regulatory

scrutiny and require us to incur significant technical, legal and other expenses. In addition, data breaches impacting other companies, such as our vendors, may allow cybercriminals to obtain personally identifiable information about our customers. Cybercriminals may then use this information to, among other things, attempt to gain unauthorized access to our customers' accounts, which could have a material adverse effect on our reputation, business and results of operations or financial condition.

Failure to maintain or to develop further reliable, efficient and secure information technology systems would be disruptive to our operations and diminish our ability to compete and grow our business successfully.

We are highly dependent on efficient and uninterrupted performance of our information technology and business systems. These systems quote, process and service our business, and perform financial functions necessary for pricing and service delivery. These systems must also be able to undergo periodic modifications and improvements without interruptions or untimely delays in service. Additionally, our ability to integrate our systems with those of our clients is critical to our success. Our information systems rely on the commitment of significant financial and managerial resources to maintain and enhance existing systems as well as develop and create new systems to keep pace with continuing changes in information processing technology or evolving industry and regulatory requirements. However, we still rely on manual processes and procedures, including accounting, reporting and consolidation processes that may result in errors and may not scale proportionately with our business growth.

A failure or delay to achieve improvements in our information technology platforms could interrupt certain processes or degrade business operations and could place us at a competitive disadvantage. If we are unable to implement appropriate systems, procedures and controls, we may not be able to successfully offer our services and grow our business and account for transactions in an appropriate and timely manner, which could have an adverse effect on our business, financial condition and results of operations.

Our results of operations will continue to fluctuate due to seasonality.

Our operating results and operating cash flows normally fluctuate as a result of seasonal variations in our business. Due to higher demand in the summer months and lower demand in the winter months, coupled with a primarily fixed revenue stream based on a per-member, per-month payment structure, we normally experience lower operating margins in the summer and higher operating margins in the winter.

Our reported financial results could suffer if there is an impairment of long-lived assets.

We are required under generally accepted accounting principles in the United States of America ("GAAP") to review the carrying value of long-lived assets to be used in operations whenever events or changes in circumstances indicate that the carrying amount of the assets may be impaired. Factors that may necessitate an impairment assessment include, among others, significant adverse changes in the extent or manner in which an asset is used, significant adverse changes in legal factors or the business climate that could affect the value of an asset or significant declines in the observable market value of an asset. Where the presence or occurrence of those events indicates that an asset may be impaired, we assess its recoverability by determining whether the carrying value of the asset exceeds the sum of the projected undiscounted cash flows expected to result from the use and eventual disposition of the assets over the remaining economic life of the asset. If such testing indicates the carrying value of the asset is not recoverable, we estimate the fair value of the asset using appropriate valuation methodologies, which would typically include an estimate of discounted cash flows. If the fair value of those assets is less than carrying value, we record an impairment loss equal to the excess of the carrying value over the estimated fair value. The use of different estimates or assumptions in determining the fair value of our intangible assets may result in different values for those assets, which could result in an impairment or, in the period in which an impairment is recognized, could result in a materially different impairment charge. For example, we recorded an asset impairment charge of $14.2 million in 2018 related to NextGen.

In addition, goodwill may be impaired if the estimated fair value of one or more of our reporting units is less than the carrying value of the respective reporting unit. As a result of our growth, in part through acquisitions, goodwill and other intangible assets represent a significant portion of our assets. For example, goodwill generated in relation to the acquisition of Circulation was $40.0 million. We perform an analysis on our goodwill balances to test for impairment on an annual basis. Interim impairment tests may also be required in advance of our annual impairment test if events occur or circumstances change that would more likely than not reduce the fair value, including goodwill, of one or more of our reporting units below the reporting unit's carrying value. Such circumstances could include but are not limited to: (1) loss of significant contracts, (2) a significant adverse change in legal factors or in the climate of our business, (3) unanticipated competition, (4) an adverse action or assessment by a regulator or (5) a significant decline in our stock price.

As of December 31, 2018, the carrying value of goodwill, intangibles and property and equipment, net was $135.2 million, $26.1 million and $23.0 million, respectively. We continue to monitor the carrying value of these long-lived assets. If future

conditions are different from management's estimates at the time of an acquisition or market conditions change subsequently, we may incur future charges for impairment of our goodwill or intangible assets, which could have a material adverse impact on our results of operations and financial position.

Our use of a reinsurance program and insurance programs to cover certain claims for losses suffered and costs or expenses incurred could negatively impact our business.

We reinsured a substantial portion of our automobile, general liability, professional liability and workers' compensation insurance policies through May 15, 2017. Upon renewal of the policies, we made the decision to no longer reinsure these risks, although we continue to resolve claims under the historical policy years. Through February 15, 2011, one of our subsidiaries also insured certain general liability, automobile liability, and automobile physical damage coverage for independent third-party transportation providers. In the event that actual reinsured losses increase unexpectedly and substantially exceed actuarially determined estimated reinsured losses under the program, the aggregate of such losses could materially increase our liability and adversely affect our financial condition, liquidity, cash flows and results of operations.

In addition, under our current insurance policies, we are subject to deductibles, and thus retain exposure within these limits. In the event that actual losses within our deductible limits increase unexpectedly and substantially exceed our expected losses, the aggregate of such losses could materially increase our liability and adversely affect our financial condition, liquidity, cash flows and results of operations.

As the availability to us of certain traditional insurance coverage diminishes or increases in cost, we will continue to evaluate the levels and types of insurance coverage we include in our reinsurance and self-insurance programs, as well as the deductible limits within our traditional insurance programs. Any increase to these reinsurance and self-insurance programs or increases in deductible limits increases our risk exposure and therefore increases the risk of a possible material adverse effect on our financial condition, liquidity, cash flows and results of operations.

Inaccurate, misleading or negative media coverage could damage our reputation and harm our ability to maintain or procure contracts.

There is sometimes media coverage regarding services that we or our competitors provide or contracts that we or our competitors are a party to. Inaccurate, misleading or negative media coverage about us could harm our reputation and, accordingly, our ability to maintain our existing contracts or procure new contracts.

Regulatory Risks

Our Healthcare Segments conduct business in a heavily regulated healthcare industry. Compliance with existing Laws is costly, and changes in Laws or violations of Laws may result in increased costs or sanctions that could reduce our segments' revenue and profitability.

The U.S. healthcare industry is subject to extensive federal and state Laws relating to, among other things:

- professional licensure;
- conduct of operations;
- addition of facilities, equipment and services, including certificates of need;
- coding and billing related to our services; and
- payment for services.

Both federal and state government agencies have increased coordinated civil and criminal enforcement efforts related to the healthcare industry. Regulations related to the healthcare industry are extremely complex and, in many instances, the industry does not have the benefit of significant regulatory or judicial interpretation of those laws. The Patient Protection and Affordable Care Act, as well as the anticipated attempts to repeal all or portions of those laws by the President and Congress, has also introduced some degree of regulatory uncertainty as the industry does not know how the changes it introduced or changes to it will affect many aspects of the industry. Medicare and Medicaid anti-fraud and abuse laws prohibit certain business practices and relationships related to items and services reimbursable under Medicare, Medicaid and other governmental healthcare programs, including the payment or receipt of remuneration to induce or arrange for referral of patients or recommendation for the provision of items or services covered by Medicare or Medicaid or any other federal or state healthcare program. Federal and state Laws prohibit the submission of false or fraudulent claims, including claims to obtain

reimbursement under Medicare and Medicaid. Our Healthcare Segments have implemented compliance policies to help assure their compliance with these regulations as they become effective; however, different interpretations or enforcement of these laws and regulations in the future could subject our practices to allegations

of impropriety or illegality or could require such segments to make changes in their facilities, equipment, personnel, services or the manner in which they conduct our business.

Changes in budgetary priorities of the government entities that fund the services our Healthcare Segments provide could result in our segments' loss of contracts or a decrease in amounts payable to them under their contracts.

Our Healthcare Segments' revenue is largely derived from contracts that are directly or indirectly paid or funded by government agencies. All of these contracts are subject to legislative appropriations and state or national budget approval, as well as changes to potential eligibility for services. The availability of funding under NET Services' contracts with state governments is dependent in part upon federal funding to states. Changes in Medicaid methodology may further reduce the availability of federal funds to states in which our Healthcare Segments provide services. The President of the United States and Congress have proposed various changes to the Medicaid program, including considering converting the Medicaid program to a block grant format or capping the federal contribution to state Medicaid programs to a fixed amount per beneficiary. CMS has invited states to submit requests for waivers to CMS that would allow states to reduce or eliminate the NET benefit for some populations. In response, several states have asked for and received temporary waivers of NET requirements for the Medicaid expansion or non-disabled adult population. In addition, in late 2018, DHHS published in the Unified Agenda its intention to revise the current regulations under which states are required to provide NET services for all Medicaid beneficiaries. The stated goal of this proposed rule is to provide states with greater flexibility as part of the administration's reform initiatives. It is possible that revised regulations could be issued in 2019 or 2020 making it optional for the states to provide NET services to certain populations. Such changes, individually or in the aggregate, could have a material adverse effect on our Healthcare Segments operations.

Among the alternative Medicaid funding approaches that states have explored are provider assessments as tools for leveraging increased Medicaid federal matching funds. Provider assessment plans generate additional federal matching funds to the states for Medicaid reimbursement purposes, and implementation of a provider assessment plan requires approval by CMS in order to qualify for federal matching funds. These plans usually take the form of a bed tax or a quality assessment fee, which were historically required to be imposed uniformly across classes of providers within the state, except that such taxes only applied to Medicaid health plans.

Changes to provider assessment opportunities, the Medicaid programs in states in which our Healthcare Segments operate or in the structure of the federal government's support for those programs can affect the amount of funds available in the programs our Healthcare Segments support. Because funding under our Healthcare Segments' contracts is dependent in part upon federal funding, such funding changes could have a significant effect upon such segments' businesses.

Currently, many of the U.S. states in which our segments operate are facing budgetary shortfalls or changes in budgetary priorities. While many of these states are dealing with budgetary concerns by shifting costs from institutional care to home and community based care such as we provide, there is no assurance that this trend will continue.

Consequently, a significant decline in government expenditures, shift of expenditures or funding away from programs that call for the types of services that we provide, or change in government contracting or funding policies could cause payors to terminate their contracts with our segments or reduce their expenditures under those contracts, either of which could have a negative impact on our segments' operating results.

Our Healthcare Segments are subject to regulations relating to privacy and security of patient and service user information. Failure to comply with privacy and security regulations could result in a material adverse impact on our segments' operating results.

There are numerous federal and state regulations addressing patient information privacy and security concerns. In particular, the federal regulations issued under HIPAA contain provisions that:

- protect individual privacy by limiting the uses and disclosures of patient information;
- require the implementation of security safeguards to ensure the confidentiality, integrity and availability of individually identifiable health information in electronic form; and
- prescribe specific transaction formats and data code sets for certain electronic healthcare transactions.

Compliance with state and federal laws and regulations is costly and requires our segment management to expend substantial time and resources which could negatively impact our segments' results of operations. Further, the HIPAA

regulations and state privacy laws expose our segments to increased regulatory risk, as the penalties associated with a failure to comply or with information security breaches, even if unintentional, could have a material adverse effect on our segments' results of operations.

Our Healthcare Segments could be subject to actions for false claims or recoupment of funds pursuant to certain audits if they do not comply with government coding and billing rules, which could have a material adverse impact on our segments' operating results.

If our Healthcare Segments fail to comply with federal and state documentation, coding and billing rules, our segments could be subject to criminal or civil penalties, loss of licenses and exclusion from the Medicare and Medicaid programs, which could have a material adverse impact on our segments' operating results. In billing for our segments' services to third-party payors, our segments must follow complex documentation, coding and billing rules. These rules are based on federal and state laws, rules and regulations, various government pronouncements, and industry practice. Failure to follow these rules could result in potential criminal or civil liability under the federal False Claims Act, under which extensive financial penalties can be imposed or under various state statutes which prohibit the submission of false claims for services covered. Compliance failure could further result in criminal liability under various federal and state criminal or civil statutes. Our segments may be subject to audits conducted by our clients or their proxies that may result in recoupment of funds. In addition, our segments' clients may be subject to certain audits that may result in recoupment of funds from our clients that may, in turn, implicate our segments' services. Our segments' businesses could be adversely affected in the event such an audit results in negative findings and recoupment from or penalties to their customers.

Our Healthcare Segments' contracts are subject to stringent claims and invoice processing regimes which vary depending on the customer and nature of the payment mechanism. Government entities may take the position that if a transport cannot be matched to a healthcare event, or is conducted inconsistently with contractual, regulatory or even policy requirements, payment for such transport may be recouped by such customer.

While our Healthcare Segments carefully and regularly review their documentation, coding and billing practices, the rules are frequently vague and confusing and they cannot assure that governmental investigators, private insurers or private whistleblowers will not challenge their practices. Such a challenge could result in a material adverse effect on our Healthcare Segments' financial position and results of operations.

Our Healthcare Segments' business could be subject to civil penalties and loss of business if we fail to comply with applicable bribery, corruption and other regulations governing business with governments.

Our Healthcare Segments are subject to the federal Anti-Kickback Statute, which prohibits the offer, payment, solicitation or receipt of any form of remuneration in return for referring, ordering, leasing, purchasing or arranging for or recommending the ordering, purchasing or leasing of items or services payable by a federally funded healthcare program. Any of our Healthcare Segments' financial relationships with healthcare providers will be potentially implicated by this statute to the extent Medicare or Medicaid referrals are implicated. Violations of the Anti-Kickback Statute could result in substantial civil or criminal penalties, including criminal fines of up to $100,000 per violation, imprisonment of up to ten years, civil penalties under the Civil Monetary Penalties Law of up to $100,000 per violation, plus three times the remuneration involved, civil penalties under the False Claims Act of up to $22,363 for each claim submitted, plus three times the amounts paid for such claims and exclusion from participation in the Medicaid and Medicare programs. Any such penalties could have a significant negative effect on our Healthcare Segments' operations. Furthermore, the exclusion, if applied to such segments, could result in significant reductions in our revenues, which could materially and adversely affect such segments' businesses, financial condition and results of their operations. In addition, many states have adopted laws similar to the federal Anti-Kickback Statute with similar penalties.

Our Healthcare Segments' businesses could be adversely affected by future legislative changes that hinder or reverse the privatization of non-emergency transportation services.

The market for certain of our Healthcare Segments' services depends largely on government sponsored programs. These programs can be modified or amended at any time. Moreover, part of our growth strategy includes aggressively pursuing opportunities created by government initiatives to privatize the delivery of non-emergency transportation services. In 2017, legislation was proposed in the U.S. Congress, but not passed, which would reduce or eliminate certain non-emergency medical transportation services provided by NET Services as a required Medicaid benefit. If additional privatization initiatives are not proposed or enacted, or if previously enacted privatization initiatives are challenged, repealed or invalidated, there could be a material adverse impact on our Healthcare Segments' operating results.

Changes to the regulatory landscape applicable to Matrix could have a material adverse effect on our results of operations and financial condition.

The CHA services industry is primarily regulated by federal and state healthcare Laws and the requirements of participation and reimbursement of the MA Program established by CMS. From time to time, CMS considers changes to regulatory guidelines

with respect to prospective CHAs or the risk adjusted payment system applicable to Matrix's Medicare Advantage plan customers. CMS could adopt new requirements or guidelines that may, for example, increase the costs associated with CHAs, limit the opportunities and settings available to administer CHAs, or otherwise change the risk adjusted payment system in a way that would adversely impact our business. Further, changes in or adoption of new state laws governing the scope of practice of mid-level practitioners, or more restrictive interpretations of such laws, may restrict Matrix's ability to provide services using nurse practitioners. Any such implementation of additional regulations on the CHA industry by CMS or other regulatory bodies or further regulation of mid-level practitioners could have a material adverse impact on Matrix's revenues and margins, which could have a material adverse impact on our consolidated results of operations.

If our Healthcare Segments fail to comply with physician self-referral laws, to the extent applicable to our operations, they could experience a significant loss of reimbursement revenue.

Our Healthcare Segments may be subject to federal and state statutes and regulations banning payments for referrals of patients and referrals by physicians to healthcare providers with whom the physicians have a financial relationship and billing for services provided pursuant to such referrals if any occur. Violation of these federal and state laws and regulations, to the extent applicable to our Healthcare Segments' operations, may result in prohibition of payment for services rendered, loss of licenses, fines, criminal penalties and exclusion from Medicaid and Medicare programs. To the extent such segments do maintain such financial relationships with physicians, they rely on certain exceptions to self-referral laws that they believe will be applicable to such arrangements. Any failure to comply with such exceptions could result in the penalties discussed above.

As government contractors, our segments are subject to an increased risk of litigation and other legal actions and liabilities.

As government contractors, our segments are subject to an increased risk of investigation, criminal prosecution, civil fraud, whistleblower lawsuits and other legal actions and liabilities that are not as frequently experienced by companies that do not provide government sponsored services. Companies providing government sponsored services can also become involved in public inquiries which can lead to negative media speculation or potential cancellation or termination of contracts. Further, government contract awards are frequently challenged by the losing bidders leading to delays in contract start dates, rebids, or even loss of a previously awarded contract.

Our Healthcare Segments' businesses are subject to licensing regulations and other regulatory provisions, including provisions governing surveys and audits. Changes to, or violations of, these regulations could negatively impact our Healthcare Segments' revenues.

In many of the locations where our segments operate, they are required by local laws to obtain and maintain licenses. The applicable state and local licensing requirements govern the services our segments provide, the credentials of staff, record keeping, treatment planning, client monitoring and supervision of staff. The failure to maintain these licenses or the loss of a license could have a material adverse impact on our segments' businesses and could prevent them from providing services to clients in a given jurisdiction. Our Healthcare Segments' contracts are subject to surveys or audit by their payors or their clients. Our segments are also subject to regulations that restrict their ability to contract directly with a government agency in certain situations. Such restrictions could affect our segments' ability to contract with certain payors and clients, and could have a material adverse impact on our segments' results of operations.

Our Healthcare Segments' contracts are subject to audit and modification by the payors with whom our Healthcare Segments contract, at their sole discretion.

Our Healthcare Segments' businesses depend on their ability to successfully perform under various government funded contracts. Under the terms of these contracts, payors, government agencies or their proxy contractors can review our segments' compliance or performance, as well as our segments' records and general business practices at any time, and may, in their discretion:

- suspend or prevent our segments from receiving new contracts or extending existing contracts because of violations or suspected violations of procurement laws or regulations;
- terminate or modify our segments' existing contracts;
- reduce the amount our segments are paid under our existing contracts; or
- audit and object to our segments' contract related fees.

Any increase in the number or scope of audits could increase our segments' expenses, and the audit process may disrupt the day-to-day operations of our segments' businesses and distract their management. If payors have significant audit findings, or if they make material modifications to our segments' contracts, it could have a material adverse impact on our segments' results of operations.

Our estimated income taxes could be materially different from income taxes that we ultimately pay.

We are subject to income taxation in both the U.S. and, due to our ownership of international entities prior to the WD Services sale, 10 foreign countries, including specific states or provinces where we operate. Our total income tax provision is a function of applicable local tax rates and the geographic mix of our income from continuing and discontinued operations before taxes, which is itself impacted by currency movements. Consequently, the isolated or combined effects of unfavorable movements in tax rates, geographic mix, or foreign exchange rates could reduce our after-tax income.

Our total income tax provision is based on our income and the tax laws in the various jurisdictions in which we operate. Significant judgment and estimation is required in determining our annual income tax expense and in evaluating our tax positions and related matters. In the ordinary course of our business, there are many transactions and calculations for which the ultimate tax determinations are uncertain or otherwise subject to interpretation. In addition, we make judgments regarding the applicability of tax treaties and the appropriate application of transfer pricing regulations. In the event one taxing jurisdiction disagrees with another taxing jurisdiction with respect to the amount or applicability of a particular type of tax, or the amount or availability of a particular type of tax refund or credit, we could experience temporary or permanent double taxation and increased professional fees to resolve such taxation matters.

Our determination of our income tax liability is always subject to review by applicable tax authorities, and we have been audited by various jurisdictions in prior years. Although we believe our income tax estimates and related determinations are reasonable and appropriate, relevant taxing authorities may disagree. The ultimate outcome of any such audits and reviews could be materially different from the estimates and determinations reflected in our historical income tax provisions and accruals. Any adverse outcome of any such audit or review could have an adverse effect on our financial condition and the results of our operations.

Risks Related to Our Indebtedness

Restrictive covenants in our Credit Agreement may limit our current and future operations, particularly our ability to respond to changes in our business or to pursue our business strategies.

The terms contained in the agreements that govern certain of our indebtedness, including our Amended and Restated Credit and Guaranty Agreement (as amended, supplemented, or modified, the "Credit Agreement"), and the agreements that govern any future indebtedness of ours, may include a number of restrictive covenants that impose significant operating and financial restrictions, including restrictions on our ability to take actions that we believe may be in our best interest. These agreements, among other things, limit our ability to:

- incur additional debt;
- provide guarantees in respect of obligations of other persons;
- issue redeemable stock and preferred stock;
- pay dividends or distributions or redeem or repurchase capital stock;
- make loans, investments and capital expenditures;
- enter into transactions with affiliates;
- create or incur liens;
- make distributions from our subsidiaries;
- sell assets and capital stock of our subsidiaries;
- make acquisitions; and
- consolidate or merge with or into, or sell substantially all of our assets to, another person.

A breach of the covenants or restrictions could result in a default under the applicable agreements that govern our indebtedness. Such default may preclude us from drawing from our senior secured credit facility (the "Credit Facility") or allow the creditors to accelerate the related debt and may result in the acceleration of any other debt that we may incur to which a cross acceleration or cross-default provision applies. In the event our lenders accelerate the repayment of our borrowings, we cannot assure that we and our subsidiaries would have sufficient assets to repay such indebtedness.

Loss of available financing or an inability to renew, repay or refinance our debt could have an adverse effect on our financial condition and results of operations.

At December 31, 2018, our available credit under the Credit Facility was $187.7 million. If our cash on hand is insufficient, or we are unable to generate sufficient cash flows in the future, to cover our cash flow and liquidity needs and service our debt, we may be required to seek additional sources of funds, including refinancing all or a portion of our existing or future debt,

incurring additional debt to maintain sufficient cash flow to fund our ongoing operating needs, pay interest and fund anticipated expenditures. In addition, the Credit Facility matures on August 2, 2019. There can be no assurance that any refinancing will be possible or that any additional financing could be obtained on acceptable terms. If we are unable to obtain additional financing, we may (i) be unable to satisfy our obligations under our outstanding indebtedness, (ii) be unable to pursue future business opportunities or fund acquisitions, (iii) find it more difficult to fund future operating costs, tax payments or general corporate expenditures and (iv) become vulnerable to adverse general economic, capital markets and industry conditions. Any of these circumstances could have a material adverse effect on our financial position, liquidity and results of operations.

We may incur substantial additional indebtedness in the future, which could impair our financial condition.

We may incur substantial additional indebtedness in the future to fund activities including but not limited to share repurchases, acquisitions, cash dividends and business expansion. Any existing and future indebtedness increases the risk that we may be unable to generate cash sufficient to pay amounts due in respect of such indebtedness. Future substantial indebtedness could have other important consequences on our business. For example, it could:

- make it more difficult for us to satisfy our obligations;
- make it more difficult to renew or enter into new contracts with existing and potential future clients;
- limit our ability to borrow additional amounts to fund working capital, capital expenditures, debt service requirements, execution of our business strategy or acquisitions and other purposes;
- require us to dedicate a substantial portion of our cash flow from operations to pay principal and interest on our debt, which would reduce the funds available to us for other purposes;
- restrict our ability to dispose of assets and use the proceeds from any such dispositions;
- restrict our ability to raise debt or equity capital to be used to repay other indebtedness when it becomes due;
- make us more vulnerable to adverse changes in general economic, industry and competitive conditions, as well as in government regulation and to our business;
- expose us to risks inherent in interest rate fluctuations because some of our borrowings are at variable rates of interest, which could result in higher interest expense in the event of increases in interest rates; and
- make it more difficult to satisfy our financial obligations.

Our ability to satisfy and manage our debt obligations depends on our ability to generate cash flow and on overall financial market conditions. To some extent, this is subject to prevailing economic and competitive conditions and to certain financial, business and other factors, many of which are beyond our control. Our business may not generate sufficient cash flow from operations to permit us to pay principal, premium, if any, or interest on our debt obligations. If we are unable to generate sufficient cash flow from operations to service our debt obligations and meet our other cash needs, we may be forced to reduce or delay capital expenditures, sell or curtail assets or operations, seek additional capital, or seek to restructure or refinance our indebtedness. If we must sell or curtail our assets or operations, it may negatively affect our ability to generate revenue.

Risks Related to Our Capital Stock

Our annual operating results and stock price may be volatile or may decline significantly regardless of our operating performance.

Our annual operating results and the market price for our Common Stock may fluctuate significantly in response to a number of factors, many of which we cannot control, including:

- changes in rates or coverage for services by payors;
- changes in Medicaid, Medicare or other U.S. federal or state rules, regulations or policies;
- market conditions or trends in our industry or the economy as a whole;
- increased competition in any of our segments, including through insourcing of services by our clients and new entrants to the market;
- other events or factors, including those resulting from war, incidents of terrorism, natural disasters or responses to these events;
- changes in tax law; and
- changes in accounting principles.

In addition, the stock markets, and in particular, NASDAQ, have experienced considerable price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. In the past,

stockholders have instituted securities class action litigation following periods of market volatility. If we become involved in securities litigation, we could incur substantial costs, and our resources and the attention of management could be diverted from our business.

The Company depends on its subsidiaries for cash to fund all of its operations and expenses, including to make future dividend payments, if any.

Our operations are conducted entirely through our subsidiaries and our ability to generate cash to fund all of our operations and expenses, to pay dividends or to meet any debt service obligations is highly dependent on the earnings and the receipt of funds from our subsidiaries via dividends or intercompany loans. We do not currently expect to declare or pay dividends on our Common Stock for the foreseeable future; however, to the extent that we determine in the future to pay dividends on our Common Stock, none of our subsidiaries will be obligated to make funds available to us for the payment of dividends. Further, the agreement governing our Credit Agreement significantly restricts the ability of our subsidiaries to pay dividends, make loans or otherwise transfer assets to us. In addition, Delaware law may impose requirements that may restrict our ability to pay dividends to holders of our Common Stock.

If securities or industry analysts do not publish research or publish misleading or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our Common Stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. If one or more analysts downgrade our stock or publish misleading or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price or trading volume to decline.

Future sales of shares by existing stockholders could cause our stock price to decline.

Sales of substantial amounts of our Common Stock in the public market, or the perception that these sales could occur, could cause the market price of our Common Stock to decline. As of February 22, 2019, we had 12,833,846 outstanding shares of Common Stock which are freely transferable without restriction or further registration under the Securities Act, unless held by or purchased by our "affiliates" as that term is defined in Rule 144 under the Securities Act. Shares of our Common Stock held by or purchased by our affiliates are restricted securities within the meaning of Rule 144 under the Securities Act, but will be eligible for resale subject to applicable volume, means of sale, holding period and other limitations of Rule 144 under the Securities Act.

As of December 31, 2018, shares of our Preferred Stock were convertible into 2,010,045 shares of Common Stock. On May 5, 2018, we filed a registration statement under the Securities Act relating to (i) 3,574,300 shares of Common Stock, consisting of 1,653,755 shares of Common Stock and 1,920,545 shares of Common Stock issuable upon the conversion of shares of Preferred Stock and (ii) 765,916 shares of Preferred Stock, for the sale by Coliseum Capital Co-Invest, L.P., Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P. and Blackwell Partners, LLC - Series A (collectively, the "Coliseum Stockholders") of such securities, which was declared effective on June 15, 2018.

In August 2016, we filed a registration statement under the Securities Act to register additional shares of Common Stock to be issued under our equity compensation plans and, as a result, all shares of Common Stock acquired upon exercise of stock options granted under our plans will also be freely tradable under the Securities Act, unless purchased by our affiliates. As of December 31, 2018, there were stock options outstanding to purchase a total of 908,588 shares of our Common Stock and there were 52,131 shares of our Common Stock subject to restricted stock awards. In addition, 1,356,820 shares of our Common Stock are reserved for future issuances under the plan.

The terms of our Preferred Stock contain restrictive covenants that may impair our ability to conduct business and we may not be able to maintain compliance with the obligations under our outstanding Preferred Stock which could have a material adverse effect on our future results of operations and our stock price.

On February 11, 2015 and March 12, 2015, we issued $65.5 million and $15.8 million, respectively, of Preferred Stock. The terms of the Preferred Stock require us to pay mandatory quarterly dividends, either in cash or through an increase in the stated principal value of such stock. Our ability to satisfy and manage our obligations under our outstanding Preferred Stock depends, in part, on our ability to generate cash flow and on overall financial market conditions. Additionally, the terms of our Preferred Stock contain operating and financial covenants that limit management's discretion with respect to certain business matters. Among other things, these covenants, subject to certain limitations and exceptions, restrict our ability to incur additional debt, sell or otherwise dispose of our assets, make acquisitions, and merge or consolidate with other entities. As a

result of these covenants and restrictions, we may be limited in how we conduct our business, which could have a material adverse effect on our future results of operations and our stock price.

Future offerings of debt or equity securities that would rank senior to our Common Stock, may adversely affect the market price of our Common Stock.

If, in the future, we decide to issue debt or equity securities that rank senior to our Common Stock, it is likely that such securities will be governed by an indenture or other instrument containing covenants restricting our operating flexibility. Additionally, any convertible or exchangeable securities that we issue in the future may have rights, preferences and privileges more favorable than those of our Common Stock and may result in dilution to owners of our Common Stock. We and, indirectly, our stockholders, will bear the cost of issuing and servicing such securities. Because our decision to issue debt or equity securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of our future offerings. Thus, holders of our Common Stock will bear the risk of our future offerings reducing the market price of our Common Stock and diluting the value of their stock holdings in us.

Fulfilling our obligations incident to being a public company, including with respect to the requirements of and related rules under the Sarbanes-Oxley Act of 2002, is expensive and time-consuming, and any delays or difficulties in satisfying these obligations could have a material adverse effect on our future results of operations and our stock price.

We are subject to the reporting and corporate governance requirements, under the listing standards of NASDAQ and the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), that apply to issuers of listed equity, which impose certain significant compliance costs and obligations upon us. Being a publicly listed company requires a significant commitment of additional resources and management oversight resulting in increased operating costs. These requirements also place additional demands on our finance and accounting staff and on our financial accounting and information systems. Other expenses associated with being a public company include increases in auditing, accounting and legal fees and expenses, investor relations expenses, increased directors' fees and director and officer liability insurance costs, registrar and transfer agent fees and listing fees, as well as other expenses. As a public company, we are required, among other things, to define and expand the roles and the duties of our Board of Directors ("Board") and its committees and institute more comprehensive compliance and investor relations functions.

If we fail to maintain effective internal control over financial reporting in the future, the accuracy and timing of our financial reporting may be adversely affected. Preparing our consolidated financial statements involves a number of complex manual and automated processes, which are dependent upon individual data input or review and require significant management judgment. One or more of these elements may result in errors that may not be detected and could result in a material misstatement of our consolidated financial statements. If a material misstatement occurs in the future, we may fail to meet our future reporting obligations. For example, we may fail to file periodic reports in a timely manner or may need to restate our financial results, either of which may cause the price of our Common Stock to decline.

If the accounting estimates we make, and the assumptions on which we rely, in preparing our financial statements prove inaccurate, our actual results may be adversely affected.

Our financial statements have been prepared in accordance with GAAP. The preparation of these financial statements requires us to make estimates and judgments about, among other things, taxes, revenue recognition, contingent obligations, NET Services transportation expense, recoverability of long-lived assets and doubtful accounts. In addition, the implementation of ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), which was effective for the Company beginning January 1, 2018, required a significant level of judgment and estimation. These estimates and judgments affect the reported amounts of our assets, liabilities, revenue and expenses, the amounts of charges accrued by us, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances and at the time they are made. If our estimates or the assumptions underlying them are not correct, we may need to accrue additional charges or reduce the value of assets that could adversely affect our results of operations, leading to a loss in investor confidence in our ability to manage our business and our stock price could decline.

Anti-takeover provisions in our second amended and restated certificate of incorporation and amended and restated by-laws could discourage, delay or prevent a change of control of our company and may affect the trading price of our Common Stock.

Our second amended and restated certificate of incorporation and amended and restated bylaws include a number of provisions that may be deemed to have anti-takeover effects, including provisions governing when and by whom special

meetings of our stockholders may be called, and provisions that may discourage, delay or prevent a change in our management or control over us that stockholders may consider favorable. In addition, in the event of certain change of control transactions, holders of Preferred Stock may be entitled under the governing certificate of designations to be paid both (i) the liquidation preference per share then in effect plus certain unpaid dividends and (ii) a pro rata portion of the transaction consideration on an as-converted

basis. As a result of these provisions, holders of our Common Stock may not receive the full benefit of any premium to the market price of our Common Stock offered by a bidder in a takeover context.

Even in the absence of a takeover attempt, the existence of these provisions may adversely affect the prevailing market price of our Common Stock if the provisions are viewed as discouraging takeover attempts in the future. Our second amended and restated certificate of incorporation and amended and restated by-laws may also make it difficult for stockholders to replace or remove our management. These provisions may facilitate management entrenchment that may delay, deter, render more difficult or prevent a change in our control, which may not be in the best interests of our stockholders.

We do not expect to pay dividends on our Common Stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our Common Stock.

We currently do not expect to declare and pay dividends on our Common Stock for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth, to develop our business, for working capital needs and for general corporate purposes. Therefore, you are not likely to receive any dividends on your Common Stock for the foreseeable future and the success of an investment in shares of our Common Stock will depend upon any future appreciation in their value. There is no guarantee that shares of our Common Stock will appreciate in value or even maintain the price at which stockholders have purchased their shares.

Item 1B. ***Unresolved Staff Comments.***

None.

Item 2. ***Properties.***

Our principal executive office is located in Stamford, Connecticut. As of February 22, 2019, we leased space in approximately 40 locations. The lease terms vary and we believe are generally at market rates. We believe that our properties are adequate for our current business needs, and believe that we can obtain adequate space, if needed, to meet our foreseeable business needs.

Item 3. ***Legal Proceedings.***

From time-to-time, we may become involved in legal proceedings arising in the ordinary course of our business. We cannot predict with certainty the potential for or outcome of any future litigation. Regardless of the outcome of any particular litigation and the merits of any particular claim, litigation can have a material adverse impact on our company due to, among other reasons, any injunctive relief granted which could inhibit our ability to operate our business, amounts paid as damages or in settlement of any such matter, diversion of management resources and defense costs.

On January 21, 2019, the United States District Court for the Southern District of Ohio unsealed a qui tam complaint, filed in December 2015, against Mobile Care Group, Inc., Mobile Care Group of Ohio, LLC, Mobile Care EMS & Transport, Inc. and LogistiCare Solutions, LLC ("LogistiCare") by the relators Brandee White, Laura Cunningham, and Jeffery Wisier (the "Relators") alleging violations of the federal False Claims Act by presenting claims for payment to government healthcare programs knowing that the prerequisites for such claims to be paid had not been met. The Relators seek to recover damages, fees and costs under the federal False Claims Act including treble damages, civil penalties and attorneys' fees. In addition, the Relators seek reinstatement to their jobs with the Mobile Care entities. None of the Relators was employed by LogistiCare. Prior to January 21, 2019, LogistiCare had no knowledge of the complaint. The federal government has declined to intervene against LogistiCare. The Company intends to defend the litigation vigorously and believes that the case will not have a material adverse effect on its business, financial condition or results of operations.

Item 4. ***Mine Safety Disclosures.***

Not applicable.

PART II

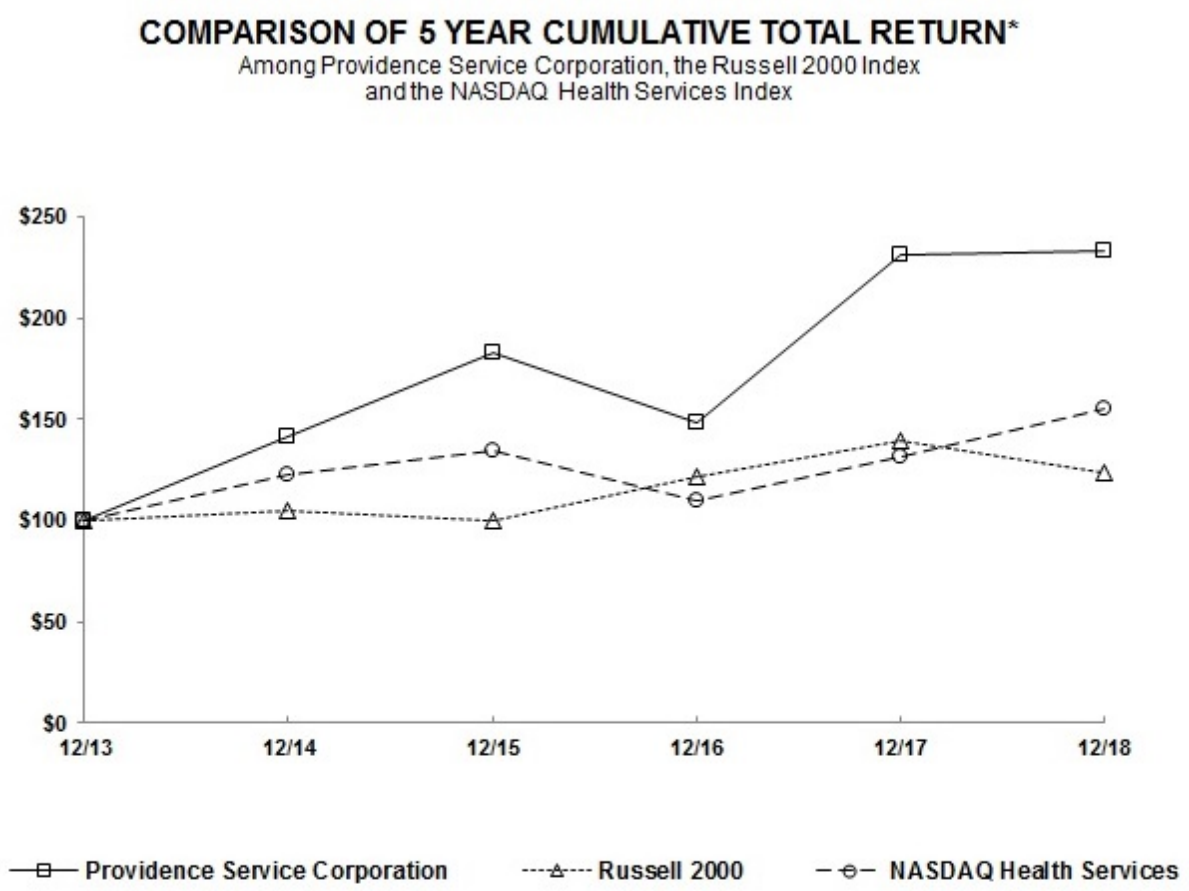
Item 5. ***Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.***

Market for our Common Stock

Our Common Stock, our only class of common equity, has been quoted on NASDAQ under the symbol "PRSC" since August 19, 2003. Prior to that time there was no public market for our Common Stock. As of February 22, 2019, there were 26 holders of record of our Common Stock.

Stock Performance Graph

The following graph shows a comparison of the cumulative total return for our Common Stock, NASDAQ Health Services Index and Russell 2000 Index assuming an investment of $100 in each on December 31, 2013.



Dividends

We have not paid any cash dividends on our Common Stock and currently do not expect to pay dividends on our Common Stock. In addition, our ability to pay dividends on our Common Stock is limited by the terms of our Credit

Agreement and our Preferred Stock. The payment of future cash dividends, if any, will be reviewed periodically by the Board and will depend upon,

among other things, our financial condition, funds from operations, the level of our capital and development expenditures, any restrictions imposed by present or future debt or equity instruments, and changes in federal tax policies, if any.

Issuer Purchases of Equity Securities

Period	Total Number of Shares of Common Stock Purchased (1)	Average Price Paid per Share	Total Number of Shares of Common Stock Purchased as Part of Publicly Announced Program (2)	Maximum Dollar Value of Shares of Common Stock that May Yet Be Purchased Under Program (2) (in thousands)
Fourth quarter:				
October 1, 2018 to October 31, 2018	—	$ —	—	$ 81,177
November 1, 2018 to November 30, 2018	226	$ 67.66	—	$ 81,177
December 1, 2018 to December 31, 2018	968	$ 65.70	—	$ 81,177
Total	1,194	$ 66.07	—	

(1) Includes shares that were acquired from employees in connection with the settlement of income tax and related benefit withholding obligations arising from vesting in restricted stock awards.

(2) On October 26, 2016, our Board authorized a new repurchase program, under which the Company may repurchase up to $100.0 million in aggregate value of the Company's Common Stock during the twelve-month period following October 26, 2016. Through October 26, 2017, a total of 770,808 shares were purchased through this plan for $30.4 million, excluding commission payments.

On November 2, 2017, our Board approved the extension of the Company's prior stock repurchase program, authorizing the Company to engage in a repurchase program to repurchase up to $69.6 million (the amount remaining from the $100.0 million repurchase amount authorized in 2016) in aggregate value of our Common Stock through December 31, 2018. Subsequently, on March 29, 2018, the Board authorized an increase in the amount available for stock repurchases under the Company's existing stock repurchase program by $77.8 million, and extended the existing stock repurchase program through June 30, 2019. Purchases under the repurchase program may be made from time-to-time through a combination of open market repurchases (including Rule 10b5-1 plans), privately negotiated transactions, and accelerated share repurchase transactions, at the discretion of the Company's officers, and as permitted by securities laws, covenants under existing bank agreements, and other legal requirements. As of December 31, 2018, a total of 1,018,989 shares were purchased through the extended plan approved on November 2, 2017, for $66.3 million, excluding commission payments. For additional information, see Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources".

Item 6. ***Selected Financial Data.***

We have derived the following selected financial data from the consolidated financial statements and related notes. The information set forth below is not necessarily indicative of future results. This information should be read in conjunction with our consolidated financial statements and the related notes, and Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations", all of which are included elsewhere in this Annual Report on Form 10-K.

Significant transactions which occurred during the periods presented include the acquisition of Ingeus effective May 30, 2014, which primarily comprised our WD Services segment; the investment in Mission Providence, a joint venture in Australia, which commenced operations in 2014 but was sold on September 29, 2017; our equity interest in Matrix effective October 19, 2016, which was originally acquired on October 23, 2014, comprised our HA Services segment through October 19, 2016; and the acquisition of Circulation effective September 21, 2018, which is included in our NET Services segment. The operations of HA Services, Human Services, which was sold effective November 1, 2015, and WD Services, which was sold effective December 21, 2018, have been presented as discontinued operations for all periods presented.

	Year Ended December 31,				
	2018	2017	2016	2015	2014
	(1)(2)(3)(4)(11)	(5)(6)(7)(8)(11)	(7)(9)(11)	(10)	(12)
	(dollars and shares in thousands, except per share data)				
Statement of operations data:					
Service revenue, net	$ 1,384,965	$ 1,318,220	$ 1,233,842	$ 1,082,951	$ 884,117
Operating expenses:					
Service expense	1,284,603	1,223,627	1,131,963	987,352	803,681
General and administrative expense	46,098	43,491	39,527	40,598	45,566
Asset impairment charge	14,175	—	1,415	—	—
Depreciation and amortization	15,813	13,618	12,780	10,221	8,808
Total operating expenses	1,360,689	1,280,736	1,185,685	1,038,171	858,055
Operating income	24,276	37,484	48,157	44,780	26,062
Non-operating expense:					
Interest expense, net	1,783	1,204	1,515	2,312	10,472
Other income	—	(5,363)	—	—	—
Equity in net loss (gain) of investees	6,158	(13,445)	1,789	—	—
Gain on measurement of cost method investment	(6,577)	—	—	—	—
Income from continuing operations, before income taxes	22,912	55,088	44,853	42,468	15,590
Provision for income taxes	4,684	4,003	17,972	15,718	8,053
Income from continuing operations, net of tax	18,228	51,085	26,881	26,750	7,537
(Loss) income from discontinued operations, net of tax	(37,053)	2,735	62,965	56,444	12,738
Net (loss) income	(18,825)	53,820	89,846	83,194	20,275
Net (gain) loss from discontinued operations attributable to noncontrolling interests	(156)	(451)	2,082	502	—
Net (loss) income attributable to Providence	$ (18,981)	$ 53,369	$ 91,928	$ 83,696	$ 20,275
Diluted (loss) earnings per common share:					
Continuing operations	$ 0.92	$ 2.97	$ 1.34	$ 1.22	$ 0.50
Discontinued operations	(2.86)	0.15	3.87	3.18	0.85
Total	$ (1.94)	$ 3.12	$ 5.21	$ 4.40	$ 1.35

Weighted-average number of common shares outstanding:					
Diluted	13,033	13,673	14,779	16,116	15,019

	As of December 31,				
	2018	2017	2016	2015	2014
	(2)(3)(11)		(9)		
	(dollars in thousands)				
Balance sheet data:					
Cash and cash equivalents	$ 5,678	$ 52,798	$ 72,262	$ 79,756	$ 121,538
Total assets	572,246	704,090	685,279	1,050,202	1,168,934
Long-term obligations, including current portion	1,071	2,984	3,611	300,071	574,613
Other liabilities	182,785	287,543	306,428	382,423	372,907
Convertible preferred stock	77,392	77,546	77,565	77,576	—
Total stockholders' equity	310,998	336,017	297,675	290,132	221,414

(1) General and administrative expense for the year ended December 31, 2018 includes $1.7 million in acquisition costs related to the acquisition of Circulation and $8.4 million in restructuring and related costs related to the Organizational Consolidation.

(2) In conjunction with the acquisition of Circulation and an analysis of the technology capabilities and scalability of the Circulation platform, we determined we would not continue the development of our NextGen technology. We also determined we would not place any of the developed NextGen technology into service, and recorded an asset impairment charge of $13.5 million related to our NET Services segment during the fourth quarter of 2018. In addition, we had previously recorded an impairment charge of $0.7 million during the second quarter of 2018 in relation to the decision to abandon specific development work intended to synchronize data across applications of the proprietary NextGen systems, based on the determination of an alternative method to accomplish this task.

(3) On September 21, 2018, we acquired all of the outstanding equity of Circulation. The purchase price was comprised of cash consideration of $45.1 million paid to Circulation's equity holders (including holders of vested Circulation stock options), other than Providence. Our initial investment in Circulation was $3.0 million. As a result of the transaction, the fair value of this pre-acquisition interest increased to $9.6 million, and thus we recognized a gain of $6.6 million.

(4) On December 21, 2018, we completed the sale of our WD Services segment. Included in (loss) income from discontinued operations, net of tax, for 2018 is a loss, net of tax, on the WD Services sale of $1.1 million. We additionally sold our Ingeus France operations, effective July 17, 2018 and recorded a loss on the sale of $0.7 million. We also incurred an impairment charge of $9.2 million for the adjustment of the carrying value of the assets and liabilities of Ingeus France to its estimated fair value when it was initially recorded as held for sale during 2018, which is included in (loss) income from discontinued operations, net of tax.

(5) Other income for the year ended December 31, 2017 includes the receipt of the Haverhill Litigation settlement of $5.4 million. See further information on the Haverhill Litigation in Note 20, *Commitments and Contingencies,* in the accompanying consolidated financial statements.

(6) (Loss) income from discontinued operations, net of tax, for the year ended December 31, 2017 includes a gain on sale of equity investment of $12.4 million related to the sale of the Company's equity interest in Mission Providence. The investment in Mission Providence was part of the WD Services segment.

(7) (Loss) income from discontinued operations, net of tax, for the years ended December 31, 2017 and 2016 include losses of $6.0 million and $5.6 million, respectively, related to potential indemnification claims for our historical Human Services segment.

(8) The year ended December 31, 2017 includes a net tax benefit of $15.9 million related to the enactment of the Tax Reform Act (as defined below) during the fourth quarter of 2017 due to the re-measurement of deferred tax liabilities by Providence as a result of the reduction in the U.S. corporate tax rate. Providence realized a benefit of $19.3 million,

partially offset by $3.4 million of increased tax expense resulting from additional equity in net gain of Matrix, due to Matrix's re-measurement of its deferred tax liabilities. In addition, the tax provision was adversely impacted by tax expense of $3.6 million related to the Company's 2015 Holding Company LTI Program (the "HoldCo LTIP"), for which expense was incurred for financial

reporting purposes, but no shares were issued due to the market condition of the award not being satisfied and thus no tax deduction was realized.

(9) On October 19, 2016, we completed the Matrix Transaction. Included in (loss) income from discontinued operations, net of tax, for 2016 is a gain on the transaction, net of tax, totaling $109.4 million. In conjunction with the completion of this transaction, we fully repaid the amounts outstanding on our term loans and Credit Facility in 2016.

(10) On November 1, 2015, we completed the sale of our Human Services segment. Included in (loss) income from discontinued operations, net of tax, for 2015 is a gain on the sale of the Human Services segment, net of tax, totaling $100.3 million.

(11) Equity in net (gain) loss of investees relates to Matrix, which became an equity investment upon the completion of the Matrix Transaction. We recorded $6.2 million in equity in net loss of investees and $13.4 million in equity in net gain of investees in 2018 and 2017, respectively. We recorded $1.8 million in equity in net loss of investees for the period of October 19, 2016 through December 31, 2016. The equity in net gain from Matrix for the year ended December 31, 2017 includes a benefit of $13.6 million related to the re-measurement of deferred tax liabilities arising from a lower U.S. corporate tax rate as a result of the Tax Reform Act. As a result of the increased equity income, Providence incurred higher tax expense of $3.4 million, which is reflected as a component of “Provision for income taxes” in the table above. The investment in Matrix at December 31, 2018 of $161.5 million is included in “Equity investments” in our consolidated balance sheet.

(12) 2014 includes $4.5 million of financing fees that were deferred and fully expensed within interest expense in the fourth quarter of 2014 in relation to bridge financing commitments and $3.0 million of third-party financing fees that are included in general and administrative expense.

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations.***

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with Item 6. "Selected Financial Data" and our consolidated financial statements and related notes included in Item 8. "Financial Statements and Supplementary Data" of this report. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and other factors that may cause actual results to differ materially from those projected in any forward-looking statements, as discussed in "Disclosure Regarding Forward-Looking Statements". These risks and uncertainties include but are not limited to those set forth in Item 1A. "Risk Factors".

Overview of Our Business

Please refer to *Item 1. "Business"* of this Annual Report on Form 10-K for a discussion of our services and corporate strategy.

We own subsidiaries and investments primarily engaged in the provision of healthcare services in the United States. Our NET Services segment, which primarily operates under the brands LogistiCare and Circulation, is the largest manager of NET programs for state governments and MCOs in the United States. On September 21, 2018, we completed the acquisition of Circulation, which offers a full suite of logistics solutions to manage NET programs across all areas of healthcare, powered by its HIPAA-compliant digital platform. Circulation's technology expands LogistiCare's capabilities to manage transportation benefits, integrating all transportation capabilities while proactively monitoring for fraud waste and abuse and emphasizing member convenience and satisfaction.

Our Matrix Investment segment consists of a minority investment in Matrix, a nationwide provider of home and mobile-based healthcare services for health plans in the United States, including CHAs, quality gap closure visits, "level of service" needs assessments, and post-acute and chronic care management, providing such services through a network of community-based clinicians and a fleet of mobile health clinics with advanced diagnostics capabilities.

Our Corporate and Other segment includes the Company's executive, accounting, finance, internal audit, tax, legal, public reporting, and corporate development functions, as well as the results of the Company's captive insurance company. On April 11, 2018, the Company announced the Organizational Consolidation. LogistiCare will retain its name and continue to be headquartered in Atlanta, GA, and the Company will continue to be named The Providence Service Corporation and be listed on NASDAQ under the ticker symbol "PRSC". The Organizational Consolidation is expected to be complete by the second quarter of 2019.

Business Outlook and Trends

Our performance is affected by a number of trends that drive the demand for our services. In particular, the markets in which we operate are exposed to various trends such as healthcare industry and demographic dynamics. Over the long term, we believe there are numerous factors that could affect growth within the industries in which we operate, including:

- an aging population, which will increase demand for healthcare services and transportation;
- a movement towards value-based versus fee for service care and budget pressure on governments, both of which may increase the use of private corporations to provide necessary and innovative services;
- increasing demand for in-home care provision, driven by cost pressures on traditional reimbursement models and technological advances enabling remote engagement;
- technological advancements, which may be utilized by us to improve service and lower costs, but also by others which may increase industry competitiveness; and
- proposals by the President of the United States and Congress to change the Medicaid program, including considering converting the Medicaid program to a block grant format or capping the federal contribution to state Medicaid programs to a fixed amount per beneficiary, and CMS' grant of waivers to states relative to the parameters of their Medicaid programs. Enactment of adverse legislation, regulation or agency guidance, or litigation challenges to ACA, state Medicaid programs, or other governmental programs may reduce the eligibility or demand for our services, our ability to conduct some or all of our business and/or reimbursement rates for services performed within our segments.

On December 21, 2018, the Company completed the WD Services Sale, except for the segment's employment services operations in Saudi Arabia. Our contractual counterparties in Saudi Arabia, including an entity owned by the Saudi Arabian government, assumed these operations beginning January 1, 2019. The total cash consideration from the sale was approximately $46.5 million, with the buyer retaining existing WD Services cash of $21.0 million. In addition to the purchase consideration, the

Company expects to be able to realize cash tax benefits of approximately $51.9 million as a result of the transaction, including approximately $34.3 million in tax refunds by the fourth quarter of 2019 in relation to its 2018 tax returns and loss carrybacks, which is inclusive of $0.6 million of tax that would have been otherwise due in the fourth quarter of 2018. The remaining cash tax benefit of $17.6 million is expected to be realized as an offset to tax payments over the following three years, based upon the Company's current estimate of taxable income. In addition, $1.1 million of benefits related to future capital loss is available, which amount was reserved as of December 31, 2018.

On September 21, 2018, the Company completed the acquisition of Circulation, which offers a full suite of logistics solutions to manage non-emergency transportation across all areas of healthcare, powered by its HIPAA-compliant digital platform. Circulation enables administration of transportation benefits, proactively monitors for fraud waste and abuse, and integrates all transportation capabilities, while emphasizing patient convenience and satisfaction. Circulation's proprietary platform simplifies ordering, improves reliability and efficiency, and reduces transportation spend. We believe the acquisition advances our central mission of reducing transportation as a barrier to healthcare, and will help deliver a differentiated user experience and provide a core technology and analytics platform that better positions us for growth. Following the acquisition and an analysis of the technology capabilities and scalability of the Circulation platform, we determined we will utilize the Circulation platform to service our legacy and new contracts, which resulted in an impairment charge of $13.5 million to NextGen. See further information on the impairment in Note 7, *Property and Equipment,* in the accompanying consolidated financial statements. Also, in connection with the acquisition of Circulation, the Company established a management incentive plan ("MIP"), whereby certain key employees of Circulation may be entitled to cash payments if certain financial measures are met based upon cumulative NET Services EBITDA; less the assumption of former Corporate and Other segment costs; less cumulative CAPEX ("MIP Financial Performance") for the performance period January 1, 2019 to December 31, 2021 as compared to the baseline, as determined by the Board. To the extent amounts are earned, the payout date is within 30 days following the finalization of the Company's audited financial statements for the fiscal year ending December 31, 2021. Payout is subject to the participant remaining employed by the Company through December 31, 2021. The amount that can be earned through the MIP ranges from $12.5 million to $237.5 million, based on a range of value of the MIP Financial Performance of $272.5 million to $395.5 million. As of December 31, 2018, the Company has accrued $1.4 million, reflected in "Other long-term liabilities" in the consolidated balance sheet, towards its estimate of the expected payout under the MIP.

On June 11, 2018, the Company entered into a Share Purchase Agreement to sell the shares of Ingeus France for a de minimis amount. The sale was effective on July 17, 2018, after court approval. As a result, an impairment charge of $9.2 million was recorded during the year ended December 31, 2018, and a loss, primarily related to the release of the effects of historic cumulative translation adjustments, of $0.7 million was recorded during the year ended December 31, 2018.

Revenues and Expenses

NET Services

NET Services primarily contracts with state Medicaid agencies and MCOs for the coordination of their members' non-emergency transportation needs. Most contracts are capitated, which means we are paid on a per-member, per-month basis for each eligible member. For most contracts, we arrange for transportation of members through our network of independent transportation providers, whereby we negotiate rates and remit payment to the transportation providers. However, for certain contracts, we assume no risk for the transportation network, credentialing and/or payments to these providers. For these contracts, we only provide administrative management services to support the customers' efforts to serve its clients.

Classification of Operating Expenses

Our "Service expense" line item includes the majority of the operating expenses of NET Services as well as our captive insurance company, with the exception of certain costs which are classified as "General and administrative expense". Service expense also excludes asset impairment charges and depreciation and amortization expenses. In the discussion below, we present the breakdown of service expense by the following major categories: purchased services, payroll and related costs, other operating expenses and stock-based compensation. Purchased services include the amounts we pay to third-party service providers and are typically dependent upon service volume. Payroll and related costs include all personnel costs of our segments. Other operating expenses include general overhead costs, excluding facilities and related charges, of our segments. Stock-based compensation represents the stock-based compensation expense associated with stock grants to employees of our segments.

Our “General and administrative expense” primarily includes the operating expenses of our corporate office, excluding depreciation and amortization, as well as acquisition related charges and facility related charges of NET Services.

Critical Accounting Policies and Estimates

Critical accounting policies and estimates are those that we believe are important in the preparation of our consolidated financial statements because they require that we use judgment and estimates in applying those policies. We prepare our consolidated financial statements and accompanying notes in accordance with GAAP. Preparation of the consolidated financial statements and accompanying notes requires that we make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the date of the consolidated financial statements as well as revenue and expenses during the periods reported. We base our estimates on historical experience, where applicable, and other assumptions that we believe are reasonable under the circumstances. Actual results may differ from our estimates under different assumptions or conditions.

There are certain critical estimates that we believe require significant judgment in the preparation of our consolidated financial statements. We consider an accounting estimate to be critical if:

- it requires us to make an assumption because information was not available at the time or it included matters that were highly uncertain at the time the estimate is made; and
- changes in the estimate or different estimates that could have been selected may have had a material impact on our financial condition or results of operations.

For more information on each of these policies, see Note 2, *Significant Accounting Policies and Recent Accounting Pronouncements*, to our consolidated financial statements. We discuss information about the nature and rationale for our critical accounting estimates below.

Accrued Transportation Costs

We accrue the cost of transportation expense within NET Services based on request for services and the amount we expect to be billed by transportation providers, as we generally only pay transportation providers for completed trips based upon documentation submitted after services have been provided. The transportation accrual requires significant judgment, as the accrual is based upon contractual rates and mileage estimates, as well as an estimated rate for unknown cancellations, as members may have requested transportation but not notified us of cancellation. Based upon historical experience and contract terms, we estimate the amount of expense incurred for invoices which have not yet been submitted as of period end. Actual expense could be greater or less than the amounts estimated due to changes in member or transportation provider behavior.

Business Combinations

We assign the value of the consideration transferred to acquire a business to the tangible assets and identifiable intangible assets acquired and liabilities assumed on the basis of their fair values at the date of acquisition. Any excess purchase price paid over the fair value of the net tangible and intangible assets acquired is allocated to goodwill. When determining the fair values of assets acquired and liabilities assumed, management makes significant estimates and assumptions, especially with respect to intangible assets. Critical estimates in valuing certain intangible assets include but are not limited to future expected cash flows from customer relationships, developed technology and trade names, and discount rates. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable. As a result, actual results may differ significantly from estimates.

Recoverability of Goodwill and Definite-Lived Intangible Assets

Goodwill. In accordance with ASC 350, *Intangibles-Goodwill and Other*, we review goodwill for impairment annually, or more frequently, if events and circumstances indicate that an asset may be impaired. Such circumstances could include, but are not limited to: (1) the loss or modification of significant contracts, (2) a significant adverse change in legal factors or in business climate, (3) unanticipated competition, (4) an adverse action or assessment by a regulator, or (5) a significant decline in the Company's stock price. We perform the annual goodwill impairment test for all reporting units as of October 1.

First, we perform qualitative assessments for each reporting unit to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the qualitative assessment suggests that it is more likely than not that the fair value of a reporting unit is less than its carrying value amount, we then perform a quantitative assessment and compare the fair value of the reporting unit to its carrying value.

We adopted ASU No. 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ("ASU 2017-04") effective April 1, 2017. ASU 2017-04 removes the requirement to compare the implied fair value of goodwill with its carrying amount as part of step two of the goodwill impairment test. Instead, if we deem it necessary to perform the quantitative goodwill impairment test in an annual or interim period, we recognize an impairment charge equal to the excess, if any, of a reporting unit's carrying amount over its fair value, not to exceed the total amount of goodwill allocated to the reporting unit.

Long-Lived Assets Including Intangibles. In accordance with ASC 360, *Property, Plant, and Equipment*, we review the carrying value of long-lived assets or groups of assets to be used in operations whenever events or changes in circumstances indicate that the carrying amount of the assets may be impaired. Factors that may necessitate an impairment assessment include, among others, significant adverse changes in the extent or manner in which an asset or group of assets is used, significant adverse changes in legal factors or the business climate that could affect the value of an asset or group of assets or significant declines in the observable market value of an asset or group of assets. The presence or occurrence of those events indicates that an asset or group of assets may be impaired. In those cases, we assess the recoverability of an asset or group of assets by determining whether the carrying value of the asset or group of assets exceeds the sum of the projected undiscounted cash flows expected to result from the use and eventual disposition of the assets over the remaining economic life of the asset or the primary asset in the group of assets. If such testing indicates the carrying value of the asset or group of assets is not recoverable, we estimate the fair value of the asset or group of assets using appropriate valuation methodologies, which would typically include an estimate of discounted cash flows. If the fair value of those assets or groups of assets is less than carrying value, we record an impairment loss equal to the excess of the carrying value over the estimated fair value.

The use of different estimates or assumptions in determining the fair value of our goodwill and intangible assets may result in different values for those assets, which could result in an impairment or, in the period in which an impairment is recognized, could result in a materially different impairment charge.

Income Taxes

We record income taxes under the liability method. Deferred tax assets and liabilities reflect our estimation of the future tax consequences of temporary differences between the carrying amounts of assets and liabilities for book and tax purposes. We determine deferred income taxes based on the differences in accounting methods and timing between financial statement and income tax reporting. Accordingly, we determine the deferred tax asset or liability for each temporary difference based on the enacted tax rates expected to be in effect when we realize the underlying items of income and expense. We consider many factors when assessing the likelihood of future realization of our deferred tax assets, including our recent earnings experience by jurisdiction, expectations of future taxable income, and the carryforward periods available to us for tax reporting purposes, as well as other relevant factors. We may establish a valuation allowance to reduce deferred tax assets to the amount we believe is more likely than not to be realized. Due to inherent complexities arising from the nature of our businesses, future changes in income tax law, tax sharing agreements or variances between our actual and anticipated operating results, we make certain judgments and estimates. Therefore, actual income taxes could materially vary from these estimates.

We record liabilities to address uncertain tax positions we have taken in previously filed tax returns or that we expect to take in a future tax return. The determination for required liabilities is based upon an analysis of each individual tax position, taking into consideration whether it is more likely than not that our tax position, based on technical merits, will be sustained upon examination. For those positions for which we conclude it is more likely than not it will be sustained, we recognize the largest amount of tax benefit that is greater than 50 percent likely of being realized upon ultimate settlement with the taxing authority. The difference between the amount recognized and the total tax position is recorded as a liability. The ultimate resolution of these tax positions may be greater or less than the liabilities recorded.

On December 22, 2017, the Tax Reform Act was enacted, which significantly changes U.S. tax law by, among other things, lowering corporate income tax rates, implementing a territorial tax system and imposing a repatriation tax on deemed repatriated earnings of foreign subsidiaries. The Tax Reform Act permanently reduces the U.S. corporate income tax rate from a maximum of 35% to a flat 21% rate, effective January 1, 2018. The Tax Reform Act also provides for a one-time deemed repatriation of post-1986 undistributed foreign subsidiary earnings and profits through the year ended December 31, 2017.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Reform Act. We recognized the provisional tax impacts related to deemed repatriated earnings and the benefit for the revaluation of deferred

tax assets and liabilities, and included these amounts in our consolidated financial statements for the year ended December 31, 2017. The financial

reporting impact of the Tax Reform Act was completed in the fourth quarter of 2018 and an additional benefit of $0.3 million was recorded.

Reinsurance and Self-Insurance Liabilities

We historically reinsured a substantial portion of our automobile, general and professional liability and workers' compensation costs under reinsurance programs through our wholly-owned subsidiary, Social Services Providers Captive Insurance Company ("SPCIC"), a licensed captive insurance company domiciled in the State of Arizona. In conjunction with the policy renewals on May 16, 2017, SPCIC did not renew the expiring policies. However, SPCIC continues to resolve claims under the historical policy years. In addition, under the current policies, the Company retains liability up to the policy deductibles. In addition, we maintain self-funded health insurance programs for employees with a stop-loss umbrella policy with a third-party insurer to limit the maximum potential liability for individual claims and for a maximum potential claim liability based on member enrollment. We utilize independent actuarial reports to determine the expected losses and in order to record the appropriate entries associated with our historical reinsurance programs, our retained exposure for the deductibles under our current policies, and self-funded health insurance programs. We regularly analyze our reserves for incurred but not reported claims, and for reported but not paid claims related to our reinsurance and self-funded insurance programs. We believe our reserves are adequate. However, significant judgment is involved in assessing these reserves such as evaluating historical paid claims, average lag times between the claims' incurred date, reported dates and paid dates, and the frequency and severity of claims. There may be differences between actual settlement amounts and recorded reserves and any resulting adjustments are recorded once a probable amount is known.

Revenue Recognition

NET Services provides non-emergency transportation services pursuant to contractual commitments over defined service delivery periods. For most contracts, NET Services arranges for transportation of members through its network of independent transportation providers, whereby it remits payment to the transportation providers. However, for certain contracts, NET Services only provides administrative management services to support the customers' efforts to serve its clients, and the amount of revenue recognized is based upon the management fee earned.

These contracts typically include single performance obligations under which NET Services stands ready to deliver management, fulfillment and record-keeping related to non-emergency transportation services. Transportation management services include, but are not limited to, fraud, waste, and abuse and utilization review programs as well as compliance controls. NET Services' performance obligations consist of a series of distinct services that are substantially the same and which are transferred to the customer in the same manner. In most cases, NET Services is the principal in its arrangements because it controls the services before transferring those services to the customer.

NET Services primarily uses the 'as invoiced' practical expedient to recognize revenue because it typically has the right to consideration from customers in an amount that corresponds directly with the value of its performance to date. This is consistent with NET Services' historical revenue recognition policy. NET Services recognizes revenue for some of its contracts that include variable consideration using a time-elapsed measure when the fees earned relate directly to services performed in the period. Because most contracts include termination for convenience clauses with required notice periods of less than one year, most NET Services contracts are deemed to be short-term in nature.

Some of NET Services' contracts include provisions whereby it must provide certain levels of service or face potential penalties or be required to refund fees paid by the customer. For those contracts, NET Services records a provision to reduce revenue to reflect the amount to which it expects it will ultimately be entitled.

Deferred Revenue

At times we may receive funding for certain services in advance of services being rendered. These amounts are reflected in the consolidated balance sheets as "Deferred revenue" until the services are rendered.

Stock-Based Compensation

Our primary forms of employee stock-based compensation are stock option awards and restricted stock awards, including certain awards which vest based upon performance conditions. We measure the value of stock option awards on the date of grant at fair value using the appropriate valuation techniques, including the Black-Scholes and Monte Carlo option-pricing models. We recognize the fair value as stock-based compensation expense on a straight-line basis over the requisite

service period, which is typically the vesting period. The pricing models require various highly judgmental assumptions including volatility and expected option term. If any of the assumptions used in the models change significantly, stock-based compensation expense may differ materially in the future from that recorded in the current period. We do not record stock-based compensation expense net of

estimated forfeitures and the tax effects of awards are treated as discrete items in the period in which tax windfalls or shortfalls occur. See additional discussion included in Note 2, *Significant Accounting Policies and Recent Accounting Pronouncements*, to our consolidated financial statements.

Our tax rate is subject to quarterly volatility from the effects of stock award exercises and vesting activities, including the adverse impact on our income tax provision for awards which result in a tax deduction less than the amount recorded for financial reporting purposes based upon the fair value of the award at the grant date.

Restructuring, Redundancy and Related Reorganization Costs

We accrue for severance and other employee separation costs when it is probable that benefits would be paid and the amounts are reasonably estimable. The amounts used in determining severance accruals are based on an estimate of the salaries and related benefit costs payable and are included in accrued expenses to the extent they have not been paid.

Results of Operations

Segment reporting. Our operations are organized and reviewed by management along our segment lines. We operate in one principal business segment, NET Services. Our investment in Matrix is also a reportable segment referred to as the "Matrix Investment". Segment results are based on how our chief operating decision maker manages our business, makes operating decisions and evaluates operating performance. The operating results of our principal business segment include revenue and expenses incurred by the segment, as well as an allocation of direct expenses incurred by our corporate division on behalf of the segment, which primarily relate to insurance and stock-based compensation allocations. Indirect expenses, including unallocated corporate functions and expenses, such as executive, accounting, finance, internal audit, tax, legal, public reporting, certain strategic and corporate development functions and the results of the Company's captive insurance company and elimination entries recorded in consolidation are reflected in "Corporate and Other".

Discontinued operations. During the periods presented, the Company completed the following transactions, which resulted in the presentation of the operations as Discontinued Operations.

- On November 1, 2015, the Company completed the sale of its Human Services segment. In addition to the results through the sale date, the Company has recorded additional expenses related to legal proceedings related to an indemnified legal matter.

- On October 19, 2016, affiliates of Frazier Healthcare Partners purchased a 53.2% equity interest in Matrix with Providence retaining a 46.8% equity interest at the time of the transaction. Prior to the closing of the Matrix Transaction, the financial results of Matrix were included in the Company's HA Services segment.

- On December 21, 2018, the Company completed the sale of substantially all of the operating subsidiaries of its WD Services segment to APM and APM UK Holdings Limited, an affiliate of APM, except for the segment's employment services operations in Saudi Arabia. The Company's contractual counterparties in Saudi Arabia, including an entity owned by the Saudi Arabian government, assumed these operations beginning January 1, 2019. Additionally, on June 11, 2018, the Company entered into a Share Purchase Agreement to sell Ingeus France for a de minimis amount. The sale was effective on July 17, 2018, after court approval.

Year ended December 31, 2018 compared to year ended December 31, 2017

The following table sets forth results of operations and the percentage of consolidated total revenues represented by items in our consolidated statements of operations for 2018 and 2017 (in thousands):

	Year ended December 31,			
	2018		2017	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	1,384,965	100.0 %	1,318,220	100.0 %
Operating expenses:				
Service expense	1,284,603	92.8 %	1,223,627	92.8 %
General and administrative expense	46,098	3.3 %	43,491	3.3 %
Asset impairment charge	14,175	1.0 %	—	— %
Depreciation and amortization	15,813	1.1 %	13,618	1.0 %
Total operating expenses	1,360,689	98.2 %	1,280,736	97.2 %
Operating income	24,276	1.8 %	37,484	2.8 %
Non-operating expense:				
Interest expense, net	1,783	0.1 %	1,204	0.1 %
Other income	—	— %	(5,363)	(0.4)%
Equity in net loss (gain) of investees	6,158	0.4 %	(13,445)	(1.0)%
Gain on remeasurement of cost method investment	(6,577)	(0.5)%	—	— %
Income from continuing operations before income taxes	22,912	1.7 %	55,088	4.2 %
Provision for income taxes	4,684	0.3 %	4,003	0.3 %
Income from continuing operations	18,228	1.3 %	51,085	3.9 %
(Loss) income from discontinued operations, net of tax	(37,053)	(2.7)%	2,735	0.2 %
Net (loss) income	(18,825)	(1.4)%	53,820	4.1 %
Net (income) loss from discontinued operations attributable to noncontrolling interest	(156)	— %	(451)	— %
Net (loss) income attributable to Providence	(18,981)	(1.4)%	53,369	4.0 %

Service revenue, net. Consolidated service revenue, net for 2018 increased $66.7 million, or 5.1%, compared to 2017 due to an increase in revenue of NET Services.

Total operating expenses. Consolidated operating expenses for 2018 increased $80.0 million, or 6.2%, compared to 2017. Operating expenses for 2018 compared to 2017 included an increase in expenses attributable to NET Services of $76.0 million and Corporate and Other of $4.0 million. NET Services' operating expenses include asset impairment charges of $14.2 million for 2018.

Operating income. Consolidated operating income for 2018 decreased $13.2 million compared to 2017 due to an increase in the operating loss for Corporate and Other of $4.0 million in 2018 as compared to 2017, and a decrease in operating income of NET Services in 2018 as compared to 2017 of $9.3 million.

Interest expense, net. Consolidated interest expense, net for 2018 increased $0.6 million, or 48.1%, compared to 2017, and remained consistent as a percentage of revenue. The increase was attributable to borrowings on the revolving line of credit during the second half of 2018 used to fund the Circulation acquisition, which were repaid as of December 31, 2018.

Other income. Other income in 2017 of $5.4 million represents the settlement received from the Haverhill Litigation.

Equity in net (gain) loss of investees. Our equity in net (gain) loss of investees for 2018 of $6.2 million represents equity in net loss for Matrix. Our equity in net gain of investees for 2017 of $13.4 million represents equity in net gain for Matrix. We began reporting Matrix as an equity investment effective October 19, 2016, upon the completion of the Matrix Transaction, and we record our ownership percentage of Matrix's profit or loss in net loss or gain of investees. Included in Matrix's 2018 full standalone net loss of $20.0 million (which is not consolidated with Providence's) are depreciation and amortization of $43.1 million, interest expense of $25.9 million, integration related costs of $6.5 million, equity compensation of $2.7 million, management fees paid to Matrix's shareholders of $4.9 million, merger and acquisition diligence related costs of $2.3 million and income tax benefit of $7.2 million. Included in Matrix's 2017 full standalone net income of $26.7 million (which is not consolidated with Providence's) are depreciation and amortization of $33.5 million, interest expense of $14.8 million, transaction bonuses and other transaction related costs of $3.5 million, equity compensation of $2.6 million, management fees paid to Matrix's shareholders of $2.3 million and income tax benefit of $29.6 million. Matrix's significant income tax benefit in 2017 primarily related to the re-measurement of deferred tax liabilities arising from a lower U.S. corporate tax rate as a result of the Tax Reform Act.

Gain on remeasurement of cost method investment. On September 21, 2018, we acquired all of the outstanding equity of Circulation. The purchase price was comprised of cash consideration of $45.1 million paid to Circulation's equity holders (including holders of vested Circulation stock options), other than Providence. Our initial investment in Circulation was $3.0 million. As a result of the transaction, the fair value of this pre-acquisition interest increased to $9.6 million, and thus we recognized a gain of $6.6 million.

Provision for income taxes. Our effective tax rate from continuing operations for 2018 was 20.4%. The effective tax rate was relatively consistent with the U.S. federal statutory rate of 21%, reflecting the benefit of stock option exercises and tax credits, partially offset by the impact of state income tax.

Our effective tax rate from continuing operations for 2017 was 7.3%. The effective tax rate was lower than the U.S. federal statutory rate of 35% primarily due to the impact of the Tax Reform Act. The tax provision includes a benefit of $15.9 million related to the enactment of the Tax Reform Act during the fourth quarter of 2017, consisting of a net tax benefit of $19.3 million from the re-measurement of deferred tax liabilities from the lower U.S. corporate tax rate, partially offset by additional tax expense of $3.4 million due to an increase in our equity in net gain of Matrix as a result of Matrix's re-measurement of deferred tax liabilities. In addition, the Company incurred tax expense of $3.6 million related to the HoldCo LTIP, for which expense was recorded for financial reporting purposes based upon fair value of the award at the grant date, but no shares were issued due to the market condition of the award not being satisfied. This tax expense was the result of the adoption of Accounting Standards Update No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"), which subjects our tax rate to quarterly volatility from the effects of stock award exercises and vesting activities, including the adverse impact on our income tax provision for awards which result in a tax deduction less than the amount recorded for financial reporting purposes.

(Loss) income from discontinued operations, net of tax. (Loss) income from discontinued operations, net of tax, includes the activity of our former WD Services segment and our former Human Services segment. For 2018, the loss from discontinued operations, net of tax, for our former WD Services segment was of $37.0 million. Included in the loss was a loss on disposition, net of tax, of $1.8 million as well as an asset impairment charge of $9.2 million related to the sale of WD Services operations in France in the second quarter of 2018. For 2017, income from discontinued operations, net of tax for our WD Services segment was $8.7 million, which included a gain on sale of our equity interest in Mission Providence of $12.4 million.

For 2018, the loss from discontinued operations, net of tax for our Human Services segment was $0.1 million, which primarily reflects a reduction of the accrued settlement amount for indemnified legal matters, based on the final settlement agreement, offset by the related income tax impact. For 2017, the loss from discontinued operations, net of tax for our Human Services segment was $6.0 million, which primarily related to the accrual of a contingent liability of $9.0 million related to the settlement of indemnification claims and associated legal costs of $0.7 million, partially offset by a related tax benefit.

Net (income) loss from discontinued operations attributable to noncontrolling interests. Net (income) loss from discontinued operations attributable to noncontrolling interests primarily relates to a minority interest held by a third-party operating partner in our company servicing the offender rehabilitation contract in our historical WD Services segment.

Segment Results. The following analysis includes discussion of each of our segments.

NET Services

NET Services financial results are as follows for 2018 and 2017 (in thousands):

	Year Ended December 31,			
	2018		2017	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	1,384,965	100.0%	1,318,220	100.0%
Service expense	1,285,029	92.8%	1,227,426	93.1%
General and administrative expense	14,247	1.0%	11,779	0.9%
Asset impairment charge	14,175	1.0%	—	—%
Depreciation and amortization	15,026	1.1%	13,275	1.0%
Operating income	56,488	4.1%	65,740	5.0%

Service revenue, net. Service revenue, net for NET Services in 2018 increased $66.7 million, or 5.1%, compared to 2017. The increase was primarily related to the impact of new contracts, including managed care organization ("MCO") contracts in Illinois, Indiana, Oregon and New York and new state contracts in Texas and West Virginia, which contributed $112.8 million of revenue for 2018, as well as net increased revenue from existing contracts of $39.2 million, due to the net impact of membership and rate changes, including the impact of increased rates agreed after 2017 on certain contracts related to increased costs to serve the contracts, which was partially offset by the impact of a retroactive rate adjustment recorded in 2017 related to increased utilization activity under a significant contract. Revenue additionally increased $2.2 million due to revenue generated from Circulation in the fourth quarter of 2018. These increases were partially offset by the impact of contracts we no longer serve, including state contracts in New York and Connecticut, certain MCO contracts in Florida and Louisiana, and decreased membership in Virginia, which resulted in a decrease in revenue of $72.0 million. In addition, the adoption of ASC 606 resulted in a decrease in revenue of $15.5 million in 2018 as compared to revenue under the previous accounting standard, as one contract is now accounted for on a net basis.

Service expense. Service expense is comprised of the following for 2018 and 2017 (in thousands):

	Year Ended December 31,			
	2018		2017	
	$	Percentage of Revenue	$	Percentage of Revenue
Purchased services	1,055,278	76.2%	1,009,518	76.6%
Payroll and related costs	179,175	12.9%	165,666	12.6%
Other operating expenses	49,626	3.6%	51,720	3.9%
Stock-based compensation	950	0.1%	522	—%
Total service expense	1,285,029	92.8%	1,227,426	93.1%

Service expense for 2018 increased $57.6 million, or 4.7%, compared to 2017. The increase in service expense was primarily due to higher purchased services and payroll and related costs. Purchased services expense increased primarily as a result of new contracts, which was partially offset by the impact of terminated contracts. Purchased services as a percentage of revenue decreased from 76.6% in 2017 to 76.2% in 2018. This was due primarily to lower transportation costs on a per trip basis in certain geographies as a result of ongoing initiatives to better align the rates we pay to our transportation provider partners with local market conditions and the fees paid to us by our customers. Transportation costs on a per trip basis fluctuate from period to period.

Payroll and related costs as a percentage of revenue increased from 12.6% in 2017 to 12.9% in 2018 due to increased corporate staffing, temporary labor and increased health insurance expenses, as well as the impact from the acquisition of

Circulation. Other operating expenses decreased for 2018 as compared to 2017 primarily attributable to a decrease in costs targeted at operational improvement from $6.3 million in 2017 to $2.8 million in 2018. This decrease was partially offset by increased software and hardware maintenance costs associated with new technology initiatives.

General and administrative expense. General and administrative expenses in 2018 increased $2.5 million, or 21.0%, as compared to 2017, primarily due to $1.7 million of transaction expenses related to the acquisition of Circulation in 2018, as well as increased facility costs resulting from the overall growth of our operations.

Asset impairment charge. Following the acquisition of Circulation and an analysis of the technology capabilities and scalability of the Circulation platform, we determined we would not continue the development of NextGen. We also determined we would not place any of the developed NextGen into service and recorded an asset impairment charge of $13.5 million related to our NET Services segment during the fourth quarter of 2018. We had previously recorded an impairment charge of $0.7 million during the second quarter of 2018 in relation to the decision to abandon specific development work intended to synchronize data across applications of the proprietary NextGen system, based on the determination of an alternative method to accomplish this task.

Depreciation and amortization expense. Depreciation and amortization expenses increased $1.8 million compared to 2017, primarily due to the addition of long-lived assets relating to information technology projects, as well as amortization expense related to the intangible assets acquired with the Circulation acquisition. As a percentage of revenue, depreciation and amortization increased to 1.1% for 2018 from 1.0% for 2017.

Corporate and Other

Corporate and Other includes the headcount and professional service costs incurred at the Providence corporate level, our captive insurance company, and elimination entries to account for inter-segment transactions. Corporate and Other financial results are as follows for 2018 and 2017 (in thousands):

	Year Ended December 31,	
	2018	**2017**
	$	**$**
Service expense	(426)	(3,799)
General and administrative expense	31,851	31,712
Depreciation and amortization	787	343
Operating loss	(32,212)	(28,256)

Operating loss. Corporate and Other operating loss in 2018 increased by $4.0 million, or 14.0%, as compared to 2017. Included in "General and administrative expense" for 2018 are $8.4 million of expenses relating to the Organizational Consolidation, including retention, recruitment and accelerated stock-based compensation expenses. Additionally, included in "Depreciation and amortization" is $0.4 million of accelerated depreciation expense incurred in relation to the Organizational Consolidation. General and administrative expenses for 2018 also include an increase in legal and consulting costs over 2017. Included in both 2018 and 2017 is a reduction in insurance loss reserves in "Service expense" due to favorable claims history of our captive reinsurance program.

The operating loss included expense of less than $0.1 million and $2.4 million, respectively, of cash settled stock-based compensation for 2018 and 2017, primarily as a result of an increase in the Company's stock price in 2017 as compared to a decrease in 2018. The operating loss included $6.3 million and $7.1 million, respectively, of share settled stock-based compensation, excluding accelerated stock-based compensation expense related to the Organizational Consolidation, for 2018 and 2017. Share settled stock-based compensation expense for 2017 included stock-based compensation for the HoldCo LTIP of $4.7 million.

Costs associated with the resignation of James Lindstrom, a former Chief Executive Officer of the Company, during the year ended December 31, 2017 include cash compensation related items of $0.9 million, stock-based compensation of $0.7 million, and other costs of $0.2 million. These costs are recorded as part of "General and administrative expense".

Year ended December 31, 2017 compared to year ended December 31, 2016

The following table sets forth results of operations and the percentage of consolidated total revenues represented by items in our consolidated statements of operations for 2017 and 2016 (in thousands):

	Year ended December 31,			
	2017		2016	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	1,318,220	100.0 %	1,233,842	100.0%
Operating expenses:				
Service expense	1,223,627	92.8 %	1,131,963	91.7%
General and administrative expense	43,491	3.3 %	39,527	3.2%
Asset impairment charge	—	— %	1,415	0.1%
Depreciation and amortization	13,618	1.0 %	12,780	1.0%
Total operating expenses	1,280,736	97.2 %	1,185,685	96.1%
Operating income	37,484	2.8 %	48,157	3.9%
Non-operating expense:				
Interest expense, net	1,204	0.1 %	1,515	0.1%
Other income	(5,363)	(0.4)%	—	—%
Equity in net (gain) loss of investees	(13,445)	(1.0)%	1,789	0.1%
Income from continuing operations before income taxes	55,088	4.2 %	44,853	3.6%
Provision for income taxes	4,003	0.3 %	17,972	1.5%
Income from continuing operations	51,085	3.9 %	26,881	2.2%
Income from discontinued operations, net of tax	2,735	0.2 %	62,965	5.1%
Net income	53,820	4.1 %	89,846	7.3%
Net (income) loss from discontinued operations attributable to noncontrolling interest	(451)	— %	2,082	0.2%
Net income attributable to Providence	53,369	4.0 %	91,928	7.5%

Service revenue, net. Consolidated service revenue, net for 2017 increased $84.4 million, or 6.8%, compared to 2016 due to an increase in revenue of NET Services.

Total operating expenses. Consolidated operating expenses for 2017 increased $95.1 million, or 8.0%, compared to 2016. Operating expenses for 2017 compared to 2016 included an increase in expenses attributable to NET Services of $95.8 million, which was partially offset by a decrease at Corporate and Other of $0.7 million. 2016 operating expenses include an asset impairment charge of $1.4 million at Corporate and Other.

Operating income. Consolidated operating income for 2017 decreased $10.7 million compared to 2016 due to a decrease in operating income of NET Services in 2017 as compared to 2016 of $11.3 million, which was partially offset by a decrease in the operating loss for Corporate and Other of $0.6 million in 2017 as compared to 2016.

Interest expense, net. Consolidated interest expense, net for 2017 decreased $0.3 million compared to 2016, and remained constant as a 0.1% of revenue.

Other income. Other income in 2017 of $5.4 million represents the settlement received from the Haverhill Litigation.

Equity in net (gain) loss of investees. Our equity in net (gain) loss of investees for 2017 includes equity in net gain for Matrix of $13.4 million. Our equity in net loss of investees for 2016 includes equity in net loss for Matrix of $1.8 million. We

began reporting Matrix as an equity investment effective October 19, 2016, upon the completion of the Matrix Transaction, and we record our ownership percentage of Matrix's profit or loss in net loss or gain of investees. Included in Matrix's 2017 full standalone net income of $26.7 million (which is not consolidated with Providence's) are depreciation and amortization of $33.5 million, interest expense of $14.8 million, transaction bonuses and other transaction related costs of $3.5 million, equity compensation of $2.6 million, management fees paid to Matrix's shareholders of $2.3 million, merger and acquisition diligence related costs of $0.7 million and income tax benefit of $29.6 million. Matrix's significant income tax benefit in 2017 primarily related to the re-measurement of deferred tax liabilities arising from a lower U.S. corporate tax rate as a result of the Tax Reform Act. Included in Matrix's 2016 full standalone net loss of $4.2 million (which is not consolidated with Providence's) are depreciation and amortization of $6.4 million, interest expense of $2.9 million, transaction bonuses and other transaction related costs of $6.4 million, equity compensation of $0.4 million, management fees paid to Matrix's shareholders of $0.4 million and income tax benefit of $2.8 million.

Provision for income taxes. Our effective tax rate from continuing operations for 2017 was 7.3%. The effective tax rate was lower than the U.S. federal statutory rate of 35% primarily due to the impact of the Tax Reform Act. The tax provision includes a benefit of $15.9 million related to the enactment of the Tax Reform Act during the fourth quarter of 2017, consisting of a net tax benefit of $19.3 million from the re-measurement of deferred tax liabilities from the lower U.S. corporate tax rate, partially offset by additional tax expense of $3.4 million due to an increase in our equity in net gain of Matrix as a result of Matrix's re-measurement of deferred tax liabilities. In addition, the Company incurred tax expense of $3.6 million related to the HoldCo LTIP, for which expense was recorded for financial reporting purposes based upon fair value of the award at the grant date, but no shares were issued due to the market condition of the award not being satisfied. This tax expense was the result of the adoption of ASU 2016-09, which subjects our tax rate to quarterly volatility from the effects of stock award exercises and vesting activities, including the adverse impact on our income tax provision for awards which result in a tax deduction less than the amount recorded for financial reporting purposes.

Our effective tax rate from continuing operations for 2016 was 40.1%. The effective tax rate was higher than the U.S. federal statutory rate of 35% primarily due to the impact of state taxes.

Income from discontinued operations, net of tax. Income from discontinued operations, net of tax, includes the activity of our former WD Services segment, Human Services segment and our former HA Services segment, composed entirely of our 100% ownership in Matrix until the completion of the Matrix Transaction on October 19, 2016. See Note 23, *Discontinued Operations,* to our consolidated financial statements for additional information.

For 2017, income from discontinued operations, net of tax for our WD Services segment was $8.7 million, which included a gain on sale of our equity interest in Mission Providence of $12.4 million. For 2016, the loss from discontinued operations, net of tax for our WD Services segment was $45.8 million, which included an asset impairment charge of $19.6 million.

For 2017, loss from discontinued operations, net of tax for our Human Services segment was $6.0 million, which primarily related to the accrual of a contingent liability of $9.0 million related to the settlement of indemnification claims and associated legal costs of $0.7 million, partially offset by a related tax benefit. For 2016, the loss from discontinued operations, net of tax for our Human Services segment was $5.6 million, which included an accrual of $6.0 million with respect to potential indemnification claims, legal costs of $1.1 million related to these potential claims and transaction related expenses of $0.8 million, partially offset by a related tax benefit.

Income from discontinued operations, net of tax for our HA Services segment was $114.3 million for 2016, which included a gain on disposition, net of tax, of $109.4 million.

Net (income) loss from discontinued operations attributable to noncontrolling interests. Net (income) loss from discontinued operations attributable to noncontrolling interests primarily relates to a minority interest held by a third-party operating partner in our company servicing the offender rehabilitation contract in our historical WD Services segment.

Segment Results. The following analysis includes discussion of each of our segments.

NET Services

NET Services financial results are as follows for 2017 and 2016 (in thousands):

	Year Ended December 31,			
	2017		2016	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	1,318,220	100.0%	1,233,720	100.0%
Service expense	1,227,426	93.1%	1,132,857	91.8%
General and administrative expense	11,779	0.9%	11,406	0.9%
Depreciation and amortization	13,275	1.0%	12,375	1.0%
Operating income	65,740	5.0%	77,082	6.2%

Service revenue, net. Service revenue, net for NET Services in 2017 increased $84.5 million, or 6.8%, compared to 2016. The increase was related to net increased revenue from existing contracts, including successfully renewed contracts, of $82.5 million, due to the net impact of membership and rate changes. Included within net rate changes are the positive impacts of final agreements on rate adjustments related to existing contracts that experienced increased utilization in 2017 as well as the release of previously accrued revenue hold-backs based on certain contract performance requirements on a significant contract. Additionally, the impact of new contracts, including new MCO contracts in Florida and New York, contributed $93.8 million of revenue for 2017. These increases were partially offset by the $91.8 million impact on revenue of contracts we no longer serve, including a contract with the state of New York.

Service expense. Service expense is comprised of the following for 2017 and 2016 (in thousands):

	Year Ended December 31,			
	2017		2016	
	$	Percentage of Revenue	$	Percentage of Revenue
Purchased services	1,009,518	76.6%	927,321	75.2%
Payroll and related costs	165,666	12.6%	162,000	13.1%
Other operating expenses	51,720	3.9%	42,478	3.4%
Stock-based compensation	522	—%	1,058	0.1%
Total service expense	1,227,426	93.1%	1,132,857	91.8%

Service expense for 2017 increased $94.6 million, or 8.3%, compared to 2016. The increase in service expense was primarily attributable to the impact of new MCO contracts in California, Florida and New York. Purchased services as a percentage of revenue increased from 75.2% in 2016 to 76.6% in 2017 primarily attributable to an increase in utilization across multiple contracts. The higher utilization was in part driven by increased Medicaid reimbursement in New Jersey for certain medical services, increasing the demand for transportation services, and increased utilization across multiple MCOs in California. Additionally, due to milder winter weather conditions during the first quarter of 2017, we experienced above expected utilization; however, we experienced lower utilization for contracts in the third quarter of 2017 due in part to the impact of Hurricane Irma. The increase in purchased services as a percentage of revenue caused by increased utilization was partially offset by the successful implementation of initiatives aimed at lowering transportation costs on a per trip and per mile basis as well as the release of a reserve based upon the finalization of a contract amendment with a state customer.

Payroll and related costs as a percentage of revenue decreased from 13.1% in 2016 to 12.6% in 2017 due to efficiencies gained from multiple process improvement initiatives, including those aimed at lowering payroll expense across our reservation and operation center networks, as well as a decrease in chief executive officer compensation expense due to the transition of the chief executive officer position during 2017. Other operating expenses increased for 2017 as compared to 2016

primarily attributable to an incremental $4.1 million of value enhancement and related costs incurred for external resources used in the design and

implementation of NET Services member experience and value enhancement initiatives in 2017, as well as increased software and hardware maintenance costs associated with increased use of information technology.

General and administrative expense. General and administrative expense in 2017 increased $0.4 million, or 3.3%, as compared to 2016, due to increased facility costs resulting from the overall growth of our operations. As a percentage of revenue, general and administrative expense remained constant at 0.9%.

Depreciation and amortization expense. Depreciation and amortization expense increased $0.9 million primarily due to the addition of long-lived assets relating to information technology projects. As a percentage of revenue, depreciation and amortization remained constant at 1.0%.

Corporate and Other

Corporate and Other includes the headcount and professional service costs incurred at the holding company level, at our captive insurance company, and elimination entries to account for inter-segment transactions. Corporate and Other financial results are as follows for 2017 and 2016 (in thousands):

	Year Ended December 31,	
	2017	**2016**
	$	**$**
Service revenue, net	—	122
Service expense	(3,799)	(894)
General and administrative expense	31,712	28,121
Asset impairment charge	—	1,415
Depreciation and amortization	343	405
Operating loss	(28,256)	(28,925)

Operating loss. Corporate and Other operating loss in 2017 decreased by $0.6 million, or 2.3%, as compared to 2016 primarily due a reduction in insurance loss reserves of $3.5 million in 2017, versus $2.5 million in 2016, due to favorable claims history of our captive reinsurance programs, as well as decreased costs of the captive operations due to no longer writing new policies as of May 2017, which is included in "Service expense", decreased accounting, legal and professional fees included in "General and administrative expense", and decreased asset impairment charges, as $1.4 million was recorded in 2016 in relation to the sale of a building. These decreases were partially offset by an increase in cash settled stock-based compensation expense of $3.6 million, primarily as a result of an increase in the Company's stock price in 2017 as compared to a decrease in 2016, an increase in share settled stock-based compensation expense of $2.7 million, primarily related to an increase in expense for the HoldCo LTIP despite this program expiring with no shares due to any employees, expense for stock options issued to a former chief executive officer upon separation from the Company, and a benefit recorded in 2016 for performance based units, with no corresponding benefit in 2017.

General and administrative expense includes stock-based compensation for the HoldCo LTIP of $4.7 million and $3.3 million for 2017 and 2016, respectively. No shares were distributed under the HoldCo LTIP as the volume weighted average of Providence's stock price over the 90-day trading period ended on December 31, 2017 was less than $56.79. As such, as of December 31, 2017, we accelerated all remaining unrecognized compensation expense for the Holdco LTIP as there was no further requisite service period associated with the award resulting in an acceleration of expense of $1.1 million. General and administrative expense also includes $0.4 million and $1.6 million for 2017 and 2016, respectively, related to a shareholder lawsuit.

Costs associated with the resignation of James Lindstrom during the year ended December 31, 2017 include cash compensation related items of $0.9 million, stock-based compensation of $0.7 million, and other costs of $0.2 million. These costs are recorded as part of "General and administrative expense".

Seasonality

Our quarterly operating results and operating cash flows normally fluctuate due in part to seasonal factors, uneven demand for services and the timing of new contracts, which impact the amount of revenues earned and expenses incurred. NET Services

experiences fluctuations in demand during the summer and winter. Due to higher demand in the summer months, lower demand during the winter months, and a primarily fixed revenue stream based on a per-member, per-month payment structure, NET Services normally experiences lower operating margins during the summer season and higher operating margins during the winter.

Liquidity and Capital Resources

Short-term capital requirements consist primarily of recurring operating expenses, new contract start-up costs and costs associated with our Organizational Consolidation and other strategic initiatives. We expect to meet our cash requirements through available cash on hand, cash generated from NET Services, and borrowing capacity under our Credit Facility (as defined below).

Cash flow from operating activities was $7.9 million in 2018. Additionally, 2018 included $12.8 million in proceeds from the sale of our WD Services segment and cash outflows of $43.7 million related to the acquisition of Circulation, which are included in cash used in investing activities, and $12.4 million of proceeds from stock option exercises and cash outflows of $56.1 million for repurchases of common stock for treasury, which are included in cash used in financing activities. Our balance of cash, cash equivalents and restricted cash was $12.4 million and $101.6 million at December 31, 2018 and 2017, respectively, which includes cash of discontinued operations.

We had restricted cash of $4.4 million and $6.3 million at December 31, 2018 and 2017, respectively, primarily related to contractual obligations and activities of our captive insurance subsidiary. Given expiring policies under our captive insurance subsidiary were not renewed upon expiration in May 2017, we expect our restricted cash balances to decline over time. These restricted cash amounts are not included in our balance of cash and cash equivalents, although they are included in the cash, cash equivalents and restricted cash balance on the accompanying consolidated statements of cash flows, as a result of the adoption of Accounting Standards Update No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash,* as of January 1, 2018. At both December 31, 2018 and 2017, we had no amounts outstanding under our Credit Facility.

We may, from time to time, access capital markets to raise equity or debt financing for various business reasons, including acquisitions. We may also raise debt financing to fund future repurchases of our Common Stock. The timing, term, size, and pricing of any such financing will depend on investor interest and market conditions, and there can be no assurance that we will be able to obtain any such financing. During the second quarter of 2018, we extended the term of our Credit Facility to expire in August 2019, as further discussed below. At the end of the third quarter of 2018, we borrowed funds on our revolving credit facility to acquire Circulation. As of December 31, 2018, these amounts were fully repaid.

On March 29, 2018, the Company's Board of Directors amended our ongoing stock repurchase program to add an additional $77.8 million of capacity and extend the expiration date of the program from December 31, 2018 to June 30, 2019. As of December 31, 2018, the Company had approximately $81.2 million of share repurchase availability. During the year ended December 31, 2018, the Company repurchased 838,719 shares for $55.8 million.

The accompanying consolidated cash flow statement for all periods presented includes both continuing and discontinued operations. Discontinued operations include the activity of our historical WD Services, Human Services and HA Services segments. The loss from discontinued operations totaled $37.1 million for the year ended December 31, 2018, while income from discontinued operations totaled $2.7 million and $63.0 million for the years ended December 31, 2017 and 2016, respectively. For 2018, the loss from discontinued operations primarily related to the operating loss of our historical WD Services segment, as well as the loss, net of tax, of $1.8 million incurred on the disposition of subsidiaries within this segment. The significant income from discontinued operations during the year ended December 31, 2016 related to the gain on sale of our HA Services segment. Significant non-cash items of our discontinued operations included the following:

	2018	2017	2016
Depreciation	$ 6,711	$ 7,825	$ 11,799
Amortization	5,153	5,026	23,145
Asset impairment charge	9,203	—	19,588
Deferred income taxes	345	(3,940)	45,700

2018 cash flows compared to 2017

Operating activities. Cash provided by operating activities was $7.9 million for 2018, a decrease of $47.1 million compared with 2017. 2018 and 2017 cash flows from operations were driven by net loss of $18.8 million and net income $53.8 million,

respectively, non-cash adjustments to reconcile net income to net cash provided by operating activities of $67.1 million and negative $11.1 million, respectively, and changes in working capital of negative $40.3 million and positive $12.3 million, respectively.

The change in non-cash adjustments to reconcile net income to net cash provided by operating activities was due primarily to the impact of:

- the asset impairment charge incurred in 2018 of $23.4 million, of which $9.2 million is included in discontinued operations related to the sale of WD Services operations in France;
- the impact on deferred taxes and income taxes receivable as a result of the sale of substantially all of the operating subsidiaries in the WD Services segment in 2018 and as a result of the Tax Reform Act passed in 2017;
- the pre-tax loss on sale of subsidiaries of $53.7 million in 2018, which includes a non-cash reclass of $30.0 million from currency translation adjustment;
- the gain on remeasurement of our cost method investment in Circulation of $6.6 million in 2018;
- the gain on sale of Mission Providence of $12.4 million in 2017; and
- the impact of the change in equity in net (gain) loss of investees, which was a loss of $6.1 million in 2018 as compared to a gain of $12.1 million in 2017.

The change in working capital was primarily driven by the following:

- Accounts receivable generated a cash outflow in 2018 of $31.0 million as compared to an inflow of $5.7 million in 2017. The increase in cash outflow of $36.7 million was primarily attributable to NET Services due to the timing of collections from a limited number of payers, which was partially offset by $13.1 million of additional cash inflow from discontinued operations.
- Accounts payable and accrued expenses generated a cash outflow of $21.8 million in 2018, as compared to a cash outflow of $9.1 million in 2017. The increase in cash outflow of $12.7 million is primarily the result of the settlement of indemnified legal claims in 2018, of which $9.0 million was accrued for during 2017, which was partially offset by an increase in cash inflow from discontinued operations of $7.8 million and the impact of changes in the NET Services accrued contract payable balance.
- Accrued transportation costs of NET Services generated a cash inflow of $1.3 million in 2018, as compared to a cash inflow of $11.2 million in 2017. The decrease in cash inflow of $9.9 million is due primarily to the timing of payments to NET Services transportation providers.

Investing activities. Net cash used in investing activities of $45.3 million in 2018 increased by $38.3 million as compared to 2017. The increase was primarily attributable to the purchase of Circulation resulting in cash used for acquisition, net of cash acquired, of $43.7 million, which was partially offset by $12.8 million of proceeds on the sale of WD Services. Additionally, 2017 includes the impact of $15.6 million in proceeds from the sale of our equity investment in Mission Providence. During 2018, we also collected a note receivable for $3.1 million. Additionally in 2017, we made a cost method investment in Circulation for $3.0 million. There was also a decrease in the purchase of property and equipment of $2.4 million. 2018 and 2017 included purchases of property and equipment of $6.7 million and $4.5 million, respectively, by our discontinued operations.

Financing activities. Net cash used in financing activities of $51.6 million in 2018 increased $17.8 million as compared to 2017. During 2018, we repurchased $26.7 million more of our Common Stock than in 2017. In addition, there was an increase in proceeds from Common Stock issued pursuant to stock option exercises of $10.5 million.

2017 cash flows compared to 2016

Operating activities. Cash provided by operating activities was $55.0 million for 2017, an increase of $13.3 million compared with 2016. 2017 and 2016 cash flows from operations were driven by net income of $53.8 million and $89.8 million, respectively, non-cash adjustments to reconcile net income to net cash provided by operating activities of negative $11.1 million and negative $32.9 million, respectively, and changes in working capital of $12.3 million and negative $15.2 million, respectively.

The change in non-cash adjustments to reconcile net income to net cash provided by operating activities was due primarily to the impact of:

- the disposition of HA Services in 2016, resulting in decreased gain on sale of business, depreciation, amortization and deferred taxes in 2017 as compared to 2016;
- the asset impairment charge incurred in 2016 of $21.0 million, which is included in discontinued operations;

- the impact on deferred taxes as a result of the Tax Reform Act passed in 2017;
- the gain on sale of Mission Providence of $12.4 million in 2017, which is included in discontinued operations; and
- the impact of the change in equity in net (gain) loss of investees, which was a gain of $12.1 million in 2017 as compared to a loss of $10.3 million in 2016.

The change in working capital was primarily driven by the following:

- Accounts receivable generated a cash inflow in 2017 of $5.7 million as compared to an outflow of $19.3 million in 2016. The increase in cash inflow of $25.0 million was primarily attributable to NET Services due to the timing of collections as well as an outflow of $3.1 million of HA Services in 2016. These changes were partially offset by cash outflows in 2017 related to an increase in WD Services' receivables in Germany, Saudi Arabia, South Korea and the UK.
- Prepaid expenses and other generated a cash inflow of $15.5 million in 2017, as compared to a cash outflow of $4.1 million in 2016. The increase in cash inflow of $19.5 million was primarily attributable to a decrease in other receivables related to amounts receivable from insurance carriers in respect to certain claims paid by the Company, but reimbursable from the respective insurance carrier, decreased receivables related to our captive insurance company insurance policy rewrite, decreased prepaid value added taxes in the UK, decreased prepayments in WD Services in relation to certain contracts and changes in income tax payments.
- Accounts payable and accrued expenses generated a cash outflow of $9.1 million in 2017, as compared to a cash inflow of $33.4 million in 2016. The decrease in cash inflow of $42.4 million is due primarily to the impact of NET Services accrued contract payments of $21.5 million, as well as the disposition of HA Services, which generated a cash inflow of $10.6 million in 2016. Partially offsetting these impacts is the impact of the increase in the accrued settlement related to our former Human Services segment of $9.0 million during 2017 as compared to an increase of $6.0 million in 2016.
- Accrued transportation costs of NET Services generated a cash inflow of $11.2 million in 2017, as compared to a cash inflow of $8.7 million in 2016. The increase in cash inflow of $2.6 million is due primarily to the timing of payments to NET Services transportation providers and increased volume.
- Income taxes payable on sale of business for 2016 includes a cash outflow of $30.2 million related to the sale of our Human Services segment.

Investing activities. Net cash used in investing activities totaled $7.0 million in 2017, compared to cash provided by investing activities of $318.0 million in 2016. The change was primarily attributable to $371.6 million of proceeds on the Matrix Transaction recorded in 2016, which was partially offset by the impact of $15.6 million in proceeds from the sale of our equity investment in Mission Providence in 2017. Additionally in 2017, we made a cost method investment in Circulation for $3.0 million. There was also a decrease in funding of our equity investment in Mission Providence of $13.7 million and a decrease in the purchase of property and equipment of $21.3 million. 2017 and 2016 included purchases of property and equipment of $4.5 million and $29.0 million, respectively, by our discontinued operations.

Financing activities. Net cash used in financing activities of $33.8 million in 2017 decreased $343.0 million as compared to 2016. During 2016, there was a net repayment of debt of $305.0 million, primarily related to the repayment of debt upon the completion of the Matrix Transaction. Additionally, during 2017, we repurchased $41.0 million less of our Common Stock than in 2016. In addition, there was a decrease in proceeds from Common Stock issued pursuant to stock option exercises of $2.2 million.

Obligations and commitments

Current Credit Facility

We are party to the amended and restated credit and guaranty agreement, dated as of August 2, 2013 (as amended, the "Credit Agreement"), with Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer, and the other lenders party thereto. The Credit Agreement provides us with a $200.0 million revolving credit facility (the "Credit Facility"), including a sub-facility of $25.0 million for letters of credit. As of December 31, 2018, we had no borrowings and ten letters of credit in the amount of $12.3 million outstanding. At December 31, 2018, our available credit under the revolving credit facility was $187.7 million.

Under the Credit Agreement, the Company has an option to request an increase in the amount of the revolving credit facility or in a term loan facility from time to time (on substantially the same terms as apply to the existing facility) in an aggregate amount of up to $75.0 million with either additional commitments from lenders under the Credit Agreement at such time or new commitments from financial institutions acceptable to the administrative agent in its reasonable discretion, so long

as no default or event of default exists at the time of any such increase. The Company may not be able to access additional funds under this increase option as no lender is obligated to participate in any such increase under the Credit Facility. The Credit Agreement has a maturity date of August 2, 2019. See also "Risk Factors-Risks Related to our Indebtedness-Loss of available financing or an inability to renew, repay or refinance our debt could have an adverse effect on our financial condition and results of operations."

We may prepay any outstanding principal under the Credit Facility in whole or in part, at any time without premium or penalty, subject to reimbursement of the lenders' breakage and redeployment costs in connection with prepayments of London Interbank Offered Rate, or LIBOR, loans. The unutilized portion of the commitments under the Credit Facility may be irrevocably reduced or terminated by us at any time without penalty.

Interest on the outstanding principal amount of any loans accrues, at our election, at a per annum rate equal to LIBOR, plus an applicable margin or the base rate plus an applicable margin. The applicable margin ranges from 2.25% to 3.25% in the case of LIBOR loans and 1.25% to 2.25% in the case of the base rate loans, in each case, based on our consolidated leverage ratio as defined in the Credit Agreement. Interest on any loans is payable quarterly in arrears. In addition, we are obligated to pay a quarterly commitment fee based on a percentage of the unused portion of each lender's commitment under the Credit Facility and quarterly letter of credit fees based on a percentage of the maximum amount available to be drawn under each outstanding letter of credit. The commitment fee and letter of credit fee range from 0.25% to 0.50% and 2.25% to 3.25%, respectively, in each case, based on our consolidated leverage ratio.

The Credit Facility also requires us (subject to certain exceptions as set forth in the Amended and Restated Credit Agreement) to prepay the outstanding loans in an aggregate amount equal to 100% of the net cash proceeds received from certain asset dispositions, debt issuances, insurance and casualty awards and other extraordinary receipts.

Our obligations under the Credit Facility are guaranteed by all of our present and future domestic subsidiaries, excluding certain domestic subsidiaries, which includes our insurance captive. Our obligations under, and each guarantor's obligations under its guaranty of, the Credit Facility are secured by a first priority lien on substantially all of our respective assets, other than our equity investment in Matrix, including a pledge of 100% of the issued and outstanding stock of our domestic subsidiaries, excluding our insurance captive.

The Credit Agreement contains customary affirmative and negative covenants and events of default. The negative covenants include restrictions on our ability to, among other things, incur additional indebtedness, create liens, make investments, give guarantees, pay dividends, repurchase shares, sell assets, and merge and consolidate. We are subject to financial covenants, including consolidated net leverage and consolidated interest coverage covenants. The Company's consolidated net leverage ratio may not be greater than 3.00:1.00 as of the end of any fiscal quarter and the Company's consolidated interest coverage ratio may not be less than 3.00:1.00 as of the end of any fiscal quarter. We were in compliance with all covenants as of December 31, 2018.

Credit Facility Background

On August 2, 2013, we entered into the Credit Agreement with Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer, SunTrust Bank, as syndication agent, Merrill Lynch, Pierce, Fenner & Smith Incorporated and SunTrust Robinson Humphrey, Inc., as joint lead arrangers and joint book managers and other lenders party thereto. The Credit Agreement provided us with a senior secured credit facility, in aggregate principal amount of $225.0 million, comprised of a $60.0 million term loan facility and a $165.0 million revolving credit facility. The Credit Facility includes sublimits for swingline loans and letters of credit in amounts of up to $10.0 million and $25.0 million, respectively. On August 2, 2013, we borrowed the entire amount available under the term loan facility and $16.0 million under our revolving credit facility and used the proceeds thereof to refinance certain of our existing indebtedness.

On May 28, 2014, we entered into the first amendment to the Credit Agreement (the "First Amendment"). The First Amendment provided for, among other things, an increase in the aggregate amount of the Credit Facility from $165.0 million to $240.0 million and other modifications in connection with the consummation of the acquisition of Ingeus.

On October 23, 2014, we entered into the Second Amendment to the Credit Agreement (the "Second Amendment") to (i) add a new term loan tranche in aggregate principal amount of up to $250.0 million to partly finance the acquisition of Matrix and make certain other modifications in connection with the consummation of the acquisition of Matrix and (ii) add an excess cash flow mandatory prepayment provision.

On September 3, 2015, we entered into the Third Amendment to the Credit Agreement (the "Third Amendment"). Pursuant to the Third Amendment, the lenders under the Credit Agreement consented to Providence's sale of the Human Services segment

and certain other amendments to the terms of the Credit Agreement to reflect such consents.

On August 28, 2016, we entered into the Fourth Amendment and Consent (the "Fourth Amendment") to the Credit Agreement. In accordance with the Fourth Amendment, which provided for the lenders' consent to the Matrix Transaction, a portion of the net cash proceeds received by the Company in connection with the Matrix Transaction was applied to the prepayment of outstanding term loans and revolving loans. Additionally, effective following the repayment of the outstanding term loans in full on October 20, 2016, the Fourth Amendment further (i) reduced the aggregate revolving commitments under the Credit Agreement to $200.0 million, (ii) amended the consolidated net leverage ratio covenant such that the Company's consolidated net leverage ratio may not be greater than 3.00:1.00 as of the end of any fiscal quarter and (iii) replaced the existing consolidated fixed charge coverage ratio covenant with a covenant that the Company's consolidated interest coverage ratio may not be less than 3.00:1.00 as of the end of any fiscal quarter.

On June 7, 2018, we entered into the Fifth Amendment to the Credit Agreement (the "Fifth Amendment") which (i) extended the maturity date of the Credit Agreement to August 2, 2019 and (ii) amended certain covenants under the Credit Agreement to provide for greater operational, financial and strategic flexibility, including the implementation of the Organizational Consolidation.

We may from time to time incur additional indebtedness, obtain additional financing or refinance existing indebtedness, subject to market conditions and our financial condition.

Rights Offering

We completed a rights offering on February 5, 2015, allowing all of the Company's existing common stockholders the non-transferrable right to purchase their pro rata share of $65.5 million of Preferred Stock at a price equal to $100.00 per share (the "Rights Offering"). The Preferred Stock was convertible into shares of our Common Stock at a conversion price equal to $39.88, which was the closing price of our Common Stock on NASDAQ on October 22, 2014.

Stockholders exercised subscription rights to purchase 130,884 shares of the Company's Preferred Stock. Pursuant to the terms and conditions of the Standby Purchase Agreement between the Coliseum Stockholders and the Company, the remaining 524,116 shares of the Company's Preferred Stock were purchased by the Coliseum Stockholders at the $100.00 per share subscription price. The Coliseum Stockholders beneficially owned approximately 94% of our outstanding Preferred Stock after giving effect to the Rights Offering and the Standby Purchase Agreement. The Company received $65.5 million in aggregate gross proceeds from the consummation of the Rights Offering and Standby Purchase Agreement, which it used to repay the related party unsecured subordinated bridge note that was outstanding as of December 31, 2014.

Additionally, on March 12, 2015, the Coliseum Stockholders exercised their right to purchase an additional 150,000 shares of the Company's convertible preferred stock at a $105 per share subscription price.

We may pay a noncumulative cash dividend on each share of Preferred Stock, when, as and if declared by a committee of our Board, at the rate of 5.5% per annum on the liquidation preference then in effect. On or before the third business day immediately preceding each fiscal quarter, we determine our intention whether or not to pay a cash dividend with respect to that ensuing quarter and give notice of our intention to each holder of Preferred Stock as soon as practicable thereafter.

In the event we do not declare and pay a cash dividend, the liquidation preference will be increased to an amount equal to the liquidation preference in effect at the start of the applicable dividend period, plus an amount equal to such then applicable liquidation preference multiplied by 8.5% per annum, computed on the basis of a 365-day year and the actual number of days elapsed from the start of the applicable dividend period to the applicable date of determination.

Cash dividends are payable quarterly in arrears on January 1, April 1, July 1 and October 1 of each year, and, if declared, will begin to accrue on the first day of the applicable dividend period. Payment in kind ("PIK") dividends, if applicable, will accrue and be cumulative on the same schedule as set forth above for cash dividends and will also be compounded at the applicable annual rate on each applicable subsequent dividend date. PIK dividends are paid upon the occurrence of a liquidation event, conversion or redemption in accordance with the terms of the Preferred Stock. Cash dividends were declared each quarter for the years ended December 31, 2018 and 2017 and totaled $4.4 million each year. For information on the treatment of Preferred Stock in the event of a certain change of control transactions, see "Risk Factors–Risks Related to Our Capital Stock–Anti-takeover provisions in our second amended and restated certificate of incorporation and

amended and restated by-laws could discourage, delay or prevent a change of control of our company and may affect the trading price of our Common Stock."

Reinsurance and Self-Funded Insurance Programs

Reinsurance

We historically reinsured a substantial portion of our automobile, general and professional liability and workers' compensation costs under reinsurance programs primarily through our wholly-owned captive insurance subsidiary, Social Services Providers Captive Insurance Company, or SPCIC. As of May 16, 2017, SPCIC did not renew the expiring reinsurance policies. SPCIC will continue to resolve claims under the historical policy years.

At December 31, 2018, the cumulative reserve for expected losses since inception of these historical automobile, general and professional liability and workers' compensation reinsurance programs was $0.3 million, $0.8 million and $2.8 million, respectively. Based on an independent actuarial report, our expected losses related to workers' compensation, automobile and general and professional liability in excess of our liability under our associated historical reinsurance programs at December 31, 2018 was $6.6 million. We recorded a corresponding receivable from third-party insurers and liability at December 31, 2018 for these expected losses, which would be paid by third-party insurers to the extent losses are incurred.

Further, we had restricted cash of $4.4 million and $6.3 million at December 31, 2018 and December 31, 2017, respectively, which was primarily restricted to secure the reinsured claims losses under the historical automobile, general and professional liability and workers' compensation reinsurance programs.

Health Insurance

We offer our NET Services, U.S. based WD Services, and corporate employees an option to participate in self-funded health insurance programs. Additionally, we historically offered this option to our HA Services and Human Services segments' employees. During the year ended December 31, 2018, health claims were self-funded with a stop-loss umbrella policy with a third-party insurer to limit the maximum potential liability for individual claims generally to $300,000 per person, subject to an aggregating stop-loss limit of $400,000. In addition, the program has a total stop-loss limit for total claims, in order to limit our exposure to catastrophic claims.

Health insurance claims are paid as they are submitted to the plan administrator. We maintain accruals for claims that have been incurred but not yet reported to the plan administrator, and therefore, have not been paid. The incurred but not reported reserve is based on an established cap and current payment trends of health insurance claims. The liability for the self-funded health plan of $2.2 million as of December 31, 2018 and 2017, was recorded in "Reinsurance liability and related reserve" in our consolidated balance sheets.

We charge our employees a portion of the costs of our self-funded group health insurance programs. We determine this charge at the beginning of each plan year based upon historical and projected medical utilization data. Any difference between our projections and our actual experience is borne by us, up to the stop-loss limit. We estimate potential obligations for liabilities under this program to reserve what we believe to be a sufficient amount to cover liabilities based on our past experience. Any significant increase in the number of claims or costs associated with claims made under this program above what we reserve could have a material adverse effect on our financial results.

Contractual cash Obligations

The following is a summary of our future contractual cash obligations as of December 31, 2018:

	At December 31, 2018				
Contractual cash obligations (000's)	**Total**	**Less than 1 Year**	**1-3 Years**	**3-5 Years**	**After 5 Years**
Capital leases	$ 1,071	$ 718	$ 353	$ —	$ —
Interest (1)	445	445	—	—	—
Purchased services commitment (2)	35,231	13,805	21,419	7	—
Guarantees (3)	42,056	42,056	—	—	—
Letters of credit (3)	12,338	12,338	—	—	—
Operating leases (4)	27,039	8,825	11,046	5,568	1,600
Total	$ 118,180	$ 78,187	$ 32,818	$ 5,575	$ 1,600

(1) Future interest payments have been calculated at the current rates as of December 31, 2018.

(2) The purchased service commitment includes a commitment for transportation services. Our commitment amount represents the minimum obligation we have under this agreement. If the Company does not utilize the minimum level of services specified in the agreement, a penalty provision will apply. However, the minimum obligation is less than our projected use for these periods and payments may be more than the minimum obligation based on actual use.

(3) Guarantees and letters of credit ("LOCs") are commitments that represent funding responsibilities that may require our performance in the event of third-party demands or contingent events. Guarantees include surety bonds we provide to certain customers to protect against potential non-delivery of our non-emergency transportation services. Of the outstanding balance of our stand-by LOCs, $12.3 million directly reduces the amount available to us from our Credit Facility. The surety bonds and LOC amounts in the above table represent the amount of commitment expiration per period.

(4) The operating leases are for office space and related office equipment. We account for these leases on a monthly basis. Certain leases contain periodic rent escalation adjustments and renewal options.

Other than the items described above, we do not have any off-balance sheet arrangements as of December 31, 2018.

Stock repurchase programs

On November 4, 2015, our Board authorized us to engage in a repurchase program to repurchase up to $70.0 million in aggregate value of our Common Stock during the twelve-month period following November 4, 2015. This plan terminated on November 3, 2016. A total of 1,360,249 shares were purchased through this plan for $63.0 million, excluding commission payments.

On October 26, 2016, our Board authorized us to engage in a repurchase program to repurchase up to $100.0 million in aggregate value of our Common Stock during the twelve-month period following October 26, 2016. As of October 26, 2017, we spent $30.4 million, excluding commission payments, to purchase 770,808 shares of our Common Stock under this plan.

On November 2, 2017, the Board approved the extension of the Company's existing stock repurchase program, authorizing the Company to engage in a repurchase program to repurchase up to $69.6 million (the amount remaining from the $100.0 million repurchase amount authorized in 2016) in aggregate value of our Common Stock through December 31, 2018. Subsequently, on March 29, 2018, the Board authorized an increase in the amount available for stock repurchases under the Company's existing stock repurchase program by $77.8 million, and extended the existing stock repurchase program through June 30, 2019. As of December 31, 2018, 1,018,989 shares were purchased under this plan for $66.3 million, excluding commission payments, after it was extended on November 2, 2017.

Purchases under the repurchase program may be made from time-to-time through a combination of open market repurchases (including Rule 10b5-1 plans), privately negotiated transactions, and accelerated share repurchase transactions, at

the discretion of our officers, and as permitted by securities laws, covenants under existing bank agreements, and other legal requirements.

Off-balance sheet arrangements

As of December 31, 2018 and 2017, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

New Accounting Pronouncements

The new accounting pronouncements that impact our business are included in Note 2, *Significant Accounting Policies and Recent Accounting Pronouncements,* to our consolidated financial statements and are incorporated herein by reference.

Item 7A. ***Quantitative and Qualitative Disclosures About Market Risk.***

Interest rate risk

We have exposure to interest rate risk mainly related to our revolving credit facility, which has variable interest rates that may increase. We did not have any amounts outstanding on our revolving credit facility at December 31, 2018.

Item 8. ***Financial Statements and Supplementary Data.***

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting for the registrant, as such term is defined in Rule 13a-15(f) of the Exchange Act. We designed our internal control over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting can provide only reasonable assurance with respect to financial statement preparation and presentation. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. The Company conducts periodic evaluations of its internal controls to enhance, where necessary, its procedures and controls.

We acquired Circulation, Inc. ("Circulation") on September 21, 2018, and we excluded from the assessment of effectiveness of our internal control over financial reporting as of December 31, 2018, Circulation's internal control over financial reporting associated with total assets of $6.1 million (which excludes acquired goodwill and intangible assets) and total revenues of $2.2 million included in the consolidated financial statements of the Company as of and for the year ended December 31, 2018.

We are currently integrating this acquisition into our internal control over financial reporting processes. In executing this integration, we are analyzing, evaluating and, where necessary, making changes in controls and procedures related to this acquisition, which we expect to be completed in fiscal year 2019. We have excluded this acquisition from our assessment of internal control over financial reporting as of December 31, 2018, as permitted by the guidance provided by the staff of the SEC. Other than the changes described above, there were no changes in our internal control over financial reporting during the fiscal quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

The Company, under the supervision and with the participation of its management, including its principal executive officer and principal financial officer, conducted an evaluation of the effectiveness of the Company's internal control over financial reporting as of December 31, 2018, based on the criteria set forth in the Internal Control–Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on such evaluation, the Company concluded that its internal control over financial reporting was effective as of December 31, 2018.

KPMG LLP, an independent registered public accounting firm that audited the Company's consolidated financial statements included in this Annual Report on Form 10-K, has issued an audit report on the effectiveness of the Company's internal control over financial reporting which is presented in Part II, Item 8 of this Annual Report on Form 10-K.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
The Providence Service Corporation:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of The Providence Service Corporation and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes and financial statement schedule II (collectively, the "consolidated financial statements"). In our opinion, based on our audits and the report of the other auditors, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 1, 2019 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

We did not audit the financial statements of Mercury Parent, LLC (43.6 percent owned investee company) as of and for the period ended December 31, 2018. The Company's investment in Mercury Parent, LLC as of December 31, 2018 was $161.5 million, and its equity in net loss of Mercury Parent, LLC was $6.2 million for the year ended December 31, 2018. The financial statements of Mercury Parent, LLC were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for Mercury Parent, LLC, is based solely on the report of the other auditors.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for revenues and related costs in 2018 due to the adoption of Accounting Standards Codification Topic 606, Revenue from Contracts with Customers.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits and the report of the other auditors provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2008.

Stamford, Connecticut
March 1, 2019

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
The Providence Service Corporation:

Opinion on Internal Control Over Financial Reporting

We have audited The Providence Service Corporation and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes and financial statement schedule II (collectively, the "consolidated financial statements"), and our report dated March 1, 2019 expressed an unqualified opinion on those consolidated financial statements.

The Company acquired Circulation, Inc. ("Circulation") during 2018, and management excluded from its assessment of the effectiveness of the Company's internal control over financial reporting as of December 31, 2018, Circulation's internal control over financial reporting associated with total assets of $6.1 million (which excludes acquired goodwill and intangible assets) and total revenues of $2.2 million included in the consolidated financial statements of the Company as of and for the year ended December 31, 2018. Our audit of internal control over financial reporting of the Company also excluded an evaluation of the internal control over financial reporting of Circulation.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

Stamford, Connecticut
March 1, 2019

The Providence Service Corporation
Consolidated Balance Sheets
(in thousands except share and per share data)

	December 31, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 5,678	$ 52,798
Accounts receivable, net of allowance of $1,854 in 2018 and $5,262 in 2017	147,756	110,208
Other receivables	4,846	5,749
Prepaid expenses and other	44,167	22,459
Restricted cash	1,482	1,091
Current assets of discontinued operations	7,051	104,024
Total current assets	210,980	296,329
Property and equipment, net	22,965	37,672
Goodwill	135,216	95,215
Intangible assets, net	26,146	14,165
Equity investments	161,503	169,699
Other assets	9,949	11,977
Restricted cash, less current portion	2,886	5,205
Deferred tax asset	2,601	—
Noncurrent assets of discontinued operations	—	73,828
Total assets	$ 572,246	$ 704,090
Liabilities, redeemable convertible preferred stock and stockholders' equity		
Current liabilities:		
Current portion of long-term obligations	$ 718	$ 2,400
Accounts payable	8,828	318
Accrued expenses	39,191	71,643
Accrued transportation costs	84,889	83,588
Deferred revenue	562	3,019
Reinsurance and related liability reserves	5,438	4,319
Current liabilities of discontinued operations	3,257	61,643
Total current liabilities	142,883	226,930
Long-term obligations, less current portion	353	584
Other long-term liabilities	14,970	16,216
Deferred tax liabilities	25,650	39,232
Noncurrent liabilities of discontinued operations	—	7,565
Total liabilities	183,856	290,527
Commitments and contingencies (Note 20)		
Redeemable convertible preferred stock		
Convertible preferred stock, net: Authorized 10,000,000 shares; $0.001 par value; 801,606 and 803,200 issued and outstanding; 5.5%/8.5% dividend rate	77,392	77,546
Stockholders' equity		
Common stock: Authorized 40,000,000 shares; $0.001 par value; 17,784,769 and 17,473,598 issued and outstanding (including treasury shares)	18	17
Additional paid-in capital	334,744	313,955
Retained earnings	187,127	204,818
Accumulated other comprehensive loss, net of tax	—	(25,805)

Treasury shares, at cost, 4,970,093 and 4,126,132 shares	(210,891)	(154,803)
Total Providence stockholders' equity	310,998	338,182
Noncontrolling interest	—	(2,165)
Total stockholders' equity	310,998	336,017
Total liabilities, redeemable convertible preferred stock and stockholders' equity	$ 572,246	$ 704,090

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Consolidated Statements of Operations
(in thousands except share and per share data)

	Year ended December 31,		
	2018	**2017**	**2016**
Service revenue, net	$ 1,384,965	$ 1,318,220	$ 1,233,842
Operating expenses:			
Service expense	1,284,603	1,223,627	1,131,963
General and administrative expense	46,098	43,491	39,527
Asset impairment charge	14,175	—	1,415
Depreciation and amortization	15,813	13,618	12,780
Total operating expenses	1,360,689	1,280,736	1,185,685
Operating income	24,276	37,484	48,157
Other expenses:			
Interest expense, net	1,783	1,204	1,515
Other income	—	(5,363)	—
Equity in net loss (gain) of investees	6,158	(13,445)	1,789
Gain on remeasurement of cost method investment	(6,577)	—	—
Income from continuing operations before income taxes	22,912	55,088	44,853
Provision for income taxes	4,684	4,003	17,972
Income from continuing operations, net of tax	18,228	51,085	26,881
(Loss) income from discontinued operations, net of tax	(37,053)	2,735	62,965
Net (loss) income	(18,825)	53,820	89,846
Net (income) loss from discontinued operations attributable to noncontrolling interest	(156)	(451)	2,082
Net (loss) income attributable to Providence	$ (18,981)	$ 53,369	$ 91,928
Net (loss) income available to common stockholders (Note 16)	$ (25,257)	$ 42,636	$ 76,940
Basic (loss) earnings per common share:			
Continuing operations	$ 0.92	$ 2.99	$ 1.35
Discontinued operations	(2.87)	0.15	3.90
Basic (loss) earnings per common share	$ (1.95)	$ 3.14	$ 5.25
Diluted (loss) earnings per common share:			
Continuing operations	$ 0.92	$ 2.97	$ 1.34
Discontinued operations	(2.86)	0.15	3.87
Diluted (loss) earnings per common share	$ (1.94)	$ 3.12	$ 5.21
Weighted-average number of common shares outstanding:			
Basic	12,960,837	13,602,140	14,666,896
Diluted	13,033,247	13,673,314	14,779,398

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Consolidated Statements of Comprehensive Income
(in thousands)

	Year ended December 31,		
	2018	**2017**	**2016**
Net (loss) income	$ (18,825)	$ 53,820	$ 89,846
Net (income) loss from discontinued operations attributable to noncontrolling interest	(156)	(451)	2,082
Net (loss) income attributable to Providence	(18,981)	53,369	91,928
Other comprehensive income (loss):			
Foreign currency translation adjustments, net of tax	(4,168)	7,117	(16,618)
Reclassification of translation loss realized upon sale of subsidiaries in 2018 and equity investment in 2017	29,973	527	—
Other comprehensive income (loss)	25,805	7,644	(16,618)
Comprehensive income	6,980	61,464	73,228
Comprehensive (income) loss from discontinued operations attributable to noncontrolling interest	(2,165)	(255)	1,968
Comprehensive income attributable to Providence	$ 4,815	$ 61,209	$ 75,196

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Consolidated Statements of Stockholders' Equity
(in thousands except share data)

	Common Stock		Additional Paid-In	Retained	Accumulated Other Comprehensive Loss, Net of	Treasury Stock		Non-Controlling	
	Shares	Amount	Capital	Earnings	Tax	Shares	Amount	Interest	Total
Balance at December 31, 2015	17,186,780	$ 17	$ 293,012	$ 69,209	$ (16,831)	1,895,998	$ (54,823)	$ (452)	$290,132
Stock-based compensation	—	—	5,154	—	—	—	—	—	5,154
Exercise of employee stock options, including net tax benefit of $276	105,788	—	3,832	—	—	—	—	—	3,832
Restricted stock issued	22,793	—	—	—	—	2,736	(130)	—	(130)
Stock repurchase plan	—	—	—	—	—	1,579,942	(70,248)	—	(70,248)
Conversion of convertible preferred stock to common stock	300	—	12	—	—	—	—	—	12
Convertible preferred stock dividends	—	—	—	(4,419)	—	—	—	—	(4,419)
Foreign currency translation adjustments, net of tax	—	—	—	—	(16,618)	—	—	114	(16,504)
Noncontrolling interest	—	—	—	—	—	—	—	(2,082)	(2,082)
Net income attributable to Providence	—	—	—	91,928	—	—	—	—	91,928
Balance at December 31, 2016	17,315,661	17	302,010	156,718	(33,449)	3,478,676	(125,201)	(2,420)	297,675
Stock-based compensation	—	—	7,619	—	—	—	—	—	7,619
Exercise of employee stock options	91,400	—	2,423	—	—	5,665	(238)	—	2,185
Restricted stock issued	36,623	—	—	—	—	19,556	(878)	—	(878)
Performance restricted stock issued	3,773	—	(96)	—	—	—	—	—	(96)
Shares issued for bonus settlement and director stipends	25,646	—	1,107	—	—	—	—	—	1,107
Stock repurchase plan	—	—	—	—	—	622,235	(28,486)	—	(28,486)
Conversion of convertible preferred stock to common stock	495	—	20	(1)	—	—	—	—	19
Convertible preferred stock dividends	—	—	—	(4,418)	—	—	—	—	(4,418)
Foreign currency translation adjustments, net of tax	—	—	—	—	7,117	—	—	(196)	6,921
Reclassification of translation loss realized upon sale of equity investments	—	—	—	—	527	—	—	—	527
Noncontrolling interest	—	—	—	—	—	—	—	451	451
Other	—	—	22	—	—	—	—	—	22
Net income attributable to Providence	—	—	—	53,369	—	—	—	—	53,369
Cumulative effect adjustment from change in accounting principle, net of tax	—	—	850	(850)	—	—	—	—	—
Balance at December 31, 2017	17,473,598	17	313,955	204,818	(25,805)	4,126,132	(154,803)	(2,165)	336,017
Cumulative effect adjustment from change in accounting principle, net of tax	—	—	—	5,710	—	—	—	—	5,710
Stock-based compensation	—	—	9,130	—	—	—	—	—	9,130
Exercise of employee stock options	266,293	1	11,669	—	—	—	—	—	11,670
Restricted stock issued	33,582	—	(320)	—	—	5,242	(335)	—	(655)
Performance restricted stock issued	3,110	—	(109)	—	—	—	—	—	(109)
Shares issued for bonus settlement and director stipends	4,193	—	150	—	—	—	—	—	150

Stock repurchase plan	—	—	—	—	—	838,719	(55,753)	—	(55,753)
Conversion of convertible preferred stock to common stock	3,993	—	161	(7)	—	—	—	—	154
Foreign currency translation adjustments, net of tax	—	—	—	—	(4,168)	—	—	1,839	(2,329)
Reclassification of translation loss realized upon sale of foreign subsidiary	—	—	—	—	29,973	—	—	—	29,973
Convertible preferred stock dividends	—	—	—	(4,413)	—	—	—	—	(4,413)
Noncontrolling interest	—	—	—	—	—	—	—	326	326
Other	—	—	108	—	—	—	—	—	108
Net loss attributable to Providence	—	—	—	(18,981)	—	—	—	—	(18,981)
Balance at December 31, 2018	17,784,769	$ 18	$ 334,744	$ 187,127	$ —	4,970,093	$(210,891)	$ —	$310,998

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Consolidated Statements of Cash Flows
(in thousands)

	Year ended December 31,		
	2018	**2017**	**2016**
Operating activities			
Net (loss) income	$ (18,825)	$ 53,820	$ 89,846
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation	18,769	18,542	21,699
Amortization	8,908	7,927	26,026
Provision for doubtful accounts	6,062	1,372	3,759
Stock-based compensation	8,993	7,543	5,136
Deferred income taxes	(545)	(22,996)	(14,130)
Amortization of deferred financing costs and debt discount	512	682	1,754
Write-off of deferred financing charges	—	—	2,302
Asset impairment charge	23,378	—	21,003
Equity in net (gain) loss of investees	6,072	(12,054)	10,287
Gain on sale of equity investment	—	(12,377)	—
Loss (gain) on sale of business	53,692	—	(167,895)
Gain on remeasurement of cost method investment	(6,577)	—	—
Deferred income taxes and income taxes payable (receivable) on sale of business	(51,861)	—	58,492
Other non-cash charges (credits)	(353)	296	(1,323)
Changes in operating assets and liabilities, net of effects of acquisitions:			
Accounts receivable	(30,997)	5,715	(19,332)
Prepaid expenses and other	14,253	15,457	(4,058)
Reinsurance and related liability reserve	(2,743)	(5,731)	(4,110)
Accounts payable and accrued expenses	(21,799)	(9,064)	33,365
Income taxes payable on gain from sale of business	—	—	(30,153)
Accrued transportation costs	1,301	11,232	8,654
Deferred revenue	(1,975)	(4,691)	(4,019)
Other long-term liabilities	1,634	(629)	4,462
Net cash provided by operating activities	7,899	55,044	41,765
Investing activities			
Purchase of property and equipment	(17,521)	(19,923)	(41,216)
Proceeds from sale of property	—	—	1,039
Proceeds from sale of equity investment	—	15,593	—
Acquisitions, net of cash acquired	(43,711)	—	—
Dispositions or sale of business, net of cash sold	12,780	—	371,580
Purchase of equity investment	—	—	(13,663)
Cost method investments	—	(3,000)	—
Proceeds from note receivable	3,130	—	—
Other investing activities	—	310	239
Net cash (used in) provided by investing activities	(45,322)	(7,020)	317,979
Financing activities			
Preferred stock dividends	(4,413)	(4,418)	(4,419)
Repurchase of common stock, for treasury	(56,088)	(29,364)	(70,378)
Proceeds from common stock issued pursuant to stock option exercise	12,413	1,921	4,108

Proceeds from debt	42,000	—	52,500
Repayment of debt	(42,000)	—	(357,450)
Other financing activities	(3,467)	(1,927)	(1,182)
Net cash used in financing activities	(51,555)	(33,788)	(376,821)
Effect of exchange rate changes on cash	(261)	978	(1,357)
Net change in cash, cash equivalents and restricted cash	(89,239)	15,214	(18,434)
Cash, cash equivalents and restricted cash at beginning of period	101,606	86,392	104,826
Cash, cash equivalents and restricted cash at end of period	$ 12,367	$ 101,606	$ 86,392

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Supplemental Cash Flow Information
(in thousands)

Supplemental cash flow information	Year ended December 31, 2018	2017	2016
Cash included in current assets of discontinued operations held for sale	$ 2,321	$ 42,512	$ 22,666
Cash paid for interest	$ 1,162	$ 987	$ 9,768
Cash paid for income taxes	$ 12,054	$ 18,128	$ 55,827
Proceeds receivable from option exercise	$ —	$ 562	$ —
Purchases of equipment in accounts payable and accrued liabilities	$ —	$ 1,362	$ 983
Note receivable issued for sale of property	$ —	$ —	$ 3,130
Purchase of equipment through capital lease obligation	$ 724	$ 1,474	$ 4,547
Acquisitions:			
Purchase price	$ 54,700	$ —	$ —
Less:			
Cash acquired	(1,302)	—	—
Restricted cash acquired	(110)	—	—
Value of existing ownership in Circulation	(9,577)	—	—
Acquisitions, net of cash acquired	$ 43,711	$ —	$ —

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Notes to Consolidated Financial Statements
December 31, 2018
(in thousands except share and per share data)

1. Organization and Basis of Presentation

Description of Business

The Providence Service Corporation ("we", the "Company" or "Providence"), owns subsidiaries and investments primarily engaged in the provision of healthcare services in the United States. The Company's NET Services segment, which primarily operates under the brands LogistiCare and Circulation, since its acquisition in September 2018, is the largest manager of non-emergency medical transportation ("NET") programs for state governments and managed care organizations ("MCOs") in the United States ("U.S."). On September 21, 2018, we completed the acquisition of Circulation, Inc. ("Circulation"), which offers a full suite of logistics solutions to manage NET programs across all areas of healthcare, powered by its HIPAA-compliant digital platform. Circulation's technology expands LogistiCare's capabilities to manage transportation benefits, integrating all transportation capabilities while proactively monitoring for fraud, waste and abuse and emphasizing member convenience and satisfaction.

The Company's Matrix Investment segment consists of a minority investment in CCHN Group Holdings, Inc. and its subsidiaries ("Matrix"), a nationwide provider of home and mobile-based healthcare services for health plans in the U.S., including comprehensive health assessments ("CHAs"), quality gap closure visits, "level of service" needs assessments, and post-acute and chronic care management, providing such services through a network of community-based clinicians and a fleet of mobile health clinics with advanced diagnostics capabilities.

The Company's Corporate and Other segment includes the Company's executive, accounting, finance, internal audit, tax, legal, public reporting, and corporate development functions. On April 11, 2018, the Company announced an organizational consolidation plan to integrate substantially all activities and functions performed at the corporate holding company level into LogistiCare (the "Organizational Consolidation"). LogistiCare will retain its name and continue to be headquartered in Atlanta, GA, and the Company will continue to be named The Providence Service Corporation and be listed on NASDAQ Global Select Market ("NASDAQ") under the ticker symbol "PRSC". The Organizational Consolidation is expected to be complete by the second quarter of 2019. See Note 10, *Restructuring and Related Reorganization Costs,* for further information.

Discontinued Operations

During the periods presented, the Company completed the following transactions, which resulted in the presentation of the operations as Discontinued Operations.

- On December 21, 2018, the Company completed the sale of substantially all of the operating subsidiaries of its WD Services segment to Advanced Personnel Management Global Pty Ltd of Australia ("APM") and APM UK Holdings Limited, an affiliate of APM, with the exception of the segment's employment services operations in Saudi Arabia (the "WD Services Sale"). The Company's contractual counterparties in Saudi Arabia, including an entity owned by the Saudi Arabian government, assumed these operations beginning January 1, 2019. Additionally, on June 11, 2018, the Company entered into a Share Purchase Agreement to sell Ingeus France for a de minimis amount. The sale was effective on July 17, 2018, after court approval.

- On October 19, 2016, affiliates of Frazier Healthcare Partners purchased a 53.2% equity interest in Matrix with Providence retaining a 46.8% equity interest (the "Matrix Transaction") at the time of the transaction. Prior to the closing of the Matrix Transaction, the financial results of Matrix were included in the Company's Health Assessment Services ("HA Services") segment.

- On November 1, 2015, the Company completed the sale of its *Human Service*s segment. In addition to the results through the sale date, the Company has recorded additional expenses related to legal proceedings as described in Note 20, *Commitment and Contingencies*, related to an indemnified legal matter.

Basis of Presentation

The Company follows accounting standards set by the Financial Accounting Standards Board ("FASB"). The FASB establishes accounting principles generally accepted in the United States ("GAAP"). Rules and interpretive releases of the Securities

and Exchange Commission ("SEC") under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. References to GAAP issued by the FASB in these footnotes are to the FASB *Accounting Standards Codification* ("ASC"), which serves as a single source of authoritative non-SEC accounting and reporting standards to be applied by non-governmental entities. All amounts are presented in U.S. dollars, unless otherwise noted.

The Company holds an investment in Matrix which is accounted for using the equity method. The Company does not control the decision-making process or business management practices of Matrix. While the Company has access to certain information and performs certain procedures to review the reasonableness of information, the Company relies on management of Matrix to provide accurate financial information prepared in accordance with GAAP. The Company receives audit reports relating to such financial information from Matrix's independent auditors on an annual basis. The Company is not aware of any errors in or possible misstatements of the financial information provided by Matrix that would have a material effect on the Company's consolidated financial statements.

Reclassifications

The Company has reclassified certain amounts relating to its prior period results to conform to its current period presentation. See Note 2, *Significant Accounting Policies and Recent Accounting Pronouncements*, for additional information on reclassifications.

2. Significant Accounting Policies and Recent Accounting Pronouncements

Principles of Consolidation

The accompanying consolidated financial statements include The Providence Service Corporation, its wholly-owned subsidiaries, and entities it controls, or in which it has a variable interest and is the primary beneficiary of expected cash profits or losses. The Company records its investments in entities that it does not control, but over which it has the ability to exercise significant influence, using the equity method. The Company has eliminated significant intercompany transactions and accounts.

Accounting Estimates

The Company uses estimates and assumptions in the preparation of the consolidated financial statements in accordance with GAAP. Those estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the Company's consolidated financial statements. These estimates and assumptions also affect the reported amount of net income or loss during any period. The Company's actual financial results could differ significantly from these estimates. The significant estimates underlying the Company's consolidated financial statements include revenue recognition; allowance for doubtful accounts; accrued transportation costs; accrued restructuring; income taxes; recoverability of current and long-lived assets, including equity method investments; intangible assets and goodwill; loss contingencies; accounting for business combinations, including amounts assigned to definite and indefinite lived intangibles and contingent consideration; loss reserves for reinsurance and self-funded insurance programs; and stock-based compensation.

Cash and Cash Equivalents

Cash and cash equivalents include all cash balances and highly liquid investments with an initial maturity of three months or less. Investments in cash equivalents are carried at cost, which approximates fair value. The Company places its temporary cash investments with high credit quality financial institutions. At times, such investments may be in excess of the federally insured limits.

Accounts Receivable and Allowance for Doubtful Accounts

The Company records accounts receivable amounts at the contractual amount, less an allowance for doubtful accounts. The Company maintains an allowance for doubtful accounts at an amount it estimates to be sufficient to cover the risk that an account will not be collected. The Company regularly evaluates its accounts receivables, especially receivables that are past due, and reassesses its allowance for doubtful accounts based on identified customer collection issues. In circumstances where the Company is aware of a customer's inability to meet its financial obligation, the Company records a specific allowance for doubtful accounts to reduce its net recognized receivable to an amount the Company reasonably expects to collect. Under

certain contracts of NET Services, final payment is based on a reconciliation of actual utilization and cost, and the final reconciliation may require a considerable period of time.

The Company's provision for doubtful accounts expense from continuing operations for the years ended December 31, 2018, 2017 and 2016 was $338, $1,347 and $2,892, respectively.

Property and Equipment

Property and equipment are stated at historical cost, net of accumulated depreciation, or at fair value if the assets were initially recorded as the result of a business combination or if the asset was remeasured due to an impairment. Depreciation is calculated using the straight-line method over the estimated useful life of the asset. Maintenance and repairs are expensed as incurred. Gains and losses resulting from the disposition of an asset are reflected in operating expense.

Recoverability of Goodwill

In accordance with ASC 350, *Intangibles-Goodwill and Other*, the Company reviews goodwill for impairment annually, or more frequently, if events and circumstances indicate that an asset may be impaired. Such circumstances could include, but are not limited to: (1) the loss or modification of significant contracts, (2) a significant adverse change in legal factors or in business climate, (3) unanticipated competition, (4) an adverse action or assessment by a regulator, or (5) a significant decline in the Company's stock price. We perform the annual goodwill impairment test for all reporting units as of October 1.

First, we perform qualitative assessments for each reporting unit to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the qualitative assessment suggests that it is more likely than not that the fair value of a reporting unit is less than its carrying value amount, then we perform a quantitative assessment and compare the fair value of the reporting unit to its carrying value.

We adopted ASU No. 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ("ASU 2017-04") effective April 1, 2017. ASU 2017-04 removes the requirement to compare the implied fair value of goodwill with its carrying amount as part of step two of the goodwill impairment test. Instead, if we deem it necessary to perform the quantitative goodwill impairment test in an annual or interim period, we recognize an impairment charge equal to the excess, if any, of a reporting unit's carrying amount over its fair value, not to exceed the total amount of goodwill allocated to the reporting unit.

The Company estimates the fair value of the Company's reporting units using either an income approach, a market valuation approach, a transaction valuation approach or a blended approach. The income approach produces an estimated fair value of a reporting unit based on the present value of the cash flows the Company expects the reporting unit to generate in the future. Estimates included in the discounted cash flow model include the discount rate, which the Company determines based on adjusting an industry-wide weighted-average cost of capital for size, geography, and company specific risk factors, long-term rates of growth and profitability of the Company's business, working capital effects and planned capital expenditures. The market approach produces an estimated fair value of a reporting unit based on a comparison of the reporting unit to comparable publicly traded entities in similar lines of business. The transaction valuation approach produces an estimated fair value of a reporting unit based on a comparison of the reporting unit to publicly available transactional data involving both publicly traded and private entities in similar lines of business. The Company's significant estimates in both the market and transaction approach include the selected similar companies with comparable business factors such as size, growth, profitability, risk and return on investment and the multiples the Company applies to revenue and earnings before interest, taxes, depreciation and amortization ("EBITDA") to estimate the fair value of the reporting unit.

Recoverability of Intangible Assets Subject to Amortization and Other Long-Lived Assets

Intangible assets subject to amortization and other long-lived assets are carried at cost and are amortized or depreciated on a straight-line basis over their estimated useful lives of 3 to 15 years. In accordance with ASC 360, *Property, Plant, and Equipment*, the Company reviews the carrying value of long-lived assets or groups of assets to be used in operations whenever events or changes in circumstances indicate that the carrying amount of the assets may be impaired. Factors that may necessitate an impairment assessment include, among others, significant adverse changes in the extent or manner in which an asset or group of assets is used, significant adverse changes in legal factors or the business climate that could affect the value of an asset or group of assets or significant declines in the observable market value of an asset or group of assets. The presence or occurrence of those events indicates that an asset or group of assets may be impaired. In those cases, the Company assesses the recoverability of an asset or group of assets by determining whether the carrying value of the asset or group of assets exceeds the sum of the projected undiscounted cash flows expected to result from the use and eventual disposition of the assets over the

remaining economic life of the asset or the primary asset in the group of assets. If such testing indicates the carrying value of the asset or group of assets is not recoverable, the Company estimates the fair value of the asset or group of assets using appropriate valuation methodologies,

which would typically include an estimate of discounted cash flows. If the fair value of those assets or groups of assets is less than carrying value, the Company records an impairment loss equal to the excess of the carrying value over the estimated fair value.

Accrued Transportation Costs

Eligible members of our customers schedule transportation through the Company's central reservation system. NET Services generally contracts with third-party providers to provide transportation. The cost of transportation is recorded in the month the services are rendered, based upon contractual rates and mileage estimates. Transportation providers provide invoices once the trip is completed. Any trips that have not been invoiced require an accrual, based upon the expected cost as well as an estimate for cancellations, as the Company is generally only obligated to pay the transportation provider for completed trips. These estimates are based upon the historical trend associated with each contract's population and the transportation provider network servicing the program. There may be differences between actual invoiced amounts and estimated costs, and any resulting adjustments are included in expense. Accrued transportation costs were $84,889 and $83,588 at December 31, 2018 and 2017, respectively.

Deferred Financing Costs and Debt Discounts

The Company capitalizes direct expenses incurred in connection with its credit facilities and other borrowings, and amortizes such expenses over the life of the respective credit facility or other borrowings. Fees charged by lenders on the revolving facility and all fees charged by third parties are recorded as deferred financing costs and fees charged by lenders on term loans are recorded as a debt discount. Deferred financing costs, net of amortization, totaling $268 and $388 as of December 31, 2018 and 2017, respectively, are included in "Prepaid expenses and other" on the consolidated balance sheets.

Revenue Recognition

The Company adopted ASU No. 2014-09, *Revenue from Contracts with Customers,* effective January 1, 2018 using the modified retrospective transition method for contracts that were not completed as of January 1, 2018. See *Recent Accounting Pronouncements* below for further information on the adoption.

The Company recognizes revenue as it transfers control of promised services to its customers. The Company generates all of its revenue from contracts with customers. The amount of revenue recognized reflects the consideration to which the Company expects to be entitled in exchange for these services. The Company satisfies substantially all of its performance obligations and recognizes revenue over time instead of at points in time. See further information in Note 3, *Revenue Recognition.*

Stock-Based Compensation

The Company follows the fair value recognition provisions of ASC Topic 718 – *Compensation – Stock Compensation* ("ASC 718"), which requires companies to measure and recognize compensation expense for all share-based payments at fair value.

- The Company calculates the fair value of stock options using the Black-Scholes option-pricing formula. The fair value of non-vested restricted stock grants is determined based on the closing market price of the Company's Common Stock on the date of grant. Stock-based compensation expense charged against income for stock options and stock grants is based on the grant-date fair value. Forfeitures are recorded as they occur. The expense for stock-based compensation awards is amortized on a straight-line basis over the requisite service period, which is typically the vesting period.

- The Company records restricted stock units ("RSUs") that may be settled by the holder in cash, rather than shares, as a liability and remeasures these liabilities at fair value at the end of each reporting period. Upon settlement of these awards, the total compensation expense recorded over the vesting period of the awards will equal the settlement amount, which is based on the Company's stock price on the settlement date.

- Performance-based RSUs vest upon achievement of certain company specific performance conditions. On the date of grant, the Company determines the fair value of the performance-based award using the fair value of the Company's Common Stock at that time and assesses whether it is probable that the performance targets

will be achieved. If assessed as probable, the Company records compensation expense for these awards over the requisite service period. At each reporting period, the Company reassesses the probability of achieving the performance targets and the performance period required to meet those targets. The estimation of whether the performance targets will be achieved and of the performance period required to achieve the targets requires judgment, and to the extent actual results or updated estimates differ from the Company's current estimates, the cumulative effect

on current and prior periods of those changes will be recorded in the period estimates are revised, or the change in estimate will be applied prospectively depending on whether the change affects the estimate of total compensation cost to be recognized or merely affects the period over which compensation cost is to be recognized. The ultimate number of shares issued and the related compensation expense recognized will be based on a comparison of the final performance metrics to the specified targets.

- The Company calculates the fair value of market-based stock awards using the Monte-Carlo simulation valuation model. Forfeitures are recorded as they occur. Compensation expense for market-based awards is recognized over the requisite service period regardless of whether the market conditions are expected to be achieved.

Income Taxes

Deferred income taxes are determined by the liability method in accordance with ASC Topic 740 - *Income Taxes*. Under this method, deferred tax assets and liabilities are determined based on differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and are measured using the enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. The Company considers many factors when assessing the likelihood of future realization of deferred tax assets, including recent earnings experience by jurisdiction, expectations of future taxable income, and the carryforward periods available for tax reporting purposes, as well as other relevant factors. The Company establishes a valuation allowance to reduce deferred tax assets to the amount that is more likely than not to be realized. Due to inherent complexities arising from the nature of the Company's businesses, future changes in income tax law or variances between the Company's actual and anticipated operating results, the Company makes certain judgments and estimates. Therefore, actual income taxes could materially vary from these estimates.

The Company has recorded a valuation allowance which includes amounts for certain carryforwards and deferred tax assets, as more fully described in Note 19, *Income Taxes,* for which the Company has concluded that it is more likely than not that these carryforwards and deferred tax assets will not be realized in the ordinary course of operations.

The Company recognizes interest and penalties related to income taxes as a component of income tax expense.

The Company accounts for uncertain tax positions based on a two-step process of evaluating recognition and measurement criteria. The first step assesses whether the tax position is more likely than not to be sustained upon examination by the tax authority, including resolution of any appeals or litigation, based on the technical merits of the position. If the tax position meets the more likely than not criteria, the portion of the tax benefit greater than 50% likely to be realized upon settlement with the tax authority is recognized in the consolidated financial statements.

On December 22, 2017, the U.S. bill commonly referred to as the Tax Cuts and Jobs Act ("Tax Reform Act") was enacted as more fully described in Note 19, *Income Taxes.*

Loss Reserves for Certain Reinsurance and Self-Funded Insurance Programs

The Company historically reinsured a substantial portion of its automobile, general and professional liability and workers' compensation costs under reinsurance programs primarily through the Company's wholly-owned subsidiary, Social Services Providers Captive Insurance Company ("SPCIC"), a licensed captive insurance company domiciled in the State of Arizona. As of May 16, 2017, SPCIC did not renew the expiring reinsurance policies. SPCIC will continue to resolve claims under the historical policy years.

The Company utilizes a report prepared by an independent actuary to estimate the gross expected losses related to historical automobile, general and professional and workers' compensation liability reinsurance policies, including the estimated losses in excess of SPCIC's insurance limits, which would be reimbursed to SPCIC to the extent such losses were incurred. As of December 31, 2018 and 2017, the Company had reserves of $3,900 and $6,699, respectively, for the automobile, general and professional liability and workers' compensation reinsurance policies, net of expected receivables for losses in excess of SPCIC's historical insurance limits. The gross reserve as of December 31, 2018 and 2017 of $10,489 and $12,448, respectively, is classified as "Reinsurance liability reserves" and "Other long-term liabilities" in the consolidated balance sheets. The estimated amount to be reimbursed to SPCIC as of December 31, 2018 and 2017 was $6,589 and $5,749, respectively, and is classified as "Other receivables" and "Other assets" in the consolidated balance sheets.

The Company also maintains a self-funded health insurance program with a stop-loss umbrella policy with a third-party insurer to limit the maximum potential liability for individual claims generally to $300 per person, subject to an aggregating stop-loss limit of $400. In addition, the program has a total stop-loss limit for total claims, in order to limit the Company's exposure to

catastrophic claims. With respect to this program, the Company considers historical and projected medical utilization data when estimating its health insurance program liability and related expense. As of December 31, 2018 and 2017, the Company had $2,201 and $2,229, respectively, in reserve for its self-funded health insurance programs. The reserves are classified as "Reinsurance and related liability reserves" in the consolidated balance sheets.

The Company utilizes analysis prepared by third-party administrators and independent actuaries based on historical claims information with respect to the general and professional liability coverage, workers' compensation coverage, automobile liability, automobile physical damage, and health insurance coverage to determine the amount of required reserves.

The Company regularly analyzes its reserves for incurred but not reported claims, and for reported but not paid claims related to its reinsurance and self-funded insurance programs. The Company believes its reserves are adequate. However, significant judgment is involved in assessing these reserves, such as assessing historical paid claims, average lag times between the claims' incurred date, reported dates and paid dates, and the frequency and severity of claims. There may be differences between actual settlement amounts and recorded reserves and any resulting adjustments are included in expense once a probable amount is known.

Restructuring and Related Reorganization Costs

On April 11, 2018, the Company announced the Organizational Consolidation. The Company accrued for severance and other employee separation costs under this plan when it was probable that benefits would be paid and the amount was reasonably estimable. The amounts used in determining severance accruals are based on an estimate of the salaries and related benefit costs payable and are included in accrued expenses to the extent they have not been paid. See further information in Note 10, *Restructuring and Related Reorganization Costs.*

Discontinued Operations

In determining whether a group of assets disposed (or to be disposed) of should be presented as a discontinued operation, the Company makes a determination of whether the criteria for held-for-sale classification is met and whether the disposition represents a strategic shift that has (or will have) a major effect on the entity's operations and financial results. If these determinations can be made affirmatively, the results of operations of the group of assets being disposed of (as well as any gain or loss on the disposal transaction) are aggregated for separate presentation apart from continuing operating results of the Company in the consolidated financial statements. See Note 23, *Discontinued Operations,* for a summary of discontinued operations.

Earnings Per Share

The Company computes basic earnings per share by taking net income attributable to the Company available to common stockholders divided by the weighted average number of common shares outstanding during the period, including restricted stock and stock held in escrow if such shares are participating securities. Diluted earnings per share includes the potential dilution that may occur from stock-based awards and other stock-based commitments using the treasury stock or the as-if converted methods, as applicable. For additional information on how the Company computes earnings per share, see Note 16, *Earnings Per Share*.

Recent Accounting Pronouncements

The Company adopted the following accounting pronouncements during the year ended December 31, 2018:

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers* (Topic 606) ("ASU 2014-09"). ASU 2014-09 introduced FASB Accounting Standards Codification Topic 606 ("ASC 606"), which replaced historical revenue recognition guidance and is intended to improve and converge with international standards the financial reporting requirements for revenue from contracts with customers. The core principle of ASC 606 is that an entity should recognize revenue for the transfer of goods or services equal to the amount that it expects to be entitled to receive for those goods or services. ASC 606 also requires additional disclosures about the nature, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments. ASU 2014-09 allows for adoption either on a full retrospective basis to each prior reporting period presented or on a modified retrospective basis with the cumulative effect of initially applying the new guidance recognized at the date of initial application. The Company adopted

ASU 2014-09 effective January 1, 2018 using the modified retrospective transition method for contracts that were not completed as of January 1, 2018.

The Company recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of retained earnings. These impacts related to our WD Services segment, which has since met the criteria for classification as discontinued operations. Upon adoption of ASU 2014-09, the cumulative effect of the changes made to the Company's consolidated balance sheet as of January 1, 2018 were as follows:

	Balance at December 31, 2017	Adjustments due to ASU 2014-09	Balance at January 1, 2018
Assets			
Current assets of discontinued operations	$ 104,024	$ 11,182	$ 115,206
Liabilities			
Current liabilities of discontinued operations	61,643	5,442	67,085
Noncurrent liabilities of discontinued operations	7,565	30	7,595
Equity			
Retained earnings, net of tax	204,818	5,710	210,528

The impact of applying the new revenue recognition guidance on the Company's consolidated statement of operations for the year ended December 31, 2018 was as follows:

	Year ended December 31, 2018	
	As Reported	Pro forma as if the previous accounting guidance was in effect
Service revenue, net	$ 1,384,965	$ 1,400,453
Service expense	1,284,603	1,300,091
Operating income	24,276	24,276

There was no impact of applying the new revenue recognition guidance on the Company's consolidated balance sheet at December 31, 2018, as any assets and liabilities impacted by the guidance were sold in the WD Services Sale. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. See further information in Note 3, *Revenue Recognition*.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"). ASU 2016-15 provides guidance for eight targeted changes with respect to how cash receipts and cash payments are classified in the statements of cash flows, with the objective of reducing diversity in practice. ASU 2016-15 is effective for financial statements issued for fiscal years beginning after December 15, 2017, with early adoption permitted. The Company adopted ASU 2016-15 on January 1, 2018. The adoption did not have a significant impact on the Company's consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash* ("ASU 2016-18"). ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. ASU 2016-18 is effective for public entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period; however, any adjustments must be reflected as of the beginning of the fiscal year that includes that interim period. ASU 2016-18 must be adopted retrospectively. The Company adopted ASU 2016-18 on January 1, 2018. As a result of the adoption of ASU 2016-18, the Company recast its consolidated statement of cash flows for the years ended December 31, 2017 and 2016. The recast resulted in an increase in cash used in investing activities of $7,834 for the year ended December 31, 2017. The recast resulted in a decrease in cash provided by investing activities of $5,926 for the year ended December 31, 2016. See additional information in Note 4, *Cash, Cash Equivalents and Restricted Cash.*

In May 2017, the FASB issued ASU No. 2017-09, *Compensation–Stock Compensation (Topic 718): Scope of Modification Accounting* ("ASU 2017-09"). ASU 2017-09 provides guidance about which changes to the terms of a share-

based payment award should be accounted for as a modification. A change to an award should be accounted for as a modification unless the fair value of the modified award is the same as the original award, the vesting conditions do not change, and the classification as an equity or liability instrument does not change. This guidance is effective for fiscal years beginning after December 15, 2017. Early

adoption is permitted. The Company adopted ASU 2017-09 on January 1, 2018. The adoption of ASU 2017-09 did not have a material impact on the Company's consolidated financial statements.

Recent accounting pronouncements that were not yet adopted by the Company through December 31, 2018 are as follows:

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* ("ASU 2016-02"). ASU 2016-02 introduced FASB Accounting Standards Codification Topic 842 ("ASC 842"), which will replace ASC 840, *Leases*. In July 2018, the FASB issued ASU No. 2018-10, *Codification Improvements to Topic 842 (Leases)* ("ASU 2018-10"), which provides narrow amendments to clarify how to apply certain aspects of the new lease standard. Additionally, in July 2018, the FASB issued ASU No. 2018-11, *Leases (Topic 842): Targeted Improvements* ("ASU 2018-11"). ASU 2018-11 provides a new transition method and a practical expedient for separating components of a contract.

ASC 842 is effective for publicly held entities for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted. Lessees may apply a modified retrospective transition approach for leases existing at, or entered after, the beginning of the earliest comparative period presented in the financial statements, or lessees may initially apply the new lease standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption.

The Company has not entered into significant lease agreements in which it is the lessor; however, the Company does have lease agreements in which it is the lessee. Under ASC 842, lessees will be required to recognize a lease liability and right-of-use asset for all leases (with the exception of short-term leases) at the commencement date. The Company will apply the modified retrospective transition method and elect the transition option to use the effective date of January 1, 2019 as the date of initial application. The Company will recognize the cumulative effect of the transition adjustment as of the effective date and will not provide any new lease disclosures for periods before the effective date. With respect to the practical expedients, the Company will elect the package of practical expedients and the practical expedient not to separate lease and non-lease components. The Company will not apply the use of hindsight practical expedient. Based on the Company's current portfolio of leases, the Company expects $24,000 to $28,000 of additional leased assets and liabilities will be recognized on its consolidated balance sheet. The Company does not expect a material impact on the statement of operations.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments - Credit Losses (Topic 326)* ("ASU 2016-13"). The amendments in ASU 2016-13 will supersede or clarify much of the existing guidance for reporting credit losses for assets held at amortized cost basis and available for sale debt securities. The amendments in ASU 2016-13 affect loans, debt securities, trade receivables, net investments in leases, off balance sheet credit exposures, reinsurance receivables, and any other financial assets not excluded from the scope that have the contractual right to receive cash. ASU 2016-13 is effective for financial statements issued for fiscal years beginning after December 15, 2019, with early adoption permitted for fiscal years beginning after December 15, 2018. The Company is currently evaluating the impact of ASU 2016-13 on its consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement* ("ASU 2018-13"). ASU 2018-13 removes certain disclosures, modifies certain disclosures and added additional disclosures. The standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019, with early adoption permitted. Certain disclosures in ASU 2018-13 would need to be applied on a retrospective basis and others on a prospective basis. The Company is currently evaluating the impact of ASU 2018-13 on its consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles-Goodwill and Other-Internal-Use Software: Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract* ("ASU 2018-15"), which will align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The standard is effective for fiscal years beginning after December 15, 2019, with early adoption permitted. The Company is currently evaluating the impact of ASU 2018-15 on its consolidated financial statements.

In August 2018, the SEC adopted the final rule under SEC Release No. 33-10532, Disclosure Update and Simplification, amending certain disclosure requirements that were redundant, duplicative, overlapping, outdated or superseded. In addition, the amendments expanded the disclosure requirements on the analysis of stockholders' equity for interim financial statements. Under the amendments, an analysis of changes in each caption of stockholders' equity presented in the balance

sheet must be provided in a note or separate statement. The analysis should present a reconciliation of the beginning balance to the ending balance of each period for which a statement of comprehensive income is required to be filed. The final rule is effective on November 5, 2018. The Company will adopt this new rule beginning with its financial reporting for the quarter ending March 31, 2019. Upon adoption,

the Company will include its Consolidated Statements of Stockholders' Equity with each filing of a Quarterly Report on Form 10-Q.

3. Revenue Recognition

Under ASC 606, the Company recognizes revenue as it transfers control of promised services to its customers. The Company generates all of its revenue from contracts with customers. The amount of revenue recognized reflects the consideration to which the Company expects to be entitled in exchange for these services. The Company satisfies substantially all of its performance obligations and recognizes revenue over time instead of at points in time.

Disaggregation of Revenue

The following table summarizes disaggregated revenue from contracts with customers for the year ended December 31, 2018 by contract type for NET Services:

State Medicaid agency contracts	$	732,261
Managed care organization contracts		652,704
Total NET Services revenue, net	$	1,384,965

Capitated contracts	$	1,096,822
Non-capitated contracts		288,143
Total NET Services revenue, net	$	1,384,965

NET Services provides non-emergency transportation services pursuant to contractual commitments over defined service delivery periods. For most contracts, NET Services arranges for transportation of members through its network of independent transportation providers, whereby it remits payment to the transportation providers. However, for certain contracts, NET Services only provides administrative management services to support the customers' efforts to serve its clients, and the amount of revenue recognized is based upon the management fee earned.

These contracts typically include single performance obligations under which NET Services stands ready to deliver management, fulfillment and record-keeping related to non-emergency transportation services. Transportation management services include, but are not limited to, fraud, waste, and abuse and utilization review programs as well as compliance controls. NET Services' performance obligations consist of a series of distinct services that are substantially the same and which are transferred to the customer in the same manner. In most cases, NET Services is the principal in its arrangements because it controls the services before transferring those services to the customer.

NET Services primarily uses the 'as invoiced' practical expedient to recognize revenue because it typically has the right to consideration from customers in an amount that corresponds directly with the value of its performance to date. This is consistent with NET Services' historical revenue recognition policy. NET Services recognizes revenue for some of its contracts that include variable consideration using a time-elapsed measure when the fees earned relate directly to services performed in the period. Because most contracts include termination for convenience clauses with required notice periods of less than one year, most NET Services contracts are deemed to be short-term in nature.

Some of NET Services' contracts include provisions whereby it must provide certain levels of service or face potential penalties or be required to refund fees paid by the customer. For those contracts, NET Services records a provision to reduce revenue to reflect the amount to which it expects it will ultimately be entitled.

The only financial impact for NET Services of adopting ASU 2014-09 was the determination it is the agent under one of its contracts based on the new guidance, whereas it previously considered itself the principal in the arrangement. Consequently, NET Services now recognizes revenue under the specific contract on a net basis, which resulted in reduced revenue and service expense of $15,488 during the year ended December 31, 2018.

During the year ended December 31, 2018, NET Services recognized $5,685 from performance obligations satisfied in previous periods due to the resolution of contractual adjustments agreed with the customer.

Related Balance Sheet Accounts

Accounts receivable, net - The following table provides information about accounts receivable, net as of December 31, 2018 and 2017:

	December 31, 2018	December 31, 2017
Accounts receivable	$ 101,340	$ 73,416
NET Services' reconciliation contract receivable	48,270	42,054
Allowance for doubtful accounts	(1,854)	(5,262)
	$ 147,756	$ 110,208

NET Services accrued contract payments - Includes liabilities related to certain contracts of NET Services for which final payment is based on a reconciliation of actual utilization and cost, and the final reconciliation may require a considerable period of time. The balance is included in "Accrued expenses" in the consolidated balance sheets. The balance at December 31, 2018 and 2017 totaled $9,756 and $17,487, respectively.

Deferred revenue - Includes funds received for certain services in advance of services being rendered. The balance of current deferred revenue at December 31, 2018 and December 31, 2017 totaled $562 and $3,019, respectively. The balance of noncurrent deferred revenue was $963 at December 31, 2018, and is included in "Other long-term liabilities" on the consolidated balance sheet. The decrease in the total deferred revenue balance from December 31, 2017 to December 31, 2018 is primarily driven by cash payments received or due in advance of satisfying our performance obligations. During the year ended December 31, 2018, $3,019 of revenue deferred as of December 31, 2017 was recognized.

Practical Expedients, Exemptions and Other Matters

We do not incur significant sales commission expenses. Any amounts are expensed as incurred. These costs are recorded within service expense in the consolidated statements of operations.

The Company generally expects the period of time from when it transfers a promised service to a customer and when the customer pays for the service to be one year or less, and thus we do not have a significant financing component for our contracts with customers.

We do not disclose the value of unsatisfied performance obligations for (i) contracts with an original expected length of one year or less; (ii) contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed; or (iii) contracts for which the variable consideration is allocated entirely to a wholly unsatisfied performance obligation or to a wholly unsatisfied promise to transfer a distinct good or service that forms part of a single performance obligation, and the terms of the variable consideration relate specifically to our efforts to transfer the distinct service or to a specific outcome from transferring the distinct service.

4. Cash, Cash Equivalents and Restricted Cash

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the consolidated balance sheets to the amounts shown in the consolidated statements of cash flows:

	December 31,	
	2018	2017
Cash and cash equivalents	$ 5,678	$ 52,798
Restricted cash, current	1,482	1,091
Current assets of discontinued operations	2,321	42,512
Restricted cash, less current portion	2,886	5,205
Cash, cash equivalents and restricted cash	$ 12,367	$ 101,606

Restricted cash primarily relates to amounts held in trusts for reinsurance claims losses under the Company's captive insurance operation for historical workers' compensation, general and professional liability and auto liability reinsurance

programs, as well as amounts restricted for withdrawal under our self-insured medical and benefits plans. Current assets of discontinued

operations principally reflects the cash position of WD Services operations in Saudi Arabia, which was not sold as part of the WD Services Sale. Such cash will be used to fund the shut-down costs of this operation as needed.

5. Equity Investment

Matrix

Prior to the closing of the Matrix Transaction on October 19, 2016, the financial results of Matrix were included in the Company's HA Services segment. Subsequent to the closing of the Matrix Transaction, the Company owned a 46.8% noncontrolling interest in Matrix. As of December 31, 2018, the Company owned a 43.6% noncontrolling interest in Matrix. Pursuant to a Shareholder's Agreement, affiliates of Frazier Healthcare Partners hold rights necessary to control the fundamental operations of Matrix. The Company accounts for this investment in Matrix under the equity method of accounting and the Company's share of Matrix's income or losses are recorded as "Equity in net loss (gain) of investees" in the accompanying consolidated statements of operations.

The carrying amount of the assets included in the Company's consolidated balance sheets and the maximum loss exposure related to the Company's interest in Matrix as of December 31, 2018 and 2017 totaled $161,503 and $169,699, respectively.

Summary financial information for Matrix on a standalone basis is as follows:

	December 31,	
	2018	2017
Current assets	$ 61,565	$ 37,563
Long-term assets	719,450	597,613
Current liabilities	27,619	27,718
Long-term liabilities	373,159	240,513

	Year ended December 31, 2018	Year ended December 31, 2017	October 19, 2016 through December 31, 2016
Revenue	$ 282,067	$ 227,872	$ 41,635
Operating (loss) income	(1,186)	11,870	(4,079)
Net (loss) income	(19,962)	26,665	(4,200)

Included in Matrix's standalone net loss of $19,962 for the year ended December 31, 2018 are depreciation and amortization of $43,119, integration costs of $6,524, equity compensation of $2,698, management fees paid to Matrix's shareholders of $4,887, merger and acquisition due diligence related costs of $2,341, transaction related costs of $1,010, interest expense of $25,942, including debt transaction costs and the write-off of deferred financing fees of $3,748, and an income tax benefit of $7,166.

Included in Matrix's standalone net income of $26,665 for the year ended December 31, 2017 are depreciation and amortization of $33,512, transaction related expenses of $3,537, which includes $2,679 of transaction incentive compensation, equity compensation of $2,639, management fees paid to Matrix's shareholders of $2,331, acquisition related costs of $412, interest expense of $14,818 and an income tax benefit of $29,613. The income tax benefit primarily related to the re-measurement of deferred tax liabilities arising from a lower U.S. corporate tax rate as a result of the Tax Reform Act.

Included in Matrix's standalone net loss of $4,200 for the year ended December 31, 2016 are depreciation and amortization of $6,356, transaction related expenses of $6,367, which includes $4,033 of transaction incentive compensation, equity compensation of $407, management fees paid to Matrix's shareholders of $396, interest expense of $2,949 and an income tax benefit of $2,828.

See Note 23, *Discontinued Operations*, for Matrix's January 1, 2016 through October 19, 2016 results of operations.

6. Prepaid Expenses and Other

Prepaid expenses and other were comprised of the following:

	December 31,	
	2018	2017
Prepaid income taxes	$ 35,207	$ 254
Escrow funds	—	10,000
Prepaid insurance	1,308	1,765
Note receivable	—	3,224
Prepaid rent	828	722
Other	6,824	6,494
Total prepaid expenses and other	$ 44,167	$ 22,459

Escrow funds at December 31, 2017 represented amounts related to indemnification claims from the sale of the Human Services segment. The escrow funds were used during the year ended December 31, 2018 to satisfy a portion of the Company's settlement of indemnification claims. See Note 20, *Commitments and Contingencies*, for further information.

7. Property and Equipment

Property and equipment consisted of the following:

	Estimated Useful Life (years)	December 31,	
		2018	2017
Computer and telecom equipment	3 — 5	$ 29,883	$ 27,742
Software	3 — 5	24,318	22,256
Leasehold improvements	Shorter of 7 years or lease term	8,078	7,599
Furniture and fixtures	5 — 10	1,942	2,351
Automobiles	5	3,666	3,209
Construction and development in progress	N/A	299	12,579
		68,186	75,736
Less accumulated depreciation		45,221	38,064
Total property and equipment, net		$ 22,965	$ 37,672

Depreciation expense from continuing operations was $12,058, $10,717 and $9,900 for the years ended December 31, 2018, 2017 and 2016, respectively.

Following the acquisition of Circulation and an analysis of the technology capabilities and scalability of the Circulation platform, the Company determined it would not continue the development of the LCAD NextGen technology ("NextGen"). The Company also determined it would not place any of the developed NextGen technology into service, and recorded an asset impairment charge of $13,496 related to its NET Services segment during the fourth quarter of 2018. In addition, the Company had previously recorded an impairment of $679 during the second quarter of 2018 in relation to the decision to abandon specific development work intended to synchronize data across applications of the proprietary NextGen systems, based on the determination of an alternative method to accomplish this task. The total impairment charge of $14,175 is reflected in "Asset impairment charge" in the consolidated statement of operations for the year ended December 31, 2018. As of December 31, 2017, construction in progress was primarily comprised of the software development costs for NextGen.

8. Goodwill and Intangibles

Impairment

The Company did not record any goodwill or intangible asset impairment charges for continuing operations for the years ended December 31, 2018, 2017 and 2016.

Goodwill

There were no changes in goodwill from December 31, 2016 to December 31, 2017. Changes in goodwill were as follows for the period from December 31, 2017 to December 31, 2018:

	NET Services
Balances at December 31, 2017	
Goodwill	$ 191,215
Accumulated impairment losses	(96,000)
	95,215
Acquisition of Circulation	40,001
Balances at December 31, 2018	
Goodwill	231,216
Accumulated impairment losses	(96,000)
	$ 135,216

The total amount of goodwill from continuing operations that was deductible for income tax purposes related to acquisitions as of December 31, 2018 and 2017 was $29 for each year.

Intangible Assets

Intangible assets are comprised of acquired customer relationships, trademarks and trade names, and developed technology. Intangible assets consisted of the following:

		December 31,			
		2018		2017	
	Estimated Useful Life (Yrs)	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Customer relationships	15	$ 43,800	$ (32,515)	$ 43,800	$ (29,635)
Developed technology of Circulation	5	14,100	(705)	—	—
Customer relationships of Circulation	3	1,400	(117)	—	—
Trademarks and trade names of Circulation	3	200	(17)	—	—
Total		$ 59,500	$ (33,354)	$ 43,800	$ (29,635)

The weighted-average amortization period at December 31, 2018 for intangibles was 12.3 years. No significant residual value is estimated for these intangible assets. Amortization expense from continuing operations was $3,755, $2,901 and $2,881 for the years ended December 31, 2018, 2017 and 2016, respectively.

The Company acquired Circulation in September 2018, which resulted in the increase of intangible assets from December 31, 2017 to December 31, 2018. See additional discussion of the Circulation acquisition in Note 22, *Acquisitions*.

The total amortization expense is estimated to be as follows for the next five years as of December 31, 2018:

Year	Amount
2019	$ 6,234
2020	6,234
2021	6,101
2022	5,461
2023	2,116
Total	$ 26,146

9. Accrued Expenses

Accrued expenses consisted of the following:

	December 31,	
	2018	2017
Accrued compensation and related	$ 11,050	$ 18,816
NET Services accrued contract payments	9,756	17,487
Accrued settlement	—	15,000
Accrued cash settled stock-based compensation	3,719	3,938
Income taxes payable	—	1,959
Other	14,666	14,443
Total accrued expenses	$ 39,191	$ 71,643

The accrued settlement at December 31, 2017 represented amounts related to indemnification claims from the sale of the Human Services segment, which was completed on November 1, 2015. The settlement was finalized during the year ended December 31, 2018, which resulted in the payment of the accrued settlement amount, in which $10,000 was released from an escrow account and $4,475 was paid in cash. See Note 20, *Commitments and Contingencies*, for further information.

10. Restructuring and Related Reorganization Costs

Corporate and Other

On April 11, 2018, the Company announced the Organizational Consolidation, which involves transferring all job responsibilities previously performed by employees of the holding company to LogistiCare, and closing the current corporate offices in Stamford, Connecticut and Tucson, Arizona. The Company adopted an employee retention plan designed to incentivize current holding company level employees to remain employed with the Company during the transition. The employee retention plan became effective on April 9, 2018 and covers the holding company level employees and provides for certain payments and benefits to be provided to the employees if they remain employed with the Company through a retention date established for each individual, subject to a fully executed retention letter. The Organizational Consolidation is expected to be completed by the end of the second quarter of 2019.

As of December 31, 2018, the Company estimates that it will incur aggregate pre-tax restructuring charges of approximately $12,200 through June 30, 2019 in connection with the Organizational Consolidation discussed above. These charges include approximately $7,100 related to retention and personnel costs, $2,000 related to acceleration of stock-based compensation, $600 related to accelerated depreciation and $2,500 related to other costs, including lease termination and recruiting costs. A total of $8,797 restructuring and related costs has been incurred during the year ended December 31, 2018 related to the Organizational Consolidation. These costs include $5,098 of retention and personnel costs, $1,731 of accelerated stock-based compensation expense, $436 of accelerated depreciation and $1,532 of other costs, primarily related to recruiting and legal costs. These costs are recorded as “General and administrative expense” and “Depreciation and amortization” in the accompanying consolidated statements of operations. The Company’s estimate is subject to change, as it is based upon assumptions for the sublease of office space in Stamford, Connecticut and Tucson, Arizona, as well as other factors.

Summary of Liability for Corporate and Other Restructuring and Related Charges

	January 1, 2018	Costs Incurred	Cash Payments	December 31, 2018
Retention and personnel liability	$ —	$ 5,098	$ (3,142)	$ 1,956
Other liability	—	1,532	(1,134)	398
Total	$ —	$ 6,630	$ (4,276)	$ 2,354

The total restructuring liability at December 31, 2018 includes $2,124 classified as "Accrued expenses" and $230 classified as "Accounts payable" in the consolidated balance sheet.

11. Debt

The Company's debt was as follows:

	December 31, 2018	December 31, 2017
$200,000 revolving loan, LIBOR plus 2.25% - 3.25% with interest payable at least once every three months through August 2019	$ —	$ —
Capital lease obligations	1,071	2,984
	1,071	2,984
Less current portion of debt	718	2,400
Total debt, less current portion	$ 353	$ 584

Annual maturities of revolving loan and capital lease obligations as of December 31, 2018 are as follows:

Year	Amount
2019	$ 718
2020	308
2021	45
Total	$ 1,071

Credit Facility

The Company is a party to the amended and restated credit and guaranty agreement, dated as of August 2, 2013 (as amended, the "Credit Agreement"), with Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer, and the other lenders party thereto. The Credit Agreement provides the Company with a $200,000 revolving credit facility (the "Credit Facility"), including a sub-facility of $25,000 for letters of credit. On June 7, 2018, the Company and certain of its subsidiaries entered into the Fifth Amendment to the Amended and Restated Credit and Guaranty Agreement (the "Amendment"), amending the Amended and Restated Credit and Guaranty Agreement dated as of August 2, 2013 (as amended to date, the "Credit Agreement"), by and among the Company, the guarantors from time to time party thereto, the lenders from time to time party thereto and Bank of America, N.A. as administrative agent. The Amendment (i) extended the maturity date of the Credit Agreement to August 2, 2019 and (ii) amended certain covenants under the Credit Agreement to provide for greater operational, financial and strategic flexibility, including the implementation of the Company's Organizational Consolidation.

As of December 31, 2018, the Company had borrowings of $0 and ten letters of credit outstanding in the amount of $12,338 under the revolving credit facility. At December 31, 2018, the Company's available credit under the revolving credit facility was $187,662. Under the Credit Agreement, the Company has an option to request an increase in the amount of the revolving credit facility from time to time (on substantially the same terms as apply to the existing facilities) in an aggregate

amount of up to $75,000 with either additional commitments from lenders under the Credit Agreement at such time or new commitments from

financial institutions acceptable to the administrative agent in its reasonable discretion, so long as no default or event of default exists at the time of any such increase. The Company may not be able to access additional funds under this increase option as no lender is obligated to participate in any such increase under the Credit Facility. The Credit Agreement has a maturity date of August 2, 2019.

Interest on the outstanding principal amount of loans accrues, at the Company's election, at a per annum rate equal to LIBOR, plus an applicable margin, or the base rate as defined in the agreement plus an applicable margin. The applicable margin ranges from 2.25% to 3.25% in the case of LIBOR loans and 1.25% to 2.25% in the case of the base rate loans, in each case, based on the Company's consolidated leverage ratio as defined in the Credit Agreement. Interest on the loans is payable quarterly in arrears. In addition, the Company is obligated to pay a quarterly commitment fee based on a percentage of the unused portion of each lender's commitment under the Credit Facility and quarterly letter of credit fees based on a percentage of the maximum amount available to be drawn under each outstanding letter of credit. The commitment fee and letter of credit fee range from 0.25% to 0.50% and 2.25% to 3.25%, respectively, in each case, based on the Company's consolidated leverage ratio.

The Company's obligations under the Credit Facility are guaranteed by all of the Company's present and future domestic subsidiaries, excluding certain domestic subsidiaries which include the Company's insurance captive and the Company's investment in Matrix. The Company's obligations under, and each guarantor's obligations under its guaranty of, the Credit Facility are secured by a first priority lien on substantially all of the Company's respective assets, including a pledge of 100% of the issued and outstanding stock of the Company's domestic subsidiaries, excluding the Company's insurance captive.

The Credit Agreement contains customary affirmative and negative covenants and events of default. The negative covenants include restrictions on the Company's ability to, among other things, incur additional indebtedness, create liens, make investments, give guarantees, pay dividends, sell assets, and merge and consolidate. The Company is subject to financial covenants, including consolidated net leverage and consolidated interest coverage covenants.

Capital Leases

We have capital leases for information technology hardware and software with termination dates ranging from January 2018 through October 2020. The terms of the leases are between 12 and 36 months, with interest recorded at an incremental borrowing rate of 3.28%. At December 31, 2018, $1,894 represents the hardware and software under capital leases and $673 represents the related accumulated depreciation.

12. Convertible Preferred Stock, Net

The Company completed a rights offering on February 5, 2015 (the "Rights Offering") providing all of the Company's existing common stockholders the non-transferrable right to purchase their pro rata share of $65,500 of convertible preferred stock at a price equal to $100.00 per share ("Preferred Stock"). The Preferred Stock is convertible into shares of Providence's common stock, $0.001 par value per share ("Common Stock") at a conversion price equal to $39.88 per share, which was the closing price of the Company's Common Stock on NASDAQ on October 22, 2014.

Stockholders exercised subscription rights to purchase 130,884 shares of the Company's Preferred Stock. Pursuant to the terms and conditions of the Standby Purchase Agreement (the "Standby Purchase Agreement") between Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Blackwell Partners, LLC - Series A and Coliseum Capital Co-Invest, L.P. (collectively, the "Coliseum Stockholders") and the Company, the remaining 524,116 shares of the Company's Preferred Stock were purchased by the Coliseum Stockholders at the $100.00 per share subscription price. The Company received $65,500 in aggregate gross proceeds from the consummation of the Rights Offering and Standby Purchase Agreement. Additionally, on March 12, 2015, the Coliseum Stockholders exercised their right to purchase an additional 150,000 shares of the Company's Preferred Stock, at a purchase price of $105.00 per share or a total purchase price of $15,750, of the same series and having the same conversion price as the Preferred Stock sold in the Rights Offering.

The Company may pay a noncumulative cash dividend on each share of Preferred Stock, if and when declared by a committee of its Board of Directors ("Board"), at the rate of five and one-half percent (5.5%) per annum on the liquidation preference then in effect. On or before the third business day immediately preceding each fiscal quarter, the Company must determine its intention whether or not to pay a cash dividend with respect to that ensuing quarter and will give notice of its intention to each holder of Preferred Stock as soon as practicable thereafter.

In the event the Company does not declare and pay a cash dividend, the Company will declare a payment-in-kind ("PIK") dividend by increasing the liquidation preference of the convertible Preferred Stock to an amount equal to the liquidation preference in effect at the start of the applicable dividend period, plus an amount equal to the liquidation preference then in effect multiplied

by eight and one-half percent (8.5%) per annum, computed on the basis of a 365-day year and the actual number of days elapsed from the start of the applicable dividend period to the applicable date of determination.

All holders of the Company's Preferred Stock are able to convert their Preferred Stock into shares of Common Stock at a rate of approximately 2.51 shares of Common Stock for each share of Preferred Stock. As of December 31, 2018, a total of 3,394 shares of Preferred Stock have been converted to 8,503 shares of Common Stock.

Cash dividends are payable quarterly in arrears on January 1, April 1, July 1 and October 1 of each year, and commenced on April 1, 2015, and, if declared, begin to accrue on the first day of the applicable dividend period. PIK dividends, if applicable, accrue cumulatively on the same schedule as set forth above for cash dividends and are also compounded at the applicable annual rate on each applicable subsequent dividend date. Cash dividends on redeemable convertible preferred stock totaling $4,413, or $5.50 per share, $4,418, or $5.50 per share, and $4,419, or $5.50 per share, were distributed to convertible preferred stockholders for the years ended December 31, 2018, 2017 and 2016, respectively.

The Preferred Stock is accounted for outside of stockholders' equity as it may be redeemed upon certain change in control events that are not solely in the control of the Company. Dividends are recorded in stockholders' equity and consist of the 5.5%/8.5% dividend. Certain other provisions apply in certain change in control events.

The following table summarizes the Preferred Stock activity for the years ended December 31, 2018 and 2017:

	Dollar Value	Share Count
Balance at December 31, 2016	$ 77,565	803,398
Conversion to common stock	(20)	(198)
Allocation of issuance costs	1	—
Balance at December 31, 2017	$ 77,546	803,200
Conversion to common stock	(161)	(1,594)
Allocation of issuance costs	7	—
Balance at December 31, 2018	$ 77,392	801,606

As of December 31, 2018 and 2017, the outstanding shares of Preferred Stock were convertible into 2,010,045 and 2,014,042 shares of Common Stock, respectively.

13. Stockholders' Equity

At December 31, 2018 and 2017 there were 17,784,769 and 17,473,598 shares of the Company's Common Stock issued, respectively, including 4,970,093 and 4,126,132 treasury shares at December 31, 2018 and 2017, respectively.

Subject to the rights specifically granted to holders of any then outstanding shares of the Company's Preferred Stock, the Company's common stockholders are entitled to vote together as a class on all matters submitted to a vote of the Company's common stockholders, and are entitled to any dividends that may be declared by the Board. The Company's common stockholders do not have cumulative voting rights. Upon the Company's dissolution, liquidation or winding up, holders of the Company's Common Stock are entitled to share ratably in the Company's net assets after payment or provision for all liabilities and any preferential liquidation rights of the Company's Preferred Stock then outstanding. The Company's common stockholders do not have preemptive rights to purchase shares of the Company's stock. The issued and outstanding shares of the Company's Common Stock are not subject to any redemption provisions and are not convertible into any other shares of the Company's capital stock. The rights, preferences and privileges of holders of the Company's Common Stock will be subject to those of the holders of any shares of the Company's Preferred Stock the Company may issue in the future.

The following table reflects the total number of shares of the Company's Common Stock reserved for future issuance as of December 31, 2018:

Shares of common stock reserved for:	
Exercise of stock options and restricted stock awards	960,719
Conversion of preferred stock to common stock	2,010,045
Total shares of common stock reserved for future issuance	2,970,764

Share Repurchases

On November 4, 2015, the Board authorized the Company to engage in a repurchase program to repurchase up to $70,000 in aggregate value of the Company's Common Stock during the twelve-month period following November 4, 2015. This plan terminated on November 3, 2016. A total of 1,360,249 shares were purchased through this plan for $62,981, excluding commission payments.

On October 26, 2016, the Board authorized a new repurchase program, under which the Company may repurchase up to $100,000 in aggregate value of the Company's Common Stock during the twelve-month period following October 26, 2016. Through October 26, 2017, a total of 770,808 shares were purchased through this plan for $30,360, excluding commission payments.

On November 2, 2017, the Board approved the extension of the Company's October 26, 2016 stock repurchase program, authorizing the Company to engage in a repurchase program to repurchase up to $69,640 (the amount remaining from the $100,000 repurchase amount authorized in 2016) in aggregate value of our Common Stock through December 31, 2018. Subsequently, on March 29, 2018, the Board authorized an increase in the amount available for stock repurchases under the Company's existing stock repurchase program by $77,800, and extended the existing stock repurchase program through June 30, 2019. As of December 31, 2018, 1,018,989 shares were purchased under this plan after it was extended on November 2, 2017 for $66,256, excluding commission payments.

During the years ended December 31, 2018, 2017 and 2016, the Company withheld 5,242, 19,556 and 2,736 shares, respectively, from employees to cover the settlement of income tax and related benefit withholding obligations arising from vesting of restricted stock awards. In addition, during the years ended December 31, 2018 and 2017, the Company withheld 12,676 and 5,665 shares, respectively, from employees to cover the settlement of income tax and related benefit withholding obligations and the exercise price upon the exercise of stock options.

14. Stock-Based Compensation and Similar Arrangements

The Company provides stock-based compensation to employees, non-employee directors, consultants and advisors under the Company's 2006 Long-Term Incentive Plan ("2006 Plan"). The 2006 Plan allows the flexibility to grant or award stock options, stock appreciation rights, restricted stock, unrestricted stock, stock units including restricted stock units and performance awards to eligible persons.

The following table summarizes the activity under the 2006 Plan as of December 31, 2018:

	Number of shares of the Company's Common Stock authorized for issuance	Number of shares of the Company's Common Stock remaining for future grants	Number of shares of the Company's Common Stock subject to	
			Stock Options	Stock Grants
2006 Plan	5,400,000	1,356,820	908,588	52,131

The following table reflects the amount of stock-based compensation, for share settled awards issued to employees and non-employee directors, recorded in each financial statement line item for the years ended December 31, 2018, 2017 and 2016:

	Year Ended December 31,		
	2018	2017	2016
Service expense	$ 950	$ 434	$ 841
General and administrative expense	8,037	7,052	4,324
Equity in net loss (gain) of investees	137	76	18
(Loss) income from discontinued operations, net of tax	6	57	(29)
Total stock-based compensation	$ 9,130	$ 7,619	$ 5,154

Stock-based compensation included in service expense is related to the NET Services segment, whereas the amount included in equity in net loss (gain) of investees is related to the Matrix Investment segment, as a member of Matrix management continues to hold Providence equity awards.

The amounts above exclude tax benefits of $1,888, $2,885 and $2,072 for the years ended December 31, 2018, 2017 and 2016, respectively.

Stock Options

During the year ended December 31, 2016, the Company did not grant any stock options. The fair value of each stock option awarded to employees is estimated on the date of grant using the Black-Scholes option-pricing formula based on the following assumptions for the years ended December 31, 2018 and 2017:

	Year Ended December 31,					
	2018			2017		
Expected dividend yield	0.0%			0.0%		
Expected stock price volatility	26.47%	—	39.83%	19.5%	—	42.95%
Risk-free interest rate	2.26%	—	2.91%	1.0%	—	2.23%
Expected life of options (years)	1.29	—	6.50	0.03	—	6.50

The risk-free interest rate was based on the U.S. Treasury security rate in effect as of the date of grant which corresponds to the expected life of the award. The expected stock price volatility was based on the Company's historical data. The expected lives of options were based on the Company's historical data, a simplified method for plain vanilla options, or the Company's best estimate where appropriate. The simplified method was used for plain vanilla options for which the Company did not have sufficient historical data to use in determining the expected life.

In connection with the Organizational Consolidation, on April 9, 2018, the Company entered into an agreement with R. Carter Pate for his continued employment as the Company's Interim CEO through June 30, 2019. The agreement also provided for a grant of unvested options to purchase up to 394,000 shares of the Company's common stock, at a price of $71.67 per share, which was the closing price of the Company's common stock on the grant date. The options are subject to vesting as follows: (i) 50% of the options will become vested if Mr. Pate remains employed by the Company through June 30, 2019 (the "Time-Vesting Options"), (ii) 25% of the options will become vested on March 31, 2019 if the Company has achieved its budget for its 2018 fiscal year, subject to certain adjustments, and Mr. Pate is then employed, and (iii) 25% of the options will become vested on March 31, 2019 subject to Mr. Pate's achievement of other performance metrics if Mr. Pate is then employed. In recognition of certain holding company employees' essential contributions to the success of the Company, and to encourage further alignment with the Company's long-term interests through the ownership of equity, Mr. Pate voluntarily set aside 98,500 of the options granted to him, representing 25% of his total award. The value of the awards of $1,273 was fully expensed in the three months ended June 30, 2018. The Compensation Committee of the Board granted cash bonuses to employees based upon their performance throughout the Organizational Consolidation process in December 2018 in relation to the options voluntarily set aside by Mr. Pate.

In accordance with the terms of the agreement and actual performance to budget, only half of the options related to the budget performance criteria in (ii) above will vest.

In addition, the Time-Vesting Options will become fully vested upon a "change in control" (as defined in the 2006 Plan) or a termination of Mr. Pate's employment by the Company without "cause" (as defined in the Company's 2015 Holding Company LTI Program) or for "good reason" (as defined in the Option Agreement). Once vested, the options will remain exercisable until April 8, 2021, unless terminated earlier due to a termination of Mr. Pate's employment for "cause".

Also, in connection with the Organizational Consolidation and his appointment as Interim CFO, on April 9, 2018, William Severance received an option to purchase 13,710 shares of common stock at a price of $71.67 per share, which was the closing price of the Company's common stock on the grant date. The options will become fully exercisable on May 10, 2019, subject to Mr. Severance's continued employment with the Company, and if not exercised will expire on December 31, 2020.

During the fourth quarter of 2017, James Lindstrom resigned from the Company as Chief Executive Officer ("CEO") and board member of the Company. As a result of Mr. Lindstrom's resignation as CEO, a separation agreement was entered into between the Company and Mr. Lindstrom. As a result of this separation agreement, Mr. Lindstrom was granted 125,000 stock options with an exercise price of $61.33 per share that were immediately vested. 75,000 of these options were exercised during the year ended December 31, 2018, the remaining options expired on December 31, 2018.

During the year ended December 31, 2018, the Company issued 266,293 shares of its Common Stock in connection with the exercise of employee stock options under the Company's 2006 Plan.

The following table summarizes the stock option activity for the year ended December 31, 2018:

	Year ended December 31, 2018			
	Number of Shares Under Option	Weighted-average Exercise Price	Weighted-average Remaining Contractual Term	Aggregate Intrinsic Value
Balance at beginning of period, January 1	606,695	$ 48.70		
Granted	750,993	66.73		
Exercised	(278,969)	44.82		
Forfeited/Canceled	(120,131)	68.81		
Expired	(50,000)	61.33		
Outstanding at end of period, December 31	908,588	$ 61.44	2.40	$ 4,348
Vested or expected to vest at end of period, December 31	871,651	$ 61.01	2.49	$ 4,348
Exercisable at end of period, December 31	263,897	$ 50.28	1.98	$ 2,570

The weighted-average grant date fair value for options granted, total intrinsic value and cash received by the Company related to options exercised during the years ended December 31, 2018, 2017 and 2016 were as follows:

	Year ended December 31,		
	2018	2017	2016
Weighted-average grant date fair value per share	$ 15.08	$ 9.05	$ —
Options exercised:			
Total intrinsic value	$ 6,805	$ 2,010	$ 979
Cash received	$ 12,413	$ 1,921	$ 4,108

Stock Option Modifications

As part of the Company's retention plan associated with the Organizational Consolidation, the Company provided that unvested stock-based awards to employees subject to the retention plan will vest in full upon their termination dates so long as those employees fulfill their service obligation to the Company under the retention plan. As such, the vesting terms of 11,035

stock options were modified. Additionally, the exercise terms of the respective unvested stock options were modified to allow for exercise through December 31, 2020. As a result of the modifications, the Company revalued the awards as of April 9, 2018,

and is expensing the unrecognized stock-based compensation cost, based on the new fair value, through the termination date of each relevant employee. Additional expense incurred during the year ended December 31, 2018, as a result of the modification, totaled $168. See Note 10, *Restructuring and Related Reorganization Costs,* for additional information.

During the fourth quarter of 2017, as a result of the separation agreement between the Company and Mr. Lindstrom, Mr. Lindstrom's outstanding stock options from his grants of 11,319 on August 6, 2015 and 9,798 on March 15, 2017 were modified to accelerate the vesting date of both awards to November 15, 2017 and allow exercise of the stock options until December 31, 2018. As a result of the modification to the terms of the original stock options granted to Mr. Lindstrom, the Company recognized an accelerated expense of $83 on the award for the year ended December 31, 2017.

Restricted Stock Awards

During the year ended December 31, 2018, the Company granted 20,242 shares of restricted stock ("RSAs") to non-employee directors of its Board, executive officers and certain key employees. The awards primarily vest in three equal installments on the first, second and third anniversaries of the date of grant.

During the year ended December 31, 2018, the Company issued 27,894 shares of its Common Stock to non-employee directors, executive officers and key employees upon the vesting of certain RSAs granted in 2017, 2016 and 2015 under the Company's 2006 Plan.

The following table summarizes the activity of the shares and weighted-average grant date fair value of the Company's unvested restricted Common Stock during the year ended December 31, 2018:

	Shares	Weighted-average grant date fair value
Non-vested at beginning of period, January 1	64,779	$ 44.82
Granted	20,242	$ 66.07
Vested	(27,894)	$ 46.39
Forfeited or cancelled	(9,799)	$ 46.83
Non-vested at end of period, December 31	47,328	$ 52.56

As of December 31, 2018, there was $7,604 of unrecognized compensation cost related to unvested share settled stock options and RSAs granted under the 2006 Plan. The cost is expected to be recognized over a weighted-average period of 1.2 years. The total fair value of stock options and RSAs vested was $4,428, $3,550 and $1,383 for the years ended December 31, 2018, 2017 and 2016, respectively.

Restricted Stock Award Modifications

As part of the Company's retention plan associated with the Organizational Consolidation, the Company provided that unvested stock-based awards to employees subject to the retention plan will vest in full upon their termination dates so long as those employees fulfill their service obligation to the Company under the retention plan. As such, the vesting terms of 7,286 restricted stock awards were modified. As a result of the modifications, the Company revalued the awards as of April 9, 2018, and is expensing the unrecognized stock-based compensation cost, based on the new fair value, through the termination date of each relevant employee. Additional expense incurred during the year ended December 31, 2018, as a result of the modification, totaled $290. See Note 10, *Restructuring and Related Reorganization Costs,* for additional information.

Restricted Stock Units

During the year ended December 31, 2016, the Company granted 5,930 restricted stock units to a key employee, related to the terms of a separation agreement, that vested on January 3, 2017. The units were settled through a cash payment of

$304 during the year ended December 31, 2017. The award was classified as a liability, and the expense recorded was based upon the Company's closing stock price at the end of each reporting period and the completed requisite service period.

Deferred Share Units

During the year ended December 31, 2018, the Company granted 4,803 deferred share units to a director that vested on June 8, 2018, but will not be released until March 3, 2019. The units were fully expensed during the year ended December 31, 2018 and had a grant date fair value of $75.51 per share.

Cash Settled Awards

During the years ended December 31, 2018, 2017 and 2016, respectively, the Company issued 2,017, 3,097 and 3,360 stock equivalent units ("SEUs"), which settle in cash upon vesting, to Coliseum Capital Partners, L.P., in lieu of a grant to Christopher Shackelton, Chairman of the Board, for his service on the Board, which vest one-third upon each anniversary of the vesting date. The fair value of the SEUs is based on the closing stock price on the last day of the period and the completed requisite service period. The Company recorded $209, $235 and $287 of expense for SEUs during the years ended December 31, 2018, 2017 and 2016, respectively.

During the year ended December 31, 2014, the Company issued 200,000 stock option equivalent units ("SOEUs"), with an exercise price of $43.81 per share, which settle in cash, to Coliseum Capital Partners, L.P in lieu of a grant to Christopher Shackelton, for other services rendered. All 200,000 SOEUs were outstanding and exercisable at December 31, 2018. This award vested one-third upon grant, one-third on June 30, 2015 and one-third on June 30, 2016. No additional SOEUs were granted during the years ended December 31, 2018, 2017 and 2016. The Company recorded benefits of $191 and $1,517 for SOEUs during the years ended December 31, 2018 and 2016, respectively, and expense of $2,146 during the year ended December 31, 2017. The benefits and expense are included in "General and administrative expense" in the consolidated statements of operations. The fair value of the SOEUs was estimated as of December 31, 2018, 2017 and 2016 using the Black-Scholes option-pricing formula and amortized over the option's graded vesting periods with the following assumptions:

	Year ended December 31,								
	2018			2017			2016		
Expected dividend yield	0.0%			0.0%			0.0%		
Expected stock price volatility	27.82%	—	30.59%	23.36%	—	32.09%	35.71%	—	41.8%
Risk-free interest rate	2.50%	—	2.61%	1.75%	—	1.95%	1.11%	—	1.64%
Expected life of options (in years)	0.75	—	1.75	0.75	—	2.75	1.00	—	3.00

As of December 31, 2018 and 2017, the Company had a short-term liability of $3,719 and $3,938, respectively, in "Accrued expenses" in the consolidated balance sheets related to unexercised vested and unvested cash settled share-based payment awards. The cash settled share-based compensation expense in total excluded a tax benefit of $908 for the year ended December 31, 2017. The cash settled share-based compensation benefit in total excluded a tax expense of $4 and $492 for the years ended December 31, 2018 and 2016. The unrecognized compensation cost for SEUs is expected to be recognized over a weighted average period of 0.7 years; however, the total expense for both SEUs and SOEUs will continue to be adjusted until the awards are settled.

Holdco Long-Term Incentive Plan

On August 6, 2015 (the "Award Date"), the Compensation Committee of the Board adopted the 2015 Holding Company LTI Program ("HoldCo LTIP") under the 2006 Plan. Under the program, executives would receive shares of Providence common stock based on the shareholder value created in excess of an 8.0% compounded annual return between the Award Date and December 31, 2017 (the "Extraordinary Shareholder Value"). The Award Date value was calculated on the basis of the Providence stock price equal to the volume weighted average of the common share price over the 90-day trading period ending on the Award Date. The Extraordinary Shareholder Value was calculated on the basis of the Providence stock price equal to the volume weighted average of the common share price over the 90-day trading period ending on December 31, 2017. A pool for use in the allocation of awards was created equal to 8.0% of the Extraordinary Shareholder Value.

It was determined that no shares would be distributed under the Holdco LTIP as the calculation of the pool amount was zero. $4,738 and $3,319 of expense are included in "General and administrative expense" in the consolidated statements of operations for the years ended December 31, 2017 and 2016, respectively.

These awards were classified as equity and the fair value of the awards was calculated using a Monte-Carlo simulation valuation model. The fair value of the awards granted in 2016 were estimated using the following assumptions:

	Year ended December 31, 2016
Forward interest rate	0.24% — 2.71%
Expected Volatility	40.0%
Dividend Yield	—%
Fair Value of Total Pool	$12,870

15. Long-Term Incentive Plans

The Company established Long-Term Incentive Plans ("LTIPs") for the Company's operating segments during the fourth quarter of 2015. The awards pay in cash, however up to 50% of the award may be paid in unrestricted stock if the recipient elects this option when the LTIP offer letter is received. In addition, at the discretion of the Company, the recipients may be able to elect unrestricted stock in lieu of cash compensation at a later date. The LTIPs reward participants based on certain measures of free cash flow and EBITDA results adjusted as specified in the plan document. The awards vest in three installments: 60% of the award will pay out immediately following December 31, 2017, 25% one year following the performance period (i.e. December 31, 2018) and 15% two years following the performance period (i.e. December 31, 2019). Payout is subject to the participant remaining employed by the Company.

During 2017, the Company revised the structure of the NET Services long-term incentive plan. As a result, the Company finalized the amount payable under the plan at $2,956. The total value will be paid to the awarded participants per the terms of the original agreement and thus the remaining unamortized expense relating to this plan continues to be recognized over the remaining service period. For the years ended December 31, 2018, 2017, and 2016, a benefit of $253, expense of $816 and expense of $1,513, respectively, is included in "Service expense" in the consolidated statements of operations related to this plan. At December 31, 2018 and 2017, the liability for long-term incentive plans of the Company's operating segments of $630 and $2,657, respectively, is reflected in "Accrued expenses" and "Other long-term liabilities" in the consolidated balance sheets.

The Board approved the LogistiCare 2017 Senior Executive LTI Plan (the "LogistiCare LTIP") for executive management and key employees of NET Services during the three months ending March 31, 2018. The LogistiCare LTIP pays in cash, however up to 50% of the award may be paid in unrestricted stock if the recipient elects this option prior to the award payment date. The LogistiCare LTIP rewards participants based on certain measures of free cash flow and EBITDA results adjusted as specified in the plan document. The awards have a performance period of January 1, 2017 through December 31, 2019, with a payout date within two and a half months of the performance period end date. Payout is subject to the participant remaining employed by the Company on the payment date. The maximum amount that can be earned through the LogistiCare LTIP is $7,000. As of December 31, 2018, 65.5% of the awards have been issued under the LogistiCare LTIP. No expense has been incurred for this plan during the year ended December 31, 2018, as we currently believe that it is not probable the defined measures will be met.

In connection with the acquisition of Circulation, the Company established a management incentive plan ("MIP") that is intended to motivate key employees of Circulation whereby they may be entitled to cash payments if certain financial measures are met based upon cumulative NET Services EBITDA; less the assumption of former Corporate and Other segment costs; less cumulative CAPEX ("MIP Financial Performance") for the performance period January 1, 2019 to December 31, 2021 as compared to the baseline, as determined by the Board. To the extent amounts are earned, the payout date is within 30 days following the finalization of the Company's audited financial statements for the fiscal year ending December 31, 2021. Payout is subject to the participant remaining employed by the Company through December 31, 2021. The amount that can be earned through the MIP ranges from $12,500 to $237,500 based on a range of value of the MIP Financial Performance of $272,500 to $395,500. As of December 31, 2018, the Company has accrued $1,441, reflected in "Other long-term liabilities" in the consolidated balance sheet, towards its estimate of the expected payout under the MIP.

16. Earnings Per Share

The following table details the computation of basic and diluted earnings per share:

	Year ended December 31,		
	2018	**2017**	**2016**
Numerator:			
Net (loss) income attributable to Providence	$ (18,981)	$ 53,369	$ 91,928
Less dividends on convertible preferred stock	(4,420)	(4,419)	(4,419)
Less income allocated to participating securities	(1,856)	(6,314)	(10,569)
Net (loss) income available to common stockholders	$ (25,257)	$ 42,636	$ 76,940
Continuing operations	$ 11,953	$ 40,647	$ 19,749
Discontinued operations	(37,210)	1,989	57,191
	$ (25,257)	$ 42,636	$ 76,940
Denominator:			
Denominator for basic earnings per share -- weighted-average shares	12,960,837	13,602,140	14,666,896
Effect of dilutive securities:			
Common stock options	72,410	66,314	105,837
Performance-based restricted stock units	—	4,860	6,665
Denominator for diluted earnings per share -- adjusted weighted-average shares assumed conversion	13,033,247	13,673,314	14,779,398
Basic earnings (loss) per share:			
Continuing operations	$ 0.92	$ 2.99	$ 1.35
Discontinued operations	(2.87)	0.15	3.90
	$ (1.95)	$ 3.14	$ 5.25
Diluted earnings (loss) per share:			
Continuing operations	$ 0.92	$ 2.97	$ 1.34
Discontinued operations	(2.86)	0.15	3.87
	$ (1.94)	$ 3.12	$ 5.21

Income allocated to participating securities is calculated by allocating a portion of net income attributable to Providence, less dividends on convertible stock, to the convertible preferred stockholders on a pro-rata as converted basis; however, the convertible preferred stockholders are not allocated losses.

The following weighted-average shares were not included in the computation of diluted earnings per share as the effect of their inclusion would have been anti-dilutive:

	Year ended December 31,		
	2018	**2017**	**2016**
Stock options to purchase common stock	560,547	362,392	22,638
Convertible preferred stock	802,489	803,323	803,442

17. Operating Leases and Service Commitment

Operating Leases

The Company has non-cancelable contractual obligations in the form of operating leases for office space, related office equipment and other facilities. The leases expire in various years and generally provide for renewal options. In the normal course of business, it is expected that these leases will be renewed or replaced by leases on other properties.

Certain operating leases provide for increases in future minimum annual rental payments based on defined increases in the Consumer Price Index, subject to certain minimum increases. Several of these lease agreements contain provisions for periods in which rent payments are reduced. The total amount of rental payments due over the lease term is being charged to rent expense on a straight-line basis over the term of the lease. The cumulative difference between rent expense recorded and the amount paid, for continuing operations, as of December 31, 2018 and 2017 was $2,115 and $2,209, respectively, and is included in "Accrued expenses" and "Other long-term liabilities" in the consolidated balance sheets.

Future minimum payments under non-cancelable operating leases for equipment and property with initial terms of one year or more consisted of the following at December 31, 2018:

	Operating Leases
2019	$ 8,825
2020	6,452
2021	4,594
2022	3,801
2023	1,767
Thereafter	1,600
Total future minimum lease payments	$ 27,039

Rent expense for continuing operations related to operating leases was $10,960, $10,250 and $9,624, for the years ended December 31, 2018, 2017 and 2016, respectively. Also, the lease agreements generally require the Company to pay executory costs such as real estate taxes, insurance, and repairs, which are recorded to expense as incurred.

Service Commitment

The Company has entered into a commitment related to transportation services. The commitment amount represents the minimum obligation the Company has under this agreement. If the Company does not utilize the minimum level of services specified in the agreement, a penalty provision will apply. However, the minimum obligation is less than the Company's projected use for these periods and payments may be more than the minimum obligation based on actual use.

Future minimum payments under this service commitment consisted of the following at December 31, 2018:

	Service Commitment
2019	$ 9,509
2020	19,208
Total future minimum payments	$ 28,717

18. Retirement Plan

The Company maintains a qualified defined contribution plan under Section 401(k) of the Internal Revenue Code of 1986, as amended, for all employees of its NET Services' operating segment and corporate personnel. The Company, at its

discretion, may make a matching contribution to the plan. Any matching contributions vest over 5 years. Unvested matching contributions are forfeitable upon employee termination. Employee contributions are fully vested and non-forfeitable. The Company's

contributions to the plan for continuing operations were $340, $304 and $232, for the years ended December 31, 2018, 2017 and 2016, respectively.

The Company also maintains a Deferred Compensation Rabbi Trust Plan for highly compensated employees of NET Services. This plan was put in place to compensate for the inability of highly compensated employees to take full advantage of the Company's 401(k) plan. Additional information is included in Note 20, *Commitments and Contingencies*.

19. Income Taxes

The federal and state tax provision is summarized as follows:

	Year Ended December 31,		
	2018	**2017**	**2016**
Federal income tax expense (benefit):			
Current	$ 3,462	$ 19,011	$ 20,963
Deferred	(1,157)	(19,762)	(6,545)
Total Federal income tax expense (benefit)	2,305	(751)	14,418
State income tax expense (benefit):			
Current	2,113	4,048	4,501
Deferred	266	706	(947)
Total State income tax expense (benefit)	2,379	4,754	3,554
Total provision for income taxes	$ 4,684	$ 4,003	$ 17,972

A reconciliation of the provision for income taxes with amounts determined by applying the statutory U.S. federal income tax rate to income from continuing operations before income taxes is as follows:

	Year Ended December 31,		
	2018	**2017**	**2016**
Federal statutory rates	21%	35%	35%
Federal income tax at statutory rates	$ 4,812	$ 19,281	$ 15,699
Revaluation of net deferred tax liabilities due to U.S. tax reform	(286)	(19,304)	—
U.S. tax reform impact on equity income of investees	—	(1,646)	—
Change in valuation allowance	36	177	296
Change in uncertain tax positions	108	7	73
State income taxes, net of federal benefit	1,843	3,157	2,399
Compensation expense	235	—	—
Stock compensation	76	3,400	—
Meals and entertainment	74	99	94
Transaction costs	263	159	—
Cost method investment re-measurement gain	(1,381)	—	—
Tax credits	(1,208)	(354)	(947)
Legal expense	—	(805)	522
Other	112	(168)	(164)
Provision for income taxes	$ 4,684	$ 4,003	$ 17,972
Effective income tax rate	20%	7%	40%

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities of continuing operations are as follows:

	December 31,	
	2018	2017
Deferred tax assets:		
Net operating loss carryforwards	$ 19,485	$ —
Capital loss carryforward	1,072	—
Tax credit carryforwards	840	486
Accounts receivable allowance	227	1,134
Accrued items and reserves	6,817	8,297
Stock compensation	1,480	1,480
Deferred rent	543	572
Deferred revenue	272	—
Other	773	172
	31,509	12,141
Deferred tax liabilities:		
Deferred financing costs	12	38
Prepaids	900	1,439
Property and equipment depreciation	3,492	3,329
Goodwill and intangibles amortization	6,944	3,678
Equity investment	40,577	42,113
Other	—	303
	51,925	50,900
Net deferred tax liabilities	(20,416)	(38,759)
Less valuation allowance	(2,633)	(473)
Net deferred tax liabilities	$ (23,049)	$ (39,232)
Net noncurrent deferred tax assets, net of valuation allowance of $0 for 2018 and 2017	$ 2,601	$ —
Net noncurrent deferred tax liabilities, net of valuation allowance of $2,633 and $473 for 2018 and 2017, respectively	(25,650)	(39,232)
	$ (23,049)	$ (39,232)

At December 31, 2018, the Company had approximately $86,865 of federal net operating loss carryforwards, including $3,055 which will expire primarily in 2037 and $83,810 which can be carried forward indefinitely. In addition, at December 31, 2018, the Company had approximately $26,936 of state net operating loss carryforwards which expire as follows:

2023	$ 2,021
Thereafter	24,915
Total state net operating loss carryforwards	$ 26,936

Approximately $8,600 of the U.S. and state net operating loss carryforwards relate to Circulation, Inc. pre-acquisition tax periods and are subject to change of ownership limitations on their use. These limitations are not expected to restrict the ultimate use of these loss carryforwards.

Realization of the Company's net operating loss carryforwards is dependent on generating sufficient taxable income. Although realization is not assured, management believes it is more likely than not that all of the deferred tax assets will be

realized, to the extent they are not covered by a valuation allowance. The amount of the deferred tax asset considered realizable, however, could be reduced in the near term if estimates of future taxable income during the carryforward period are reduced.

The net change in the total valuation allowance for the year ended December 31, 2018 was $2,160, of which $36 related to current operations, $1,492 related to discontinued operations and $632 related to the balance from the Circulation acquisition. The valuation allowance of $2,633 includes $2,166 for state net operating loss, capital loss and tax credit carryforwards and $467 for stock compensation and accrued liability deferred tax assets for which the Company has concluded that it is more likely than not that these carryforwards and deferred tax assets will not be realized in the ordinary course of operations. The Company will continue to assess the valuation allowance, and to the extent it is determined that the valuation allowance should be changed, an appropriate adjustment will be recorded.

U.S. Tax Reform

On December 22, 2017, the Tax Reform Act was enacted which institutes fundamental changes to the taxation of multinational corporations. The Tax Reform Act includes changes to the taxation of foreign earnings by implementing a dividend exemption system, expansion of the current anti-deferral rules, a minimum tax on low-taxed foreign earnings and new measures to deter base erosion. The Tax Reform Act also includes a permanent reduction in the corporate tax rate to 21%, repeal of the corporate alternative minimum tax, expensing of capital investment, and limitation of the deduction for interest expense. Furthermore, as part of the transition to the new tax system, a one-time transition tax is imposed on a U.S. shareholder's historical undistributed earnings and profits ("E&P") of foreign affiliates. Although the Tax Reform Act is generally effective January 1, 2018, GAAP requires recognition of the tax effects of new legislation during the reporting period that includes the enactment date, which was December 22, 2017.

As a result of the reduction in the U.S. corporate income tax rate, the Company revalued its ending net deferred tax liabilities as of December 31, 2017 and recognized a provisional tax benefit of $20,950. The Company projected net accumulated deficits in foreign E&P; therefore, no provisional tax expense for deemed repatriation was recognized.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Reform Act. In accordance with the SAB 118 guidance, the Company has recognized the provisional tax impacts related to the benefit for the revaluation of deferred tax assets and liabilities in its consolidated financial statements for the year ended December 31, 2017. The financial reporting impact of the Tax Reform Act was completed in the fourth quarter of 2018 and an additional benefit of $286 was recorded.

Unrecognized Tax Benefits

The Company expects no material amount of the unrecognized tax benefits to be recognized during the next twelve months. The Company recognizes interest and penalties as a component of income tax expense. During the years ended December 31, 2018, 2017 and 2016, the Company recognized approximately $47, $65 and $19, respectively, in interest and penalties from continuing operations. The Company had approximately $109 and $83 for the payment of penalties and interest of continuing operations accrued as of December 31, 2018 and 2017, respectively.

A reconciliation of the liability for unrecognized income tax benefits for continuing operations is as follows:

	December 31,		
	2018	**2017**	**2016**
Unrecognized tax benefits, beginning of year	$ 1,115	$ 1,108	$ 271
Balance upon acquisition/disposition	—	—	764
Increase related to prior year positions	104	22	37
Increase related to current year tax positions	160	101	139
Statute of limitations expiration	(157)	(116)	(103)
Unrecognized tax benefits, end of year	$ 1,222	$ 1,115	$ 1,108

The Company is subject to taxation in the U.S. and various state jurisdictions. The statute of limitations is generally three years for the U.S. and between three and four years for the various states in which the Company operates. The tax years that remain open for examination by the U.S. and states principally include the years 2014 to 2017.

20. Commitments and Contingencies

Legal proceedings

In the ordinary course of business, the Company is a party to various lawsuits. Management does not expect these lawsuits to have a material impact on the liquidity, results of operations, or financial condition of the Company.

On January 21, 2019, the United States District Court for the Southern District of Ohio unsealed a qui tam complaint, filed in December 2015, against Mobile Care Group, Inc., Mobile Care Group of Ohio, LLC, Mobile Care EMS & Transport, Inc. and LogistiCare Solutions, LLC ("LogistiCare") by the relators Brandee White, Laura Cunningham, and Jeffery Wisier (the "Relators") alleging violations of the federal False Claims Act by presenting claims for payment to government healthcare programs knowing that the prerequisites for such claims to be paid had not been met. The Relators seek to recover damages, fees and costs under the federal False Claims Act including treble damages, civil penalties and attorneys' fees. In addition, the Relators seek reinstatement to their jobs with the Mobile Care entities. None of the Relators was employed by LogistiCare. Prior to January 21, 2019, LogistiCare had no knowledge of the complaint. The federal government has declined to intervene against LogistiCare. The Company intends to defend the litigation vigorously and believes that the case will not have a material adverse effect on its business, financial condition or results of operations.

Indemnifications related to Haverhill Litigation

The Company indemnified the Coliseum Stockholders from and against any and all losses, claims, damages, expenses and liabilities relating to or arising out of (i) any breach of any representation, warranty, covenant or undertaking made by or on behalf of the Company in the Standby Purchase Agreement and (ii) the transactions contemplated by the Standby Purchase Agreement and the 14.0% Unsecured Subordinated Note in aggregate principal amount of $65,500, except to the extent that any such losses, claims, damages, expenses and liabilities are attributable to the gross negligence, willful misconduct or fraud of such Coliseum Stockholder.

The Company has also indemnified other third parties from and against any and all losses, claims, damages, expenses and liabilities arising out of or in connection with the Company's acquisition of CCHN Group Holdings, Inc. (operating under the tradename Matrix, and formerly included in our HA Services segment) in October 2014 and related financing commitments, except to the extent that any such losses, claims, damages, expenses and liabilities are found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted from the gross negligence, bad faith or willful misconduct of such third parties, or a material breach of such third parties' obligations under the related agreements.

In June 2015, a putative stockholder class action derivative complaint related to such rights offering and acquisition was filed in the Court of Chancery of the State of Delaware captioned Haverhill Retirement System v. Kerley et al., C.A. No. 11149-VCL (the "Haverhill Litigation"). In November 2017, the Company received a payment of $5,363 under the settlement agreement entered into by the parties to the Haverhill Litigation.

The Company recorded $318 and $1,282 of such indemnified legal expenses related to the Haverhill Litigation during the years ended December 31, 2017 and 2016, respectively, which is included in "General and administrative expenses" in the consolidated statements of operations. Of these amounts, $245 and $757 for the years ended December 31, 2017 and 2016, respectively, were indemnified legal expenses of related parties. Other legal expenses of the Company related to the Haverhill Litigation are covered under the Company's insurance policies, subject to applicable deductibles and customary review of the expenses by the carrier. The Company recognized a benefit of $226 for the year ended December 31, 2018, and expense of $8 and $210 for the years ended December 31, 2017 and 2016, respectively. While the carrier typically remits payment directly to the respective law firm, the Company accrues for the cost and records a corresponding receivable for the amount to be paid by the carrier. The Company recognized an insurance receivable of $941 in "Other receivables" in the consolidated balance sheet at December 31, 2017, with a corresponding liability amount recorded to "Accrued expenses".

Other Indemnifications

The Company provided certain standard indemnifications in connection with the sale of the Human Services segment to Molina Healthcare Inc. ("Molina") effective November 1, 2015. Certain representations made by the Company in the related Membership Interest Purchase Agreement (the "Purchase Agreement") including tax representations, survive until the expiration of applicable statutes of limitation. Molina and the Company entered into a settlement agreement regarding indemnification claims by Molina with respect to *Rodriguez v. Providence Community Corrections* (the "Rodriguez

Litigation"), a complaint filed in the District Court for the Middle District of Tennessee, Nashville Division, against Providence Community Corrections, Inc. ("PCC"),

an entity sold under the Purchase Agreement. The Company expects to recover a portion of the settlement through insurance coverage, although this cannot be assured.

The Company has provided certain standard indemnifications in connection with its Matrix stock subscription transaction whereby Mercury Fortuna Buyer, LLC ("Subscriber"), Providence and Matrix entered into a stock subscription agreement (the "Subscription Agreement"), dated August 28, 2016. The representations and warranties made by the Company in the Subscription Agreement ended January 19, 2018; however, certain fundamental representations survive through the 36th month following the closing date. The covenants and agreements of the parties to be performed prior to the closing ended January 19, 2018, and all other covenants and agreements survive until the expiration of the applicable statute of limitations in the event of a breach, or for such lesser periods specified therein. The Company is not aware of any indemnification liabilities with respect to Matrix that require accrual at December 31, 2018.

The Company has provided certain standard indemnifications in connection with the sale of substantially all of its WD Services segment to APM, which closed on December 21, 2018. The non-title warranties made by the Company in the related Share Purchase Agreement survive for 18 months following the closing date, and the title-related warranties and tax warranties survive five years from the closing date. The Company is not aware of any indemnification liabilities with respect to the former WD Services segment that require accrual at December 31, 2018.

On May 9, 2018, the Company entered into a registration indemnification agreement with the Coliseum Stockholders, who as of December 31, 2018, collectively held approximately 9.6% of the Company's outstanding common stock and approximately 95.6% of the Company's outstanding Preferred Stock, pursuant to which the Company has agreed to indemnify the Coliseum Stockholders, and the Coliseum Stockholders have agreed to indemnify the Company, against certain matters relating to the registration of the Coliseum Stockholders' securities for resale under the Securities Act.

Deferred Compensation Plan

The Company has one deferred compensation plan for management and highly compensated employees of NET Services as of December 31, 2018. The deferred compensation plan is unfunded, and benefits are paid from the general assets of the Company. The total of participant deferrals, which is reflected in "Other long-term liabilities" in the consolidated balance sheets, was $1,982 and $1,806 at December 31, 2018 and 2017, respectively.

21. Transactions with Related Parties

The Company incurred legal expenses under an indemnification agreement with the Coliseum Stockholders as further discussed in Note 20, *Commitments and Contingencies*. Preferred stock dividends earned by the Coliseum Stockholders during the years ended December 31, 2018 and 2017 totaled $4,213 each year.

Effective June 15, 2018, the Company registered shares of the Company's common stock and Preferred Stock held by the Coliseum Stockholders for resale under the Securities Act and on May 9, 2018, in connection with such registration, the Company entered into a registration indemnification agreement with the Coliseum Stockholders as further discussed in Note 20, *Commitments and Contingencies*.

During the year ended December 31, 2017, the Company made a $566 loan to Mission Providence. The loan was also repaid during the year ended December 31, 2017.

22. Acquisitions

During 2017, the Company made an equity investment in Circulation, which was accounted for as a cost method investment. On September 21, 2018, the Company's subsidiary, LogistiCare, acquired all of the outstanding equity of Circulation, which offers a full suite of logistics solutions to manage non-emergency transportation across all areas of healthcare, powered by its HIPAA-compliant digital platform. Circulation enables administration of transportation benefits, proactively monitors for fraud, waste and abuse, and integrates all transportation capabilities (e.g. outsourced transportation, owned fleets, and other medical logistics services), while emphasizing patient convenience and satisfaction. Circulation's proprietary platform simplifies ordering, improves reliability and efficiency, and reduces transportation spend. The Company believes the acquisition advances LogistiCare's central mission of reducing transportation as a barrier to healthcare and will help deliver a differentiated user experience and provide a core technology and analytics platform that better positions LogistiCare for growth.

The purchase price was comprised of cash consideration of $45,123 paid to Circulation's equity holders (including holders of vested Circulation stock options), other than Providence. Per the terms of the Agreement and Plan of Merger (the "merger agreement"), dated as of September 14, 2018, by and among LogistiCare, the Company, Catapult Merger Sub, a wholly-owned subsidiary of LogistiCare ("Merger Sub"), Circulation and Fortis Advisors LLC, as the representative of Circulation's equity holders, Providence assumed certain unvested Circulation stock options under similar terms and conditions to the existing option awards previously issued by Circulation. The merger agreement also required $1,000 to be paid three years after the closing date of the transaction to each of the two co-founders of Circulation subject to their continued employment or provision of consulting services to LogistiCare. The value of the options assumed and co-founder hold back is accounted for as compensation, over the relevant vesting period, as such amounts are tied to future service conditions.

The Company's initial investment in Circulation was $3,000 in July 2017 to acquire a minority interest. As a result of the transactions pursuant to the merger agreement, the fair value of this pre-acquisition interest increased to $9,577, and thus the Company recognized a gain of $6,577. This gain is recorded as "Gain on remeasurement of cost method investment" on the Company's consolidated statement of operations for the year ended December 31, 2018. The Company determined the fair value of its pre-acquisition equity interest by multiplying the number of shares it held in Circulation pre-acquisition by the per-share consideration validated by reference to the total merger consideration agreed to with other unrelated equity holders in Circulation.

The Company incurred acquisition and related costs for this acquisition of $1,729 during the year ended December 31, 2018. These expenses are primarily included in general and administrative expenses of the NET Services segment in the consolidated statements of operations.

The purchase price of Circulation is calculated as follows:

Cash purchase of common stock	$	45,123
Providence's acquisition date fair value equity interest in Circulation		9,577
Total consideration	$	54,700

The table below presents Circulation's net assets at the date of acquisition based upon the final estimate of respective fair values:

Cash	$	1,302
Accounts receivable		996
Other assets		216
Property and equipment		49
Intangibles		15,700
Goodwill		40,001
Deferred taxes, net		(2,199)
Accounts payable and accrued liabilities		(1,244)
Deferred revenue		(69)
Other non-current liabilities		(52)
Total of assets acquired and liabilities assumed	$	54,700

The goodwill is allocated to the NET Services segment. None of the acquired goodwill is expected to be deductible for tax purposes.

The fair value of intangible assets is as follows:

	Type	Life	Value
Customer relationships	Amortizable	3 years	$ 1,400
Trademarks and trade names	Amortizable	3 years	200
Developed technology	Amortizable	5 years	14,100
			$ 15,700

The amounts of Circulation's revenue and net income included in the Company's consolidated statement of operations for the year ended December 31, 2018, and the unaudited pro forma revenue and net (loss) income attributable to Providence of the combined entity had the acquisition date been January 1, 2017, are:

	Year Ended December 31, 2018
Actual Circulation:	
Revenue	$ 2,205
Net loss	(2,108)

	Year Ended December 31,	
	2018	2017
Pro forma:		
Revenue	$ 1,388,203	$ 1,319,195
Net (loss) income attributable to Providence	(21,541)	49,097
Diluted (loss) earnings per share	$ (2.11)	$ 2.85

The pro forma information above for the year ended December 31, 2018 includes the elimination of acquisition related costs. Adjustments for all periods include expensing the incentive for two co-founders to be paid upon continuing employment, amortization expense based on the estimated fair value and useful lives of intangible assets and related tax effects. The pro forma financial information is not necessarily indicative of the results of operations that would have occurred had the transaction been affected on January 1, 2017.

23. Discontinued Operations

WD Services Segment

On December 21, 2018, the Company completed the sale of substantially all of the operating subsidiaries of its WD Services segment to APM and APM UK Holdings Limited, an affiliate of APM, except for the segment's employment services operations in Saudi Arabia. The Company's contractual counterparties in Saudi Arabia, including an entity owned by the Saudi Arabian government, assumed these operations beginning January 1, 2019.

The total cash consideration of the sale was $46,450, with the buyer retaining existing WD Services cash of $20,993. In addition to the purchase consideration, as a result of closing the transaction before the year end, the Company expects to realize cash tax benefits of approximately $51,861 from the transaction, including approximately $34,275 in tax refunds by the fourth quarter of 2019 in relation to its 2018 tax returns and loss carrybacks, which is inclusive of $646 of tax that would have been otherwise due in the fourth quarter of 2018. The remaining cash tax benefit of $17,586 is expected to be realized as an offset to tax payments over the following three years, based upon the Company's current estimate of taxable income. In addition, $1,072 of benefits related to capital loss carryforwards is available, which amount was reserved as of December 31, 2018.

On June 11, 2018, the Company entered into a Share Purchase Agreement to sell the shares of Ingeus France, its WD Services operation in France, for a de minimis amount. The sale was effective on July 17, 2018, after court approval.

On September 29, 2017, the Company and Mission Australia completed the sale of 100% of the stock of Mission Providence, a joint venture in the WD Services segment, pursuant to a share sale agreement. Upon the sale of Mission Providence, the Company received AUD 20,184, or $15,823 of proceeds, for its equity interest, net of transaction fees. Subsequently, a working capital adjustment was finalized in December 2017 resulting in the return of $229 of the proceeds. The related gain on sale of Mission Providence totaling $12,377 is recorded as "(Loss) income from discontinued operations, net of tax" in the accompanying consolidated statements of operations for the year ended December 31, 2017. Summary financial information for Mission Providence on a standalone basis for the nine months ended September 30, 2017 and the year ended December 31, 2016 is as follows:

	Nine months ended September 30, 2017	Year ended December 31, 2016
Revenue	$ 30,125	$ 36,546
Operating loss	(1,765)	(9,664)
Net loss	(1,934)	(8,843)

In accordance with ASC 205-20, *Presentation of Financial Statements-Discontinued Operations*, ("ASC 205-20") a component of an entity is reported in discontinued operations after meeting the criteria for held for sale classification if the disposition represents a strategic shift that has (or will have) a major effect on the entity's operations and financial results. The Company analyzed the quantitative and qualitative factors relevant to the disposition of the WD Services segment and determined that those held for sale conditions for discontinued operations presentation were met during the fourth quarter of 2018. As such, the historical financial results of the Company's historical WD Services segment, and the related income tax effects have been presented as discontinued operations for all periods presented in the accompanying consolidated financial statements.

HA Services Segment

Effective October 19, 2016, the Company completed the Matrix Transaction. At the closing, (i) cash consideration of $180,614 was paid by the Subscriber to Matrix based upon an enterprise value of $537,500 and (ii) Matrix borrowed approximately $198,000 pursuant to a credit and guaranty agreement providing for term loans in an aggregate principal amount of $198,000 and revolving loan commitments in an aggregate principal amount not to exceed $10,000, which was not drawn at the closing. At the closing, Matrix distributed $381,163 to Providence, in full satisfaction of a promissory note and accumulated interest between Matrix and Providence. At the closing, Providence made a $5,663 capital contribution to Matrix, as described in the Subscription Agreement, as amended, based upon its pro-rata ownership of Matrix, to fund the near-term cash needs of Matrix. On the day that was fifteen days following the closing date, Providence was, to the extent payable pursuant to the terms of the Subscription Agreement, as amended, entitled to receive from Matrix, or required to pay to Matrix, subsequent working capital adjustment payments. Providence received an initial payment of $5,172 from Matrix in November 2016 which is net of the capital contribution of $5,663 described above, based upon the initial working capital calculation as described in the Subscription Agreement. Additionally, in February 2017, the Company received a $75 payment from Matrix representing the final working capital adjustment payment.

In accordance with ASC 205-20, the Company analyzed the quantitative and qualitative factors relevant to the Matrix stock subscription transaction resulting in the Company no longer owning a controlling interest in Matrix, and determined that those held for sale conditions for discontinued operations presentation were met during the third quarter of 2016. As such, the historical financial results of Matrix, the Company's historical HA Services segment, and the related income tax effects have been presented as discontinued operations for all periods presented in the accompanying consolidated financial statements through October 19, 2016.

The Company has continuing involvement with Matrix through its ownership of 43.6% of the equity interests in Matrix as of December 31, 2018, as well as through a management consulting agreement, not to exceed ten years. Prior to the Matrix Transaction, the Company owned 100% of the equity interest in Matrix. Subsequent to the Matrix Transaction, the Company accounts for its investment in Matrix under the equity method of accounting. The Company's share of Matrix's gains and losses subsequent to the Matrix Transaction, which totaled a loss of $6,158, a gain of $13,445 and a loss of $1,789, is recorded as "Equity in net (gain) loss of investees" in its consolidated statement of operations for the years ended December 31,

2018, 2017 and 2016, respectively. Matrix's pretax loss for the year ended December 31, 2018 totaled $27,128. Matrix's pretax loss for the year ended December 31, 2017 totaled $2,948 and included $3,537 of transaction related expenses. Matrix's pretax loss for the period of

October 19, 2016 through December 31, 2016 totaled $7,027 and included $6,367 of transaction related expenses. There have been no cash inflows or outflows from or to Matrix subsequent to the closing of the Matrix Transaction, other than the working capital adjustments discussed above and management and advisory fees associated with its ongoing relationship with Matrix, of which $2,271 and $1,103 were received during the years ended December 31, 2018 and 2017, respectively. $259 and $247 are included in "Other receivables" in the consolidated balance sheets at December 31, 2018 and 2017, respectively, related to management fees receivable.

Human Services Segment

On September 3, 2015, the Company entered into a Purchase Agreement, pursuant to which the Company agreed to sell all of the membership interests in Providence Human Services, LLC and Providence Community Services, LLC, comprising the Company's Human Services segment. During the years ended December 31, 2018, 2017 and 2016, the Company recorded additional expenses and benefits related to the Human Services segment, principally related to legal proceedings as described in Note 20, *Commitment and Contingences*, related to an indemnified legal matter.

Results of Operations

The following table summarizes the results of operations classified as (loss) income from discontinued operations, net of tax, for the years ended December 31, 2018, 2017 and 2016. The HA Services segment column in the table below for the year ended December 31, 2016 reflects the financial results for HA Services from January 1, 2016 through October 19, 2016.

	Year ended December 31, 2018		
	Human Services Segment	**WD Services Segment**	**Total Discontinued Operations**
Service revenue, net	$ —	$ 264,553	$ 264,553
Operating expenses:			
Service expense	—	248,824	248,824
General and administrative expense	(495)	26,895	26,400
Asset impairment charge	—	9,203	9,203
Depreciation and amortization	—	11,864	11,864
Total operating expenses (benefits)	(495)	296,786	296,291
Operating income (loss)	495	(32,233)	(31,738)
Other expenses:			
Interest expense, net	—	35	35
Gain on foreign currency transactions	—	(388)	(388)
Other gain	—	(87)	(87)
Income (loss) from discontinued operations before gain on disposition and income taxes	495	(31,793)	(31,298)
Loss on disposition	—	(53,692)	(53,692)
(Provision) benefit for income taxes	(545)	48,482	47,937
(Loss) income from discontinued operations, net of tax	$ (50)	$ (37,003)	$ (37,053)

The loss on disposition in the table above includes the reclassification of translation loss realized upon sale of subsidiaries of $29,973. The benefit for income taxes in the table above for the WD Services segment includes tax benefits on the WD Services Sale of $51,861 and income tax expense on WD Services operations of $3,379.

	Year ended December 31, 2017		
	Human Services Segment	WD Services Segment	Total Discontinued Operations
Service revenue, net	$ —	$ 305,662	$ 305,662
Operating expenses:			
Service expense	—	265,417	265,417
General and administrative expense	9,674	28,845	38,519
Depreciation and amortization	—	12,851	12,851
Total operating expenses	9,674	307,113	316,787
Operating loss	(9,674)	(1,451)	(11,125)
Other expenses:			
Interest expense, net	—	74	74
Equity in net loss of investees	—	1,391	1,391
Gain on sale of equity investment	—	(12,377)	(12,377)
Loss on foreign currency transactions	—	345	345
(Loss) income from discontinued operations before gain on disposition and income taxes	(9,674)	9,116	(558)
Benefit for income taxes	3,691	(398)	3,293
(Loss) income from discontinued operations, net of tax	$ (5,983)	$ 8,718	$ 2,735

	Year ended December 31, 2016			
	Human Services Segment	HA Services Segment	WD Services Segment	Total Discontinued Operations
Service revenue, net	$ —	$ 166,090	$ 344,403	$ 510,493
Operating expenses:				
Service expense	—	120,906	320,147	441,053
General and administrative expense	7,966	2,148	30,384	40,498
Asset impairment charge	—	—	19,588	19,588
Depreciation and amortization	—	21,121	13,823	34,944
Total operating expenses	7,966	144,175	383,942	536,083
Operating (loss) income	(7,966)	21,915	(39,539)	(25,590)
Other expenses:				
Interest expense, net	—	9,929	68	9,997
Equity in net loss of investees	—	—	8,498	8,498
Write-off of deferred financing fees	—	2,302	—	2,302
Gain on foreign currency transactions	—	—	(1,374)	(1,374)
(Loss) income from discontinued operations before gain on disposition and income taxes	(7,966)	9,684	(46,731)	(45,013)
Gain on disposition	—	167,895	—	167,895
Benefit (provision) for income taxes	2,401	(63,254)	936	(59,917)
(Loss) income from discontinued operations, net of tax	$ (5,565)	$ 114,325	$ (45,795)	$ 62,965

Asset impairment charges

In connection with classifying the assets and liabilities of Ingeus France as held for sale during the three months ended June 30, 2018, the carrying value of the assets and liabilities was reduced to its estimated fair value less selling costs. As a result, an impairment charge of $9,203 was recorded during the year ended December 31, 2018 and is included in "Asset impairment charge" in the table above.

During the fourth quarter of 2016, the Company reviewed WD Services for impairment, primarily due to lower than expected volumes and unfavorable service mix shifts under a large contract in the United Kingdom ("UK") impacting future projections; additional clarity into the anticipated size and structure of the Work and Health Programme in the UK; the absence of additional details regarding the restructuring of the offender rehabilitation contract in the UK; and a change in senior management at WD Services during the fourth quarter. As a result, the Company performed a quantitative test comparing the fair value of the asset groupings comprising WD Services with the carrying amounts and recorded an asset impairment charge of $4,381 to definite-lived customer relationship intangible assets and an asset impairment charge of $9,983 to property and equipment, which are recorded in "Asset impairment charge" in the table above. In addition, the Company reviewed the carrying value of goodwill of WD Services, noting the carrying value exceeded the fair value. Therefore, the Company performed the second step of the impairment test, in which the fair value of the reporting unit is allocated to all of the assets and liabilities, on a fair value basis, with any excess representing the implied value of goodwill of the reporting unit. The fair value was determined using an income approach, which estimates the present value of future cash flows based on management's forecast of revenue growth rates and operating margins, working capital requirements and capital expenditures. Based on this analysis, the carrying value of goodwill of the WD Services reporting unit exceeded the implied fair value and the Company recorded an asset impairment charge of $5,224, which is included in "Asset impairment charge" on the Company's consolidated statement of operations.

Interest expense, net

The Company allocated interest expense, including amortization of deferred financing fees, to discontinued operations based on the portion of the debt that was required to be paid with the proceeds from the sale of the Matrix Transaction. The total allocated interest expense is included in "Interest expense, net" in the tables above. The total allocated interest expense for the year ended December 31, 2016 for the HA Services segment was $9,939.

Loss on disposition, net of tax

The total loss on disposition, net of tax, related to the sale of WD Services subsidiaries during the year ended December 31, 2018 is calculated as follows:

Total cash received, net of transaction costs and cash sold	$	12,780
Total WD Services net asset value as of transaction date, net of cash sold		(36,499)
Income tax benefit		51,861
Gain on sale before reclassification of currency translation, net of tax		28,142
Adjustment for reclassification of currency translation		(29,973)
Loss on disposition, net of tax	$	(1,831)

Assets and liabilities

The following table summarizes the carrying amounts of the major classes of assets and liabilities of discontinued operations in the consolidated balance sheets as of December 31, 2018 and 2017. Amounts as of December 31, 2018 represent the accounts of WD Services operations in Saudi Arabia, which were not sold as part of the WD Services Sale.

	December 31,	
	2018	**2017**
Cash and cash equivalents	$ 2,321	$ 42,512
Accounts receivable, net of allowance of $3,460 and $500 in 2018 and 2017, respectively	4,316	48,718
Other receivables	—	10
Prepaid expenses and other	414	12,784
Current assets of discontinued operations	$ 7,051	$ 104,024
Property and equipment, net	$ —	$ 12,705
Goodwill	—	26,453
Intangible assets, net	—	29,774
Equity investments	—	213
Other assets	—	51
Deferred tax asset	—	4,632
Noncurrent assets of discontinued operations	$ —	$ 73,828
Accounts payable	$ 486	$ 15,086
Accrued expenses	2,771	32,195
Deferred revenue	—	14,362
Current liabilities of discontinued operations	$ 3,257	$ 61,643
Other long-term liabilities	$ —	$ 5,170
Deferred tax liabilities	—	2,395
Noncurrent liabilities of discontinued operations	$ —	$ 7,565

Cash Flow Information

The following table presents depreciation, amortization, capital expenditures and significant operating noncash items of the discontinued operations for the years ended December 31, 2018, 2017 and 2016:

	For the year ended December 31, 2018		
	Human Services Segment	**WD Services Segment**	**Total Discontinued Operations**
Cash flows from discontinued operating activities:			
Depreciation	$ —	$ 6,711	$ 6,711
Amortization	—	5,153	5,153
Asset impairment charge	—	9,203	9,203
Stock-based compensation	—	6	6
Deferred income taxes	419	(74)	345

Cash flows from discontinued investing activities:				
Purchase of property and equipment	$ —	$ 6,725	$ 6,725	

	For the year ended December 31, 2017		
	Human Services Segment	WD Services Segment	Total Discontinued Operations
Cash flows from discontinued operating activities:			
Depreciation	$ —	$ 7,825	$ 7,825
Amortization	—	5,026	5,026
Stock-based compensation	—	57	57
Deferred income taxes	(3,433)	(507)	(3,940)
Cash flows from discontinued investing activities:			
Purchase of property and equipment	$ —	$ 4,527	$ 4,527

	For the year ended December 31, 2016		
	HA Services Segment	WD Services Segment	Total Discontinued Operations
Cash flows from discontinued operating activities:			
Depreciation	$ 3,661	$ 8,138	$ 11,799
Amortization	17,460	5,685	23,145
Asset impairment charge	—	19,588	19,588
Stock-based compensation	(18)	(11)	(29)
Deferred income taxes	52,338	(6,638)	45,700
Cash flows from discontinued investing activities:			
Purchase of property and equipment	$ 9,174	$ 19,810	$ 28,984

24. Segments

The Company owns subsidiaries and investments primarily engaged in the provision of healthcare services in the United States. The Company's *NET Services* segment, which primarily operates under the brands LogistiCare and Circulation, since its acquisition in September 2018, is the largest manager of NET programs for state governments and MCOs in the U.S. On September 21, 2018, we completed the acquisition of Circulation, which offers a full suite of logistics solutions to manage NET programs across all areas of healthcare, powered by its HIPAA-compliant digital platform. Circulation's technology expands LogistiCare's existing capabilities to manage transportation benefits, integrating all transportation capabilities while proactively monitoring for fraud, waste and abuse and emphasizing member convenience and satisfaction.

The Company's *Matrix Investment* segment consists of a minority investment in Matrix, a nationwide provider of home and mobile-based healthcare services for health plans in the U.S., including CHAs, quality gap closure visits, "level of service" needs assessments, and post-acute and chronic care management, providing such services through a network of community-based clinicians, and a fleet of mobile health clinics with advanced diagnostics capabilities. On October 19, 2016, affiliates of Frazier Healthcare Partners purchased a controlling equity interest in Matrix, with the Company retaining a non-controlling equity interest. Matrix's financial results prior to October 19, 2016 are presented as a discontinued operation.

The Company's *Corporate and Other* segment includes the Company's executive, accounting, finance, internal audit, tax, legal, public reporting and corporate development functions, as well as the results of the Company's captive insurance company. On April 11, 2018, the Company announced an Organizational Consolidation. See Note 10, *Restructuring and Related Reorganization Costs,* for further information.

Our segments are determined based on how the Company's chief operating decision maker ("CODM") manages the Company's business, makes operating decisions and evaluates operating performance. The operating results of the segments

include revenue and expenses incurred by the segment, as well as an allocation of direct expenses incurred by Corporate on behalf of the segment. Indirect expenses, including unallocated corporate functions and expenses, such as executive, accounting, finance, internal audit, tax, legal, public reporting, certain strategic and corporate development functions and the results of the Company's captive insurance company as well as elimination entries recorded in consolidation are reflected in Corporate and Other.

The following table sets forth certain financial information from continuing operations attributable to the Company's business segments for the years ended December 31, 2018, 2017 and 2016.

	Year Ended December 31, 2018			
	NET Services	Matrix Investment	Corporate and Other	Total
Service revenue, net	$ 1,384,965	$ —	$ —	$ 1,384,965
Service expense	1,285,029	—	(426)	1,284,603
General and administrative expense	14,247	—	31,851	46,098
Asset impairment charge	14,175	—	—	14,175
Depreciation and amortization	15,026	—	787	15,813
Operating income (loss)	$ 56,488	$ —	$ (32,212)	$ 24,276
Equity in net (gain) loss of investees	$ —	$ 6,158	$ —	$ 6,158
Investment in equity method investee	$ —	$ 161,503	$ —	$ 161,503
Total assets	$ 349,567	$ 161,503	$ 54,125	$ 565,195
Long-lived asset expenditures	$ 10,796	$ —	$ —	$ 10,796

	Year Ended December 31, 2017			
	NET Services	Matrix Investment	Corporate and Other	Total
Service revenue, net	$ 1,318,220	$ —	$ —	$ 1,318,220
Service expense	1,227,426	—	(3,799)	1,223,627
General and administrative expense	11,779	—	31,712	43,491
Asset impairment charge	—	—	—	—
Depreciation and amortization	13,275	—	343	13,618
Operating income (loss)	$ 65,740	$ —	$ (28,256)	$ 37,484
Equity in net (gain) loss of investees	$ —	$ (13,445)	$ —	$ (13,445)
Investment in equity method investee		$ 169,699		$ 169,699
Total assets	$ 294,127	$ 169,699	$ 62,412	$ 526,238
Long-lived asset expenditures	$ 15,319	$ —	$ 77	$ 15,396

	Year Ended December 31, 2016			
	NET Services	Matrix Investment	Corporate and Other	Total
Service revenue, net	$ 1,233,720	$ —	$ 122	$ 1,233,842
Service expense	1,132,857	—	(894)	1,131,963
General and administrative expense	11,406	—	28,121	39,527
Asset impairment charge	—	—	1,415	1,415
Depreciation and amortization	12,375	—	405	12,780
Operating income (loss)	$ 77,082	$ —	$ (28,925)	$ 48,157
Equity in net (gain) loss of investees	$ —	$ 1,789	$ —	$ 1,789
Long-lived asset expenditures	$ 10,845	$ —	$ 1,387	$ 12,232

Customer Information

12.6%, 13.8% and 13.1% of the Company's consolidated revenue was derived from one U.S. state Medicaid program for the years ended December 31, 2018, 2017 and 2016, respectively. In addition, substantially all of the Company's revenues are generated from domestic governmental agencies or entities that contract with governmental agencies.

25. Quarterly Results (Unaudited)

The quarterly consolidated financial statements presented below reflect WD Services and Human Services as discontinued operations for all periods presented. Additionally, certain costs incurred by the Corporate and Other segment which directly related to the WD Services Sale are also included as discontinued operations.

	Quarter ended			
	March 31, 2018	June 30, 2018 (1) (2)	September 30, 2018 (3)	December 31, 2018 (4)
Service revenue, net	$ 336,696	$ 343,736	$ 343,771	$ 360,762
Operating income	12,103	3,431	9,435	(693)
Income from continuing operations, net of tax	7,423	1,964	10,295	(1,454)
(Loss) income from discontinued operations, net of tax	(1,697)	(13,366)	(2,964)	(19,026)
Net income (loss) attributable to Providence	5,430	(11,215)	7,154	(20,350)
Earnings (loss) per common share (10):				
Basic	$ 0.27	$ (0.96)	$ 0.37	$ (1.67)
Diluted	$ 0.26	$ (0.95)	$ 0.37	$ (1.67)

	Quarter ended			
	March 31, 2017 (5)	June 30, 2017	September 30, 2017 (6)	December 31, 2017(6)(7)(8)(9)
Service revenue, net	$ 324,033	$ 338,805	$ 324,824	$ 330,558
Operating income	4,707	11,333	7,271	14,173
Income from continuing operations, net of tax	2,046	7,658	3,374	38,008
(Loss) income from discontinued operations, net of tax	(5,997)	(3,917)	11,575	1,074
Net (loss) income attributable to Providence	(4,325)	3,915	14,853	38,926
(Loss) earnings per common share (10):				
Basic	$ (0.40)	$ 0.15	$ 0.88	$ 2.44
Diluted	$ (0.40)	$ 0.14	$ 0.88	$ 2.42

(1) Operating income in the quarter ending June 30, 2018 was negatively impacted by higher transportation costs on a per trip basis as NET Services saw a shift in service mix to higher cost modes of transportation and higher average mileage per trip.

(2) Due to the disposition of Ingeus France in July 2018, the carrying value of its assets and liabilities were reduced to their estimated fair value less selling costs during the quarter ending June 30, 2018. As a result, an impairment charge of $9,203 was recorded during the quarter ending June 30, 2018, which is included in (loss) income from discontinued operations, net of tax.

(3) During the quarter ending September 30, 2018, the Company acquired all of the outstanding equity of Circulation. The Company's initial investment in Circulation was $3,000. As a result of the transaction, the fair value of this pre-acquisition interest increased to $9,577, and thus the Company recognized a gain of $6,577.

(4) (Loss) income from discontinued operations, net of tax in the quarter ending December 31, 2018, includes a loss on the disposition of substantially all of the WD Services segment of $1,056, net of tax. This sale was completed on December 21, 2018.

(5) The Company recorded expenses, net of tax, of $5,866 in (loss) income from discontinued operations, net of tax, in the quarter ending March 31, 2017 related to the Company's former Human Services segment, which are principally related to a settled legal matter.

(6) The Company recorded a gain on sale of equity investment of $12,606, net of tax, related to the sale of its equity interest in Mission Providence during the quarter ended September 30, 2017, which is reflected in (loss) income from discontinued operations, net of tax. During the quarter ended December 31, 2017, the Company recorded a reduction to the gain on sale of $229, related to the finalization of the working capital adjustment per the sale agreement.

(7) Operating income for the quarter ended December 31, 2017 increased as compared to the prior quarters in 2017 as a result of a decrease in service expense as a percentage of revenue for NET Services. This was primarily a result of lower operating costs as well as certain NET Services contractual adjustments recorded in the fourth quarter of 2017.

(8) The quarter ended December 31, 2017 includes the receipt of the Haverhill Litigation settlement of $5,363.

(9) The quarter ended December 31, 2017 includes a net tax benefit of $15,925 related to the enactment of the Tax Reform Act during the fourth quarter of 2017, due to the re-measurement of deferred tax liabilities by Providence as a result of the reduction in the U.S. corporate tax rate. Providence realized a tax benefit of $19,304, partially offset by $3,379 of increased tax expense resulting from additional equity in net gain of Matrix, due to Matrix' re-measurement of its deferred tax liabilities. The equity in net gain from Matrix for the quarter ended December 31,

2017 includes a tax benefit of $13,610 related to Matrix's re-measurement of deferred tax liabilities as a result of the Tax Reform Act.

(10) Earnings per share is computed independently for each of the quarters presented. Therefore, the sum of quarterly earnings per share may not equal the total computed for the year.

Item 9. ***Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.***

None.

Item 9A. ***Controls and Procedures.***

Evaluation of Disclosure Controls and Procedures

The Company, under the supervision and with the participation of its management (including its principal executive officer and principal financial officer), evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures, as defined in Rule 13a-15(e) of the Exchange Act as of the end of the period covered by this Annual Report on Form 10-K (December 31, 2018). Based upon this evaluation, the Company's principal executive and financial officers have concluded that such disclosure controls and procedures were effective to provide reasonable assurance that (i) information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive and financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

Management's report on internal control over financial reporting is presented in Part II, Item 8, of this Annual Report and is hereby incorporated by reference.

We acquired Circulation on September 21, 2018, as discussed in Note 22, *Acquisitions*, to the Consolidated Financial Statements. As permitted by the SEC staff's Frequently Asked Question 3 on Management's Report on Internal Control Over Financial Reporting and Certification of Disclosure in Exchange Act Periodic Reports (revised September 24, 2007), our management excluded from our assessment of internal control over financial reporting effectiveness as of December 31, 2018, Circulation's internal control over financial reporting associated with consolidated total assets of approximately 1.1%, and consolidated total revenues of approximately 0.2%, included in our Consolidated Financial Statements as of and for the year ended December 31, 2018. We will include Circulation in our assessment of the effectiveness of internal control over financial reporting starting in the third quarter of 2019.

Report of Independent Registered Public Accounting Firm

The attestation report of the registered public accounting firm on the Company's internal control over financial reporting is presented in Part II, Item 8, of this Annual Report and is hereby incorporated by reference.

Changes in Internal Control Over Financial Reporting

The principal executive and financial officers also conducted an evaluation of whether any changes in the Company's internal control over financial reporting occurred during the quarter ended December 31, 2018 that have materially affected or which are reasonably likely to materially affect such control. Such officers have concluded that no such changes have occurred.

Item 9B. ***Other Information.***

None.

PART III

Item 10. ***Directors, Executive Officers and Corporate Governance.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2019 annual meeting of stockholders; provided that if such proxy statement is not filed on or before April 30, 2019, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

Code of Ethics

We have adopted a code of ethics that applies to our senior management, including our chief executive officer, chief financial officer, controller and persons performing similar functions, as well as our directors, officers and employees. This code of ethics is part of our broader Compliance and Ethics Plan and Code of Conduct, which is available free of charge in the Investor Relations section of our website at www.prscholdings.com. We intend to disclose any amendment to, or waiver from, a provision of the code of ethics that applies to our principal executive officer, principal financial officer or principal accounting officer on our website. The information contained on our website is not part of, and is not incorporated in, this Annual Report on Form 10-K or any other report we file with or furnish to the SEC.

Item 11. ***Executive Compensation.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2019 annual meeting of stockholders; provided that if such proxy statement is not filed on or before April 30, 2019, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2019 annual meeting of stockholders; provided that if such proxy statement is not filed on or before April 30, 2019, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2019 annual meeting of stockholders; provided that if such proxy statement is not filed on or before April 30, 2019, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

Item 14. ***Principal Accounting Fees and Services.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2019 annual meeting of stockholders; provided that if such proxy statement is not filed on or before April 30, 2019, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

PART IV

Item 15. ***Exhibits, Financial Statement Schedules.***

(a)(1) Financial Statements

The following consolidated financial statements including footnotes are included in Item 8.

- Consolidated Balance Sheets at December 31, 2018 and 2017;
- Consolidated Statements of Operations for the years ended December 31, 2018, 2017 and 2016;
- Consolidated Statements of Comprehensive Income for the years ended December 31, 2018, 2017 and 2016;
- Consolidated Statements of Stockholders' Equity for the years ended December 31, 2018, 2017 and 2016; and
- Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2016.

(2) Financial Statement Schedules

Schedule II Valuation and Qualifying Accounts

	Balance at beginning of period	Additions: Charged to costs and expenses	Additions: Charged to other accounts	Deductions	Balance at end of period
Year Ended December 31, 2018:					
Allowance for doubtful accounts	$ 5,262	$ 338	$ (523) (1)	$ 3,223 (2)	$ 1,854
Year Ended December 31, 2017:					
Allowance for doubtful accounts	$ 5,164	$ 765	$ (537) (1)	$ 130 (2)	$ 5,262
Year Ended December 31, 2016:					
Allowance for doubtful accounts	$ 3,879	$ 2,903	$ 1,172 (1)	$ 2,790 (2)	$ 5,164

Notes:

Schedule above has been recast from prior year to exclude activity related to discontinued operations.

(1) Amounts primarily include the allowance for contractual adjustments related to our non-emergency transportation services operating segment that are recorded as adjustments to non-emergency transportation services revenue.
(2) Write-offs, net of recoveries.

All other schedules are omitted because they are not applicable or the required information is shown in our financial statements or the related notes thereto.

(3) Exhibits

Exhibit Number	Description
2.1	Share Sale Agreement, dated as of March 31, 2014, by and among The Providence Service Corporation, Pinnacle Australia Holdco Pty Ltd, Thérèse Virginia Rein, Gregory Kenneth Ashmead and GK Ashmead Holdings Pty Limited (as trustee of the GK Ashmead Nominees Trust) (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on April 1, 2014).
2.2	Australian Share Sale Agreement Side Deed, dated as of March 31, 2014, by and among The Providence Service Corporation, Pinnacle Australia Holdco Pty Ltd, Thérèse Virginia Rein, Gregory Kenneth Ashmead, GK Ashmead Holdings Pty Limited (as trustee of the GK Ashmead Nominees Trust) and Deloitte LLP (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on April 1, 2014).
2.3	Stock Subscription Agreement, dated as of August 28, 2016, by and among The Providence Service Corporation, CCHN Group Holdings, Inc. and Mercury Fortuna Buyer, LLC (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 31, 2016).
2.4	Amendment No. 1, dated as of October 19, 2016, to the Stock Subscription Agreement, dated August 28, 2016, by and among The Providence Service Corporation, CCHN Group Holdings, Inc. and Mercury Fortuna Buyer, LLC (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on October 25, 2016).
2.5	Agreement and Plan of Merger, dated as of September 14, 2018, among The Providence Service Corporation, LogistiCare Solutions, LLC, Catapult Merger Sub, Circulation, Inc. and Fortis Advisors LLC (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on September 17, 2018).
2.6	Share Purchase Agreement, dated November 7, 2018, among The Providence Service Corporation, Ingeus UK Holdings Limited, Advanced Personnel Management Group Pty Ltd, APM UK Holdings Limited and International APM Group Pty Limited (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended September 30, 2018 filed with the SEC on November 8, 2018).
3.1	Second Amended and Restated Certificate of Incorporation of The Providence Service Corporation, including Certificate of Designation of Series A Junior Participating Preferred Stock, as filed with the Secretary of State of Delaware on December 9, 2011 (Incorporated by reference from an exhibit to the registrant's annual report on Form 10-K for the year ended December 31, 2011 filed with the SEC on March 15, 2012).
3.2	Certificate of Amendment of the Certificate of Incorporation of The Providence Service Corporation, dated as of May 6, 2015 (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on May 7, 2015).
3.3	Amended and Restated Bylaws of The Providence Service Corporation, effective March 10, 2010 (Incorporated by reference from an exhibit to the registrant's annual report on Form 10-K for the year ended December 31, 2009 filed with the SEC on March 12, 2010).
4.1	Certificate of Designations of Series A Convertible Preferred Stock of The Providence Service Corporation, dated as of February 6, 2015 (Incorporated by reference from an exhibit to Amendment No. 1 to the registrant's annual report on Form 10-K/A for the year ended December 31, 2014 filed with the SEC on April 30, 2015).

10.1	Amended and Restated Credit and Guaranty Agreement, dated as of August 2, 2013, by and among The Providence Service Corporation and certain of its subsidiaries party thereto, Bank of America, N.A., SunTrust Bank, BMO Harris Bank, Merrill Lynch, Pierce, Fenner & Smith Incorporated and SunTrust Robinson Humphrey, Inc. and the lenders party thereto (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 5, 2013).
10.2	Amended and Restated Pledge Agreement, dated as of August 2, 2013, by and among The Providence Service Corporation, certain of its subsidiaries party thereto, and Bank of America, N.A., as administrative agent (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 5, 2013).
10.3	Amended and Restated Security Agreement, dated as of August 2, 2013, by and among The Providence Service Corporation, certain of its subsidiaries party thereto, and Bank of America, N.A., as administrative agent (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 5, 2013).

10.4	First Amendment to Amended and Restated Credit and Guaranty Agreement and Consent, dated as of May 28, 2014, by and among The Providence Service Corporation, the Guarantors named therein, the New Subsidiaries named therein, the Lenders and New Lender named therein and Bank of America, N.A., as administrative agent (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on June 3, 2014).
10.5	Second Amendment to the Amended and Restated Credit and Guaranty Agreement and Consent, dated as of October 23, 2014, by and among The Providence Service Corporation, certain of its subsidiaries party thereto, Bank of America, N.A., SunTrust Bank, Royal Bank of Canada, BMO Harris Bank, N.A., HSBC Bank USA, National Association, the other Lenders party thereto, Merrill Lynch, Pierce, Fenner & Smith Incorporated, SunTrust Robinson Humphrey, Inc., and RBC Capital Markets (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on October 24, 2014).
10.6	Third Amendment and Consent to the Amended and Restated Credit and Guaranty Agreement, dated as of September 3, 2015, by and among The Providence Service Corporation, certain of its subsidiaries party thereto, Bank of America, N.A., Sun Trust Bank, Royal Bank of Canada, BMO Harris Bank, N.A., HSBC Bank USA, National Association, the other lenders party thereto, Merrill Lynch Pierce, Fenner & Smith Incorporated, Sun Trust Robinson Humphrey, Inc. and RBC Capital Markets (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on September 8, 2015).
10.7	Fourth Amendment and Consent to the Amended and Restated Credit and Guaranty Agreement, dated as of August 28, 2016, by and among The Providence Service Corporation, the guarantors party thereto, the lenders party thereto and Bank of America, N.A., as Administrative Agent (Incorporated by reference to an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 31, 2016).
10.8	Employment Agreement, dated January 14, 2015, by and between The Providence Service Corporation and James Lindstrom (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on January 21, 2015).
10.9+	Employment Agreement, dated as of September 28, 2015, by and between The Providence Service Corporation and David Shackelton (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on November 20, 2015).
10.10+	Amended & Restated Employment Agreement, dated January 9, 2018, by and between The Providence Service Corporation and David Shackelton (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on January 16, 2018).
10.11+	Employment Agreement, dated April 4, 2016, between The Providence Service Corporation and Sophia Tawil (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2016 filed with the SEC on May 6, 2016).
10.12+	Amended & Restated Employment Agreement, dated January 9, 2018, by and between The Providence Service Corporation and Sophia Tawil (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on January 16, 2018).
10.13+	Employment Agreement, dated November 15, 2017, between The Providence Service Corporation and R. Carter Pate (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on November 15, 2017).
10.14+	Letter Agreement, dated January 10, 2018, by and between The Providence Service Corporation and William Severance (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on January 16, 2018).
10.15+	

	The Providence Service Corporation Non-Qualified Stock Option Agreement, dated April 9, 2018, between The Providence Service Corporation and R. Carter Pate (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on April 11, 2018).
10.16+	Amendment No. 1 to The Providence Service Corporation Non-Qualified Stock Option Agreement, dated May 1, 2018, between The Providence Service Corporation and R. Carter Pate (Incorporated by reference from an exhibit to the registrant's Registration Statement on Form S-1 filed with the SEC on May 9, 2018).
10.17+	Employment Agreement, dated August 18, 2018, by and among The Providence Service Corporation, LogistiCare Solutions, LLC and Kevin M. Dotts (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 22, 2018).
10.18+	The Providence Service Corporation 2006 Long-Term Incentive Plan, as amended and restated effective July 27, 2016 (Incorporated by reference from an appendix to the registrant's definitive proxy statement on Schedule 14A filed with the SEC on June 14, 2016).

10.19+	Form of Restricted Stock Agreements (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2011 filed with the SEC on May 6, 2011).
10.20+	Form of Stock Option Agreements (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2011 filed with the SEC on May 6, 2011).
10.21+	Form of Special Incentive Stock Option Award Agreement (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 11, 2015).
10.22+	Form of Matching Incentive Stock Option Award Agreement (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 11, 2015).
10.23	Amended and Restated Limited Liability Company Agreement of Mercury Parent, LLC, by and between Prometheus Holdco, LLC and Mercury Fortuna Buyer, LLC, dated as of October 19, 2016 (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on October 25, 2016).
10.24	Second Amended and Restated Limited Liability Company Agreement of Mercury Parent, LLC, by and between Prometheus Holdco, LLC and Mercury Fortuna Buyer, LLC, dated February 16, 2018 (Incorporated by reference from an exhibit to the registrant's annual report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 9, 2018).
10.25+	Form of Matching Stock Option Agreement (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2017 filed with the SEC on May 10, 2017).
10.26+	Form of Stock Option Agreement (Incorporated by reference from an exhibit to the registrant's annual report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 9, 2018).
10.27+	Letter agreement, dated September 21, 2015, between The Providence Service Corporation and Matthew Umscheid (Incorporated by reference from an exhibit to the registrant's annual report on Form 10-K for the year ended December 31, 2017 filed with the SEC on March 9, 2018).
10.28+	The Providence Service Corporation Employee Retention Plan (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on April 11, 2018).
10.29	Registration Indemnification Agreement, dated May 9, 2018, between The Providence Service Corporation, Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Coliseum Capital Co-Invest, L.P. and Blackwell Partners, LLC - Series A (Incorporated by reference from an exhibit to the registrant's Registration Statement on Form S-1 filed with the SEC on May 9, 2018).
10.30+	Form of Deferred Share Unit Agreement (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended June 30, 2018 filed with the SEC on August 8, 2018).
10.31+	Form of Amendment to Retention Letter under The Providence Service Corporation Employee Retention Plan (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended September 30, 2018 filed with the SEC on November 8, 2018).
21.1*	Subsidiaries of the Registrant.
23.1*	Consent of KPMG LLP.
23.2*	Consent of Deloitte & Touche LLP (Mercury Parent, LLC financial statements).
23.3*	Consent of KPMG LLP (Mercury Parent, LLC financial statements).

31.1*	Certification pursuant to Securities Exchange Act Rules 13a-14 and 15d-14 of the Chief Executive Officer.
31.2*	Certification pursuant to Securities Exchange Act Rules 13a-14 and 15d-14 of the Chief Financial Officer.
32.1*	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, of the Chief Executive Officer.
32.2*	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, of the Chief Financial Officer.
99.1*	Financial Statements of Mercury Parent, LLC.
101. INS*	XBRL Instance Document
101.SCH*	XBRL Schema Document

101.CAL*	XBRL Calculation Linkbase Document
101.LAB*	XBRL Label Linkbase Document
101.PRE*	XBRL Presentation Linkbase Document
101.DEF*	XBRL Definition Linkbase Document

+ Management contract or compensatory plan or arrangement.

* Filed herewith.

Item 16. Form 10-K Summary.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

THE PROVIDENCE SERVICE CORPORATION

By: /s/ R. Carter Pate
R. Carter Pate
Interim Chief Executive Officer

Dated: March 1, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/S/ R. CARTER PATE R. Carter Pate	Interim Chief Executive Officer (Principal Executive Officer)	March 1, 2019
/S/ KEVIN DOTTS Kevin Dotts	Chief Financial Officer (Principal Financial Officer)	March 1, 2019
/S/ LAURENCE ORTON Laurence Orton	Senior Vice President, Finance (Principal Accounting Officer)	March 1, 2019
/S/ CHRISTOPHER S. SHACKELTON Christopher S. Shackelton	Chairman of the Board	March 1, 2019
/S/ TODD J. CARTER Todd J. Carter	Director	March 1, 2019
/S/ DAVID A. COULTER David A. Coulter	Director	March 1, 2019
/S/ RICHARD A. KERLEY Richard A. Kerley	Director	March 1, 2019
/S/ LESLIE V. NORWALK Leslie V. Norwalk	Director	March 1, 2019
/S/ FRANK J. WRIGHT Frank J. Wright	Director	March 1, 2019

10-K 1 prsc-12312017x10k.htm 10-K

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2017

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to
Commission file number 001-34221

The Providence Service Corporation
(Exact name of registrant as specified in its charter)

Delaware	**86-0845127**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
700 Canal Street, Third Floor, Stamford, CT	**06902**
(Address of principal executive offices)	**(Zip code)**

Registrant's telephone number, including area code: (203) 307-2800

Securities registered pursuant to Section 12(b) of the Act:

Title of each Class	**Name of each exchange on which registered**
Common Stock, $0.001 par value per share	**The NASDAQ Global Select Market**

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☐ Yes ☒ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). ☒ Yes ☐ No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐
Emerging growth company	☐		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☒ No

The aggregate market value of the voting and non-voting common equity of the registrant held by non-affiliates based on the closing price for such common equity as reported on The NASDAQ Global Select Market on the last business day of the registrant's most recently completed second fiscal quarter (June 30, 2017) was $576.8 million.

As of March 5, 2018, there were outstanding 12,866,551 shares (excluding treasury shares of 4,656,738) of the registrant's Common Stock, $0.001 par value per share.

DOCUMENTS INCORPORATED BY REFERENCE

All or a portion of Items 10 through 14 in Part III of this Annual Report on Form 10-K are incorporated by reference to our definitive proxy statement on Schedule 14A for our 2018 stockholder meeting; provided that if such proxy statement is not filed on or before April 30, 2018, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

TABLE OF CONTENTS

Part I

In this Annual Report on Form 10-K, the words the "Company", the "registrant", "we", "our", "us", "Providence" and similar terms refer to The Providence Service Corporation and, except as otherwise specified herein, to our subsidiaries. When such terms are used in reference to the Company's common stock, $0.001 par value per share (the "Common Stock), and the Series A Convertible Preferred Stock, $0.001 par value per share (the "Preferred Stock"), they refer specifically to The Providence Service Corporation.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains certain statements that may be deemed "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including statements related to the Company's strategies or expectations about revenues, liabilities, results of operations, cash flows, ability to fund operations, profitability, ability to meet financial covenants, contracts or market opportunities. The Company may also make forward-looking statements in other reports filed with the Securities and Exchange Commission (the "SEC"), in materials delivered to stockholders and in press releases. In addition, the Company's representatives may from time to time make oral forward-looking statements. In certain cases, you may identify forward looking-statements by words such as "may", "will", "should", "could", "expect", "plan", "project", "intend", "anticipate", "believe", "seek", "estimate", "predict", "potential", "target", "forecast", "likely", the negative of such terms or comparable terminology. In addition, statements that are not historical statements of fact should also be considered forward-looking statements. These forward-looking statements are based on the Company's current expectations, assumptions, estimates and projections about its business and industry, and involve risks, uncertainties and other factors that may cause actual events to be materially different from those expressed or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, the risks described under Item 1A in Part I of this Annual Report on Form 10-K.

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date the statement was made. The Company is under no obligation to (and expressly disclaims any such obligation to) update any of the information in any forward-looking statement if such forward-looking statement later turns out to be inaccurate, whether as a result of new information, future events or otherwise.

Item 1. ***Business.***

Background

The Providence Service Corporation owns subsidiaries and investments primarily engaged in the provision of healthcare services in the United States and workforce development services internationally. The subsidiaries and other investments in which we hold interests comprise the following segments:

- Non-Emergency Transportation Services ("NET Services") – Nationwide manager of non-emergency medical transportation ("NET") programs for state governments and managed care organizations.
- Workforce Development Services ("WD Services") – Global provider of employment preparation and placement services, legal offender rehabilitation services, youth community service programs and certain health related services to eligible participants of government sponsored programs.
- Matrix Investment – Minority interest in CCHN Group Holdings, Inc. and its subsidiaries ("Matrix"), a nationwide provider of in-home care optimization and management solutions, including comprehensive health assessments ("CHAs"), to members of managed care organizations, accounted for as an equity method investment. On February 16, 2018, Matrix acquired HealthFair, expanding its service offerings to include mobile health assessments, advanced diagnostic testing, and additional care optimization services.

In addition to its segments' operations, the Corporate and Other segment includes the Company's activities at its corporate office that include executive, accounting, finance, internal audit, tax, legal, public reporting, certain strategic and corporate development functions and the results of the Company's captive insurance company. We are actively monitoring these activities as they relate to our capital allocation and acquisition strategy to ensure alignment with Providence's overall strategic objectives and its goal of enhancing shareholder value.

The Company is a Delaware corporation formed in 1996 and headquartered in Stamford, Connecticut.

Business Strategies

Our businesses are operated on a decentralized basis and do not share any integrated functions such as sales, marketing, purchasing, human resources, accounting, finance or legal. They pursue strategies reflective of their respective industries and operating models. Our segments' core competencies include developing and managing large provider networks, tailoring healthcare and workforce development service offerings to the unique needs of diverse communities and populations, and implementing technology-enabled delivery models to achieve superior outcomes in low cost settings. We pursue both organic and inorganic growth through entry into adjacent markets and complementary service lines, particularly with offerings that may leverage the advantages inherent in our large-scale, technology-enabled, networks. In particular, as it relates to inorganic growth, we are actively evaluating the optimal industry sectors, such as the non-emergency medical transportation industry and others in which businesses complementary to our NET Services business operate, around which to focus our merger and acquisition activity. This ongoing evaluation takes into consideration and balances a number of factors, including the strategic goals, competitive landscape, and growth opportunities of our current segments, in an attempt to direct our capital towards those areas of our business most likely to drive long-term value creation and generate the highest levels of return for our shareholders. We also may enter into strategic partnerships or dispose of businesses, as demonstrated by the Matrix Transaction (defined below) and the Human Services Sale (defined below), based on a variety of factors, including availability of alternative opportunities to deploy capital or otherwise maximize shareholder value as well as other strategic considerations. The outcome of our active evaluation of the optimal industry sectors around which to focus our merger and acquisition activity as well as the potential future entry into strategic partnerships or potential disposition of businesses may impact the extent and manner in which we deploy resources across Providence, including strategic and administrative resources between Corporate and Other and our operating segments.

Discontinued Operations

On October 19, 2016, affiliates of Frazier Healthcare Partners purchased a controlling equity interest in Matrix, with Providence retaining a noncontrolling equity interest (the "Matrix Transaction"). Matrix's financial results prior to October 19, 2016 are presented as a discontinued operation. In addition, on November 1, 2015, the Company completed its sale of the Human Services Segment (the "Human Services Sale"), which is accounted for as a discontinued operation for all periods presented.

Description of Our Segments

The Company operates in two principal business segments, NET Services and WD Services. In addition, Providence holds a noncontrolling interest in Matrix, which is a reportable segment for financial reporting purposes (the "Matrix Investment"). Financial information about segments and geographic areas, including revenues, operating income (loss), and long-lived assets of each segment, is included in Note 21, *Segments*, to our consolidated financial statements and is incorporated herein by reference. See Item 1A, Risk Factors, for a discussion of risks related to our operations and investments.

NET Services

Services offered. NET Services provides non-emergency transportation solutions to clients in 38 states and the District of Columbia. As of December 31, 2017, approximately 23.6 million individuals were eligible to receive our transportation services, and during 2017, NET Services managed 66.8 million trips. For 2017, 2016 and 2015, NET Services accounted for 81.2%, 78.2% and 73.3%, respectively, of Providence's consolidated service revenue, net.

NET Services primarily contracts with state Medicaid programs and managed care organizations ("MCOs" and collectively "NET customers") for the coordination of their members' ("NET end-users") non-emergency transportation needs. NET end-users are typically Medicaid or Medicare eligible members, whose limited mobility or financial resources hinders their ability to access necessary healthcare and social services. We believe our transportation services enable access to care that not only improves the quality of life and health of the populations we serve, but also enables many of the individuals we serve to pursue independent living in their homes rather than in more expensive institutional care settings.

NET Services program delivery is dependent upon a highly-integrated technology platform and business process as well as the management of a multifaceted network of subcontracted transportation providers. Our technology platform is purpose-built for the unique needs of our industry and is highly scalable, capable of supporting substantial growth in our

clients' current and future membership base. In addition, our technology platform efficiently provides a broad interconnectivity among NET end-users, NET customers, and our network of transportation providers. We believe this technological capability and our industry experience uniquely position us as a future focal point in the evolving healthcare industry to introduce valuable population insights. In 2016 and 2017, we introduced service offerings and new technological features for NET end-users to improve service levels, lower costs and build the foundation for additional data analytics capabilities.

To fulfill the transportation needs of NET end-users, we apply our proprietary technology platform to an extensive network of approximately 5,100 transportation resources. This includes our in-network roster of fully contracted transportation providers who operate sedans, wheelchair equipped vehicles, multi-passenger vans and ambulances. Our system also utilizes partnerships with on-demand transportation network companies, mass transit entities, mileage reimbursement programs, taxis and county-based emergency medical service providers. To promote safety, quality, and compliance, our in-network transportation providers undergo an in-depth credentialing and education process. Our proprietary technology platform is designed to connect with our external partners' application program interfaces to improve on-time and on-demand performance, provide real time information and analytics (including live vehicle location data), minimize cancellations and better allow for the scale required to provide an effective, nationwide service.

Our transportation management services also include fraud, waste, and abuse and utilization review programs designed to monitor that our transportation services are provided in compliance with Medicaid program rules and remediate issues that are identified. Compliance controls include ongoing monitoring, auditing and remediation efforts, such as validating NET end-user eligibility for the requested date of service and employing a series of gatekeeping questions to check that the treatment type is covered and the appropriate mode of transportation is assigned. We also conduct post-trip confirmations of attendance directly with the healthcare providers for certain repetitive trips and we employ field monitors to inspect transportation provider vehicles and observe some transports in real time. Our claims validation process generally limits payment to trips that are properly documented, have been authorized in advance, and are billed at the pre-trip estimated amount.

In 2016, NET Services launched a strategic initiative to enhance client and member satisfaction and drive greater operational efficiencies. This initiative focuses on developing and deploying new processes and technologies needed to: progress towards an industry-leading call center and reservation scheduling platform; improve member communication, accessibility, and satisfaction; optimize the utilization of our extensive network of transportation providers; and build the foundation for additional analytical capabilities. Implementations under this strategic initiative that were completed in 2017 include new workforce management tools aimed at streamlining our call center operations and decreasing payroll costs, tools and models to better monitor transportation provider performance and capacity availability, and rate setting protocols aimed at lowering transportation costs and improving service quality. The full implementation of the initiative is expected to be substantially completed by the end of 2018.

Revenue and customers. In 2017, contracts with state Medicaid agencies and MCOs represented 55.9% and 44.1%, respectively, of NET Services' revenue. NET Services derived 13.8%, 13.1% and 15.0% of its revenue from a single state Medicaid agency for the years ended December 31, 2017, 2016 and 2015, respectively. The next four largest NET Services customers in the aggregate comprised 22.3%, 22.6% and 24.2% of NET Services' revenue for the years ended December 31, 2017, 2016 and 2015, respectively.

Contracts with state Medicaid agencies are typically for three to five years with multiple renewal options. Contracts with MCOs continue until terminated by either party upon reasonable notice (as determined in accordance with the contract), and allow for regular price adjustments based upon utilization and transportation cost. As of December 31, 2017, 30.8% of NET Services revenue was generated under state Medicaid contracts that are subject to renewal within the next 12 months. In 2017, NET Services renewed contracts representing 29.5% of its revenue in such year, including its contract with the New Jersey Department of Human Services, Division of Medical Assistance and Health Services, to provide non-emergency medical transportation management services to Medicaid-eligible New Jersey residents.

77.9% of NET Services' revenue in 2017 was generated under capitated contracts where we assume the responsibility of meeting the covered healthcare related transportation requirements of a specific population based on per-member per-month fees for the number of members in the customer's program. Revenue is recognized based on the population served during the period. Under certain capitated contracts, partial payment is received as a prepayment during the month service is provided. These partial payments may be due back to the customer, or additional payments may be due to the Company, after each reconciliation period, based on a reconciliation of actual utilization and cost compared to the prepayment made. 22.1% of NET Services' revenue was generated under other types of fee arrangements, including administrative services only, fee for service ("FFS"), cost plus and flat fee contracts, under which fees are generated based upon billing rates for specific services or defined membership populations.

Seasonality. While revenue is generally fixed, primarily as a result of the capitated nature of the majority of our contracts, service expense varies based on the utilization of our services. The quarterly operating income and cash flows of

NET Services normally fluctuate as a result of seasonal variations in the business, principally due to lower transportation demand during the winter season and higher demand during the summer season.

Competition. We compete with a variety of national organizations that provide similar healthcare and social services related transportation, such as Medical Transportation Management, Southeastrans, Veyo, and American Medical Response, as

well as local and regional providers. Most local competitors seek to win contracts for specific counties or small geographic territories whereas we and other larger competitors seek to win contracts for an entire state or large regional area. We compete based upon a number of factors, including our nationwide network, technical expertise, experience, service capability, service quality, and price.

Business development. Our sales and marketing strategy relies on a concentrated business development effort, with centralized marketing programs. Due to the critical nature of our services, our customers rely upon our past delivery performance record, network development and management expertise, technical expertise and capability, and specialized knowledge. A significant portion of our revenue is generated from long-term, repeat customers. Our long-term strategy is to improve our position as the preferred provider of transportation, complementary network-based services and data analytics offerings to a broad array of healthcare payers. Key elements of our long-term strategy include continued investment in our technologies, enabling us to both lower costs and improve service delivery. We also consider acquisitions of businesses that serve our market or leverage our nationwide infrastructure.

WD Services

Services offered. WD Services is a global provider of employment preparation and placement services, legal offender rehabilitation services, youth community service programs and certain health related services to eligible participants of government sponsored programs. For 2017, 2016 and 2015, WD Services accounted for 18.8%, 21.8% and 26.7%, respectively, of Providence's consolidated revenue.

WD Services' end user client base ("WD end-users") is broad and includes the disabled, recently and long-term unemployed and individuals seeking new skills, as well as individuals that are coping with medical illnesses, are newly graduated from educational institutions, or are being released from incarceration.

As of December 31, 2017, WD Services operated in 10 countries outside of the U.S. These countries included the United Kingdom ("UK"), France, Saudi Arabia, South Korea, Canada, Germany, Australia, Switzerland and Singapore. WD Services also holds a noncontrolling interest in a joint venture in Spain.

In order to build upon its leadership position in the UK employment services industry, enhance client satisfaction and drive greater operational efficiencies, WD Services implemented the Ingeus Futures program, which was substantially completed in 2017. This program included organizational restructuring, the development and deployment of new processes and technologies, and increased business development resources. Each aspect of the program was aimed at improving operational efficiencies and client services as well as developing the internal capabilities necessary to ensure long-term profitable growth in the employment, training and healthcare industries.

Revenue, customers and clients. The majority of WD Services' revenue is generated through the provision of employability, legal offender rehabilitation and training programs to national government entities seeking to reduce unemployment or recidivism rates. For the years ended December 31, 2017, 2016 and 2015, 61.4%, 68.3% and 75.5%, respectively, of WD Services' revenue was derived from operations in the UK, with 38.6%, 31.7% and 24.5%, respectively, derived from operations outside the UK. Additionally, during the years ended December 31, 2017, 2016 and 2015, respectively, 19.6%, 28.9% and 40.0% of WD Services' revenue was derived from a contract with the UK government's Department of Work and Pensions for employability services and 27.1%, 25.9% and 28.2% of WD Services' revenue was derived from a contract with the UK government's Ministry of Justice (the "MOJ"), for legal offender rehabilitation services. Revenue under the UK employability services contract is decreasing as expected, as referrals ended under this program in March 31, 2017. In late 2017, WD Services was awarded three new employability contracts and one sub-contract under the new Work and Health Programme in the UK, allowing Ingeus to continue to maintain its position as a leader in the UK workforce development market, although overall this program has a smaller scale than the legacy employability services contract. During 2017, there was negligible revenue under the new Work and Health Programme.

The revenue earned by WD Services under its contracts is often derived through a combination of different revenue channels including, but not limited to, fees contingent upon: (1) the volume of WD end-users referred to and/or admitted into a specific program, (2) the achievement of defined outcomes for specific individuals, such as a job placement or continued employment and (3) the achievement of defined outcomes for a population of individuals over a specific time period, such as aggregate employment or recidivism rates. The relative contributions of different revenue channels under a specific contract can fluctuate meaningfully over the life of a contract and thus contribute to significant earnings volatility. Revenue

recognition related to our National Citizen Services (“NCS”) youth programs can be particularly volatile due to the timing of services provided, which typically occur in the second and third quarters of each year. WD Services also earns revenue under fixed FFS arrangements, based

upon contractual rates established at the outset of the contract or the applicable contract year, although the rate may be prospectively adjusted during the contract year based upon actual volumes. Volume levels are typically not guaranteed under contracts.

The nature of the services offered by WD Services often relies on our ability to improve a certain set of outcomes at a reduced cost versus previously utilized in-sourced delivery models. As a result, as we commence new contracts using transformational delivery models, we are often required to invest significant upfront capital for information technology, human resources, facilities and other onboarding costs, such as consultants and redundancy payments. The level of upfront funding required is dependent upon the size and nature of the contract. Although significant upfront funding may be required, revenues are often payable only as services are delivered and, in some cases, only after incentive measures have been achieved over a multi-year period. As a result of these two factors, there can be significant variability in our earnings from quarter-to-quarter and year-to-year. In addition, under the majority of WD Services' contracts, the Company relies on its customers, which include government agencies, to provide referrals, for which the Company can provide services and earn revenue. The timing and magnitude of referrals can fluctuate significantly, leading to volatility in revenue. The Company also relies on certain customers to periodically provide information regarding the achievement of service delivery targets, which information could result in reductions in future payments if targets are not met. As a result, we often measure a contracts success over the entire term of the contract and believe the financial results of WD Services are best viewed from a multi-year perspective.

The MOJ is currently reviewing its program for outsourcing probationary services, which includes its contracts with our subsidiary Reducing Reoffending Partnership ("RRP"), which is in our WD Services segment. The review includes an investigation regarding sustainability of the economic terms of such contracts, as well as data relating to reoffending statistics and other factors that could impact contractual performance measures. The potential impact of this review on RRP's agreement with the MOJ, including with respect to any potential payments to the MOJ that may be required, cannot be determined at this time because the review is ongoing. See also "Risk Factors—Risks Related to our Business—If we fail to satisfy our contractual obligations, we could be liable for damages and financial penalties, which may place existing pledged performance and payment bonds at risk as well as harm our ability to keep our existing contracts or obtain new contracts and future bonds."

Seasonality. While there has been period-to-period variability in WD Services' earnings due to the factors discussed above and also set forth in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations – Revenues and Expenses – WD Services", there has not been a material seasonal effect on WD Services' results of operations.

Competition. In the UK, U.S., Saudi Arabia and Singapore the workforce development market is served by large, often multi-national, corporations, along with national and regional for-profit and non-profit entities. In Canada, France, Germany, South Korea, Spain and Switzerland, our competition is primarily companies specific to the geography, nationally or regionally, and both privately owned for-profit and non-profit entities. In the UK, the offender rehabilitation market is served by large corporations, often working with charitable sector providers. In general our larger competitors internationally include Maximus, Interserve, Sodexo, The Reed Group and Working Links.

The market for services to governments is competitive and subject to change and pricing pressure, particularly during the bidding for new contracts and contract renewals. However, due to the critical nature of our offerings and the WD end-users we serve, market entry can be difficult for new entrants or those without prior established track-records. Other barriers to entry include operational service complexity and significant upfront investments. This can include establishment of complex IT systems which often must interface with government systems, significant monitoring and reporting obligations, delivery from sites across wide geographies, and management and development of supply chains.

Business development. Our business development activities are performed both locally and centrally from WD Services' London headquarters. Through local and global networks and relationships, we become aware of new opportunities for which we develop bids through competitive processes. The nature of the competitive processes varies from highly competitive to being one of a few providers, or the sole provider, to bid on a contract. We pursue only those contracts that meet certain investment criteria, including risk-weighted return on capital thresholds, and involve the provision of services where we believe our experience will allow us to deliver differentiated and improved outcomes for our clients.

Matrix Investment

Providence's Matrix Investment is comprised of our interest in Matrix. Since the completion of the Matrix Transaction, the Company has had a noncontrolling equity interest in Matrix. The Company and an affiliate of Frazier Health Partners (the "Frazier Subscriber"), which holds the controlling equity interest in Matrix, are party to the Second Amended and Restated Limited Liability Company Agreement (the "Operating Agreement") of Mercury Parent, LLC, the company through which the parties hold their equity interests in Matrix. The Operating Agreement sets forth certain terms and conditions regarding the ownership by the Company and Frazier Subscriber of interests in Mercury Parent and their indirect ownership of common stock of Matrix, and

provides for, among other things, certain liquidity and governance rights and other obligations and rights, in each case, on the terms and conditions contained therein.

At December 31, 2017, the Company owned a 46.6% noncontrolling interest in Matrix. Prior to the closing of the Matrix Transaction, the financial results of Matrix were included in our Health Assessment Services ("HA Services") segment. The Company's proportionate share of Matrix's net assets and financial results for the period following the closing of the Matrix Transaction are presented under the equity method. The assets, liabilities and financial results of Matrix for the period prior to the closing of the Matrix Transaction are presented within discontinued operations. For additional information regarding the Matrix Transaction, see Note 20, *Discontinued Operations,* to our consolidated financial statements.

Services offered. Matrix provides in-home care optimization and care management solutions, which include CHAs. As of December 31, 2017, Matrix utilized a national network of over 5,800 clinical providers, including 1,700 nurse practitioners ("NPs"), located across 50 states, to provide its services primarily to members of Medicare Advantage ("MA") health plans.

Matrix recently expanded its provider network and service offerings through a series of acquisitions. In December 2017, Matrix grew its clinical provider network through its acquisition of LP Health Services, a provider of quality and wellness visits on behalf of Medicaid/Duals managed care plans across the U.S., for a purchase price of $3.8 million. LP Health Services' revenue for the year ended December 31, 2017 was approximately $6 million.

In February 2018, Matrix completed its acquisition of HealthFair, a leading operator of mobile clinics which offer preventative health assessment and advanced diagnostic testing services, including laboratory, ultrasound, EKG and mammography testing, for a purchase price of $160 million plus an earnout payment contingent on HealthFair's 2018 performance. With the addition of HealthFair, Matrix's network increased to more than 6,000 community-based providers across all 50 states, including over 1,700 NPs. We believe the combination of the two organizations will provide health plan members with more convenient access to important care management and preventative health services. As a result of the rollover of certain equity interests of HealthFair, Providence's equity ownership in Matrix was 43.6% as of February 16, 2018. HealthFair's revenue for the year ended December 31, 2017 was approximately $45 million.

Matrix primarily generates revenue from CHAs, which obtain a health plan members' information related to health status, social, environmental and medical risks and help the MA plans improve the accuracy of such information. Matrix's services typically commence with a member analysis that utilizes client data, such as medical claims data, to maximize its ability to improve client and member outcomes as a result of the assessment process. Through Matrix's contact centers, which include approximately 160 colleagues, Matrix pursues additional data collection and schedules assessments. Matrix's NPs then conduct a CHA, which is comprised of a physical examination and other diagnostic services, in the member's home. Matrix also operates a care management offering which provides additional data analytics and chronic care management services.

Matrix's services are dependent upon its technology platform which integrates the clinical provider network, operations infrastructure, call centers and clients. Matrix's platform is designed for the unique needs of its industry, is highly scalable and can support substantial growth. We believe Matrix's network and platform positions Matrix as a future focal point in the evolving healthcare industry in the introduction of both additional population insights and care management services. With data provided by its health plan clients, Matrix utilizes analytics to determine which members it can most effectively lower costs and improve outcomes through face-to-face engagements with clinicians. Each program is customized and is served by a comprehensive team of case managers, nurse practitioners, registered nurses, and trained call center colleagues.

Revenue, customers and clients. As of December 31, 2017, Matrix's customers included 48 health plans, including for-profit multi-state health plans and non-profit health plans that operate in only one state or several counties within one state. For the year ended December 31, 2017, Matrix's top five customers accounted for 72.2% of its revenue, as its largest customer accounted for 30.9% of its revenue and its second largest customer account for 26.8% of its revenue. Matrix enters into annual or multi-annual contracts with its customers under which it is paid on a per assessment basis.

Seasonality. The Company attempts to perform CHAs evenly throughout the year to efficiently utilize NP capacity, although the timing of performance is driven by client demand.

Competition. We believe that Matrix and CenseoHealth, which announced in December 2017 a combination with Advance Health, a smaller competitor, are the largest independent providers of CHAs to the health plan market. There are many smaller competitors, such as EMSI Healthcare Services, MedXM, which was acquired by Quest Diagnostics on February 1, 2018, and Inovalon. In addition, some health plans in-source CHA services. Matrix's chronic care management competitors include Landmark Healthcare, PopHealthcare and Optum.

Employees

As of December 31, 2017, there were approximately 7,100 employees across Providence and our subsidiaries. Of such employees, approximately 3,800 work in NET Services and approximately 3,300 work in WD Services. In addition, 30 employees primarily conduct corporate activities.

None of our U.S. employees are members of a union. We have nearly 1,950 and 330 full-time employees in the UK and France, respectively. Certain of our UK employees are members of the NAPO and Unison unions and certain of our employees in France are members of the Confederation Generale du Travail and have collective bargaining rights. In other countries employees may be members of a trade union but these trade unions are not formally recognized by us. Participation in unions is confidential under European employment laws. We believe we have good relationships with our employees, both unionized and non-unionized, in the U.S. and internationally.

Regulatory Environment

NET Services and Matrix Investment

Overview

Our NET Services and Matrix Investment segments (the "U.S. Healthcare Segments") are subject to numerous U.S. federal, state and local laws, regulations and agency guidance (collectively, "Laws"). These Laws significantly affect the way in which these segments operate various aspects of their businesses. Our U.S. Healthcare Segments must also comply with state and local licensing requirements, state and federal requirements for participation in Medicare and Medicaid, requirements for contracting with MA plans, and contractual requirements imposed upon them by the federal, state and local agencies and third-party commercial customers to which they provide services. Failure to follow the rules and requirements of these programs can significantly affect our U.S. Healthcare Segments' ability to be paid for the services they provide and be authorized to provide services on an ongoing basis.

The Medicare and Medicaid programs are governed by significant and complex Laws. Both Medicare and Medicaid are financed, at least in part, with federal funds. Therefore, any direct or indirect recipients of those funds are subject to federal fraud, waste and abuse Laws. In addition, there are federal privacy and security Laws that govern the healthcare industry. State Laws primarily pertain to the licensure of certain categories of healthcare professionals and providers and the state's interest in regulating the quality of healthcare in the state, regardless of the source of payment, but may also include state Laws pertaining to fraud, waste and abuse, privacy and security Laws, and the state's regulation of its Medicaid program. Federal and state regulatory laws that may affect our U.S. Healthcare Segments' businesses, include, but are not limited to the following:

- false and other improper claims or false statements Laws pertaining to reimbursement;
- the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") and its privacy, security, breach notification and enforcement and code set regulations and guidance, along with evolving state Laws protecting patient privacy and requiring notifications of unauthorized access to, or use of, patient medical information;
- civil monetary penalties Law;
- anti-kickback Laws;
- the Stark Law and other self-referral, financial inducement, fee splitting, and patient brokering Laws;
- CMS regulations pertaining to Medicare as well as CMS releases applicable to the operation of MA plans, such as reimbursement rates, risk adjustment and data collection methodologies, adjustments to quality management measurements and other relevant factors; and
- state licensure laws.

A violation of certain of these Laws could result in civil and criminal damages and penalties, the refund of monies paid by government or private payers, our U.S. Healthcare Segments' exclusion from participation in federal healthcare payer programs, or the loss of our segments' license to conduct business within a particular state's boundaries.

Federal Law

Federal healthcare Laws apply in any case in which our U.S. Healthcare Segments are providing an item or service that is reimbursable or provide information to such segments' customers that results in reimbursement by a federal healthcare payer program to such segments or to them. The principal federal Laws that affect our U.S. Healthcare Segments' businesses include those that prohibit the filing of false or improper claims or other data with federal healthcare payer programs and those that prohibit unlawful inducements for the referral of business reimbursable under federal healthcare payer programs.

False and Other Improper Claims

Under the federal False Claims Act (31 U.S.C. §§ 3729-3733) and similar state Laws, the government may impose civil liability on our U.S. Healthcare Segments if they knowingly submit a false claim to the government or cause another to submit a false claim to the government, or knowingly make a false record or statement intended to get a false claim paid by the government. The False Claims Act defines a claim as a demand for money or property made directly to the government or to a contractor, grantee, or other recipient if the money is to be spent on the government's behalf or if the government will reimburse the contractor or grantee. Liability can be incurred for submitting (or causing another to submit) false claims with actual knowledge or for submitting false claims with reckless disregard or deliberate ignorance. Liability can also be incurred for knowingly making or using a false record or statement to receive payment from the federal government or for knowingly and improperly avoiding or decreasing an obligation to pay or transmit money or property to the government. Consequently, a provider need not take an affirmative action to conceal or avoid an obligation to the government, but the mere retention of an overpayment from the government could lead to potential liability under the False Claims Act.

Many states also have similar false claims statutes. In addition, healthcare fraud is a priority of the U.S. Department of Justice, the Department of Health and Human Services ("DHHS"), its program integrity contractors and its Office of Inspector General, the Federal Bureau of Investigation and state Attorneys General. These agencies have devoted a significant amount of resources to investigating healthcare fraud.

If our U.S. Healthcare Segments are ever found to have violated the False Claims Act, they could be required to make significant payments to the government (including damages and penalties in addition to the return of reimbursements previously collected) and could be excluded from participating in federal healthcare programs or providing services to entities which contract with those programs. Although our U.S. Healthcare Segments monitor their billing practices for compliance with applicable laws, such laws are very complex, and they might not be able to detect all errors or interpret such laws in a manner consistent with a court or an agency's interpretation. While the criminal statutes generally are reserved for instances evidencing fraudulent intent, the civil and administrative penalty statutes are being applied by the federal government in an increasingly broad range of circumstances. Examples of the types of activities giving rise to liability for filing false claims include billing for services not rendered, misrepresenting services rendered (i.e., miscoding), applications for duplicate reimbursement and providing false information that results in reimbursement or impacts reimbursement amounts. Additionally, the federal government takes the position that a pattern of claiming reimbursement for unnecessary services violates these statutes if the claimant should have known that the services were unnecessary. The federal government also takes the position that claiming reimbursement for services that are substandard is a violation of these statutes if the claimant should have known that the care was substandard. Criminal penalties also are available even in the case of claims filed with private insurers if the federal government shows that the claims constitute mail fraud or wire fraud or violate any of the federal criminal healthcare fraud statutes.

State Medicaid agencies and state Attorneys General also have authority to seek criminal or civil sanctions for fraud and abuse violations. In addition, private insurers may bring actions under state false claim laws. In certain circumstances, federal and state laws authorize private whistleblowers to bring false claim or "qui tam" suits on behalf of the government against providers and reward the whistleblower with a portion of any final recovery. In addition, the federal government has engaged a number of private audit organizations to assist it in tracking and recovering claims for healthcare services that may have been improperly submitted.

Governmental investigations and whistleblower "qui tam" suits against healthcare companies have increased significantly in recent years, and have resulted in substantial penalties and fines and exclusions of persons and entities from participating in government healthcare programs. For more information on the risks related to a failure to comply with applicable government coding and billing rules, see "Risk Factors—Regulatory Risks—Our segments could be subject to actions for false claims or recoupment of funds pursuant to certain audits if they do not comply with government coding and billing rules, which could have a material adverse impact on our segments' operating results."

Health Information Practices

Under HIPAA, DHHS issued rules to define and implement standards for the electronic transactions and code sets for the submission of transactions such as claims, and privacy and security of individually identifiable health information in whatever manner it is maintained.

The Final Rule on Enforcement of the HIPAA Administrative Simplification provisions, including the transaction standards, the security standards and the privacy rule, published by DHHS addresses, among other issues, DHHS's policies for determining violations and calculating civil monetary penalties, how DHHS will address the statutory limitations on the imposition of civil monetary penalties, and various procedural issues. The rule extends enforcement provisions currently applicable to the

healthcare privacy regulations to other HIPAA standards, including security, transactions and the appropriate use of service code sets.

The Health Information Technology for Economic and Clinical Health Act ("HITECH"), enacted as part of the American Recovery and Reinvestment Act of 2009, extends certain of HIPAA's obligations to parties providing services to healthcare entities covered by HIPAA known as "business associates," imposes new notice of privacy breach reporting obligations, extends enforcement powers to state attorney generals and amends the HIPAA privacy and security laws to strengthen the civil and criminal enforcement of HIPAA. HITECH establishes four categories of violations that reflect increasing levels of culpability, four corresponding tiers of penalty amounts that significantly increase the minimum penalty amount for each violation, and a maximum penalty amount of $1.5 million for all violations of an identical provision. With the additional HIPAA enforcement power under HITECH, the Office of Civil Rights of the Department of Health and Human Services and states are increasing their investigations and enforcement of HIPAA compliance. Our U.S. Healthcare Segments have taken steps to ensure compliance with HIPAA and we are monitoring compliance on an ongoing basis.

Additionally, the HITECH Final Rule imposes various requirements on covered entities and business associates, and expands the definition of "business associates" to cover contractors of business associates. Even when our U.S. Healthcare Segments are not operating as covered entities, they may be deemed to be "business associates" for HIPAA rule purposes of such covered entities. Our U.S. Healthcare Segments monitor their compliance obligations under HIPAA as modified by HITECH, and implement operational and systems changes, associate training and education, conduct risk assessments and allocate resources as needed. Any noncompliance with HIPPA requirements could expose such segments to the criminal and increased civil penalties provided under HITECH and require them to incur significant costs in order to seek to comply with its requirements or to remediate potential issues that may arise.

Federal and State Anti-Kickback Laws

Federal law commonly known as the "Anti-Kickback Statute" prohibits the knowing and willful offer, solicitation, payment or receipt of anything of value (direct or indirect, overt or covert, in cash or in kind) which is intended to induce: the referral of an individual for a service for which payment may be made by Medicare, Medicaid or certain other federal healthcare programs; or the ordering, purchasing, leasing, or arranging for, or recommending the purchase, lease or order of, any service or item for which payment may be made by Medicare, Medicaid or certain other federal healthcare programs.

Interpretations of the Anti-Kickback Statute have been very broad and under current Law, courts and federal regulatory authorities have stated that the Anti-Kickback Statute is violated if even one purpose (as opposed to the sole or primary purpose) of the arrangement is to induce referrals. Even bona fide investment interests in a healthcare provider may be questioned under the Anti-Kickback Statute if the government concludes that the opportunity to invest was offered as an inducement for referrals.

This act is subject to numerous statutory and regulatory "safe harbors." Compliance with the requirements of a safe harbor offers defenses against Anti-Kickback Statute allegations. Failure of an arrangement to satisfy all of the requirements of a particular safe harbor does not mean that the arrangement is unlawful. However, it may mean that such an arrangement will be subject to scrutiny by the regulatory authorities.

Many states, including some where our U.S. Healthcare Segments do business, have adopted anti-kickback laws that are similar to the federal Anti-Kickback Statute. Some of these state laws are very closely patterned on the federal Anti-Kickback Statute; others, however, are broader and reach reimbursement by private payers. If our U.S. Healthcare Segments' activities were deemed to be inconsistent with state anti-kickback or illegal remuneration laws, they could face civil and criminal penalties or be barred from such activities, any of which could harm such segments' businesses.

If our U.S. Healthcare Segments' arrangements are found to violate the Anti-Kickback Statute or applicable state laws, these segments, along with their clients would be subject to civil and criminal penalties, and these segments' arrangements would not be legally enforceable, which could materially and adversely affect their business. For more information on the risks related to failure to comply with applicable anti-bribery and anti-corruption regulations, see "Risk Factors—Regulatory Risks—Our segments' business could be subject to civil penalties and loss of business if we fail to comply with applicable bribery, corruption and other regulations governing business with governments."

Federal and State Self-Referral Prohibitions

Our U.S. Healthcare Segments may be subject to federal and state statutes banning payments for referrals of patients and referrals by physicians to healthcare providers with whom the physicians have a financial relationship. Section 1877 of the Social Security Act, also known as the "Stark Law", prohibits physicians from making a "referral" for "designated health services" for

Medicare (and in many cases Medicaid) patients from entities or facilities in which such physicians directly or indirectly hold a "financial relationship".

A financial relationship can take the form of a direct or indirect ownership, investment or compensation arrangement. A referral includes the request by a physician for, or ordering of, or the certifying or recertifying the need for, any designated health services.

Certain services that our U.S. Healthcare Segments provide may be identified as "designated health services" for purposes of the Stark Law. Such segments cannot provide assurance that future regulatory changes will not result in other services they provide becoming subject to the Stark Law's ownership, investment or compensation prohibitions in the future.

Many states, including some states where our U.S. Healthcare Segments do business, have adopted similar or broader prohibitions against payments that are intended to induce referrals of clients. Moreover, many states where such segments operate have laws similar to the Stark Law prohibiting physician self-referrals. While our U.S. Healthcare Segments believe that they are operating in compliance with the Stark Law, there can be no guarantee that violations will not occur.

Healthcare Reform

On March 23, 2010, the President of the United States signed into law comprehensive health reform through the Patient Protection and Affordable Care Act (Pub. L. 11-148) ("PPACA"). On March 30, 2010, the President signed a reconciliation budget bill that included amendments to the PPACA (Pub. L. 11-152). These laws in combination form the "ACA" referred to herein. The changes to various aspects of the healthcare system in the ACA were far-reaching and included, among many others, substantial adjustments to Medicare reimbursement, establishment of individual mandates for healthcare coverage, extension of coverage to certain populations, expansion of Medicaid, restrictions on physician-owned hospitals, and increased efficiency and oversight provisions.

Some of the provisions of the ACA took effect immediately, while others will take effect later or will be phased in over time, ranging from a few months following approval to ten years. Due to the complexity of the ACA, it is likely that additional legislation will be considered and enacted. The ACA requires the promulgation of regulations that will likely have significant effects on the healthcare industry and third-party payers. Thus, the healthcare industry and our operations may be subjected to significant new statutory and regulatory requirements and contractual terms and conditions, and consequently to structural and operational changes and challenges.

The ACA also implemented significant changes to healthcare fraud and abuse laws that intensify the risks and consequences of enforcement actions. These included expansion of the False Claims Act by: (a) narrowing the public disclosure bar; and (b) explicitly stating that violations of the Anti-Kickback Statute trigger false claims liability. In addition, the ACA lessened the intent requirements under the Anti-Kickback Statute to provide that a person may violate the statute without knowledge or specific intent. The ACA also provided new funding and expanded powers to investigate fraud, including through expansion of the Medicare Recovery Audit Contractor ("RAC") program to Medicare Parts C and D and Medicaid and authorizing the suspension of Medicare and Medicaid payments to a provider of services pending an investigation of a credible allegation of fraud. Finally, the legislation created enhanced penalties for noncompliance, including increased criminal penalties and expansion of administrative penalties under Medicare and Medicaid. Collectively, such changes could have a material adverse impact on our U.S. Healthcare Segments' operations.

On January 20, 2017, the President of the United States issued an executive order that directed federal agencies to take steps to ensure the government's implementation of the ACA minimizes the burden on impacted parties (such as individuals and states). The underlying intent of the executive order was to take the first steps to repeal and replace the ACA. The executive order specifically instructed agencies to "waive, defer, grant exemptions from, or delay implementation of provisions" that place a "fiscal burden on any State" or that impose a "cost, fee, tax, penalty, or regulatory burden" on stakeholders including patients, providers, and insurers. The order stated that any changes should be made only to the extent "permitted by law" and should comply with the law governing administrative rule-making. The executive order did not, however, provide specifics on next steps or provisions that would be reexamined nor was it clear how the executive branch would be reconciled with Republican congressional efforts to repeal and replace the ACA or what portions of the ACA may continue in any replacement legislation. There are multiple pending legislative proposals to amend the ACA which, among other effects, could repeal all or parts of the ACA without replacing its extension of coverage to expansion populations. In

addition, there are pending legislative proposals to materially restructure Medicaid and other government health care programs.

In 2017, legislation was proposed in the U.S. Congress, but did not advance out of committee and was not passed, which would reduce or eliminate certain non-emergency medical transportation services provided by NET Services as a required Medicaid

benefit. A similar proposal was made in 2018 by the President of the United States in a federal budget proposal. If additional privatization initiatives are not proposed or enacted, or if previously enacted privatization initiatives are challenged, repealed or invalidated, there could be a material adverse impact on our segments' operating results.

Surveys and Audits

Our U.S. Healthcare Segments' programs are subject to periodic surveys by government authorities or their contractors to ensure compliance with various requirements. Regulators conducting periodic surveys often provide reports containing statements of deficiencies for alleged failures to comply with various regulatory requirements. In most cases, if a deficiency finding is made by a reviewing agency, our segments will work with the reviewing agency to agree upon the steps to be taken to bring our program into compliance with applicable regulatory requirements. In some cases, however, an agency may take a number of adverse actions against a program, including:

- the imposition of fines or penalties or the recoupment of amounts paid;
- temporary suspension of admission of new clients to our program's service;
- in extreme circumstances, exclusion from participation in Medicaid, Medicare or other programs;
- revocation of our license; or
- contract termination.

While our U.S. Healthcare Segments believe that our programs are in compliance with Medicare, Medicaid and other program certification requirements and state licensure requirements, failure to comply with these requirements could have a material adverse impact on such segments' businesses and their ability to enter into contracts with other agencies to provide services.

Billing/claims Reviews and Audits

Agencies and other third-party commercial payers periodically conduct pre-payment or post-payment medical reviews or other audits of our U.S. Healthcare Segments' claims or other audits in conjunction with their obligations to comply with the requirements of Medicare or Medicaid. In order to conduct these reviews, payers request documentation from our U.S. Healthcare Segments and then review that documentation to determine compliance with applicable rules and regulations, including the eligibility of clients to receive benefits, the appropriateness of the care provided to those clients, and the documentation of that care. Any determination that such segments have not complied with applicable rules and regulations could result in adjustment of payments or the incurrence of fines and penalties, or in situations of significant compliance failures review or non-renewal of related contracts.

Corporate Practice of Medicine and Fee Splitting

Some states in which our U.S. Healthcare Segments operate prohibit general business entities, such as these segments, from "practicing medicine," which definition varies from state to state and can include employing physicians, as well as engaging in fee-splitting arrangements with these healthcare providers. Among other things, our U.S. Healthcare Segments currently contract with and employ NPs to perform CHAs. We believe that such segments have structured their operations appropriately; however, they could be alleged or found to be in violation of some or all of these laws. If a state determines that some portion of our U.S. Healthcare Segments' businesses violate these laws, it may seek to have such segments discontinue or restructure those portions of their operations or subject them to increased costs, penalties, fines, certain license requirements or other measures. Any determination that such segments have acted improperly in this regard may result in liability to them. In addition, agreements between the corporation and the professional may be considered void and unenforceable.

Professional Licensure and Other Requirements

Many of our U.S. Healthcare Segments' employees are subject to federal and state laws and regulations governing the ethics and practice of their professions. For example, our mid-level practitioners (e.g., NPs) are subject to state laws requiring physician supervision and state laws governing mid-level scope of practice. As the use of mid-level practitioners by physicians increases, state governing boards are implementing more robust regulations governing mid-levels and their scope of practice under physician supervision. Our U.S. Healthcare Segments' ability to provide mid-level practitioner services may be restricted by the enactment of new state laws governing mid-level scope of practice and by state agency interpretations and

enforcement of such existing laws. In addition, services rendered by mid-level practitioners may not be reimbursed by payors at the same rates as payors may reimburse physicians for the same services. Lastly, professionals who are eligible to participate in Medicare and Medicaid as individual providers must not have been excluded from participation in government programs at any time. Our U.S. Healthcare Segments' ability to provide services depends upon the ability of their personnel to meet individual licensure and other requirements and maintain such licensure in good standing.

WD Services

Overview

As a provider of workforce development services in the U.S. and 10 countries outside the U.S., WD Services is subject to numerous national and local laws and regulations. These laws and regulations significantly affect the way in which we operate various aspects of our business. WD Services has implemented compliance policies to help assure our compliance with these laws and regulations as they become effective; however, different interpretations or enforcement of these laws and regulations in the future could subject our practices to allegations of impropriety or illegality or could require us to make changes in our facilities, equipment, personnel, services or the manner in which we conduct our business.

WD Services' revenue is primarily derived from contracts that are funded by national governments that are seeking to reduce the overall unemployment rate or improve job placement success for targeted cohorts, and to reduce the recidivism rate. Further, the revenue we receive from these contracts is typically tied to milestones that are largely uncontrolled by us. Such milestones include the job placement success of clients, duration and tenure of clients in jobs once they are placed, and various other market and industry factors including the overall unemployment rate. For more information on the risks related to failure to satisfy our contractual obligations, see "Risk Factors—Risks Related to Our Business—If we fail to satisfy our contractual obligations, we could be liable for damages and financial penalties, which may place existing pledged performance and payment bonds at risk as well as harm our ability to keep our existing contracts or obtain new contracts and future bonds."

Data Security and Protection

WD Services is also subject to the European Union's and other countries' data security and protection laws and regulations. These laws and regulations impose broad obligations on the organizations that collect such data, as well as confer broad rights on individuals about whom such data is collected. There are amendments which will come into effect in 2018 with respect to European data privacy legislation which will significantly increase the fines for any breaches. In addition to their power to impose fines, information privacy regulators in Europe have significant powers to require organizations that breach regulations to put in place measures to ensure that such breaches do not occur again, and require businesses to stop processing personal information until the required measures are in place. For more information on the risks related to a failure to comply with privacy and security regulations, see "Risk Factors—Regulatory Risks—Our segments are subject to regulations relating to privacy and security of patient and service user information. Failure to comply with privacy and security regulations could result in a material adverse impact on our segments' operating results."

The data security and protection laws and regulations may also restrict the flow of information, including information about employees or service users, from WD Services to Providence in the U.S. In certain instances, informed consent to the data transfer must be given by the affected employee or service user. Compliance with such laws and regulations is costly and requires our segment management to expend substantial time and resources which could negatively impact our segments' results of operations. Compliance may also make it more difficult for the Company to gather data necessary to ensure the appropriate operation of its internal controls or to detect corruption, resulting in the need for additional controls or increasing the Company's costs to maintain appropriate controls.

Anti-Bribery and Corruption

WD Services' international operations are subject to various U.S. and foreign statutes that prohibit bribery and corruption, including the U.S. Foreign Corrupt Practices Act and the UK's Bribery Act. These statutes generally require organizations to prohibit bribery by or for the organization and demand the implementation of systems to counter bribery, including risk management, training and guidance and the maintenance of adequate record-keeping and internal accounting practices. The statutes also, among other things, prevent the provision of anything of value to government officials for the purposes of influencing official decisions or obtaining or retaining business or otherwise obtaining favorable treatment. In addition, many countries in which we operate have antitrust or competition regulations which, among other things, prohibit collusive tendering or bid-rigging behavior. For more information on the risks related to a failure to comply with applicable anti-bribery and anti-corruption regulations, see "Risk Factors—Regulatory Risks—Our segments' business could be subject to civil penalties and loss of business if we fail to comply with applicable bribery, corruption and other regulations governing business with governments."

Licensing

In many of the locations where WD Services operates, it is required by local laws to obtain and maintain licenses. The applicable state and local licensing requirements govern the services our segments provide, the credentials of staff, record keeping, treatment planning, client monitoring and supervision of staff. The failure to maintain these licenses or the loss of a license could

have a material adverse impact on WD Services businesses and could prevent them from providing services to clients in a given jurisdiction.

Surveys and audits

WD Services' contracts permit clients to review its compliance or performance, as well as its records, at the client's discretion. In most cases, if a deficiency is found by a reviewing agency, WD Services' will work with the reviewing agency to agree upon the steps to be taken to bring our program into compliance with applicable regulatory requirements. In the case of any deficiency, however, a client may take a number of adverse actions against WD Services, including: (i) termination or modification of existing contracts, (ii) prevention of receipt of new contracts or extension of existing contracts or (iii) reduction of fees paid under existing contract.

Billing Requirements

In WD Services, particularly in Europe, our contracts are subject to stringent claims and invoice processing regimes which vary depending on the customer and nature of the payment mechanism. Under European procurement legislation which has been implemented in each EU member state, any conviction for fraud can result in a ban from participating in public procurement tenders for up to five years, or until the organization in question has put in place "self clean" measures to the satisfaction of the procuring authority. For more information on the risks related to a failure to comply with applicable government coding and billing rules, see "Risk Factors—Regulatory Risks—Our segments could be subject to actions for false claims or recoupment of funds pursuant to certain audits if they do not comply with government coding and billing rules, which could have a material adverse impact on our segments' operating results."

Brexit

On June 23, 2016, the UK held a referendum in which eligible persons voted in favor of a proposal that the UK leave the EU, also known as "Brexit". The result of the referendum increased political and economic uncertainty in the UK for the foreseeable future, in particular during any period where the terms of any UK exit from the EU are negotiated. In turn, Brexit could cause disruptions to and create uncertainty surrounding our business, including affecting our relationships with our existing and future payers and employees, which could have an adverse effect on our financial results, operations and prospects, including being adversely affected in ways that cannot be anticipated at present. For more information on the risks related to the UK's exit from the European Union, see "Risk Factors—Regulatory Risks—Our business could be adversely affected by the referendum on the UK's exit from the European Union."

Additional Information

The Company's website at www.prscholdings.com provides access to its periodic reports, certain corporate governance documents, press releases, interim shareholder reports and links to its subsidiaries' websites. The Company makes available to the public on its website its annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after it electronically files such material with, or furnishes such material to, the SEC. Copies are also available, without charge, upon request to The Providence Service Corporation, 700 Canal Street, Third Floor, Stamford, CT 06902, (203) 307-2800, Attention: Corporate Secretary. The information contained on our website is not part of, and is not incorporated by reference in, this Annual Report on Form 10-K or any other report we file with or furnish to the SEC.

Item 1A. ***Risk Factors.***

You should consider and read carefully all of the risks and uncertainties described below, as well as other information included in this Annual Report on Form 10-K, including our consolidated financial statements and related notes. The risks described below are not the only ones facing us. The occurrence of any of the following risks or additional risks and uncertainties not presently known to us or that we currently believe to be immaterial could materially and adversely affect our business, financial condition and results of operations. This Annual Report on Form 10-K also contains forward-looking statements and estimates that involve risks and uncertainties. Our actual results could differ materially from those anticipated in any forward-looking statements as a result of specific factors, including the risks and uncertainties described below.

Risks Related to Our Business

There can be no assurance that our contracts will survive until the end of their stated terms, or that upon their expiration will be renewed or extended on satisfactory terms, if at all. Disruptions to, the early expiration of or the failure to renew our contracts could have a material adverse impact on our financial condition and results of operations.

Our NET Services contracts, and certain WD Services contracts, are subject to frequent renewal. For example, many of the state Medicaid contracts held by NET Services, which represented 55.9% of NET Services revenue for the year ended December 31, 2017, have terms ranging from three to five years and are typically subject to a competitive bidding process near the end of the term. NET Services also contracts with MCOs, which represented 44.1% of NET Services revenue for the year ended December 31, 2017. MCO contracts typically continue until terminated by either party upon reasonable notice (as determined in accordance with the contract). We cannot anticipate if, when or to what extent we will be successful in renewing our state government contracts or retaining our MCO contracts. During 2017, we experienced a decline in operating income as a percentage of revenue due to the nonrenewal of certain state contracts. In addition, with respect to many of our contracts, the payer may terminate the contract without cause, at will and without penalty to the payer, either immediately or upon the expiration of a short notice period in the event that, among other reasons, government appropriations supporting the programs serviced by the contract are reduced or eliminated or the payer deems our performance under the contract to be unsatisfactory.

We cannot anticipate if, when or to what extent a payer might terminate its contract with us prior to its expiration, or fail to renew or extend a contract with us. If we are unable to retain or renew our contracts, or replace lost contracts, on satisfactory terms our financial conditions and results of operations could be materially adversely affected. While we pursue new contract awards and also undertake efficiency measures, there can be no assurance that such measures will fully offset the impact of contracts that are not renewed or are cancelled on our operating income and results of operations.

We obtain a significant portion of our business through responses to government requests for proposals and we may not be awarded contracts through this process in the future, or contracts we are awarded may not be profitable.

We obtain, and will continue to seek to obtain, a significant portion of our business from national, state, and local government entities. To obtain business from government entities, we are often required to respond to requests for proposals ("RFPs"). To propose effectively, we must accurately estimate our cost structure for servicing a proposed contract, the time required to establish operations and the terms of the proposals submitted by competitors. We must also assemble and submit a large volume of information within rigid and often short timetables. Our ability to respond successfully to RFPs will greatly impact our business. If we misinterpret bid requirements as to performance criteria or do not accurately estimate performance costs in a binding bid for an RFP, we will seek to correct such mistakes in the final contract. However, there can be no assurance that we will be able to modify the proposed contract and we may be required to perform under a contract that is not profitable.

WD Services' ability to win contracts to administer and manage programs traditionally administered by government employees is also dependent on the impact of government unions. Many WD Services government employees belong to labor unions with considerable financial resources and lobbying networks. Union opposition could result in our losing government contracts, being precluded from providing services under government contracts, or maintaining or renewing existing contracts. If we could not renew certain contracts or obtain new contracts due to opposition political actions, it could have a material adverse impact on our operating results.

If we fail to satisfy our contractual obligations, we could be liable for damages and financial penalties, which may place existing pledged performance and payment bonds at risk as well as harm our ability to keep our existing contracts or obtain new contracts and future bonds.

Our failure to comply with our contractual obligations could, in addition to providing grounds for immediate termination of the contract for cause, negatively impact our financial performance and damage our reputation, which, in turn, could have a

material adverse effect on our ability to maintain current contracts or obtain new contracts. The termination of a contract for cause could, for instance, subject us to liabilities for excess costs incurred by a payer in obtaining similar services from another source. In addition, our contracts require us to indemnify payers for our failure to meet standards of care, and some of them contain liquidated damages provisions and financial penalties that we must pay if we breach these contracts.

Our failure to meet contractual obligations could also result in substantial actual and consequential financial damages. For example, on January 25, 2018, the MOJ released a report on reoffending statistics for certain offenders who entered probation services during the period October 2015 to March 2016. The report provides statistics for all providers of probation services, including our subsidiary RRP, which is in our WD Services segment. This information is the second data set that is utilized to determine performance payments under the various providers' transforming rehabilitation contracts with the MOJ, as the actual rates of recidivism are compared to benchmark rates established by the MOJ. Performance payments and penalties are linked to two separate measures of recidivism - the binary measure and the frequency measure. The binary measure defines the percentage of offenders within a cohort, formed quarterly, who reoffend in the following 12 months. The frequency measure defines the average number of offenses committed by reoffenders within the same 12-month measurement period. The performance for the frequency measure for most providers has been below the benchmarks established by the MOJ. As a result, RRP could be required to make payments to the MOJ and the amounts of such payments could be material. The amount of potential payments to the MOJ, if any, under RRP's contracts with the MOJ cannot be estimated at this time, as the MOJ is reviewing the data to understand the underlying reasons for the increase in certain rates of recidivism and other factors that could impact the contractual measure.

Any acquisition or integration that we undertake could disrupt our business, not generate anticipated results, dilute stockholder value or have a material adverse impact on our operating results.

We endeavor to ensure our acquisition strategy and alignment of resources serves to enhance shareholder value, which could result in changes to our strategy or to the way in which we deploy resources across Providence. We have made, and anticipate that we will continue to make, acquisitions. The Company typically incurs costs related to acquisitions and integrations, including third-party costs, whether or not the acquisition or integration is completed, which can have a material adverse impact on our operating results. The success of an acquisition depends in part on our ability to integrate an acquired company into our business operations. Integration of any acquired companies will place significant demands on our management, systems, internal controls and financial and physical resources. This could require us to incur significant expense for, among other things, hiring additional qualified personnel, retaining professionals to assist in developing the appropriate control systems and expanding our information technology infrastructure. The nature of our business is such that qualified management personnel can be difficult to find. Our inability to manage growth effectively could have a material adverse effect on our financial results.

There can be no assurance that the companies acquired will generate income or incur expenses at the historical or projected levels on which we based our acquisition decisions, that we will be able to maintain or renew the acquired companies' contracts, that we will be able to realize operating and economic efficiencies upon integration of acquired companies or that the acquisitions will not adversely affect our results of operations or financial condition.

We continually review opportunities to acquire other businesses that would complement our current services, expand our markets or otherwise offer prospects for growth. In connection with our acquisition strategy, we could issue stock that would dilute existing stockholders' percentage ownership, or we could incur or assume substantial debt or contingent liabilities. Acquisitions involve numerous risks, including, but not limited to, the following:

- challenges and unanticipated costs assimilating the acquired operations;
- known and unknown legal or financial liabilities associated with an acquisition;
- diversion of management's attention from our core businesses;
- adverse effects on existing business relationships with customers;
- entering markets in which we have limited or no experience;
- potential loss of key employees of purchased organizations;
- incurrence of excessive leverage in financing an acquisition;
- failure to maintain and renew contracts and other revenue streams of the acquired business;
- costs associated with litigation or other claims arising in connection with the acquired company;
- unanticipated operating, accounting or management difficulties in connection with an acquisition; and
- dilution to our earnings per share.

We cannot assure you that we will be successful in overcoming problems encountered in connection with any acquisition or integration and our inability to do so could disrupt our operations and adversely affect our business. Our failure to address these risks or other problems encountered in connection with past or future acquisitions and investments could cause us to fail

to realize the anticipated benefits of such acquisitions or investments, incur unanticipated liabilities and harm our business generally.

We may be unable to realize the benefits of any strategic initiatives that are adopted by the Company.

From time to time we may launch strategic initiatives in order to enhance shareholder value. For example, in 2017, NET Services pursued a strategic initiative to enhance member satisfaction and drive greater operational efficiencies. The implementation of the initiative is expected to be substantially completed by the end of 2018. Also in 2017, in order to build upon its leadership position in the UK employment services industry, enhance client satisfaction and drive greater operational efficiencies, WD Services substantially completed the Ingeus Futures program. In addition, we are actively evaluating the optimal industry sectors, such as the non-emergency medical transportation industry and others in which businesses complementary to our NET Services business operate, around which to focus our go-forward merger and acquisition activity, in an attempt to direct our capital towards those areas most likely to drive long-term value creation and generate the highest levels of return for our shareholders. The outcome of this active evaluation may impact the extent and manner in which we deploy resources across Providence, including strategic and administrative resources between Corporate and Other and our operating segments. There can be no assurance as to whether any strategic initiatives will be adopted as a result of this evaluation, and the outcome of any current or future strategic initiatives is uncertain.

Our investments in any joint ventures and unconsolidated entities could be adversely affected by our lack of sole decision-making authority, our reliance on our joint venture partners' financial condition, any disputes that may arise between us and our joint venture partners and our exposure to potential losses from the actions of our joint venture partners.

We currently hold a noncontrolling interest in Matrix, which constitutes 24.0% of our consolidated assets. We do not have unilateral power to direct the activities that most significantly impact such business' economic performance. Our future growth may depend, in part, on future similar arrangements, any of which could be material to our financial condition and results of operations. These arrangements involve risks not present with respect to our wholly-owned subsidiaries, which may negatively impact our financial condition and results of operations or make the arrangements less successful than anticipated, including the following:

- we may be unable to take actions that we believe are appropriate but are opposed by our joint venture partners under arrangements that require us to cede or share decision-making authority over major decisions affecting the ownership or operation of the joint venture and any property owned by the joint venture, such as the sale or financing of the business or the making of additional capital contributions for the benefit of the business;
- our joint venture partners may take actions that we oppose;
- we may be unable to sell or transfer our interest in a joint venture to a third party if we fail to obtain the prior consent of our joint venture partners;
- our joint venture partners may become bankrupt or fail to fund their share of required capital contributions, which could adversely impact the joint venture or increase our financial commitment to the joint venture;
- our joint venture partners may have business interests or goals with respect to a business that conflict with our business interests and goals, including with respect to the timing, terms and strategies for investment, which could increase the likelihood of disputes regarding the ownership, management or disposition of the business;
- disagreements with our joint venture partners could result in litigation or arbitration that increases our expenses, distracts our officers and directors, and disrupts the day-to-day operations of the business, including the delay of important decisions until the dispute is resolved; and
- we may suffer losses as a result of actions taken by our joint venture partners with respect to our joint venture investments.

We derive a significant amount of our revenues from a few payers, which puts our financial condition and results of operations at risk. Any changes in the funding, financial viability or our relationships with these payers could have a material adverse impact on our financial condition and results of operations.

We generate a significant amount of the revenues in our segments from a few payers under a small number of contracts. For example, for the years ended December 31, 2017, 2016 and 2015, we generated 46.7%, 47.9% and 54.6%, respectively, of our consolidated revenue from ten payers. Additionally, five payers related to NET Services represented, in

the aggregate, 36.1%, 35.6% and 39.2%, respectively, of NET Services revenue for the years ended December 31, 2017, 2016 and 2015. A single payer related to WD Services represented 27.1%, 28.9% and 40.0% of our WD Services revenue for the years ended December 31, 2017, 2016 and 2015, respectively. Additionally, a single payer related to Matrix represented 30.9%, 27.8% and 31.1% of Matrix revenue for the years ended December 31, 2017, 2016 and 2015, respectively. The loss of, reduction in amounts generated by, or changes in methods or regulations governing payments for our services under these contracts could have a material adverse impact on our

revenue and results of operations. In addition, any consolidation of any of our private payers could increase the impact that any such risks would have on our revenue and results of operations.

If we fail to estimate accurately the cost of performing certain contracts, we may experience reduced or negative margins.

During 2017, 2016 and 2015, 77.9%, 78.3% and 83.6% of our NET Services revenue, respectively, was generated under capitated contracts with the remainder generated through FFS and flat fee contracts. WD Services also provides services under FFS and flat fee contracts. Under most of NET Services' capitated contracts, we assume the responsibility of managing the needs of a specific geographic population by contracting out transportation services to local transportation companies on a per ride or per mile basis. We use "pricing models" to determine applicable contract rates, which take into account factors such as estimated utilization, state specific data, previous experience in the state or with similar services, the medically covered programs outlined in the contract, identified populations to be serviced, estimated volume, estimated transportation provider rates and availability of mass transit. The amount of the fixed per-member, monthly fee is determined in the bidding process, but is predicated on actual historical transportation data for the subject geographic region as provided by the payer, actuarial work performed in-house as well as by third party actuarial firms and actuarial analysis provided by the payer. If the utilization of our services is more than we estimated, the contract may be less profitable than anticipated, or may not be profitable at all. Under our FFS contracts, we receive fees based on our interactions with government-sponsored clients. To earn a profit on these contracts, we must accurately estimate costs incurred in providing services. Our risk relating to these contracts is that our client population is not large enough to cover our fixed costs, such as rent and overhead. Our FFS contracts are not reimbursed on a cost basis and therefore, if we fail to estimate our costs accurately, we may experience reduced margins or losses on these contracts. Revenue under certain contracts may be adjusted prospectively if client volumes are below expectations. If the Company is unable to adjust its costs accordingly, our profitability may be negatively impacted. In addition, certain contracts with state Medicaid agencies are renewable at the state's option without an adjustment to pricing terms. If such renewed contracts require us to incur higher costs, including inflation or regulatory changes, than originally anticipated, our results of operations and financial condition may be adversely affected.

In WD Services, we often provide services to a client based on a unit price for delivery of a service or achievement of a defined outcome. If we fail to estimate costs accurately, we may have minimal ability to change the unit price to ensure profitability. While we may be able to alter our cost structure to reflect lower than anticipated volumes and other changes in service needs, there are certain fixed costs which are difficult to alter while still ensuring we can meet our contractual obligations. Further, many contracts require us to undertake significant onboarding projects, including making redundancies and changes to properties and IT. If we fail to anticipate the cost of these change programs, we may be unable to recover startup costs throughout the life of the contract. During the fourth quarter of 2016, WD Services recorded asset impairment charges of $19.6 million, which related, in part, to lower revenue and unanticipated costs for a recent contract. If WD Services continues to experience lower than expected volumes and unfavorable service mix shifts, it could result in additional impairment charges. For more information on the risks related to impairment of goodwill, see "Risk Factors—Risks Related to Our Business—Our reported financial results could suffer if there is an impairment of long-lived assets."

We may incur costs before receiving related revenues, which could impact our liquidity.

When we are awarded a contract to provide services, we may incur expenses before we receive any contract payments. These expenses include leasing office space, purchasing office equipment, instituting information technology systems, development of supply chains, hiring personnel and releasing certain personnel. As a result, in certain contracts where the government does not fund program start-up costs, we may be required to make significant investments before receiving any related contract payments or payments sufficient to cover start-up costs. For example, WD Services incurred start-up costs in 2017 related to the UK's Work and Health Programme, and in 2016 related to the offender rehabilitation program in the UK and start-up costs in France. In addition, payments due to us from payers may be delayed due to billing cycles or as a result of failures to approve government budgets in a timely manner, which may adversely affect our liquidity. Moreover, any resulting mismatch in expenses and revenue, especially under FFS arrangements, could be exacerbated if we fail either to invoice the payer correctly or to collect our fee in a timely manner. Such amounts may exceed our available cash, and any resulting liquidity shortages may require additional financing, which may not be available on satisfactory terms, or at all. This could have a material adverse impact on our ongoing operations and our financial position.

Our business is subject to risks of litigation.

The services we provide are subject to lawsuits and claims. A substantial award payable by the Company could have a material adverse impact on our operations and cash flows, and could adversely impact our ability to continue to purchase appropriate liability insurance. We can be subject to claims for negligence or intentional misconduct (in addition to professional liability type claims) by an employee or a third party we engage to assist with the provision of services, including but not limited to claims arising out of accidents involving vehicle collisions, workforce development placements or CHAs and various claims that could

result from employees or contracted third parties driving to or from interactions with clients or while providing direct client services. We can be subject to employee-related claims such as wrongful discharge, discrimination or a violation of equal employment laws and permitting issues. While we attempt to insure against for these types of claims, damages exceeding our insurance limits or outside our insurance coverage, such as a claim for fraud, certain wage and hour violations or punitive damages, could adversely affect our cash flow and financial condition.

We face risks related to attracting and retaining qualified employees and labor relations.

Our success depends to a significant degree on our ability to identify, attract, develop, motivate and retain highly qualified and experienced professionals who possess the skills and experience necessary to deliver high-quality services to our clients, with the continued contributions of our senior management being especially critical to our success. Our objective of providing the highest quality of service to our clients is a significant consideration when we evaluate the education, experience and qualifications of potential candidates for employment as direct care and administrative staff. A portion of our staff are professionals with requisite educational backgrounds and professional certifications. These employees are in great demand and are likely to remain a limited resource for the foreseeable future.

Our ability to attract and retain employees with the requisite experience and skills depends on several factors including, but not limited to, our ability to offer competitive wages, benefits and professional growth opportunities. While we have established programs to attract new employees and provide incentives to retain existing employees, particularly our senior management, we cannot assure you that we will be able to attract new employees or retain the services of our senior management or any other key employees in the future. In particular, we are currently seeking to fill several key management positions in our NET Services business, and we expect to continue to need to attract key employees to support the growth of our businesses. Some of the companies with which we compete for experienced personnel may have greater financial, technical, political and marketing resources, name recognition and a larger number of clients and payers than we do, which may prove more attractive to employment candidates. The inability to attract and retain experienced personnel could have a material adverse effect on our business.

The performance of each of our business segments also depends on the talents and efforts of our highly skilled information technology professionals. For example, technological improvement is a key component of the strategic initiative at NET Services to enhance member satisfaction and drive greater operational efficiencies and as NET Services expands our transportation network capacity beyond its traditional transportation provider network, increases on-time and on-demand performance, provides real time analytics and minimizes cancellations. Competition for skilled intellectual technology professionals can be intense. Our success depends on our ability to recruit, retain and motivate these individuals.

Effective succession planning is also important to our future success. If we fail to ensure the effective transfer of senior management knowledge and smooth transitions involving senior management, including the appointment of a new chief executive officer for the Company (as our chief executive officer terminated his role during the fourth quarter of 2017) and the transition of several key management positions, including the chief technology officer, in our NET Service business, our ability to execute short and long-term strategic, financial and operating goals, as well as our business, financial condition and results of operations generally, could be adversely affected.

In addition, our businesses rely on maintaining strong relationships with our employees and avoiding labor disputes. Certain of our UK employees are members of the NAPO and Unison unions and certain of our employees in France are members of the Confederation Generale du Travail. Unionized employees in both countries have collective bargaining rights. Participation in unions is confidential under European employment laws. While we believe we have good relationships with our employees, both unionized and non-unionized, in the U.S. and internationally, including the unions that represent some of our employees, a work stoppage due to our failure to renegotiate union contracts or for other reasons could have a significant negative effect on us. In addition, should additional portions of our workforce be subject to collective bargaining agreements, this could result in increased costs of doing business as we may be subject to mandatory, binding arbitration of labor scheduling, costs and standards and we may therefore have reduced operating flexibility.

We may have difficulty successfully completing divestitures or exiting businesses.

As demonstrated in 2017 with the sale of our interests in Mission Providence Pty Ltd to Konekt Limited, in 2016 with the Matrix Transaction and in 2015 with the Human Services Sale, we may dispose of all or a portion of our investments or exit businesses based on a variety of factors, including availability of alternative opportunities to deploy capital or

otherwise maximize shareholder value as well as other strategic considerations. A divestiture or business termination could result in difficulties in the separation of operations, services, products and personnel, the diversion of management's attention, the disruption of our business and the potential loss of key employees and customers. A divestiture or business termination may be subject to the satisfaction of pre-closing conditions as well as to obtaining necessary regulatory and government approvals, which, if not satisfied or obtained,

may prevent us from completing the disposition or business termination, whether or not the disposition or business termination has been publicly announced. A divestiture or business termination may also involve continued financial involvement in the divested assets and businesses, such as indemnities or other financial obligations, including continuing obligations to employees, in which the performance of the divested assets or businesses could impact our results of operations. From time to time the Company guarantees the contractual payment or performance obligations of its segments. An inability to obtain waiver or termination of such guarantees may prevent us from completing a disposition or business termination, or may result in continued financial involvement in divested assets and businesses. Further, such divestitures may result in proceeds to us in an amount less than we expect or less than our assessment of the value of those assets. Any sale of our assets could result in a loss on divestiture. Any of the foregoing could adversely affect our financial condition and results of operations.

The indemnification provisions of acquisition and disposition agreements by which we have acquired or sold companies may result in liabilities.

We rely heavily on the representations and warranties and related indemnities provided to us by the sellers of acquired companies, including as they relate to creation, ownership and rights in intellectual property and compliance with laws and contractual requirements. However, the liability of the former owners is limited under the relevant acquisition agreements, and certain sellers may be unable to meet their indemnification responsibilities. Similarly, the purchasers of our divested operations may from time to time agree to indemnify us for operations of such businesses after the closing. We cannot be assured that any of these indemnification provisions will fully protect us, and as a result we may face unexpected liabilities that adversely affect our consolidated results of operations, financial condition and cash flows.

In addition, we have provided certain indemnifications in connection with the Human Services Sale in 2015 and the Matrix Transaction in 2016. To the extent we choose to divest other operations of our businesses in the future, we expect to provide certain indemnifications in connection with these divestitures. We may face liabilities in connection with these current or future indemnification obligations that may adversely affect our consolidated results of operation, financial condition and cash flows. We have entered into a settlement with Molina Healthcare Inc. ("Molina"), the purchaser of our former Human Services segment, regarding the settlement of certain potential indemnification claims. As of December 31, 2017, the accrual is $15.0 million with respect to an estimate of loss for such potential indemnification claims. Litigation is inherently uncertain, and the losses incurred in the event that the legal proceedings related to such claims were to result in unfavorable outcomes could have a material adverse effect on the Company's business and financial performance. For more information on these potential indemnification obligations, see Note 18, *Commitments and Contingencies*, to our consolidated financial statements.

Our success depends on our ability to compete effectively in the marketplace.

We compete for clients and for contracts with a variety of organizations that offer similar services. Many organizations of varying sizes compete with us, including local not-for-profit organizations and community-based organizations, larger companies, organizations that currently provide or may begin to provide similar NET management services (including transportation network companies like Uber and Lyft), and large multi-national corporations that currently provide or may begin to provide workforce development services and CHA providers. Some of these companies may have greater financial, technical, political, marketing, name recognition and other resources and a larger number of clients or payers than we do. In addition, some of these companies offer more services than we do. To remain competitive, we must provide superior services and performance on a cost-effective basis to our customers.

The market in which we operate is influenced by technological developments that affect cost-efficiency and quality of services, and the needs of our customers change and evolve regularly. Accordingly, our success depends on our ability to develop services that address these changing needs and to provide technology needed to deliver these services on a cost-effective basis. Our competitors may better utilize technology to change the way services in our industry are designed and delivered and they may be able to provide our customers with different or greater capabilities than we can provide, including better contract terms, technical qualifications, price and availability of qualified professional personnel. In addition, new or disruptive technologies and methodologies by our competitors may make our services uncompetitive.

In conjunction with our initiatives to improve cost-efficiency, we incur substantial costs to develop technology, which may not ultimately serve our business purposes or lower costs. For example, in 2016, WD Services incurred a write-off of in-process technology of $3.1 million related to our legal offender rehabilitation services, as it was determined the system

would not meet our business needs. As of December 31, 2017, NET Services has incurred $11.9 million of development in progress costs related to its LCAD NextGen technology system, which is a critical component of its initiative to progress towards an industry-leading call center and reservation scheduling platform, improve member communication, accessibility, and satisfaction, optimize the utilization of our extensive network of transportation providers and build the foundation for additional analytical capabilities.

The system has not been placed into service, and a review of the project is ongoing. In addition, we made a cost-method investment of $3.0 million during 2017, in Circulation, a technology-based transportation services provider.

We have experienced, and expect to continue to experience, competition from new entrants into the markets in which we operate. Increased competition may result in pricing pressures, loss of or failure to gain market share or loss of or failure to gain clients or payers, any of which could have a material adverse effect on our operating results. Our business may also be adversely affected by the consolidation of competitors, which may result in increased pricing pressure or negotiating leverage with payers, or by the provision of our services by payers or clients directly, including through the acquisition of competitors.

We may be adversely impacted by inadequacies in, or security breaches of, our information technology systems.

Our information technology systems are critically important to our operations and we must implement and maintain appropriate and sufficient infrastructure and systems to support growth and business processes. We provide services to individuals, including services that require us to maintain sensitive and personal client information, including information relating to their health, social security numbers and other identifying data. Therefore, our information technology systems store client information protected by numerous federal, state and foreign regulations. We also rely on our information technology systems (some of which are outsourced to third parties) to manage the data, communications and business processes for all other functions, including our marketing, sales, logistics, customer service, accounting and administrative functions. Further, our systems include interfaces to third-party stakeholders, often connected via the Internet. In addition, certain of our services or information related to our services are carried out or hosted within our customers' IT systems, and any failure or weaknesses in their IT systems may negatively impact our ability to deliver the services, for which we may not receive relief from contractual performance obligations or compensation for services provided. As a result of the data we maintain and third-party access, we are subject to increasing cybersecurity risks. The nature of our business, where services are often performed outside a secured location, adds additional risk.

If we do not allocate and effectively manage the resources necessary to build, sustain and protect an appropriate technology infrastructure, our business or financial results could be negatively impacted. Furthermore, computer hackers and data thieves are increasingly sophisticated and operate large scale and complex automated attacks and our information technology systems may be vulnerable to material security breaches (including the access to or acquisition of customer, employee or other confidential data), cyber-based attacks or other material system failures. Because the techniques used to obtain unauthorized access or sabotage systems change frequently and may be difficult to detect for long periods of time, we may be unable to implement adequate preventative measures sufficient to prevent a breach of our systems and protect sensitive data. Any breach of our data security could result in an unauthorized release or transfer of customer or employee information, or the loss of valuable business data or cause a disruption in our business. A failure to prevent, detect and respond in a timely manner to a major breach of our data security or to other cybersecurity threats could result in system disruption, business continuity issues or compromised data integrity. These events or any other failure to safeguard personal data could give rise to unwanted media attention, damage our reputation, damage our customer relationships and result in lost sales, fines or lawsuits. We may also be required to expend significant capital and other resources to protect against or respond to or alleviate problems caused by a security breach. If we are unable to prevent material failures, our operations may be impacted, and we may suffer other negative consequences such as reputational damage, litigation, remediation costs, a requirement not to operate our business until defects are remedied or penalties under various data privacy laws and regulations, any of which could detrimentally affect our business, financial condition and results of operations.

Failure to protect our client's privacy and confidential information could lead to legal liability, adversely affect our reputation and have a material adverse effect on our business, financial condition and results of operations.

We retain confidential information in our computer systems, including personal information about our customers, such as names, addresses, phone numbers, email addresses, identification numbers and payment account information. Malicious cyber attacks to gain access to personal information affect many companies across various industries, including ours. Pursuant to federal and state laws, various government agencies have established rules protecting the privacy and security of personal information. In addition, most states have enacted laws, which vary significantly from jurisdiction to jurisdiction, to safeguard the privacy and security of personal information. An increasing number of states require that customers be notified if a security breach results in the inappropriate disclosure of personally identifiable customer information. Any compromise of the security of our systems that results in the disclosure of personally identifiable customer or employee information or inadvertent disclosure of any clients' personal information could damage our reputation, deter people from using our services, expose us to litigation, increase regulatory scrutiny and require us to incur significant

technical, legal and other expenses. In addition, data breaches impacting other companies, such as our vendors, may allow cybercriminals to obtain personally identifiable information about our customers. Cybercriminals may then use this information to, among other things, attempt to gain unauthorized access to our customers' accounts, which could have a material adverse effect on our reputation, business, results of operations or financial condition.

Failure to maintain or to develop further reliable, efficient and secure information technology systems would be disruptive to our operations and diminish our ability to compete and grow our business successfully.

We are highly dependent on efficient and uninterrupted performance of our information technology and business systems. These systems quote, process and service our business, and perform financial functions necessary for pricing and service delivery. These systems must also be able to undergo periodic modifications and improvements without interruptions or untimely delays in service. Additionally, our ability to integrate our systems with those of our clients is critical to our success. Our information systems rely on the commitment of significant financial and managerial resources to maintain and enhance existing systems as well as develop and create new systems to keep pace with continuing changes in information processing technology or evolving industry and regulatory requirements. However, we still rely on manual processes and procedures, including accounting, reporting and consolidation processes that may result in errors and may not scale proportionately with our business growth.

A failure or delay to achieve improvements in our information technology platforms could interrupt certain processes or degrade business operations and could place us at a competitive disadvantage. If we are unable to implement appropriate systems, procedures and controls, we may not be able to successfully offer our services and grow our business and account for transactions in an appropriate and timely manner, which could have an adverse effect on our business, financial condition and results of operations.

There are risks associated with our international operations that are different from the risks associated with our operations in the U.S., and our exposure to the risks of a global market could hinder our ability to maintain and expand international operations.

We have operation centers in Australia, Canada, France, Germany, Saudi Arabia, Singapore, South Korea, Switzerland, the UK and the U.S. and a noncontrolling interest in a joint venture in Spain. In implementing our international strategy, we may face barriers to entry and competition from local companies and other companies that already have established global businesses, as well as the risks generally associated with conducting business internationally. The success and profitability of international operations are subject to numerous risks and uncertainties, many of which are outside of our control, such as:

- political or economic instability;
- changes in governmental regulation or taxation;
- currency exchange fluctuations;
- difficulties and costs of staffing and managing operations in certain foreign countries, including potential pension and social plan liabilities;
- work stoppages or other changes in labor conditions; and
- taxes and other restrictions on repatriating foreign profits back to the U.S.

In addition, changes in policies or laws of the U.S. or foreign governments resulting in, among other changes, higher taxation, tariffs or similar protectionist laws could reduce the anticipated benefits of international operations and could have a material adverse effect on our results of operations and financial condition. We have currency exposure arising from both sales and purchases denominated in foreign currencies, including intercompany transactions outside the U.S., and we currently do not conduct hedging activities. The value of the U.S. dollar against other foreign currencies has seen significant volatility recently. Our financial condition and results of operations are reported in multiple currencies, and are then translated into U.S. dollars at the applicable exchange rate for inclusion in our consolidated financial statements. Appreciation of the U.S. dollar against these other currencies will have a negative impact on our reported net revenue and operating income while depreciation of the U.S. dollar against such currencies will have a positive effect on reported net revenue and operating income. We cannot predict with precision the effect of future exchange-rate fluctuations on our business and operating results, and significant rate fluctuations could have a material adverse effect on our results of operations and financial condition.

Our results of operations will continue to fluctuate due to seasonality.

NET Services operating results and operating cash flows normally fluctuate as a result of seasonal variations in our business. Due to higher demand in the summer months and lower demand in the winter months, coupled with a primarily fixed revenue stream based on a per-member, per-month payment structure, NET Services normally experiences lower operating margins during the summer season and higher operating margins during the winter season. WD Services typically

does not experience seasonal fluctuations in operating results. However, volatility in revenue and earnings is common in the case of WD Services due to the timing of commencement and expiration of certain major contracts as well as fluctuations in referrals provided by its customers.

Our reported financial results could suffer if there is an impairment of long-lived assets.

Goodwill may be impaired if the estimated fair value of one or more of our reporting units is less than the carrying value of the respective reporting unit. As a result of our growth, in part through acquisitions, goodwill and other intangible assets represent a significant portion of our assets. We perform an analysis on our goodwill balances to test for impairment on an annual basis. Interim impairment tests may also be required in advance of our annual impairment test if events occur or circumstances change that would more likely than not reduce the fair value, including goodwill, of one or more of our reporting units below the reporting unit's carrying value. Such circumstances could include but are not limited to: (1) loss of significant contracts, (2) a significant adverse change in legal factors or in the climate of our business, (3) unanticipated competition, (4) an adverse action or assessment by a regulator or (5) a significant decline in our stock price. In the fourth quarter of 2016, we recorded asset impairment charges of $19.6 million related to WD Services and an asset impairment of $1.4 million for Corporate and Other related to the sale of a building, as discussed below in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations - Critical Accounting Policies and Estimates". As of December 31, 2017, the carrying value of goodwill, intangibles and property and equipment, net is $121.7 million, $43.9 million and $50.4 million, respectively. In addition, property and equipment as of December 31, 2017 includes $13.4 million of construction and development in progress, primarily related to NET Services' LCAD NextGen technology system, as discussed above. We continue to monitor the carrying value of these long-lived assets. Any future impairment charges could have a material adverse impact on our results of operations and financial position.

Our use of a reinsurance program and insurance programs to cover certain claims for losses suffered and costs or expenses incurred could negatively impact our business.

We reinsured a substantial portion of our automobile, general liability, professional liability and workers' compensation insurance policies through May 15, 2017. Upon renewal of the policies, we made the decision to no longer reinsure these risks, although we continue to resolve claims under the historical policy years. Through February 15, 2011, one of our subsidiaries also insured certain general liability, automobile liability, and automobile physical damage coverage for independent third-party transportation providers. In the event that actual reinsured losses increase unexpectedly and substantially exceed actuarially determined estimated reinsured losses under the program, the aggregate of such losses could materially increase our liability and adversely affect our financial condition, liquidity, cash flows and results of operations.

In addition, under our current insurance policies, we are subject to deductibles, and thus retain exposure within these limits. In the event that actual losses within our deductible limits increase unexpectedly and substantially exceed our expected losses, the aggregate of such losses could materially increase our liability and adversely affect our financial condition, liquidity, cash flows and results of operations.

As the availability to us of certain traditional insurance coverage diminishes or increases in cost, we will continue to evaluate the levels and types of insurance coverage we include in our reinsurance and self-insurance programs, as well as the deductible limits within our traditional insurance programs. Any increase to these reinsurance and self-insurance programs or increases in deductible limits increases our risk exposure and therefore increases the risk of a possible material adverse effect on our financial condition, liquidity, cash flows and results of operations.

Inaccurate, misleading or negative media coverage could damage our reputation and harm our ability to maintain or procure contracts.

There is sometimes media coverage regarding services that we or our competitors provide or contracts that we or our competitors are a party to. Inaccurate, misleading or negative media coverage about us could harm our reputation and, accordingly, our ability to maintain our existing contracts or procure new contracts. In addition, negative media coverage could influence government officials to slow the pace of privatizing or retendering government services.

Regulatory Risks

Our U.S. Healthcare Segments conduct business in a heavily regulated healthcare industry. Compliance with existing Laws is costly, and changes in Laws or violations of Laws may result in increased costs or sanctions that could reduce our segments' revenue and profitability.

The U.S. healthcare industry is subject to extensive federal and state Laws relating to, among other things:

- professional licensure;
- conduct of operations;
- addition of facilities, equipment and services, including certificates of need;
- coding and billing related to our services; and
- payment for services.

Both federal and state government agencies have increased coordinated civil and criminal enforcement efforts related to the healthcare industry. Regulations related to the healthcare industry are extremely complex and, in many instances, the industry does not have the benefit of significant regulatory or judicial interpretation of those laws. The Patient Protection and Affordable Care Act, as well as the anticipated attempts to repeal all or portions of those laws by the President and Congress, has also introduced some degree of regulatory uncertainty as the industry does not know how the changes it introduced or changes to it will affect many aspects of the industry. Medicare and Medicaid anti-fraud and abuse laws prohibit certain business practices and relationships related to items and services reimbursable under Medicare, Medicaid and other governmental healthcare programs, including the payment or receipt of remuneration to induce or arrange for referral of patients or recommendation for the provision of items or services covered by Medicare or Medicaid or any other federal or state healthcare program. Federal and state Laws prohibit the submission of false or fraudulent claims, including claims to obtain reimbursement under Medicare and Medicaid. Our U.S. Healthcare Segments have implemented compliance policies to help assure their compliance with these regulations as they become effective; however, different interpretations or enforcement of these laws and regulations in the future could subject our practices to allegations of impropriety or illegality or could require such segments to make changes in their facilities, equipment, personnel, services or the manner in which they conduct our business.

Changes in budgetary priorities of the government entities that fund the services our segments provide could result in our segments' loss of contracts or a decrease in amounts payable to them under their contracts.

Our segments' revenue is largely derived from contracts that are directly or indirectly paid or funded by government agencies. All of these contracts are subject to legislative appropriations and state or national budget approval. The availability of funding under NET Services' contracts with state governments is dependent in part upon federal funding to states. Changes in Medicaid methodology may further reduce the availability of federal funds to states in which our U.S. Healthcare Segments provide services. The President of the United States and Congress have proposed various changes to the Medicaid program, including considering converting the Medicaid program to a block grant format or capping the federal contribution to state Medicaid programs to a fixed amount per beneficiary. The Centers for Medicare and Medicaid Services ("CMS") has the ability to grant waivers to states relative to the parameters of their Medicaid programs. Such changes, individually or in the aggregate could have a material adverse effect on our U.S. Healthcare Segments operations.

Among the alternative Medicaid funding approaches that states have explored are provider assessments as tools for leveraging increased Medicaid federal matching funds. Provider assessment plans generate additional federal matching funds to the states for Medicaid reimbursement purposes, and implementation of a provider assessment plan requires approval by CMS in order to qualify for federal matching funds. These plans usually take the form of a bed tax or a quality assessment fee, which were historically required to be imposed uniformly across classes of providers within the state, except that such taxes only applied to Medicaid health plans.

Changes to provider assessment opportunities, the Medicaid programs in states in which our U.S. Healthcare Segments operate or in the structure of the federal government's support for those programs can impact the amount of funds available in the programs our U.S. Healthcare Segments support. Such segments cannot make any assurances that these Medicaid changes will not negatively affect the funding under their contracts. As funding under U.S. Healthcare Segments' contracts is dependent in part upon federal funding, such funding changes could have a significant effect upon such segments' businesses.

Currently, many of the U.S. states and overseas countries in which our segments operate are facing budgetary shortfalls or changes in budgetary priorities. While many of these states are dealing with budgetary concerns by shifting costs from institutional care to home and community based care such as we provide, there is no assurance that this trend will continue.

Likewise, in many of the overseas countries addressed by WD Services, particularly the UK, a continued focus following the global financial crisis on austerity measures to reduce national and local budget deficits could lead to further spending cuts or changes to welfare arrangements. This may make availability of funding for outsourcing of such services more difficult to obtain from relevant government departments, which may lead to more challenging terms and conditions, including pressure on prices or volumes of services provided.

In the UK, the low unemployment rate has led to a change in the government prioritizing employability services, and a consequent reduction in scale of the Work and Health Programme, the successor program to the Work Programme. While we have the ability to alter a portion of our cost structure to reflect the decreasing volume of these contracts during their term, there may be significant redundancy costs and management time additionally invested to reflect these changes, particularly if programs are discontinued.

Consequently, a significant decline in government expenditures, shift of expenditures or funding away from programs that call for the types of services that we provide, or change in government contracting or funding policies could cause payers to terminate their contracts with our segments or reduce their expenditures under those contracts, either of which could have a negative impact on our segments' operating results.

Our segments are subject to regulations relating to privacy and security of patient and service user information. Failure to comply with privacy and security regulations could result in a material adverse impact on our segments' operating results.

There are numerous federal and state regulations addressing patient information privacy and security concerns. In particular, the federal regulations issued under HIPAA contain provisions that:

- protect individual privacy by limiting the uses and disclosures of patient information;
- require the implementation of security safeguards to ensure the confidentiality, integrity and availability of individually identifiable health information in electronic form; and
- prescribe specific transaction formats and data code sets for certain electronic healthcare transactions.

Compliance with state and federal laws and regulations is costly and requires our segment management to expend substantial time and resources which could negatively impact our segments' results of operations. Further, the HIPAA regulations and state privacy laws expose our segments to increased regulatory risk, as the penalties associated with a failure to comply or with information security breaches, even if unintentional, could have a material adverse effect on our segments' results of operations.

Our WD Services segment has operations in many countries in Europe, and internationally, and these operations have access to significant amounts of sensitive personal information about individuals. In Europe, these operations are subject to European and national data privacy legislation which imposes significant obligations on data processors and controllers with respect to such personal information. Similar regimes exist in other WD Service jurisdictions such as Australia, Canada and South Korea. Some countries, such as Spain, France and Germany, have particularly strong privacy laws which impose even greater obligations on people handling personal information. Data protection and privacy law within the EU is changing effective May 25, 2018, from which date the EU General Data Protection Regulation ("GDPR") must be complied with. Amongst other changes the GDPR brings about an increase in the potential fines for certain breaches of the GDPR, of up to the higher of 4% of an undertaking's global turnover or €20,000,000. In addition to fining powers, data protection authorities in Europe have significant powers to require organizations that breach regulations to put in place measures to ensure that such breaches do not occur again, and require businesses to stop processing personal information until the required measures are in place. Such orders could significantly impact our business given that we are required to handle personal information as part of our service delivery model. The GDPR and other similar laws and regulations, as well as any associated inquiries or investigations or any other government actions, may be costly to comply with, result in negative publicity, increase our operating costs, require significant management time and attention, and subject us to remedies that may harm our business, including fines or demands or orders that we modify or cease existing business practices.

Our segments could be subject to actions for false claims or recoupment of funds pursuant to certain audits if they do not comply with government coding and billing rules, which could have a material adverse impact on our segments' operating results.

If our segments fail to comply with federal and state documentation, coding and billing rules, our segments could be subject to criminal or civil penalties, loss of licenses and exclusion from the Medicare and Medicaid programs, which could have a material adverse impact on our segments' operating results. In billing for our segments' services to third-party payers, our segments must follow complex documentation, coding and billing rules. These rules are based on federal and state laws, rules and regulations, various government pronouncements, and industry practice. In the U.S., failure to follow these rules could result in

potential criminal or civil liability under the federal False Claims Act, under which extensive financial penalties can be imposed or under various state statutes which prohibit the submission of false claims for services covered. Compliance failure could further result in criminal liability under various federal and state criminal or civil statutes. Our segments may be subject to audits conducted by our clients or their proxies that may result in recoupment of funds. In addition, our segments' clients may be subject to certain audits that may result in recoupment of funds from our clients that may, in turn, implicate our segments' services. Our segments' businesses could be adversely affected in the event such an audit results in negative findings and recoupment from or penalties to their customers.

Our segment contracts are subject to stringent claims and invoice processing regimes which vary depending on the customer and nature of the payment mechanism. Government entities in the U.S. may take the position that if a transport cannot be matched to a healthcare event, or is conducted inconsistently with contractual, regulatory or even policy requirements, payment for such transport may be recouped by such customer. Under European procurement legislation which has been implemented in each EU member state, any conviction for fraud can result in a ban from participating in public procurement tenders for up to five years, or until the organization in question has put in place "self clean" measures to the satisfaction of the procuring authority. This could significantly affect our business given that most of our customers in Europe are governmental organizations. Any such breaches or deficiencies in paperwork associated with billing may also be subject to contractual clawback regimes and penalties, which can be enforced many years after the revenue has been paid by the relevant authority.

While our segments carefully and regularly review their documentation, coding and billing practices, the rules are frequently vague and confusing and they cannot assure that governmental investigators, private insurers or private whistleblowers will not challenge their practices. Such a challenge could result in a material adverse effect on our segments' financial position and results of operations.

Our segments' business could be subject to civil penalties and loss of business if we fail to comply with applicable bribery, corruption and other regulations governing business with governments.

Our U.S. Healthcare Segments are subject to the federal Anti-Kickback Statute, which prohibits the offer, payment, solicitation or receipt of any form of remuneration in return for referring, ordering, leasing, purchasing or arranging for or recommending the ordering, purchasing or leasing of items or services payable by a federally funded healthcare program. Any of our U.S. Healthcare Segments' financial relationships with healthcare providers will be potentially implicated by this statute to the extent Medicare or Medicaid referrals are implicated. Violations of the Anti-Kickback Statute could result in substantial civil or criminal penalties, including criminal fines of up to $25,000 per violation, imprisonment of up to five years, civil penalties under the Civil Monetary Penalties Law of up to $50,000 per violation, plus three times the remuneration involved, civil penalties under the False Claims Act of up to $11,000 for each claim submitted, plus three times the amounts paid for such claims and exclusion from participation in the Medicaid and Medicare programs. Any such penalties could have a significant negative effect on our U.S. Healthcare Segments' operations. Furthermore, the exclusion, if applied to such segments, could result in significant reductions in our revenues, which could materially and adversely affect such segments' businesses, financial condition and results of their operations. In addition, many states have adopted laws similar to the federal Anti-Kickback Statute with similar penalties.

As an international business whose customers are largely in the public sector, the WD Services segment generally wins work through public tender processes. Various statutes, such as the UK's Bribery Act and the Foreign Corrupt Practices Act in the U.S., generally require organizations to prohibit bribery by or for the organization and demand the implementation of systems to counter bribery, including risk management, training and guidance and the maintenance of adequate record-keeping and internal accounting practices. These statutes also, among other things, prohibit us from providing anything of value to foreign officials for the purposes of influencing official decisions or obtaining or retaining business or otherwise obtaining favorable treatment. In addition, many countries in which we operate have antitrust or competition regulations which, among other things, prohibit collusive tendering or bid-rigging behavior. Policies and procedures we implement to prevent bribery, corruption and anti-competitive conduct may not effectively prevent us from violating these regulations in every transaction in which we may engage, and such a violation could adversely affect our reputation, business, financial condition and results of operations. Any breach of bribery, corruption and collusive tendering laws could also expose our operations in Europe to a ban from participating in public procurement tenders for up to 5 years, or until the organization in question has put in place "self clean" measures to the satisfaction of the procuring authority.

In WD Services, we conduct business in several countries, each with its own system of regulation. Compliance with existing regulations is costly, and changes in regulations or violations of regulations may result in increased costs or sanctions that could reduce our revenue and profitability.

As of December 31, 2017, our WD Services segment operated in the U.S and 10 countries outside the U.S. Each of these countries has its own national and municipal laws and regulations, and some countries such as Australia, Germany and Switzerland,

have both federal and state regulations. In the UK, certain law making powers are being devolved to Scotland, Wales and Northern Ireland. These laws can differ significantly from country to country. In addition, in Europe, countries (including the UK) are subject to European Union ("EU") laws and rules. We have implemented compliance policies to help assure our compliance with these laws and regulations as they become effective; however, different interpretations or enforcement of these laws and regulations in the future could subject our practices to allegations of impropriety or illegality or could require us to make changes in our facilities, equipment, personnel, services or the manner in which we conduct our business.

Our segments' businesses could be adversely affected by future legislative changes that hinder or reverse the privatization of non-emergency transportation services or workforce development services.

The market for certain of our segments' services depends largely on government sponsored programs. These programs can be modified or amended at any time. Moreover, part of our growth strategy includes aggressively pursuing opportunities created by government initiatives to privatize the delivery of non-emergency transportation services and workforce development services. However, there are opponents to the privatization of these services and, as a result, future privatization is uncertain. In the UK, opposition to the government's outsourcing of the services provided by WD Services to private companies may increase in light of recent events in the UK, including the liquidation of the UK government contractor Carillion plc. In 2017, legislation was proposed in the U.S. Congress, but not passed, which would reduce or eliminate certain non-emergency medical transportation services provided by NET Services as a required Medicaid benefit. If additional privatization initiatives are not proposed or enacted, or if previously enacted privatization initiatives are challenged, repealed or invalidated, there could be a material adverse impact on our segments' operating results.

Our business could be adversely affected by the referendum on the UK's exit from the European Union.

On June 23, 2016, the UK held a referendum in which eligible persons voted in favor of a proposal that the UK leave the EU, also known as "Brexit". The result of the referendum increases political and economic uncertainty in the UK for the foreseeable future, in particular during any period where the terms of any UK exit from the EU are negotiated. In turn, Brexit could cause disruptions to and create uncertainty surrounding our business, including affecting our relationships with our existing and future payers and employees, which could have an adverse effect on our financial results, operations and prospects, including being adversely affected in ways that cannot be anticipated at present. The impact of Brexit on our business is not yet clear, and will depend on any agreements the UK makes to retain access to EU markets. Such agreements could potentially disrupt and/or destabilize the markets we serve and the tax jurisdictions in which we operate and adversely change tax benefits or liabilities in these or other jurisdictions. The terms of any UK exit from the EU could generate restriction on the movement of capital and the mobility of personnel. Depending on the outcome of negotiations between the UK and the European Union regarding the terms of Brexit (which will be negotiated over a period which may extend at least until March 2019), we may decide to alter the group's European operations to respond to new business, legal, regulatory, tax and trade environments that may result. In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the UK determines which EU laws to replace, modify or replicate.

Following the referendum, there was significant volatility in global stock markets and currency exchange rate fluctuations that resulted in the strengthening of the U.S. dollar against foreign currencies in which we conduct business. The strengthening of the U.S. dollar relative to the British pound and other currencies may adversely affect our results of operations as we translate sales and other results denominated in foreign currency into U.S. dollars for our financial statements. During periods of a strengthening dollar, our reported international sales and earnings could be reduced because foreign currencies may translate into fewer U.S. dollars. For the year ended December 31, 2017, revenue denominated in British pound represented 11.6% of our revenue.

Brexit may also create global economic uncertainty, which may cause our payers to closely monitor their costs and reduce their spending budget on our services. Additionally, changes in governmental personnel may impact our current relationships with our payers. Any of these effects and the uncertainties of Brexit, among others, could materially adversely affect our business, business opportunities, results of operations, financial condition, future growth and cash flows.

Changes to the regulatory landscape applicable to Matrix could have a material adverse effect on our results of operations and financial condition.

The CHA services industry is primarily regulated by federal and state healthcare Laws and the requirements of participation and reimbursement of the MA Program established by CMS. From time to time, CMS considers changes to

regulatory guidelines with respect to prospective CHAs or the risk adjusted payment system applicable to Matrix's Medicare Advantage plan customers. CMS could adopt new requirements or guidelines that may, for example, increase the costs associated with CHAs, limit the opportunities and settings available to administer CHAs, or otherwise change the risk adjusted payment system in a way that would

adversely impact our business. Further, changes in or adoption of new state laws governing the scope of practice of mid-level practitioners, or more restrictive interpretations of such laws, may restrict Matrix's ability to provide services using nurse practitioners. Any such implementation of additional regulations on the CHA industry by CMS or other regulatory bodies or further regulation of mid-level practitioners could have a material adverse impact on Matrix's revenues and margins, which could have a material adverse impact on our consolidated results of operations.

If our U.S. Healthcare Segments fail to comply with physician self-referral laws, to the extent applicable to our operations, they could experience a significant loss of reimbursement revenue.

Our U.S. Healthcare Segments may be subject to federal and state statutes and regulations banning payments for referrals of patients and referrals by physicians to healthcare providers with whom the physicians have a financial relationship and billing for services provided pursuant to such referrals if any occur. Violation of these federal and state laws and regulations, to the extent applicable to our U.S. Healthcare Segments' operations, may result in prohibition of payment for services rendered, loss of licenses, fines, criminal penalties and exclusion from Medicaid and Medicare programs. To the extent such segments do maintain such financial relationships with physicians, they rely on certain exceptions to self-referral laws that they believe will be applicable to such arrangements. Any failure to comply with such exceptions could result in the penalties discussed above.

As government contractors, our segments are subject to an increased risk of litigation and other legal actions and liabilities.

As government contractors, our segments are subject to an increased risk of investigation, criminal prosecution, civil fraud, whistleblower lawsuits and other legal actions and liabilities that are not as frequently experienced by companies that do not provide government sponsored services. Companies providing government sponsored services can also become involved in public inquiries which can lead to negative media speculation or potential cancellation or termination of contracts. In WD Services in Europe, European procurement regulations in force in each European Union member state require public procurement authorities to impose a ban from participating in public procurement tenders for up to five years, or until the organization in question has put in place "self clean" measures to the satisfaction of the procuring authority, where companies are found guilty of fraud or certain other criminal offenses. Authorities can also exercise their discretion to blacklist companies for up to two years where they believe they have been involved in acts of gross misconduct or until the organization in question has put in place "self clean" measures to the satisfaction of the procuring authority. The occurrence of any of these actions, regardless of the outcome, could disrupt our operations and result in increased costs, and could limit our ability to obtain additional contracts in other jurisdictions. Further, government tenders in the U.S., the European Union and other countries can be subject to challenge where the procurer has not followed the correct processes, or where they seek to make material amendments to contracts after award. Consequently, it can be very difficult to convince government customers to amend their contracts, even where circumstances have changed significantly, because they are concerned that if challenged they may have to re-procure the entire service. This can pose significant risks in terms of cost management and profitability.

Our segments' businesses are subject to licensing regulations and other regulatory provisions, including provisions governing surveys and audits. Changes to, or violations of, these regulations could negatively impact our segments' revenues.

In many of the locations where our segments operate, they are required by local laws (both U.S. and foreign) to obtain and maintain licenses. The applicable state and local licensing requirements govern the services our segments provide, the credentials of staff, record keeping, treatment planning, client monitoring and supervision of staff. The failure to maintain these licenses or the loss of a license could have a material adverse impact on our segments' businesses and could prevent them from providing services to clients in a given jurisdiction. Our segments' contracts are subject to surveys or audit by their payers or their clients. Our segments are also subject to regulations that restrict their ability to contract directly with a government agency in certain situations. Such restrictions could affect our segments' ability to contract with certain payers and clients, and could have a material adverse impact on our segments' results of operations.

Our segments' contracts are subject to audit and modification by the payers with whom our segments contract, at their sole discretion.

Our segments' businesses depend on their ability to successfully perform under various government funded contracts. Under the terms of these contracts, payers, government agencies or their proxy contractors can review our segments' compliance or performance, as well as our segments' records and general business practices at any time, and may, in their discretion:

- suspend or prevent our segments from receiving new contracts or extending existing contracts because of violations or suspected violations of procurement laws or regulations;
- terminate or modify our segments' existing contracts;
- reduce the amount our segments are paid under our existing contracts; or
- audit and object to our segments' contract related fees.

Any increase in the number or scope of audits could increase our segments' expenses, and the audit process may disrupt the day-to-day operations of our segments' businesses and distract their management. If payers have significant audit findings, or if they make material modifications to our segments' contracts, it could have a material adverse impact on our segments' results of operations.

Contract profitability may decline due to actions by governmental agencies or penalties that are based on government generated statistical information that may not be known to us in advance.

WD Services' operating costs and profitability may be significantly impacted by actions required by a government agency, such as the availability of information systems maintained by the government to streamline enrollment into our service programs. Government generated performance statistics, such as the MOJ reoffending report, may not be known to us prior to its release by the government agencies. WD Services may be subject to penalties that are based on such government generated statistics, and we could be required to make material payments, the amounts of which we may not be able to estimate and which could have an adverse effect on our financial condition and results of operations.

In addition, certain contracts may require that we hire former government employees, in relation to offering our service programs, or develop new information technology systems which would serve to replace legacy systems operated by the government. Lastly, revenue under certain contracts may be adjusted prospectively if client volumes are below expectations or client profiles change materially, which may also lead to cost or productivity changes. If the Company is unable to adjust its costs accordingly, profitability is negatively impacted.

Our estimated income taxes could be materially different from income taxes that we ultimately pay.

We are subject to income taxation in both the U.S. and 10 foreign countries, including specific states or provinces where we operate. Our overall effective income tax rate is a function of applicable local tax rates and the geographic mix of our income from continuing operations before taxes, which is itself impacted by currency movements. Consequently, the isolated or combined effects of unfavorable movements in tax rates, geographic mix, or foreign exchange rates could reduce our after-tax income.

Our annual tax rate is based on our income and the tax laws in the various jurisdictions in which we operate. Significant judgment and estimation is required in determining our annual income tax expense and in evaluating our tax positions and related matters. In the ordinary course of our business, there are many transactions and calculations for which the ultimate tax determinations are uncertain or otherwise subject to interpretation. Although we believe our tax estimates are reasonable, the final determination of tax audits and any related disputes could be materially different from our historical income tax provisions and accruals. In addition, we make judgments regarding the applicability of tax treaties and the appropriate application of transfer pricing regulations. In the event one taxing jurisdiction disagrees with another taxing jurisdiction with respect to the amount or applicability of a particular type of tax, or the amount or availability of a particular type of tax refund or credit, we could experience temporary or permanent double taxation and increased professional fees to resolve such taxation matters. Our determination of our income tax liability is always subject to review by applicable tax authorities, and we have been audited by various jurisdictions in prior years. Although we believe our income tax estimates and related determinations are reasonable and appropriate, relevant taxing authorities may disagree. The ultimate outcome of any such audits and reviews could be materially different from the estimates and determinations reflected in our historical

income tax provisions and accruals. Any adverse outcome of any such audit or review could have an adverse effect on our financial condition and the results of our operations.

The Tax Cuts and Jobs Act ("Tax Reform Act"), which was signed into law on December 22, 2017, significantly affected U.S. income tax law by changing how the U.S. imposes income tax on multinational corporations. We have recorded in our consolidated financial statements provisional amounts based on our current estimates of the effects of the Tax Reform Act in

accordance with our current understanding of the Tax Reform Act and currently available guidance. For additional information regarding the Tax Reform Act and the provisional tax amounts recorded in our consolidated financial statements, see "Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies". The final amounts may be significantly affected by regulations and interpretive guidance expected to be issued by the tax authorities, clarifications of the accounting treatment of various items, our additional analysis, and our refinement of our estimates of the effects of the Tax Reform Act and, therefore, such final amounts may be materially different than our current provisional amounts, which could materially affect our tax obligations and effective tax rate.

Risks Related to Our Indebtedness

Restrictive covenants in our Credit Agreement may limit our current and future operations, particularly our ability to respond to changes in our business or to pursue our business strategies.

The terms contained in the agreements that govern certain of our indebtedness, including our Amended and Restated Credit and Guaranty Agreement (as amended, supplemented, or modified, the "Credit Agreement"), and the agreements that govern any future indebtedness of ours, may include a number of restrictive covenants that impose significant operating and financial restrictions, including restrictions on our ability to take actions that we believe may be in our best interest. These agreements, among other things, limit our ability to:

- incur additional debt;
- provide guarantees in respect of obligations of other persons;
- issue redeemable stock and preferred stock;
- pay dividends or distributions or redeem or repurchase capital stock;
- make loans, investments and capital expenditures;
- enter into transactions with affiliates;
- create or incur liens;
- make distributions from our subsidiaries;
- sell assets and capital stock of our subsidiaries;
- make acquisitions; and
- consolidate or merge with or into, or sell substantially all of our assets to, another person.

A breach of the covenants or restrictions could result in a default under the applicable agreements that govern our indebtedness. Such default may preclude us from drawing from our senior secured credit facility (the "Credit Facility") or allow the creditors to accelerate the related debt and may result in the acceleration of any other debt that we may incur to which a cross acceleration or cross-default provision applies. In the event our lenders accelerate the repayment of our borrowings, we cannot assure that we and our subsidiaries would have sufficient assets to repay such indebtedness.

Loss of available financing or an inability to renew, repay or refinance our debt could have an adverse effect on our financial condition and results of operations.

At December 31, 2017, our available credit under the Credit Facility was $188.9 million. The Credit Facility matures on August 2, 2018. If our cash on hand is insufficient, or we are unable to generate sufficient cash flows in the future, to cover our cash flow and liquidity needs and service our debt, we may be required to seek additional sources of funds, including refinancing all or a portion of our existing or future debt, incurring additional debt to maintain sufficient cash flow to fund our ongoing operating needs, pay interest and fund anticipated expenditures. There can be no assurance that any refinancing will be possible or that any additional financing could be obtained on acceptable terms. If we are unable to obtain additional financing, we may (i) be unable to satisfy our obligations under our outstanding indebtedness, (ii) be unable to pursue future business opportunities or fund acquisitions, (iii) find it more difficult to fund future operating costs, tax payments or general corporate expenditures and (iv) become vulnerable to adverse general economic, capital markets and industry conditions. Any of these circumstances could have a material adverse effect on our financial position, liquidity and results of operations.

We may incur substantial additional indebtedness in the future, which could impair our financial condition.

We may incur substantial additional indebtedness in the future to fund activities including but not limited to share repurchases, acquisitions, cash dividends and business expansion. Any existing and future indebtedness increases the risk that we may be unable to generate cash sufficient to pay amounts due in respect of such indebtedness. Future substantial indebtedness could have other important consequences on our business. For example, it could:

- make it more difficult for us to satisfy our obligations;
- make it more difficult to renew or enter into new contracts with existing and potential future clients;
- limit our ability to borrow additional amounts to fund working capital, capital expenditures, debt service requirements, execution of our business strategy or acquisitions and other purposes;
- require us to dedicate a substantial portion of our cash flow from operations to pay principal and interest on our debt, which would reduce the funds available to us for other purposes;
- restrict our ability to dispose of assets and use the proceeds from any such dispositions;
- restrict our ability to raise debt or equity capital to be used to repay other indebtedness when it becomes due;
- make us more vulnerable to adverse changes in general economic, industry and competitive conditions, as well as in government regulation and to our business;
- expose us to risks inherent in interest rate fluctuations because some of our borrowings are at variable rates of interest, which could result in higher interest expenses in the event of increases in interest rates; and
- make it more difficult to satisfy our financial obligations.

Our ability to satisfy and manage our debt obligations depends on our ability to generate cash flow and on overall financial market conditions. To some extent, this is subject to prevailing economic and competitive conditions and to certain financial, business and other factors, many of which are beyond our control. Our business may not generate sufficient cash flow from operations to permit us to pay principal, premium, if any, or interest on our debt obligations. If we are unable to generate sufficient cash flow from operations to service our debt obligations and meet our other cash needs, we may be forced to reduce or delay capital expenditures, sell or curtail assets or operations, seek additional capital, or seek to restructure or refinance our indebtedness. If we must sell or curtail our assets or operations, it may negatively affect our ability to generate revenue.

Risks Related to Our Capital Stock

Our annual operating results and stock price may be volatile or may decline significantly regardless of our operating performance.

Our annual operating results and the market price for our Common Stock may fluctuate significantly in response to a number of factors, many of which we cannot control, including:

- changes in rates or coverage for services by payers;
- changes in Medicaid, Medicare or other U.S. federal or state rules, regulations, policies or applicable foreign regulations, policies and technical guidance, including UK health, employment and criminal justice legislation and guidance, Saudi Arabian licensing and Saudization rules, as well as other foreign laws applicable to our business;
- price and volume fluctuations in the overall stock market;
- market conditions or trends in our industry or the economy as a whole;
- increased competition in any of our segments, including through insourcing of services by our clients and new entrants to the market;
- other events or factors, including those resulting from war, incidents of terrorism, natural disasters or responses to these events;
- changes in tax law; and
- changes in accounting principles.

In addition, the stock markets, and in particular the NASDAQ Global Select Market, have experienced considerable price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. In the past, stockholders have instituted securities class action litigation following periods of market volatility. If

we become involved in securities litigation, we could incur substantial costs, and our resources and the attention of management could be diverted from our business.

The Company depends on its subsidiaries for cash to fund all of its operations and expenses, including to make future dividend payments, if any.

Our operations are conducted entirely through our subsidiaries and our ability to generate cash to fund all of our operations and expenses, to pay dividends or to meet any debt service obligations is highly dependent on the earnings and the receipt of funds from our subsidiaries via dividends or intercompany loans. We do not currently expect to declare or pay dividends on our Common Stock for the foreseeable future; however, to the extent that we determine in the future to pay dividends on our Common Stock, none of our subsidiaries will be obligated to make funds available to us for the payment of dividends. Further, the agreement governing our Credit Agreement significantly restricts the ability of our subsidiaries to pay dividends, make loans or otherwise transfer assets to us. In addition, Delaware law may impose requirements that may restrict our ability to pay dividends to holders of our Common Stock.

If securities or industry analysts do not publish research or publish misleading or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our Common Stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. If one or more analysts downgrade our stock or publish misleading or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price or trading volume to decline.

Future sales of shares by existing stockholders could cause our stock price to decline.

Sales of substantial amounts of our Common Stock in the public market, or the perception that these sales could occur, could cause the market price of our Common Stock to decline. As of March 5, 2018, we had 12,866,551 outstanding shares of Common Stock which are freely transferable without restriction or further registration under the Securities Act of 1933, as amended (the "Securities Act"), unless held by or purchased by our "affiliates" as that term is defined in Rule 144 under the Securities Act. Shares of our Common Stock held by or purchased by our affiliates are restricted securities within the meaning of Rule 144 under the Securities Act, but will be eligible for resale subject to applicable volume, means of sale, holding period and other limitations of Rule 144 under the Securities Act.

As of March 5, 2018, shares of our convertible preferred stock were convertible into 2,014,042 shares of Common Stock, all of which are subject to registration rights. In addition, as of March 5, 2018, 1,653,755 shares of Common Stock are beneficially owned by entities for which Coliseum Capital Management acts as investment adviser.

In August 2016, we filed a registration statement under the Securities Act to register additional shares of Common Stock to be issued under our equity compensation plans and, as a result, all shares of Common Stock acquired upon exercise of stock options granted under our plans will also be freely tradable under the Securities Act, unless purchased by our affiliates. As of December 31, 2017, there were stock options outstanding to purchase a total of 606,695 shares of our Common Stock and there were 111,157 shares of our Common Stock subject to restricted stock awards. In addition, 1,938,666 shares of our Common Stock are reserved for future issuances under the plan.

The terms of our Preferred Stock contain restrictive covenants that may impair our ability to conduct business and we may not be able to maintain compliance with the obligations under our outstanding Preferred Stock which could have a material adverse effect on our future results of operations and our stock price.

On February 11, 2015 and March 12, 2015, we issued $65.5 million and $15.8 million, respectively, of Preferred Stock. The terms of the Preferred Stock require us to pay mandatory quarterly dividends, either in cash or through an increase in the stated principal value of such stock. Our ability to satisfy and manage our obligations under our outstanding Preferred Stock depends, in part, on our ability to generate cash flow and on overall financial market conditions. Additionally, the terms of our Preferred Stock contain operating and financial covenants that limit management's discretion with respect to certain business matters. Among other things, these covenants, subject to certain limitations and exceptions, restrict our ability to incur additional debt, sell or otherwise dispose of our assets, make acquisitions, and merge or consolidate with other entities. As a result of these covenants and restrictions, we may be limited in how we conduct our business, which could have a material adverse effect on our future results of operations and our stock price.

Future offerings of debt or equity securities that would rank senior to our Common Stock, may adversely affect the market price of our Common Stock.

If, in the future, we decide to issue debt or equity securities that rank senior to our Common Stock, it is likely that such securities will be governed by an indenture or other instrument containing covenants restricting our operating flexibility. Additionally, any convertible or exchangeable securities that we issue in the future may have rights, preferences and privileges more favorable than those of our Common Stock and may result in dilution to owners of our Common Stock. We and, indirectly, our stockholders, will bear the cost of issuing and servicing such securities. Because our decision to issue debt or equity securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of our future offerings. Thus, holders of our Common Stock will bear the risk of our future offerings reducing the market price of our Common Stock and diluting the value of their stock holdings in us.

Fulfilling our obligations incident to being a public company, including with respect to the requirements of and related rules under the Sarbanes-Oxley Act of 2002, is expensive and time-consuming, and any delays or difficulties in satisfying these obligations could have a material adverse effect on our future results of operations and our stock price.

We are subject to the reporting and corporate governance requirements, under the listing standards of the NASDAQ Global Select Market ("NASDAQ") and the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), that apply to issuers of listed equity, which impose certain significant compliance costs and obligations upon us. Being a publicly listed company requires a significant commitment of additional resources and management oversight resulting in increased operating costs. These requirements also place additional demands on our finance and accounting staff and on our financial accounting and information systems. Other expenses associated with being a public company include increases in auditing, accounting and legal fees and expenses, investor relations expenses, increased directors' fees and director and officer liability insurance costs, registrar and transfer agent fees and listing fees, as well as other expenses. As a public company, we are required, among other things, to define and expand the roles and the duties of our Board of Directors ("Board") and its committees and institute more comprehensive compliance and investor relations functions.

If we fail to maintain effective internal control over financial reporting in the future, the accuracy and timing of our financial reporting may be adversely affected. Preparing our consolidated financial statements involves a number of complex manual and automated processes, which are dependent upon individual data input or review and require significant management judgment. One or more of these elements may result in errors that may not be detected and could result in a material misstatement of our consolidated financial statements. If a material misstatement occurs in the future, we may fail to meet our future reporting obligations. For example, we may fail to file periodic reports in a timely manner or may need to restate our financial results, either of which may cause the price of our common stock to decline. In addition, our WD Services business is subject to the European Union's and other countries' data security and protection laws and regulations, which may make it more difficult for the Company to maintain the records and internal accounting practices necessary to ensure the appropriate operation of our internal controls or to detect corruption or increasing the Company's costs to maintain appropriate controls.

If the accounting estimates we make, and the assumptions on which we rely, in preparing our financial statements prove inaccurate, our actual results may be adversely affected.

Our financial statements have been prepared in accordance with accounting principles generally accepted in the United States, or GAAP. The preparation of these financial statements requires us to make estimates and judgments about, among other things, taxes, revenue recognition, contingent obligations, NET Services transportation expense, recoverability of long-lived assets and doubtful accounts. In addition, our foreign operations report their results pursuant to International Financial Reporting Standards, or IFRS, or local accounting standards, which requires judgment to convert into GAAP. Lastly, the implementation of ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606), which is effective for the Company beginning January 1, 2018, requires a significant level of judgment and estimation, especially in regards to contingent or success-based payments, such as those prevalent at WD Services. These estimates and judgments affect the reported amounts of our assets, liabilities, revenue and expenses, the amounts of charges accrued by us, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances and at the time they are made. If our estimates or the assumptions underlying them are not correct, we may need to accrue additional charges or reduce the value of assets that could adversely affect our results of operations, leading to a loss in investor confidence in our ability to manage our business and our stock price could decline.

Anti-takeover provisions in our second amended and restated certificate of incorporation and amended and restated by-laws could discourage, delay or prevent a change of control of our company and may affect the trading price of our Common Stock.

Our second amended and restated certificate of incorporation and amended and restated bylaws include a number of provisions that may be deemed to have anti-takeover effects, which include when and by whom special meetings of our stockholders may be called, and may discourage, delay or prevent a change in our management or control over us that stockholders may consider favorable. Such provisions may prevent our stockholders from receiving the benefit from any premium to the market price of our Common Stock offered by a bidder in a takeover context. Even in the absence of a takeover attempt, the existence of these provisions may adversely affect the prevailing market price of our Common Stock if the provisions are viewed as discouraging takeover attempts in the future. Our second amended and restated certificate of incorporation and amended and restated by-laws may also make it difficult for stockholders to replace or remove our management. These provisions may facilitate management entrenchment that may delay, deter, render more difficult or prevent a change in our control, which may not be in the best interests of our stockholders.

We do not expect to pay dividends on our Common Stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our Common Stock.

We currently do not expect to declare and pay dividends on our Common Stock for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth, to develop our business, for working capital needs and for general corporate purposes. Therefore, you are not likely to receive any dividends on your Common Stock for the foreseeable future and the success of an investment in shares of our Common Stock will depend upon any future appreciation in their value. There is no guarantee that shares of our Common Stock will appreciate in value or even maintain the price at which stockholders have purchased their shares.

Item 1B. ***Unresolved Staff Comments.***

None.

Item 2. ***Properties.***

Our principal executive office is located in Stamford, Connecticut, and we lease additional office space in Tucson, Arizona. As of March 2, 2018, NET Services leases space in approximately 40 locations, WD Services leases space in approximately 220 locations, and Matrix leases space in five locations. The lease terms vary and we believe are generally at market rates. We believe that our properties are adequate for our current business needs, and believe that we can obtain adequate space, if needed, to meet our foreseeable business needs.

Item 3. ***Legal Proceedings.***

On June 15, 2015, a putative stockholder class action derivative complaint was filed in the Court of Chancery of the State of Delaware (the "Court"), captioned Haverhill Retirement System v. Kerley et al., C.A. No. 11149-VCL (the "Haverhill Litigation"). The complaint named Richard A. Kerley, Kristi L. Meints, Warren S. Rustand, Christopher Shackelton (the "Individual Defendants") and Coliseum Capital Management, LLC ("Coliseum Capital Management") as defendants, and the Company as a nominal defendant. The complaint purported to allege that the dividend rate increase term originally in the Company's outstanding Preferred Stock was an impermissibly coercive measure that impaired the voting rights of the Company's stockholders in connection with the vote on the removal of certain voting and conversion caps previously applicable to the Preferred Stock (the "Caps"), and that the Individual Defendants breached their fiduciary duties by approving the dividend rate increase term and attempting to coerce the stockholder vote relating to the Company's Preferred Stock, and by failing to disclose all material information necessary to allow the Company's stockholders to cast an informed vote on the Caps. The complaint also purported to allege derivative claims alleging that the Individual Defendants breached their fiduciary duties to the Company by entering into the subordinated note and standby agreement with Coliseum Capital Management, and granting Coliseum Capital Management certain stock options. The complaint further alleged that Coliseum Capital Management aided and abetted the Individual Defendants in breaching their fiduciary duties. The complaint sought, among other things, an injunction prohibiting the stockholder vote relating to the dividend rate increase, corporate governance reforms, unspecified damages and other relief.

On August 31, 2015, after arms' length negotiations, the parties reached an agreement in principle and executed a Memorandum of Understanding ("MOU") providing for the settlement of claims concerning the dividend rate increase term and stockholder vote and related disclosure. The MOU stated that the Defendants had entered into the partial settlement of the litigation solely to eliminate the distraction, burden, expense, and potential delay of further litigation involving claims that have been settled. Pursuant to the partial settlement, the Company agreed to supplement the disclosures in its definitive proxy statement on Schedule

14A (the "2015 Proxy Statement"), Coliseum Capital Management and certain of its affiliates and the Company entered into an amendment to that certain Series A Preferred Stock Exchange Agreement, by and among Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Coliseum Capital Co-Invest, L.P., Blackwell Partners, LLC, and The Providence Service Corporation dated as of February 11, 2015 described in the 2015 Proxy Statement, and the Board agreed to adopt a policy related to the Board's determination each quarter as to whether the Company should pay cash dividends or allow dividends to be paid in the form of PIK dividends on the Preferred Stock, as further described in the supplemental proxy disclosures. On September 2, 2015, Providence issued supplemental disclosures through a supplement to the 2015 Proxy Statement. On September 16, 2015, Providence stockholders approved the removal of the Caps. The Company provided notice of the proposed partial settlement to Providence's stockholders by December 11, 2015. At a hearing on February 9, 2016, the court denied approval of the settlement. The Court indicated that plaintiff's counsel could petition the Court for a mootness fee, and that defendants would have the opportunity to oppose any such application.

On January 12, 2016, the plaintiff filed a verified amended class action and derivative complaint (the "first amended complaint"). In addition to the defendants named in the earlier complaint, the first amended complaint named David Shackelton, Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Blackwell Partners, LLC, Coliseum Capital Co-Invest, L.P. (collectively, and together with Coliseum Capital Management, LLC, "Coliseum") and RBC Capital Markets, LLC ("RBC Capital Markets") as additional defendants. The first amended complaint purported to allege direct and derivative claims for breach of fiduciary duty against some or all of the Individual Defendants and David Shackelton (collectively, the "Amended Individual Defendants") regarding the approval of the subordinated note, the rights offering, the standby agreement with Coliseum Capital Management, and the grant to Coliseum Capital Management of certain stock options. The first amended complaint also purported to allege an additional derivative claim for unjust enrichment against Coliseum and further alleged that Coliseum and RBC Capital Markets aided and abetted the Amended Individual Defendants in breaching their fiduciary duties. The first amended complaint sought, among other things, revision or rescission of the terms of the subordinated note and Preferred Stock, corporate governance reforms, unspecified damages and other relief.

On May 6, 2016, the plaintiff filed a verified second amended class action and derivative complaint (the "second amended complaint"). In addition to the defendants named in the earlier complaint, the second amended complaint named Paul Hastings LLP ("Paul Hastings") and Bank of America, N.A. ("BofA") as additional defendants. In addition to previously asserted claims, the second amended complaint purported to assert direct and derivative claims for breach of fiduciary duties against Coliseum Capital Management, in its capacity as the controlling stockholder of the Company, in connection with the subordinated note, the Company's rights offering of Preferred Stock and the standby purchase agreement with Coliseum Capital Management (the "Financing Transactions"). The second amended complaint also alleged that Paul Hastings breached their fiduciary duties as counsel to the Company in connection with the Financing Transactions and that BofA and Paul Hastings aided and abetted certain of the Amended Individual Defendants in breaching their fiduciary duties in connection with the Financing Transactions. The second amended complaint sought, among other things, revision or rescission of the terms of the subordinated note and Preferred Stock, corporate governance reforms, disgorgement of fees paid to RBC Capital Markets, Paul Hastings and BofA for work relating to the Financing Transactions, unspecified damages and other relief.

On May 20, 2016, the Court granted a six-month stay of the proceeding (which was subsequently extended) to allow a special litigation committee, created by the Board, sufficient time to investigate, review and evaluate the facts, circumstances and claims asserted in or relating to this action and determine the Company's response thereto. On January 20, 2017, the special litigation committee advised the Court that the parties to the litigation and the special litigation committee had reached an agreement in principle to settle all of the claims in the litigation. The parties then entered into a proposed settlement agreement which was submitted to the Court for approval. On September 28, 2017, the Court approved the proposed settlement agreement among the parties that provided for a settlement amount of $10 million less plaintiff's legal fees and expenses (the "Settlement Amount"), with 75% of the Settlement Amount to be paid to the Company and 25% of the Settlement Amount to be paid to holders of the Company's Common Stock other than certain excluded parties. On November 16, 2017, the Company, as a nominal defendant, received a payment of $5.4 million from the Settlement Amount.

Item 4. ***Mine Safety Disclosures***

Not applicable.

PART II

Item 5. ***Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.***

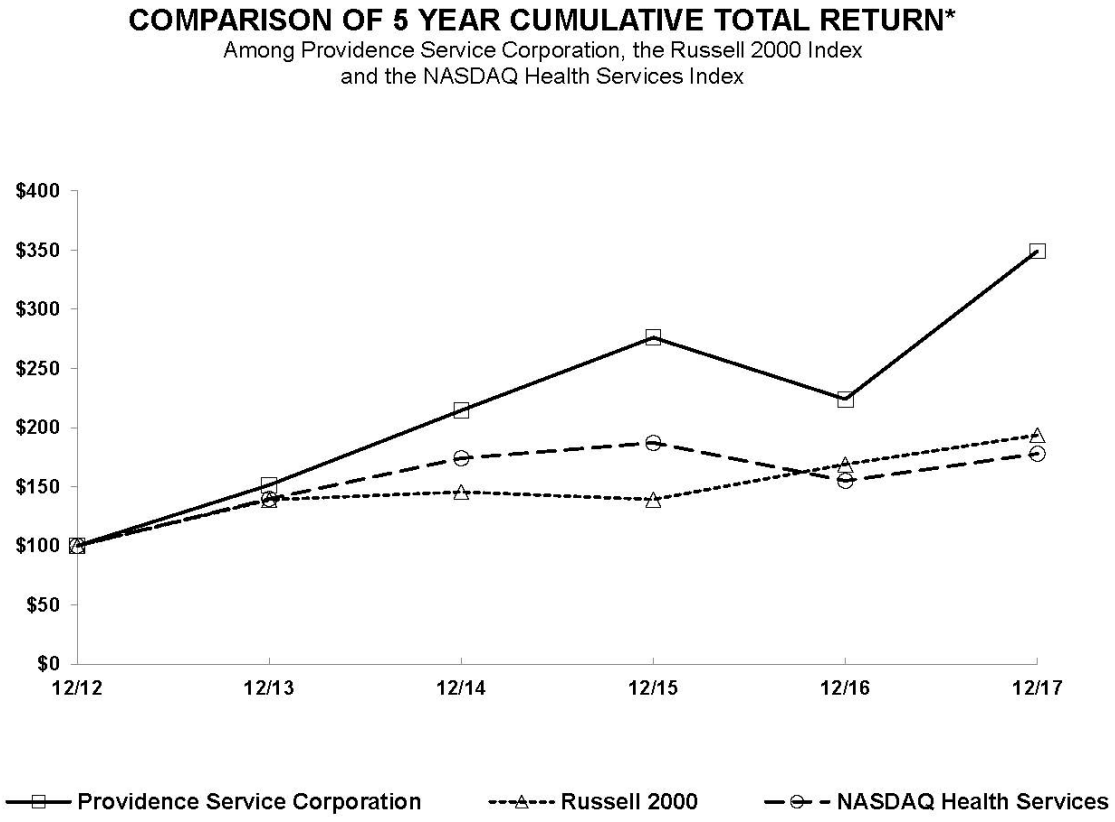
Market for our Common Stock

Our Common Stock, our only class of common equity, has been quoted on NASDAQ under the symbol "PRSC" since August 19, 2003. Prior to that time there was no public market for our Common Stock. As of March 5, 2018, there were 22 holders of record of our Common Stock. The following table sets forth the high and low sales prices per share of our Common Stock for the period indicated, as reported on NASDAQ Global Select Market:

	High	Low
2017		
Fourth Quarter	$ 60.59	$ 53.84
Third Quarter	$ 54.99	$ 49.77
Second Quarter	$ 47.47	$ 43.73
First Quarter	$ 41.80	$ 37.65
2016		
Fourth Quarter	$ 49.97	$ 34.89
Third Quarter	$ 50.30	$ 43.01
Second Quarter	$ 53.38	$ 43.77
First Quarter	$ 55.28	$ 42.03

Stock Performance Graph

The following graph shows a comparison of the cumulative total return for our Common Stock, NASDAQ Health Services Index and Russell 2000 Index assuming an investment of $100 in each on December 31, 2012.



*$100 invested on 12/31/12 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

Dividends

We have not paid any cash dividends on our Common Stock and currently do not expect to pay dividends on our Common Stock. In addition, our ability to pay dividends on our Common Stock is limited by the terms of our Credit Agreement and our Preferred Stock. The payment of future cash dividends, if any, will be reviewed periodically by the Board and will depend upon, among other things, our financial condition, funds from operations, the level of our capital and development expenditures, any restrictions imposed by present or future debt or equity instruments, and changes in federal tax policies, if any.

Issuer Purchases of Equity Securities

Period	Total Number of Shares of Common Stock Purchased (1)	Average Price Paid per Share	Total Number of Shares of Common Stock Purchased as Part of Publicly Announced Program (2)	Maximum Dollar Value of Shares of Common Stock that May Yet Be Purchased Under Program (2) (in thousands)
Fourth quarter:				
October 1, 2017 to October 31, 2017	—	$ —	—	$ 69,640
November 1, 2017 to November 30, 2017	247	$ 56.74	—	$ 69,640
December 1, 2017 to December 31, 2017	181,714	$ 58.27	180,270	$ 59,137
Total	181,961	$ 58.26	180,270	

(1) Includes (i) shares that were acquired from employees in connection with the settlement of income tax and related benefit withholding obligations arising from vesting in restricted stock awards; and (ii) the repurchase of shares under the repurchase program authorized by the Board on November 2, 2017. For more information on these repurchases, see Note 11, *Stockholders' Equity*, to our consolidated financial statements.

(2) On October 26, 2016, our Board authorized a new repurchase program, under which the Company may repurchase up to $100.0 million in aggregate value of the Company's Common Stock during the twelve-month period following October 26, 2016. Through October 26, 2017, a total of 770,808 shares were purchased through this plan for $30.4 million, excluding commission payments.

On November 2, 2017, our Board approved the extension of the Company's prior stock repurchase program, authorizing the Company to engage in a repurchase program to repurchase up to $69.6 million (the amount remaining from the $100.0 million repurchase amount authorized in 2016) in aggregate value of our Common Stock through December 31, 2018. Purchases under the repurchase program may be made from time-to-time through a combination of open market repurchases (including Rule 10b5-1 plans), privately negotiated transactions, and accelerated share repurchase transactions, at the discretion of the Company's officers, and as permitted by securities laws, covenants under existing bank agreements, and other legal requirements. As of December 31, 2017, a total of 180,270 shares were purchased through the extended plan approved on November 2, 2017, for $10.5 million, excluding commission payments. For additional information, see Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and capital resources".

Equity Compensation Plan Information

The following table provides certain information as of December 31, 2017 with respect to our equity based compensation plans.

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	(b) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders (1)	606,695	$ 48.70	1,938,666
Equity compensation plans not approved by security holders	—	—	—
Total	606,695	48.70	1,938,666

(1) The number of shares shown in column (b) represents the number of shares available for issuance pursuant to stock options and other stock-based awards that could be granted in the future under the Company's 2006 Long-Term Incentive Plan, as amended (the "2006 Plan").

Item 6. ***Selected Financial Data.***

We have derived the following selected financial data from the consolidated financial statements and related notes. The information set forth below is not necessarily indicative of future results. This information should be read in conjunction with our consolidated financial statements and the related notes, and Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations", all of which are included elsewhere in this Annual Report on Form 10-K.

Significant transactions which occurred during the periods presented include the acquisition of Ingeus effective May 30, 2014, which primarily comprises our WD Services segment, the investment in Mission Providence, a joint venture in Australia, which commenced operations in 2014 but was sold on September 29, 2017, and our equity interest in Matrix effective October 19, 2016. Matrix, which was originally acquired on October 23, 2014, comprised our HA Services segment through October 19, 2016. The operations of HA Services and Human Services, which was sold effective November 1, 2015, have been presented as discontinued operations for all periods presented.

	Year Ended December 31,				
	2017	2016	2015	2014	2013
	(1)(2)(3)(4)(8)(9)	(3)(5)(6)(8)(9)	(7)(8)(9)(11)	(8)(10)(11)	
	(dollars and shares in thousands, except per share data)				
Statement of operations data:					
Service revenue, net	$ 1,623,882	$ 1,578,245	$ 1,478,010	$ 1,092,880	$ 798,766
Operating expenses:					
Service expense	1,489,044	1,452,110	1,381,154	988,600	736,669
General and administrative expense	72,336	69,911	70,986	44,080	25,590
Asset impairment charge	—	21,003	—	—	—
Depreciation and amortization	26,469	26,604	23,998	17,213	9,331
Total operating expenses	1,587,849	1,569,628	1,476,138	1,049,893	771,590
Operating income	36,033	8,617	1,872	42,987	27,176
Non-operating expense:					
Interest expense, net	1,278	1,583	1,853	10,224	6,921
Other income	(5,363)	—	—	—	—
Loss on extinguishment of debt	—	—	—	—	525
Equity in net (gain) loss of investees	(12,054)	10,287	10,970	—	—
Gain on sale of investment	(12,377)	—	—	—	—
Loss (gain) on foreign currency transactions	345	(1,375)	(857)	(37)	—
Income (loss) from continuing operations, before income taxes	64,204	(1,878)	(10,094)	32,800	19,730
Provision for income taxes	4,401	17,036	14,583	8,289	6,625
Income (loss) from continuing operations, net of tax	59,803	(18,914)	(24,677)	24,511	13,105
Discontinued operations, net of tax	(5,983)	108,760	107,871	(4,236)	6,333
Net income	53,820	89,846	83,194	20,275	19,438
Net (gain) loss attributable to noncontrolling interests	(451)	2,082	502	—	—
Net income attributable to Providence	$ 53,369	$ 91,928	$ 83,696	$ 20,275	$ 19,438
Diluted earnings (loss) per common share:					
Continuing operations	$ 3.50	$ (1.45)	$ (1.83)	$ 1.63	$ 0.95
Discontinued operations	(0.44)	6.52	6.09	(0.28)	0.46
Total	$ 3.06	$ 5.07	$ 4.26	$ 1.35	$ 1.41
Weighted-average number of common shares outstanding:					
Diluted	13,673	14,667	15,961	15,019	13,810

	As of December 31,				
	2017	2016	2015	2014	2013
	(9)	(5)(6)			
	(dollars in thousands)				
Balance sheet data:					
Cash and cash equivalents	$ 95,310	$ 72,262	$ 79,756	$ 121,538	$ 75,156
Total assets	704,090	685,279	1,050,202	1,168,934	425,954
Long-term obligations, including current portion	2,984	3,611	300,071	574,613	123,500
Other liabilities	287,543	306,428	382,423	372,907	151,817
Convertible preferred stock	77,546	77,565	77,576	—	—
Total stockholders' equity	336,017	297,675	290,132	221,414	150,637

(1) Other income for the year ended December 31, 2017 includes the receipt of the Haverhill Litigation settlement of $5.4 million, see Item 3. *Legal Proceedings* for further information on the settlement.

(2) Gain on sale of equity investment of $12.4 million relates to the sale of the Company's equity interest in Mission Providence in 2017. The investment in Mission Providence was part of the WD Services segment.

(3) Discontinued operations, net of tax, for the years ended December 31, 2017 and 2016 include losses of $6.0 million and $5.6 million, respectively, related to potential indemnification claims for our historical Human Services segment.

(4) The year ended December 31, 2017 includes a net tax benefit of $16.0 million related to the enactment of the Tax Reform Act during the fourth quarter of 2017 due to the re-measurement of deferred tax liabilities by Providence as a result of the reduction in the U.S. corporate tax rate. Providence realized a benefit of $19.4 million, partially offset by $3.4 million of increased tax expense resulting from additional equity in net gain of Matrix, due to Matrix's re-measurement of its deferred tax liabilities. In addition, the tax provision was adversely impacted by tax expense of $3.6 million related to the Company's 2015 Holding Company LTI Program (the "HoldCo LTIP"), for which expense was incurred for financial reporting purposes, but no shares were issued due to the market condition of the award not being satisfied and thus no tax deduction was realized.

(5) On October 19, 2016, we completed the Matrix Transaction. Included in discontinued operations, net of tax, for 2016 is a gain on the transaction, net of tax, totaling $109.4 million. In conjunction with the completion of this transaction, we fully repaid the amounts outstanding on our term loans and Credit Facility in 2016.

(6) During the fourth quarter of 2016, WD Services recorded long-lived asset impairment charges of $10.0 million, $4.4 million and $5.2 million to its property and equipment, intangible assets and goodwill, respectively, primarily due to lower than expected volumes and unfavorable service mix shifts under a large contract in the UK impacting future projections; additional clarity into the anticipated size and structure of the Work and Health Programme in the UK; and the absence of additional details regarding the restructuring of the offender rehabilitation contract in the UK.

(7) On November 1, 2015, we completed the sale of our Human Services segment. Included in discontinued operations, net of tax, for 2015 is a gain on the sale of the Human Services segment, net of tax, totaling $100.3 million.

(8) The Company incurred $20.9 million of accelerated expense in 2015 related to restricted shares and cash placed into escrow at the time of the Ingeus acquisition. The shares and cash were placed into escrow concurrent with the payments of the acquisition consideration paid in 2014 for Ingeus; however, because two sellers of Ingeus remained employees post acquisition, the value of the shares and cash was recognized as compensation expense over the escrow term. Acceleration was triggered in 2015 when the two sellers separated from the Company. In addition, in 2015 and 2014, respectively, the Company incurred $5.9 million and $4.5 million of expense related to the separation of these two employees. Benefits of $2.0 million, $2.5 million and $16.1 million associated with the favorable resolution of acquisition contingencies and reductions in the fair value of Ingeus contingent consideration are included in general and administrative expenses for

2017, 2015 and 2014, respectively. 2017, 2016 and 2015 expenses also include $2.6 million, $8.5 million and $12.2 million, respectively, of WD Services' redundancy costs.

(9) Equity in net (gain) loss of investees primarily relates to our investment in Mission Providence during 2015, 2016 and 2017 and Matrix for the period of October 19, 2016 through December 31, 2017. Matrix became an equity investment upon the completion of the Matrix Transaction. For Mission Providence, we recorded net loss in investee of $1.4 million, $8.5 million and $11.0 million in 2017, 2016 and 2015, respectively. For Matrix, we recorded $13.4 million in equity in net gain of investee and $1.8 million in equity in net loss of investee related to our equity method investment in Matrix in 2017 and for the period of October 19, 2016 through December 31, 2016, respectively. The equity in net gain from Matrix for the year ended December 31, 2017 includes a benefit of $13.6 million related to the re-measurement of deferred tax liabilities arising from a lower U.S. corporate tax rate as a result of the Tax Reform Act. As a result of the increased equity income, Providence incurred higher tax expense of $3.4 million, which is reflected as a component of "Provision for income taxes" in the table above. The investment in Matrix at December 31, 2017 of $169.7 million is included in "Equity investments" in our consolidated balance sheet.

(10) 2014 includes $4.5 million of financing fees that were deferred and fully expensed within interest expense in the fourth quarter of 2014 in relation to bridge financing commitments and $3.0 million of third-party financing fees that are included in general and administrative expense.

(11) 2015 includes $2.4 million in Ingeus transaction-related expenses and 2014 includes $11.8 million in acquisition costs primarily related to the acquisitions of Ingeus and Matrix.

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations.***

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with Item 6. "Selected Financial Data" and our consolidated financial statements and related notes included in Item 8. "Financial Statements and Supplementary Data" of this report. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and other factors that may cause actual results to differ materially from those projected in any forward-looking statements, as discussed in "Disclosure Regarding Forward-Looking Statements". These risks and uncertainties include but are not limited to those set forth in Item 1A. "Risk Factors".

Overview of Our Business

Please refer to *Item 1. "Business"* of this Annual Report on Form 10-K for a discussion of our services and corporate strategy.

Providence owns subsidiaries and investments primarily engaged in the provision of healthcare services in the United States and workforce development services internationally. The subsidiaries and other investments in which we hold interests comprise the following segments:

- NET Services – Nationwide manager of non-emergency medical transportation programs for state governments and managed care organizations.
- WD Services – Global provider of employment preparation and placement services, legal offender rehabilitation services, youth community service programs and certain health related services to eligible participants of government sponsored programs.
- Matrix Investment – Minority interest in Matrix, a nationwide provider of in-home care optimization and management solutions, including CHAs, to members of managed care organizations, accounted for as an equity method investment. On February 16, 2018, Matrix acquired HealthFair, expanding its service offerings to include mobile health assessments, advanced diagnostic testing, and additional care optimization services.

In addition to its segments' operations, the Corporate and Other segment includes the Company's activities at its corporate office that include executive, accounting, finance, internal audit, tax, legal, public reporting, certain strategic and corporate development functions and the results of the Company's captive insurance company. We are actively monitoring these activities as they relate to our capital allocation and acquisition strategy to ensure alignment with Providence's overall strategic objectives and its goal of enhancing shareholder value.

Business Outlook and Trends

Our performance is affected by a number of trends that drive the demand for our services. In particular, the markets in which we operate are exposed to various trends such as healthcare industry and demographic dynamics in the U.S. and international government outsourcing and employment dynamics. Over the long term, we believe there are numerous factors that could affect growth within the industries in which we operate, including:

- an aging population, which will increase demand for healthcare services;
- a movement towards value-based versus fee for service care and budget pressure on governments, both of which may increase the use of private corporations to provide necessary and innovative services;
- increasing demand for in-home care provision, driven by cost pressures on traditional reimbursement models and technological advances enabling remote engagement;
- technological advancements, which may be utilized by us to improve service and lower costs, but also by others which may increase industry competitiveness;
- changes in UK government policy driven by opposition to the government's outsourcing of the services provided by WD Services to private companies, which opposition may increase in light of recent events in the UK, including the liquidation of the UK government contractor Carillion plc;
- the results of the referendum on the UK's exit from the European Union and related political and economic uncertainty in the UK; and

- proposals by the President of the United States and Congress to change the Medicaid program, including considering converting the Medicaid program to a block grant format or capping the federal contribution to state Medicaid programs

to a fixed amount per beneficiary, and CMS' grant of waivers to states relative to the parameters of their Medicaid programs. Enactment of adverse legislation, regulation or agency guidance, may reduce the demand for our services, our ability to conduct some or all of our business and/or reimbursement rates for services performed within our segments.

Historically, our segments have grown through organic expansion into new markets and service lines, organic expansion within existing markets and service lines, increases in the number of members served under contracts we have been awarded, the securing of new contracts, and acquisitions. With respect to acquisitions, we are actively evaluating the optimal industry sectors, such as the non-emergency medical transportation industry and others in which businesses complementary to our NET Services business operate, around which to focus our merger and acquisition activity. This ongoing evaluation takes into consideration and balances a number of factors, including the strategic goals, competitive landscape, and growth opportunities of our current segments, in an attempt to direct our capital towards those areas most likely to drive long-term value creation and generate the highest levels of return for our shareholders. In addition, as evidenced by the 2016 Matrix Transaction, we may also enter into strategic partnerships if we feel this provides the best opportunity to maximize shareholder value. The pursuit of our strategy may also result in the disposition of current businesses, as demonstrated in 2017 with our sale of our equity investment in Mission Providence and in 2015 with the sale of our Human Services segment. In making these determinations, we base our decisions on a variety of factors, including the availability of alternative opportunities to deploy capital, maximize shareholder value or other strategic considerations. The outcome of our active evaluation of the optimal industry sectors around which to focus our merger and acquisition activity as well as the potential future entry into strategic partnerships or potential disposition of businesses may impact the extent and manner in which we deploy resources across Providence, including strategic and administrative resources between Corporate and Other and our operating segments, and we may incur incremental costs in pursuing these efforts.

Revenues and Expenses

NET Services

NET Services primarily contracts with state Medicaid agencies and managed care organizations for the coordination of their members' non-emergency transportation needs. Most contracts are capitated, which means we are paid on a per-member, per-month basis for each eligible member. For most contracts, we arrange for transportation of members through our network of independent transportation providers, whereby we negotiate rates and remit payment to the transportation providers. However, for certain contracts, we assume no risk for the transportation network, credentialing and/or payments to these providers. For these contracts, we only provide administrative management services to support the customers efforts to serve its clients.

WD Services

WD Services primarily provides workforce development and offender rehabilitation services on a global basis that include employment preparation and placement, legal offender rehabilitation services, youth community service programs and certain health related services to eligible participants of government sponsored programs. Populations served by WD Services are broad and include the disabled, recently and long-term unemployed and individuals seeking new skills, as well as individuals that are coping with medical illnesses, are newly graduated from educational institutions, or are being released from incarceration. We contract primarily with national and regional government entities that seek to reduce the unemployment and recidivism rates.

The revenue earned by WD Services under its contracts is often derived through a combination of different revenue channels including, but not limited to, fees contingent upon: (1) the volume of WD end-users referred to or admitted into a specific program, (2) the achievement of defined outcomes for specific individuals, such as a job placement or continued employment, and (3) the achievement of defined outcomes for a population of individuals over a specific time period, such as aggregate employment or recidivism rates. The relative contributions of different revenue channels under a specific contract can fluctuate meaningfully over the life of a contract and thus contribute to significant earnings volatility. Revenue recognition related to our NCS youth programs can be particularly volatile due to the timing of services provided, which typically occur in the second and third quarters of each year. WD Services also earns revenue under fixed FFS arrangements, based upon contractual rates established at the outset of the applicable contract year, although the rate may be prospectively adjusted during the contract year based upon actual volumes. Volume levels are typically not guaranteed under contracts. We

bill according to contractual terms, typically after proof of services have been demonstrated, although certain contracts allow for ratable billings based upon expected levels of services, and require reconciliation at the conclusion of the contract year.

As described above, when WD Services enters into new markets and service lines, it often experiences significant costs, which are expensed as incurred, whereas revenue may not be realized until a later date. As a result, WD Services experiences significant variability in its financial results and we therefore believe the results of WD Services are best viewed over a multi-year period.

Classification of Operating Expenses

Our "Service expense" line item includes the majority of the operating expenses of NET Services and WD Services as well as our captive insurance company, with the exception of certain costs which are classified as "General and administrative expense". Service expense also excludes asset impairment charges and depreciation and amortization expenses. In the discussion below, we present the breakdown of service expense by the following major categories: purchased services, payroll and related costs, other operating expenses and stock-based compensation. Purchased services includes the amounts we pay to third-party service providers and are typically dependent upon service volume. Payroll and related costs include all personnel costs of our segments. Other operating expenses include general overhead costs, excluding facilities and related charges, of our segments. Stock-based compensation represents the stock-based compensation expense associated with stock grants to employees of our segments as well as the expense related to restricted stock placed into escrow at the time of the Ingeus acquisition.

Our "General and administrative expense" primarily includes the operating expenses of our corporate office, excluding depreciation and amortization, as well as facilities and related charges of our segments and contingent consideration and acquisition related adjustments, as applicable.

Critical Accounting Policies and Estimates

Critical accounting policies and estimates are those that we believe are important in the preparation of our consolidated financial statements because they require that we use judgment and estimates in applying those policies. We prepare our consolidated financial statements and accompanying notes in accordance with GAAP. Preparation of the consolidated financial statements and accompanying notes requires that we make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the date of the consolidated financial statements as well as revenue and expenses during the periods reported. We base our estimates on historical experience, where applicable, and other assumptions that we believe are reasonable under the circumstances. Actual results may differ from our estimates under different assumptions or conditions.

There are certain critical estimates that we believe require significant judgment in the preparation of our consolidated financial statements. We consider an accounting estimate to be critical if:

- it requires us to make an assumption because information was not available at the time or it included matters that were highly uncertain at the time the estimate is made; and
- changes in the estimate or different estimates that could have been selected may have had a material impact on our financial condition or results of operations.

For more information on each of these policies, see Note 2, *Significant Accounting Policies and Recent Accounting Pronouncements*, to our consolidated financial statements. We discuss information about the nature and rationale for our critical accounting estimates below.

Transportation Accrual

We accrue the cost of transportation expense within NET Services based on request for services and the amount we expect to be billed by transportation providers, as we generally only pay transportation providers for completed trips based upon documentation submitted after services have been provided. The transportation accrual requires significant judgment, as the accrual is based upon contractual rates and mileage estimates, as well as an estimated rate for unknown cancellations, as members may have requested transportation but not notified us of cancellation. Based upon historical experience and contract terms, we estimate the amount of expense incurred for invoices which have not yet been submitted as of period end. Actual expense could be greater or less than the amounts estimated due to changes in member or transportation provider behavior.

Business Combinations

We assign the value of the consideration transferred to acquire a business to the tangible assets and identifiable intangible assets acquired and liabilities assumed on the basis of their fair values at the date of acquisition. Any excess purchase price paid over the fair value of the net tangible and intangible assets acquired is allocated to goodwill. When determining the fair values of assets acquired and liabilities assumed, management makes significant estimates and

assumptions, especially with respect to intangible assets. Critical estimates in valuing certain intangible assets include but are not limited to future expected cash flows from customer relationships and trade names, and discount rates. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable. As a result, actual results may differ significantly from estimates.

Recoverability of Goodwill and Definite-Lived Intangible Assets

Goodwill. In accordance with ASC 350, *Intangibles-Goodwill and Other*, we review goodwill for impairment annually, or more frequently, if events and circumstances indicate that an asset may be impaired. Such circumstances could include, but are not limited to: (1) the loss or modification of significant contracts, (2) a significant adverse change in legal factors or in business climate, (3) unanticipated competition, (4) an adverse action or assessment by a regulator, or (5) a significant decline in the Company's stock price. We perform the annual goodwill impairment test for all reporting units as of October 1.

First, we perform qualitative assessments for each reporting unit to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the qualitative assessment suggests that it is more likely than not that the fair value of a reporting unit is less than its carrying value amount, we then perform a quantitative assessment and compare the fair value of the reporting unit to its carrying value.

We adopted ASU No. 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ("ASU 2017-04") effective April 1, 2017. ASU 2017-04 removes the requirement to compare the implied fair value of goodwill with its carrying amount as part of step two of the goodwill impairment test. Instead, if we deem it necessary to perform the quantitative goodwill impairment test in an annual or interim period, we recognize an impairment charge equal to the excess, if any, of a reporting unit's carrying amount over its fair value, not to exceed the total amount of goodwill allocated to the reporting unit.

Long-Lived Assets Including Intangibles. In accordance with ASC 360, *Property, Plant, and Equipment*, we review the carrying value of long-lived assets or groups of assets to be used in operations whenever events or changes in circumstances indicate that the carrying amount of the assets may be impaired. Factors that may necessitate an impairment assessment include, among others, significant adverse changes in the extent or manner in which an asset or group of assets is used, significant adverse changes in legal factors or the business climate that could affect the value of an asset or group of assets or significant declines in the observable market value of an asset or group of assets. The presence or occurrence of those events indicates that an asset or group of assets may be impaired. In those cases, we assess the recoverability of an asset or group of assets by determining whether the carrying value of the asset or group of assets exceeds the sum of the projected undiscounted cash flows expected to result from the use and eventual disposition of the assets over the remaining economic life of the asset or the primary asset in the group of assets. If such testing indicates the carrying value of the asset or group of assets is not recoverable, we estimate the fair value of the asset or group of assets using appropriate valuation methodologies, which would typically include an estimate of discounted cash flows. If the fair value of those assets or groups of assets is less than carrying value, we record an impairment loss equal to the excess of the carrying value over the estimated fair value.

The use of different estimates or assumptions in determining the fair value of our goodwill and intangible assets may result in different values for those assets, which could result in an impairment or, in the period in which an impairment is recognized, could result in a materially different impairment charge.

During the fourth quarter of 2016, the Company reviewed WD Services for impairment, as there were several negative factors impacting the segment, primarily due to lower than expected volumes and unfavorable service mix shifts under a large contract in the UK impacting future projections; additional clarity into the anticipated size and structure of the Work and Health Programme in the UK; the absence of additional details regarding the restructuring of the offender rehabilitation contract in the UK; and a change in senior management at WD Services during the fourth quarter. As a result, the Company performed a quantitative test comparing the fair value of the asset groupings comprising WD Services with their carrying amounts and recorded an asset impairment charge of $10.0 million to property and equipment and $4.4 million to definite-lived customer relationship intangible assets, which is recorded in "Asset impairment charge" on the Company's consolidated statement of operations for the year ended December 31, 2016. In addition, the Company reviewed the carrying value of goodwill of WD Services, noting the carrying value exceeded the fair value. Therefore, the Company performed the second step of the impairment test, in which the fair value of the reporting unit is allocated to all of the assets and liabilities, on a fair value basis, with any excess representing the implied value of goodwill of the reporting unit. The fair value was determined using an income approach, which estimates the present value of future cash flows based on management's forecast of revenue growth rates and operating margins, working capital requirements and capital expenditures. Based on this analysis, the carrying value of goodwill of the WD Services reporting unit exceeded the implied fair value and the Company recorded an impairment charge of $5.2 million, which is included in "Asset impairment charge" on the Company's consolidated

statement of operations for the year ended December 31, 2016. No impairment charges were incurred during the year ended December 31, 2017.

Income Taxes

We record income taxes under the liability method. Deferred tax assets and liabilities reflect our estimation of the future tax consequences of temporary differences between the carrying amounts of assets and liabilities for book and tax purposes. We determine deferred income taxes based on the differences in accounting methods and timing between financial statement and income tax reporting. Accordingly, we determine the deferred tax asset or liability for each temporary difference based on the enacted tax rates expected to be in effect when we realize the underlying items of income and expense. We consider many factors when assessing the likelihood of future realization of our deferred tax assets, including our recent earnings experience by jurisdiction, expectations of future taxable income, and the carryforward periods available to us for tax reporting purposes, as well as other relevant factors. We may establish a valuation allowance to reduce deferred tax assets to the amount we believe is more likely than not to be realized. Due to inherent complexities arising from the nature of our businesses, future changes in income tax law, tax sharing agreements or variances between our actual and anticipated operating results, we make certain judgments and estimates. Therefore, actual income taxes could materially vary from these estimates.

We record liabilities to address uncertain tax positions we have taken in previously filed tax returns or that we expect to take in a future tax return. The determination for required liabilities is based upon an analysis of each individual tax position, taking into consideration whether it is more likely than not that our tax position, based on technical merits, will be sustained upon examination. For those positions for which we conclude it is more likely than not it will be sustained, we recognize the largest amount of tax benefit that is greater than 50 percent likely of being realized upon ultimate settlement with the taxing authority. The difference between the amount recognized and the total tax position is recorded as a liability. The ultimate resolution of these tax positions may be greater or less than the liabilities recorded.

On December 22, 2017, the Tax Reform Act was enacted, which significantly changes U.S. tax law by, among other things, lowering corporate income tax rates, implementing a territorial tax system and imposing a repatriation tax on deemed repatriated earnings of foreign subsidiaries. The Tax Reform Act permanently reduces the U.S. corporate income tax rate from a maximum of 35% to a flat 21% rate, effective January 1, 2018. The Tax Reform Act also provides for a one-time deemed repatriation of post-1986 undistributed foreign subsidiary earnings and profits through the year ended December 31, 2017.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Reform Act. We have recognized the provisional tax impacts related to deemed repatriated earnings and the benefit for the revaluation of deferred tax assets and liabilities, and included these amounts in our consolidated financial statements for the year ended December 31, 2017. The final impact may differ from these provisional amounts, possibly materially, due to, among other things, additional analysis, changes in interpretations and assumptions we made, additional regulatory guidance that may be issued, and actions we may take as a result of the Tax Reform Act. In accordance with SAB 118, the financial reporting impact of the Tax Reform Act will be completed no later than the fourth quarter of 2018.

Reinsurance and Self-Insurance Liabilities

We historically reinsured a substantial portion of our automobile, general and professional liability and workers' compensation costs under reinsurance programs through our wholly-owned subsidiary, Social Services Providers Captive Insurance Company ("SPCIC"), a licensed captive insurance company domiciled in the State of Arizona. In conjunction with the policy renewals on May 16, 2017, SPCIC did not renew the expiring policies. However, SPCIC continues to resolve claims under the historical policy years. In addition, under the current policies, the Company retains liability up to the policy deductibles. In addition, we maintain self-funded health insurance programs for U.S. based employees with a stop-loss umbrella policy with a third party insurer to limit the maximum potential liability for individual claims and for a maximum potential claim liability based on member enrollment. We utilize independent actuarial reports to determine the expected losses and in order to record the appropriate entries associated with our historical reinsurance programs, our retained exposure for the deductibles under our current policies, and self-funded health insurance programs. We regularly analyze our reserves for incurred but not reported claims, and for reported but not paid claims related to our reinsurance and self-funded insurance programs. We believe our reserves are adequate. However, significant judgment is involved in assessing these reserves such as evaluating historical paid claims, average lag times between the claims' incurred date, reported dates and paid dates, and the frequency and severity of claims. There may be differences between actual settlement amounts and recorded reserves and any resulting adjustments are recorded once a probable amount is known.

Revenue Recognition

NET Services

Capitated contracts. The majority of NET Services revenue is generated under capitated contracts with customers where we assume the responsibility of meeting the covered transportation requirements of a specific geographic population based on per-member per-month fees for the number of members in the customer's program. Revenue is recognized based on the population served during the period. In some capitated contracts, partial payment is received as a prepayment during the month service is provided. These partial payments may be due back to the customer, or additional payments may be due to the Company, after each reconciliation period, based on a reconciliation of actual utilization and cost compared to the prepayment made.

FFS contracts. Revenues earned under FFS contracts are based upon contractually established billing rates. Revenues are recognized when the service is provided based upon contractual amounts.

Flat fee contracts. Revenues earned under flat fee contracts are recognized ratably over the covered service period based upon contractually established rates which do not fluctuate with any changes in the membership population who are eligible to receive the transportation services.

For most contracts, we arrange for transportation of members through our network of independent transportation providers, whereby we remit payment to the transportation providers; however, for certain contracts, we only provide administrative management services to support the customers efforts to serve its clients. The amount of revenue recognized is based upon the management fee earned.

WD Services

WD Services revenues are primarily generated from providing workforce development and offender rehabilitation services which include employment preparation and placement, apprenticeship and training, and certain health related services to clients on behalf of governmental and private entities. While the specific terms vary by contract and country, we primarily receive four types of revenue streams under contracts with government entities: referral/attachment fees, job placement and job outcome fees, sustainment fees and incentive fees. Referral/attachment fees are typically upfront payments that are payable when a client is referred by the contracting government entity or that client enters the program. Job placement fees are typically payable when a client is employed. Job outcome fees are typically payable when a client attains and holds employment for a specified minimum period of time. Sustainment fees are typically payable when clients maintain a job outcome past specified employment tenure milestones. Incentive fees are generally based upon a calculation that includes a variety of factors and inputs, such as average sustainment rates and client referral rates. Incentive fees vary greatly by contract.

Referral/attachment fee revenue is recognized ratably over the period of service, based upon an estimated period of time general services will be provided (i.e., the person is placed in a job or reaches the maximum time period for the program). The estimated period of time for which services will be rendered is based upon historical data. Job placement, job outcome and sustainment fee revenue is recognized when certain milestones are achieved, and amounts become billable. Incentive fee revenue is generally recognized when fixed and determinable, frequently at the end of the cumulative calculation period, unless contractual terms allow for earned payments on a fixed or ratable basis.

Revenue is also earned under fixed FFS arrangements, based upon contractual rates established at the outset of the contract or the applicable contract year, although the rate may be prospectively adjusted during the contract year based upon actual volumes.

If the rate is adjusted but the Company is unable to adjust its costs accordingly, or if the volume or types of referrals are lower than estimated, our profitability may be negatively impacted. Volume levels are typically not guaranteed under contracts.

Deferred Revenue

At times we may receive funding for certain services in advance of services being rendered. These amounts are reflected in the consolidated balance sheets as “Deferred revenue” until the services are rendered.

Stock Based Compensation

Our primary forms of employee stock-based compensation are stock option awards and restricted stock awards, including certain awards which vest based upon performance conditions. We measure the value of stock option awards on the date of grant at fair value using the appropriate valuation techniques, including the Black-Scholes and Monte Carlo option-pricing models. We

recognize the fair value as stock-based compensation expense on a straight-line basis over the requisite service period, which is typically the vesting period. The pricing models require various highly judgmental assumptions including volatility and expected option term. If any of the assumptions used in the models change significantly, stock-based compensation expense may differ materially in the future from that recorded in the current period.

As a result of the adoption of Accounting Standards Update ("ASU") No. 2016-09, *Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"), effective January 1, 2017, we no longer record stock-based compensation expense net of estimated forfeitures and the tax effects of awards are treated as discrete items in the period in which tax windfalls or shortfalls occur. The adoption also impacted the presentation of cash flows and the computation of earnings per share.

The adoption of ASU 2016-09 will subject our tax rate to quarterly volatility from the effects of stock award exercises and vesting activities, including the adverse impact on our income tax provision for awards which result in a tax deduction less than the amount recorded for financial reporting purposes based upon the fair value of the award at the grant date. See additional discussion included in Note 2, *Significant Accounting Policies and Recent Accounting Pronouncements*, to our consolidated financial statements.

Restructuring, Redundancy and Related Reorganization Costs

We have engaged in employee headcount optimization actions within WD Services which require management to estimate the timing and amount of severance and other employee separation costs for workforce reduction. We accrue for severance and other employee separation costs under these actions when it is probable that a liability has been incurred and the amount is reasonably estimable. The amounts used in determining severance accruals are based on an estimate of the salaries and related benefit costs payable under existing plans for the number of employees impacted, but the final determination of the actual employees to be terminated is subject to a customary consultation process. The estimate of costs that will ultimately be paid requires significant judgment and to the extent that actual results or updated results differ from our current estimates, such amounts will be recorded as a cumulative adjustment in the period such amounts are determined.

Results of operations

Segment reporting. Our operations are organized and reviewed by management along our segment lines. We operate in two principal business segments: NET Services and WD Services. Our investment in Matrix is also a reportable segment referred to as the "Matrix Investment". Segment results are based on how our chief operating decision maker manages our business, makes operating decisions and evaluates operating performance. The operating results of the two principal business segments include revenue and expenses incurred by the segment, as well as an allocation of direct expenses incurred by our corporate division on behalf of the segment, which primarily relate to insurance and stock-based compensation allocations. Indirect expenses, including unallocated corporate functions and expenses, such as executive, finance, accounting, human resources, information technology and legal, as well as the results of our captive insurance company (the "Captive") and elimination entries recorded in consolidation are reflected in "Corporate and Other".

Discontinued operations. Effective October 19, 2016, we completed the Matrix Transaction resulting in our ownership of a noncontrolling interest in our historical HA Services segment. The HA Services segment results of operations for the periods through October 19, 2016 are separately discussed in the "Discontinued operations, net of tax" section set forth below. For periods subsequent to the transaction, the results of the Matrix Investment are separately discussed in the "Equity in net loss of investees" section set forth below. Additionally, effective November 1, 2015, we completed the sale of our Human Services segment. The Human Services segment results of operations are separately discussed in the "Discontinued operations, net of tax" section set forth below.

Year ended December 31, 2017 compared to year ended December 31, 2016

The following table sets forth results of operations and the percentage of consolidated total revenues represented by items in our consolidated statements of income for 2017 and 2016 (in thousands):

	Year ended December 31,			
	2017		2016	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	1,623,882	100.0 %	1,578,245	100.0 %
Operating expenses:				
Service expense	1,489,044	91.7 %	1,452,110	92.0 %
General and administrative expense	72,336	4.5 %	69,911	4.4 %
Asset impairment charge	—	— %	21,003	1.3 %
Depreciation and amortization	26,469	1.6 %	26,604	1.7 %
Total operating expenses	1,587,849	97.8 %	1,569,628	99.5 %
Operating income	36,033	2.2 %	8,617	0.5 %
Non-operating expense:				
Interest expense, net	1,278	0.1 %	1,583	0.1 %
Other income	(5,363)	(0.3)%	—	— %
Equity in net (gain) loss of investees	(12,054)	(0.7)%	10,287	0.7 %
Gain on sale of equity investment	(12,377)	(0.8)%	—	— %
Loss (gain) on foreign currency transactions	345	— %	(1,375)	(0.1)%
Income (loss) from continuing operations before income taxes	64,204	4.0 %	(1,878)	(0.1)%
Provision for income taxes	4,401	0.3 %	17,036	1.1 %
Income (loss) from continuing operations	59,803	3.7 %	(18,914)	(1.2)%
Discontinued operations, net of tax	(5,983)	(0.4)%	108,760	6.9 %
Net income	53,820	3.3 %	89,846	5.7 %
Net (gain) loss attributable to noncontrolling interest	(451)	— %	2,082	0.1 %
Net income attributable to Providence	53,369	3.3 %	91,928	5.8 %

Service revenue, net. Consolidated service revenue, net for 2017 increased $45.6 million, or 2.9%, compared to 2016. Revenue for 2017 compared to 2016 includes an increase in revenue of NET Services of $84.5 million, which was partially offset by a decrease in revenue of WD Services of $38.7 million. Excluding the effects of changes in currency exchange rates, consolidated service revenue increased 3.4% in 2017 compared to 2016.

Total operating expenses. Consolidated operating expenses for 2017 increased $18.2 million, or 1.2%, compared to 2016. Operating expenses for 2017 compared to 2016 included an increase in expenses attributable to NET Services of $95.8 million and Corporate and Other of $2.5 million. Partially offsetting these expense increases was a decrease in WD Services' operating expenses of $80.2 million. 2016 operating expenses include asset impairment charges of $19.6 million at WD Services and $1.4 million at Corporate and Other.

Operating income. Consolidated operating income for 2017 increased $27.4 million compared to 2016 due to a decrease in the operating loss of WD Services in 2017 of $41.4 million, as compared to 2016. This change was partially offset

by a decrease in operating income of NET Services in 2017 as compared to 2016 of $11.3 million and an increase in the operating loss for Corporate and Other of $2.7 million in 2017 as compared to 2016.

Interest expense, net. Consolidated interest expense, net for 2017 decreased $0.3 million, or 19.3%, compared to 2016, and remained consistent as a percentage of revenue.

Other income. Other income in 2017 of $5.4 million represents the settlement received from the Haverhill Litigation, see Item 3. *Legal Proceedings* for further information on the settlement.

Equity in net (gain) loss of investees. Our equity in net (gain) loss of investees for 2017 of $12.1 million includes an equity in net loss for Mission Providence of $1.4 million through the sale date on September 29, 2017, and an equity in net gain for Matrix of $13.4 million. Our equity in net loss of investees for 2016 of $10.3 million includes an equity in net loss for Mission Providence of $8.5 million and Matrix of $1.8 million. We began reporting Matrix as an equity investment effective October 19, 2016, upon the completion of the Matrix Transaction, and we record our ownership percentage of Matrix's profit or loss in net loss or gain of investees. Included in Matrix's 2017 full standalone net income of $26.7 million (which is not consolidated with Providence's) are depreciation and amortization of $33.5 million, interest expense of $14.8 million, transaction bonuses and other transaction related costs of $3.5 million, equity compensation of $2.6 million, management fees paid to Matrix's shareholders of $2.3 million, merger and acquisition diligence related costs of $0.7 million and income tax benefit of $29.6 million. Matrix's significant income tax benefit in 2017 primarily related to the re-measurement of deferred tax liabilities arising from a lower U.S. corporate tax rate as a result of the Tax Reform Act. Included in Matrix's 2016 full standalone net loss of $4.2 million (which is not consolidated with Providence's) are depreciation and amortization of $6.4 million, interest expense of $2.9 million, transaction bonuses and other transaction related costs of $6.4 million, equity compensation of $0.4 million, management fees paid to Matrix's shareholders of $0.4 million and income tax benefit of $2.8 million.

Gain on sale of equity investment. The gain on sale of equity investment of $12.4 million relates to the sale of the Company's equity interest in Mission Providence in 2017. The investment in Mission Providence was part of the WD Services segment. The sale of Mission Providence is not included as a discontinued operation as the disposition did not represent a strategic shift that has a major effect on our operations and financial results.

Loss (gain) on foreign currency transactions. The foreign currency loss of $0.3 million and gain of $1.4 million for 2017 and 2016, respectively, were primarily due to translation adjustments of our foreign subsidiaries.

Provision for income taxes. Our effective tax rate from continuing operations for 2017 was 6.9%. The effective tax rate was lower than the U.S. federal statutory rate of 35% primarily due to the impact of the Tax Reform Act. The tax provision includes a benefit of $16.0 million related to the enactment of the Tax Reform Act during the fourth quarter of 2017, consisting of a net tax benefit of $19.4 million from the re-measurement of deferred tax liabilities from the lower U.S. corporate tax rate, partially offset by additional tax expense of $3.4 million due to an increase in our equity in net gain of Matrix as a result of Matrix's re-measurement of deferred tax liabilities. In addition, the Company incurred tax expense of $3.6 million related to the HoldCo LTIP, for which expense was recorded for financial reporting purposes based upon fair value of the award at the grant date, but no shares will be issued due to the market condition of the award not being satisfied. This tax expense was the result of the adoption of ASU 2016-09, which subjects our tax rate to quarterly volatility from the effects of stock award exercises and vesting activities, including the adverse impact on our income tax provision for awards which result in a tax deduction less than the amount recorded for financial reporting purposes.

During 2016, we recognized an income tax provision despite having a loss from continuing operations before income taxes. Because of foreign net operating losses (including equity investee losses) for which the future income tax benefit could not be recognized, and non-deductible expenses, the Company recognized taxable income for this year upon which the income tax provision for financial reporting is calculated.

Discontinued operations, net of tax. Discontinued operations, net of tax, includes the activity of our former Human Services segment and our former HA Services segment, composed entirely of our 100% ownership in Matrix until the completion of the Matrix Transaction on October 19, 2016. For 2017, discontinued operations, net of tax for our Human Services segment was a loss of $6.0 million, which primarily related to the accrual of a contingent liability of $9.0 million related to the settlement of indemnification claims and associated legal costs of $0.7 million, partially offset by a related tax benefit. Discontinued operations, net of tax for our Human Services segment was a loss of $5.6 million in 2016, which included an accrual of $6.0 million with respect to potential indemnification claims, legal costs of $1.1 million related to these potential claims and transaction related expenses of $0.8 million, partially offset by a related tax benefit. Discontinued operations, net of tax for our HA Services segment was income of $114.3 million for 2016, which included a gain on

disposition, net of tax, of $109.4 million. See Note 20, *Discontinued Operations,* to our consolidated financial statements for additional information.

Net (income) loss attributable to noncontrolling interests. Net (income) loss attributable to noncontrolling interests primarily relates to a minority interest held by a third-party operating partner in our company servicing the offender rehabilitation contract in our WD Services segment.

Segment Results. The following analysis includes discussion of each of our segments.

NET Services

NET Services financial results are as follows for 2017 and 2016 (in thousands):

	Year Ended December 31,			
	2017		2016	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	1,318,220	100.0%	1,233,720	100.0%
Service expense	1,227,426	93.1%	1,132,857	91.8%
General and administrative expense	11,779	0.9%	11,406	0.9%
Depreciation and amortization	13,275	1.0%	12,375	1.0%
Operating income	65,740	5.0%	77,082	6.2%

Service revenue, net. Service revenue, net for NET Services in 2017 increased $84.5 million, or 6.8%, compared to 2016. The increase was related to net increased revenue from existing contracts, including successfully renewed contracts, of $82.5 million, due to the net impact of membership and rate changes. Included within net rate changes are the positive impacts of final agreements on rate adjustments related to existing contracts that experienced increased utilization in 2017 as well as the release of previously accrued revenue hold-backs based on certain contract performance requirements on a significant contract. Additionally, the impact of new contracts, including new managed care organization contracts in Florida and New York, contributed $93.8 million of revenue for 2017. These increases were partially offset by the $91.8 million impact on revenue of contracts we no longer serve, including a contract with the state of New York.

Service expense. Service expense is comprised of the following for 2017 and 2016 (in thousands):

	Year Ended December 31,			
	2017		2016	
	$	Percentage of Revenue	$	Percentage of Revenue
Purchased services	1,009,518	76.6%	927,321	75.2%
Payroll and related costs	165,666	12.6%	162,000	13.1%
Other operating expenses	51,720	3.9%	42,478	3.4%
Stock-based compensation	522	—%	1,058	0.1%
Total service expense	1,227,426	93.1%	1,132,857	91.8%

Service expense for 2017 increased $94.6 million, or 8.3%, compared to 2016. The increase in service expense was primarily attributable to the impact of new managed care organization contracts in California, Florida and New York. Purchased services as a percentage of revenue increased from 75.2% in 2016 to 76.6% in 2017 primarily attributable to an increase in utilization across multiple contracts. The higher utilization was in part driven by increased Medicaid reimbursement in New Jersey for certain medical services, increasing the demand for transportation services, and increased utilization across multiple managed care contracts in California. Additionally, due to milder winter weather conditions during the first quarter of 2017, we experienced above expected utilization; however, we experienced lower utilization for contracts in the third quarter of 2017 due in part to the impact of Hurricane Irma. The increase in purchased services as a percentage of revenue caused by increased utilization was partially offset by the successful implementation of initiatives aimed at lowering

transportation costs on a per trip and per mile basis as well as the release of a reserve based upon the finalization of a contract amendment with a state customer.

Payroll and related costs as a percentage of revenue decreased from 13.1% in 2016 to 12.6% in 2017 due to efficiencies gained from multiple process improvement initiatives, including those aimed at lowering payroll expense across our reservation

and operation center networks, as well as a decrease in chief executive officer compensation expense due to the transition of the chief executive officer position during 2017. Other operating expenses increased for 2017 as compared to 2016 primarily attributable to an incremental $4.1 million of value enhancement and related costs incurred for external resources used in the design and implementation of NET Services member experience and value enhancement initiatives in 2017, as well as increased software and hardware maintenance costs associated with increased use of information technology.

General and administrative expense. General and administrative expenses in 2017 increased $0.4 million, or 3.3%, as compared to 2016, due to increased facility costs resulting from the overall growth of our operations. As a percentage of revenue, general and administrative expense remained constant at 0.9%.

Depreciation and amortization expense. Depreciation and amortization expenses increased $0.9 million primarily due to the addition of long-lived assets relating to information technology projects. As a percentage of revenue, depreciation and amortization remained constant at 1.0%. At December 31, 2017, NET Services has $11.9 million of construction and development in progress related to its LCAD NextGen technology system, which is expected to be placed into service in 2018.

WD Services

WD Services financial results are as follows for 2017 and 2016 (in thousands):

	Year Ended December 31,			
	2017		2016	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	305,662	100.0%	344,403	100.0 %
Service expense	265,417	86.8%	320,147	93.0 %
General and administrative expense	25,438	8.3%	30,300	8.8 %
Asset impairment charge	—	—%	19,588	5.7 %
Depreciation and amortization	12,851	4.2%	13,824	4.0 %
Operating income (loss)	1,956	0.6%	(39,456)	(11.5)%

Service revenue, net. Service revenue, net in 2017 decreased $38.7 million, or 11.2%, compared to 2016. Excluding the effects of changes in currency exchange rates, service revenue decreased 8.9% in 2017 compared to 2016, which was primarily related to the anticipated decline of referrals under the segment's Work Programme contracts in the UK, as well as decreased revenue under our offender rehabilitation program. While WD Services has successfully secured contracts under the UK's new Work and Health Programme, the successor program to the Work Programme, with a combined total value of approximately $195 million over 5 years, revenues under these new contracts were negligible in 2017 and did not offset declines in revenue experienced under the Work Programme contracts. These decreases were partially offset by increases across various employability contracts outside the UK, including in Australia, France, Germany and the U.S., as well as increased revenue from our health services contract in the UK. 2017 includes the impact of $5.2 million of revenue recognized under the offender rehabilitation program related to the finalization of a contractual adjustment for the contract year ended March 31, 2017, whereas 2016 includes $5.4 million of revenue recognized under the offender rehabilitation program related to the finalization of a contractual adjustment for the prior contract years ended March 31, 2015 and 2016.

Service expense. Service expense is comprised of the following for 2017 and 2016 (in thousands):

	Year Ended December 31,			
	2017		2016	
	$	Percentage of Revenue	$	Percentage of Revenue
Payroll and related costs	177,195	58.0%	210,293	61.1 %
Purchased services	49,491	16.2%	65,363	19.0 %
Other operating expenses	38,675	12.7%	44,502	12.9 %
Stock-based compensation	56	—%	(11)	— %
Total service expense	265,417	86.8%	320,147	93.0 %

Service expense in 2017 decreased $54.7 million, or 17.1%, compared to 2016. Payroll and related costs decreased primarily as a result of declining referrals under the segment's primary employability program in the UK as well as redundancy plans that better aligned headcount with service delivery volumes, resulting in a decrease of payroll and related costs as a percentage of revenue. Payroll and related costs include $2.6 million and $8.5 million in 2017 and 2016, respectively, of termination benefits related to redundancy plans. Purchased services decreased in 2017 compared to 2016 primarily as a result of a decline in client referrals under our primary employability program in the UK, which resulted in a decline in the use of outsourced services. Other operating expenses decreased in 2017 compared to 2016 primarily as a result of a decline in consulting related costs and information technology maintenance costs.

General and administrative expense. General and administrative expense in 2017 decreased $4.9 million compared to 2016. The decrease was due to office closures associated with the restructuring of the UK operations, as well as lower rent for certain offices. Additionally, $2.0 million of the decrease related to the impact of acquisition related contingencies that were favorably resolved in 2017, resulting in a benefit to general and administrative expense.

Asset impairment charge. During the fourth quarter of 2016, WD Services recorded asset impairment charges of $10.0 million, $4.4 million and $5.2 million to its property and equipment, intangible assets and goodwill, respectively, primarily due to lower than expected volumes and unfavorable service mix shifts under a large contract in the UK impacting future projections; additional clarity into the anticipated size and structure of the Work and Health Programme in the UK; and the absence of additional details regarding the restructuring of the offender rehabilitation contract in the UK. No impairment charges were incurred in 2017.

Depreciation and amortization expense. Depreciation and amortization expense for 2017 decreased $1.0 million compared to 2016, primarily due to the asset impairment charges incurred during the fourth quarter of 2016, which decreased the value of our intangible assets and certain property and equipment.

Corporate and Other

Corporate and Other includes the headcount and professional service costs incurred at the Providence corporate level, our captive insurance company, and elimination entries to account for inter-segment transactions. Corporate and Other financial results are as follows for 2017 and 2016 (in thousands):

	Year Ended December 31,	
	2017	2016
	$	$
Service revenue, net	—	122
Service expense (a)	(3,799)	(894)
General and administrative expense	35,119	28,205

Asset impairment charge	—	1,415
Depreciation and amortization	343	405
Operating loss	(31,663)	(29,009)

(a) Negative amounts are present for this line item due to changes in estimate for claims incurred but not reported, as well as elimination entries that are included in Corporate and Other. Certain offsetting amounts are reflected in the financial results of our operating segments.

Operating loss. Corporate and Other operating loss in 2017 increased by $2.7 million, or 9.1%, as compared to 2016 primarily due to an increase in cash settled stock-based compensation expense of $3.6 million, primarily as a result of an increase in the Company's stock price in 2017 as compared to a decrease in 2016, an increase in share settled stock-based compensation expense of $2.7 million, primarily related to an increase in expense for the HoldCo LTIP despite this program expiring with no shares due to any employees, expense for stock options issued to a former chief executive officer upon separation from the Company, and a benefit recorded in 2016 for performance based units, with no corresponding benefit in 2017, as well as an increase of $3.8 million of professional costs due to activities associated with our increased focus on strategic initiatives. This increase was partially offset by a reduction in insurance loss reserves of $3.5 million in 2017, versus $2.5 million in 2016, due to favorable claims history of our Captive reinsurance programs, as well as decreased costs of the Captive operations due to no longer writing new policies as of May 2017, which is included in "Service expense", decreased accounting, legal and professional fees included in "General and administrative expense", and decreased asset impairment charges, as $1.4 million was recorded in 2016 in relation to the sale of a building.

General and administrative expense includes stock-based compensation for the HoldCo LTIP of $4.7 million and $3.3 million for 2017 and 2016, respectively. No shares will be distributed under the HoldCo LTIP as the volume weighted average of Providence's stock price over the 90-day trading period ended on December 31, 2017 was less than $56.79. As such, as of December 31, 2017, we accelerated all remaining unrecognized compensation expense for the Holdco LTIP as there was no further requisite service period associated with the award resulting in an acceleration of expense of $1.1 million. General and administrative expense also includes $0.4 million and $1.6 million for 2017 and 2016, respectively, related to a shareholder lawsuit.

Costs associated with the resignation of Mr. Lindstrom during the year ended December 31, 2017 include cash compensation related items of $0.9 million, stock-based compensation of $0.7 million, and other costs of $0.2 million. These costs are recorded as part of "General and administrative expense".

Year ended December 31, 2016 compared to year ended December 31, 2015

The following table sets forth results of operations and the percentage of consolidated total revenues represented by items in our consolidated statements of income for 2016 and 2015 (in thousands):

	Year ended December 31,			
	2016		2015	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	1,578,245	100.0 %	1,478,010	100.0 %
Operating expenses:				
Service expense	1,452,110	92.0 %	1,381,154	93.4 %
General and administrative expense	69,911	4.4 %	70,986	4.8 %
Asset impairment charge	21,003	1.3 %	—	— %
Depreciation and amortization	26,604	1.7 %	23,998	1.6 %
Total operating expenses	1,569,628	99.5 %	1,476,138	99.9 %
Operating income	8,617	0.5 %	1,872	0.1 %
Non-operating expense:				
Interest expense, net	1,583	0.1 %	1,853	0.1 %
Equity in net loss of investees	10,287	0.7 %	10,970	0.7 %
Gain on foreign currency transactions	(1,375)	(0.1)%	(857)	(0.1)%
Income (loss) from continuing operations before income taxes	(1,878)	(0.1)%	(10,094)	(0.7)%
Provision for income taxes	17,036	1.1 %	14,583	1.0 %
Income (loss) from continuing operations	(18,914)	(1.2)%	(24,677)	(1.7)%
Discontinued operations, net of tax	108,760	6.9 %	107,871	7.3 %
Net income	89,846	5.7 %	83,194	5.6 %
Net loss attributable to noncontrolling interest	2,082	0.1 %	502	— %
Net income attributable to Providence	91,928	5.8 %	83,696	5.7 %

Service revenue, net. Consolidated service revenue, net for 2016 increased $100.2 million, or 6.8%, compared to 2015. Revenue for 2016 compared to 2015 included an increase in revenue of NET Services of $150.7 million, which was partially offset by a decrease in revenue of WD Services of $50.7 million. Excluding the effects of changes in currency exchange rates, consolidated service revenue increased 8.8% in 2016 compared to 2015.

Total operating expenses. Consolidated operating expenses for 2016 increased $93.5 million, or 6.3%, compared to 2015. Operating expenses for 2016 compared to 2015 included an increase in expenses attributable to NET Services of $144.8 million and Corporate and Other of $2.2 million. Partially offsetting these expense increases was a decrease in WD Services' operating expenses of $53.6 million. Operating expenses included asset impairment charges of $19.6 million at WD Services and $1.4 million at Corporate and Other during 2016, while no such charges were incurred in 2015.

Operating income. Consolidated operating income for 2016 increased $6.7 million compared to 2015 due to an increase in operating income of NET Services in 2016 as compared to 2015 of $5.9 million and a decrease in the operating loss of WD Services in 2016 as compared to 2015 of $2.9 million, although WD Services' new offender rehabilitation program incurred an operating loss in 2016 as compared to operating income in 2015. In addition, France continued to experience a significant operating loss in 2016, consistent with 2015. These changes were partially offset by an increase in the

operating loss for Corporate and Other of $2.0 million, driven primarily by the asset impairment charge of $1.4 million in 2016.

Interest expense, net. Consolidated interest expense, net for 2016 decreased $0.3 million, or 14.6%, compared to 2015. The decrease is primarily related to the repayment of the related party note during 2015, which was partially offset by higher commitment fees on our Credit Facility for 2016 as compared to 2015.

Equity in net loss of investees. Equity in net loss of investees primarily relates to our investments in Mission Providence and Matrix. Mission Providence, which is part of WD Services, began providing services in July 2015. We record 75% of Mission Providence's profit or loss in equity in net loss of investees. We began reporting Matrix as an equity investment effective October 19, 2016, upon the completion of the Matrix Transaction. Our equity in net loss of investees related to WD Services and Matrix totaled $8.5 million and $1.8 million, respectively, for 2016. Included in Matrix's results (which are not consolidated with Providence's) is interest expense of $2.9 million and transaction related expenses of $6.0 million, which includes $4.0 million of transaction incentive compensation payable to the Matrix management team.

Gain on foreign currency transactions. The foreign currency gains of $1.4 million and $0.9 million for 2016 and 2015, respectively, were primarily due to translation adjustments of our foreign subsidiaries.

Provision for income taxes. We recognized an income tax provision for 2016 and 2015 despite having losses from continuing operations before income taxes. Because of foreign net operating losses (including equity investee losses) for which the future income tax benefit currently cannot be recognized, and non-deductible expenses such as amortization of deferred consideration related to the Ingeus acquisition, the Company recognized taxable income for these years upon which the income tax provision for financial reporting is calculated.

Discontinued operations, net of tax. Discontinued operations, net of tax, includes the activity of our former Human Services segment and our former HA Services segment, composed entirely of our 100% equity interest in Matrix until the completion of the Matrix Transaction on October 19, 2016. Discontinued operations, net of tax for our Human Services segment was a loss of $5.6 million in 2016 and income of $101.8 million in 2015, respectively. 2016 Human Services results include an accrual of $6.0 million with respect to potential indemnification claims, legal costs of $1.1 million related to these potential claims and transaction related expenses of $0.8 million. 2015 Human Services segment results include a gain on disposition, net of tax, of $100.3 million. Discontinued operations, net of tax for our HA Services segment was income of $114.3 million and $6.1 million for 2016 and 2015, respectively. 2016 HA Services segment results include a gain on disposition, net of tax, of $109.4 million. See Note 20, *Discontinued Operations,* to our consolidated financial statements for additional information.

Net loss attributable to noncontrolling interest. Net loss attributable to noncontrolling interests primarily relates to the minority interest associated with our company servicing the offender rehabilitation contract in our WD Services segment. As this contract is currently experiencing losses, as further discussed below, we have a net loss attributable to noncontrolling interests.

Segment Results. The following analysis includes discussion of each of our segments.

NET Services

NET Services financial results are as follows for 2016 and 2015 (in thousands):

	Year Ended December 31,			
	2016		2015	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	1,233,720	100.0%	1,083,015	100.0%
Service expense	1,132,857	91.8%	991,659	91.6%
General and administrative expense	11,406	0.9%	10,704	1.0%
Depreciation and amortization	12,375	1.0%	9,429	0.9%
Operating income	77,082	6.2%	71,223	6.6%

Service revenue, net. Service revenue, net for NET Services in 2016 increased $150.7 million, or 13.9%, compared to 2015. The increase related to the impact of new contracts which contributed $76.4 million of revenue in 2016, including contracts in California and Florida, and an increase in revenue associated with existing contracts of $119.8 million due to the net impact of membership and rate changes, partially offset by the loss of certain contracts that resulted in a decrease in revenue of $45.5 million.

Service expense. Service expense is comprised of the following for 2016 and 2015 (in thousands):

	Year Ended December 31,			
	2016		2015	
	$	Percentage of Revenue	$	Percentage of Revenue
Purchased services	927,321	75.2%	814,632	75.2%
Payroll and related costs	162,000	13.1%	141,669	13.1%
Other operating expenses	42,478	3.4%	34,634	3.2%
Stock-based compensation	1,058	0.1%	724	0.1%
Total service expense	1,132,857	91.8%	991,659	91.6%

Service expense for 2016 increased $141.2 million, or 14.2%, compared to 2015. The increase in service expense was primarily attributable to an increase in purchased transportation services due primarily to higher transportation volume. Purchased services as a percentage of revenue remained constant at 75.2%. Additionally, our payroll and related costs increased for 2016 as compared to 2015 primarily due to the hiring of employees to support new contracts and increased call volume associated with increased utilization, as well as an increase of $1.2 million in expense for the long-term incentive plan for management put into place in the fourth quarter of 2015 and separation related charges for NET Services' former chief executive officer during 2016 of $0.8 million. Our other operating expenses also increased for 2016 as compared to 2015. The increase was primarily attributable to increased bad debt expense, including $2.1 million of expense related to one specific customer, and costs incurred for external resources used in the design and implementation of NET Services member experience and value enhancement initiatives of $2.0 million. Stock-based compensation increased $0.3 million in 2016 as compared to 2015 primarily due to the expense associated with new stock-based compensation awards granted in 2016 that vested in January 2017.

General and administrative expense. General and administrative expenses in 2016 increased $0.7 million, or 6.6%, as compared to 2015, due to increased facility costs resulting from the overall growth of our operations. As a percentage of revenue, general and administrative expense decreased slightly from 1.0% for 2015 to 0.9% for 2016.

Depreciation and amortization expense. Depreciation and amortization expenses increased $2.9 million primarily due to the addition of long-lived assets in our call centers. As a percentage of revenue, depreciation and amortization increased slightly from 0.9% for 2015 to 1.0% for 2016.

WD Services

WD Services financial results are as follows for 2016 and 2015 (in thousands):

	Year Ended December 31,			
	2016		2015	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	344,403	100.0 %	395,059	100.0 %
Service expense	320,147	93.0 %	393,803	99.7 %
General and administrative expense	30,300	8.8 %	29,846	7.6 %
Asset impairment charge	19,588	5.7 %	—	— %
Depreciation and amortization	13,824	4.0 %	13,776	3.5 %
Operating income (loss)	(39,456)	(11.5)%	(42,366)	(10.7)%

Service revenue, net. Service revenue, net in 2016 decreased $50.7 million, or 12.8%, compared to 2015. Excluding the effects of changes in currency exchange rates, service revenue decreased 5.1% in 2016 compared to 2015, which was primarily related to revenue declines associated with declining referrals and an altered pricing structure under the segment's primary employability program in the UK and a revised bidding strategy in certain markets. Implemented in late 2015, the overhauled bidding process emphasized the pursuit of only those contracts that meet certain investment criteria, including risk-weighted return

on capital thresholds, and involve the provision of services where we believe our experience will allow us to deliver differentiated and improved outcomes for our clients. As a result of this enhanced criteria and a challenging UK outsourcing industry, new contracts have been more infrequent and smaller in nature. The decrease was partially offset by two new contracts in France that began in 2015 and growth of NCS youth programs in 2016. WD Services additionally recognized revenue of $5.4 million for 2016 under its offender rehabilitation program related to the finalization of a contractual adjustment for contract years ended March 31, 2015 and 2016, which partially offset the decline in revenue under this contract for 2016.

Service expense. Service expense is comprised of the following for 2016 and 2015 (in thousands):

	Year Ended December 31,			
	2016		2015	
	$	Percentage of Revenue	$	Percentage of Revenue
Payroll and related costs	210,293	61.1 %	249,130	63.1%
Purchased services	65,363	19.0 %	78,498	19.9%
Other operating expenses	44,502	12.9 %	45,418	11.5%
Stock-based compensation	(11)	— %	20,757	5.3%
Total service expense	320,147	93.0 %	393,803	99.7%

Service expense in 2016 decreased $73.7 million, or 18.7%, compared to 2015. Payroll and related costs decreased primarily as a result of the redundancy plans implemented in the fourth quarter of 2015 that were designed to better align headcount with service delivery volumes as well as declining referrals under the segment's primary employability program in the UK. Partially offsetting these decreases was increased payroll and related costs associated with a significant new offender rehabilitation program that began in 2015 and higher payroll expenses in France associated with new programs implemented in 2015 and 2016. As referenced above, both the segment's new offender rehabilitation program and operations in France had significant operating losses in 2016. In addition, $8.5 million in termination benefits related to three redundancy plans contributed to losses in 2016. Purchased services decreased in 2016 compared to 2015 primarily as a result of a decline in client referrals under our primary employability program in the UK which required less use of outsourced services. Stock-based compensation decreased $20.8 million in 2016 as compared to 2015 primarily due to expenses totaling $16.1 million related to the settlement of outstanding awards in the fourth quarter of 2015 in relation to the separation of two executives, who were also sellers of Ingeus to Providence, as further described in Note 13, *Stock-Based Compensation and Similar Arrangements,* to our consolidated financial statements.

General and administrative expense. General and administrative expense in 2016 increased $0.5 million compared to 2015. $2.5 million of the increase relates to the impact of the reduction in the fair value of contingent consideration that was recorded in 2015. Offsetting this increase were decreased facility costs of $2.0 million primarily due to the closure of numerous sites in the UK, partially offset by the opening of new sites in France during 2016.

Asset impairment charge. During the fourth quarter of 2016, WD Services recorded asset impairment charges of $10.0 million, $4.4 million and $5.2 million to its property and equipment, intangible assets and goodwill, respectively, primarily due to lower than expected volumes and unfavorable service mix shifts under a large contract in the UK impacting future projections; additional clarity into the anticipated size and structure of the Work and Health Programme in the UK; and the absence of additional details regarding the restructuring of the offender rehabilitation contract in the UK. No impairment charges were incurred in 2015.

Depreciation and amortization expense. Depreciation and amortization expense for 2016 was flat compared to 2015.

Corporate and Other

Corporate and Other includes the headcount and professional service costs incurred at the Providence corporate level, our captive insurance company, and elimination entries to account for inter-segment transactions. Corporate and Other financial results are as follows for 2016 and 2015 (in thousands):

	Year Ended December 31,	
	2016	2015
	$	$
Service revenue, net (a)	122	(64)
Service expense (a)	(894)	(4,308)
General and administrative expense	28,205	30,436
Asset impairment charge	1,415	—
Depreciation and amortization	405	793
Operating loss	(29,009)	(26,985)

(a) Negative amounts are present for this line item due to elimination entries that are included in Corporate and Other. Offsetting amounts are reflected in the financial results of our operating segments.

Operating loss. Corporate and Other operating loss in 2016 increased by $2.0 million, or 7.5%, as compared to 2015 primarily due to a $4.5 million decrease in benefits associated with favorable claims experiences on our reinsurance and self-insured programs, an asset impairment charge of $1.4 million in 2016 and a $0.4 million net increase in compensation related expenses. The $0.4 million net increase in compensation expenses in 2016 was primarily due to an increase in short-term incentives and $1.0 million of compensation related to the sale of the Company's Human Services segment in 2015. Also included in 2016 were $1.6 million of expenses related to a shareholder lawsuit, an increase of $0.8 million from 2015. These increases in expense were partially offset by a decrease in various professional fees of $4.0 million. The Company anticipates continued reductions in multiple Corporate and Other expense categories in 2017.

Seasonality

Our quarterly operating results and operating cash flows normally fluctuate due in part to seasonal factors, uneven demand for services and the timing of new contracts, which impact the amount of revenues earned and expenses incurred. NET Services experiences fluctuations in demand during the summer and winter seasons. Due to higher demand in the summer months, lower demand during the winter months, and a primarily fixed revenue stream based on a per-member, per-month payment structure, NET Services normally experiences lower operating margins during the summer season and higher operating margins during the winter. WD Services is impacted by both the timing of commencement and expiration of major contracts. Under many of WD Services' contracts, we invest significant sums of money in personnel, leased office space, purchased or developed technology, and other costs, and generally incur these costs prior to commencing services and receiving payments. This results in significant variability in financial performance and cash flows between quarters and for comparative periods. It is expected that future contracts will be structured in a similar fashion. However, the Company does not expect a large variability in financial performance upon the commencement of WD Service's newly secured Work and Health Programme contracts as the upfront implementation investments needed for these contracts are expected to be significantly less than those associated with other large contract commencements undertaken in the past, such as the offender rehabilitation program in 2016. In addition, under the majority of WD Services' contracts, the Company relies on its customers, which include government agencies, to provide referrals, for which the Company can provide services and earn revenue. The timing and magnitude of referrals can fluctuate significantly, leading to volatility in revenue.

Liquidity and capital resources

Short-term capital requirements consist primarily of recurring operating expenses and new contract start-up costs, including workforce restructuring costs. We expect to meet any cash requirements through available cash on hand, cash generated from our operating segments, and borrowing capacity under our Credit Facility (as defined below).

Cash flow from operating activities was our primary source of cash during 2017, and included $5.4 million received from the settlement of the Haverhill Litigation. Additionally, 2017 included $15.6 million in proceeds from the sale of our equity investment in Mission Providence which is included in cash provided by investing activities. Our balance of cash and cash equivalents was $95.3 million and $72.3 million at December 31, 2017 and 2016, respectively, including $40.1 million and $21.4 million held in foreign countries, respectively. The December 31, 2017 foreign cash balance includes the proceeds from the sale of Mission Providence of $15.6 million. Such cash held in foreign countries is generally used to fund foreign operations, although it may also be used to repay intercompany indebtedness existing between Providence and its foreign subsidiaries. As of March 5, 2018, the Company transferred $13.9 million from its foreign operations to its domestic operations since December 31, 2017.

We had restricted cash of $6.3 million and $14.1 million at December 31, 2017 and 2016, respectively, primarily related to contractual obligations and activities of our captive insurance subsidiary. Given expiring policies under our captive insurance subsidiary were not renewed upon expiration in May 2017, we expect our restricted cash balances to decline over time. These restricted cash amounts are not included in our balance of cash and cash equivalents. At both December 31, 2017 and 2016, we had no amounts outstanding under our credit facility.

We may, from time to time, access capital markets to raise equity or debt financing for various business reasons, including acquisitions. We may also raise debt financing to fund future repurchases of our Common Stock. The timing, term, size, and pricing of any such financing will depend on investor interest and market conditions, and there can be no assurance that we will be able to obtain any such financing. Our current credit facility expires on August 2, 2018. On November 2, 2017, the Company's Board approved the extension of the Company's existing stock repurchase program, authorizing the Company to engage in a repurchase program to repurchase up to $69.6 million (the amount remaining from the $100.0 million repurchase amount authorized in 2016) in aggregate value of our Common Stock through December 31, 2018. Through December 31, 2017, the Company repurchased 180,270 shares, for $10.5 million, and $59.1 million was available under the plan to repurchase shares. During the period January 1, 2018 to March 5, 2018, the Company repurchased an additional 527,825 shares for $33.3 million, and $25.8 million was available under the plan to repurchase shares.

The cash flow statement for all periods presented includes both continuing and discontinued operations. Discontinued operations includes the activity of our Human Services and HA Services segments. The loss from discontinued operations totaled $6.0 million for the year ended December 31, 2017, while income from discontinued operations totaled $108.8 million and $107.9 million for the years ended December 31, 2016 and 2015, respectively. For 2017, the loss from discontinued operations primarily related to the accrual of a contingent liability of $9.0 million related to the future settlement of indemnification claims associated with our former Human Services segment, partially offset by a related tax benefit. The significant income from discontinued operations during the years ended December 31, 2016 and 2015 related to the gains on sale of our HA Services segment and Human Services segment, respectively. Significant non-cash items of our discontinued operations in 2016 and 2015 included $3.7 million and $5.7 million of depreciation expense, respectively, $17.5 million and $28.6 million of amortization expense, respectively, and $52.3 million and negative $5.0 million of deferred taxes, respectively. Our discontinued operations also purchased property and equipment totaling $9.2 million and $10.3 million during 2016 and 2015.

2017 cash flows compared to 2016

Operating activities. Cash provided by operating activities was $55.0 million for 2017, an increase of $13.3 million compared with 2016. 2017 and 2016 cash flow from operations was driven by net income of $53.8 million and $89.8 million, respectively, non-cash adjustments to reconcile net income to net cash provided by operating activities of negative $11.1 million and negative $32.9 million, respectively, and changes in working capital of $12.3 million and negative $15.2 million, respectively.

The change in non-cash adjustments to reconcile net income to net cash provided by operating activities was due primarily to the impact of:

- the disposition of HA Services, resulting in decreased gain on sale of business, depreciation, amortization and deferred taxes in 2017 as compared to 2016;
- the asset impairment charge incurred in 2016 of $21.0 million;
- the impact on deferred taxes as a result of the Tax Reform Act passed in 2017;
- the gain on sale of Mission Providence of $12.4 million in 2017; and

- the impact of the change in equity in net (gain) loss of investees, which was a gain of $12.1 million in 2017 as compared to a loss of $10.3 million in 2016.

The change in working capital was primarily driven by the following:

- Accounts receivable generated a cash inflow in 2017 of $5.7 million as compared to an outflow of $19.3 million in 2016. The increase in cash inflow of $25.0 million was primarily attributable to NET Services due to the timing of collections as well as an outflow of $3.1 million of HA Services in 2016. These changes were partially offset by cash outflows in 2017 related to an increase in WD Services' receivables in Germany, Saudi Arabia, South Korea and the UK.
- Prepaid expenses and other generated a cash inflow of $15.5 million in 2017, as compared to a cash outflow of $4.1 million in 2016. The increase in cash inflow of $19.5 million was primarily attributable to a decrease in other receivables related to amounts receivable from insurance carriers in respect to certain claims paid by the Company, but reimbursable from the respective insurance carrier, decreased receivables related to our captive insurance company insurance policy rewrite, decreased prepaid value added taxes in the UK, decreased prepayments in WD Services in relation to certain contracts and changes in income tax payments.
- Accounts payable and accrued expenses generated a cash outflow of $9.1 million in 2017, as compared to a cash inflow of $33.4 million in 2016. The decrease in cash inflow of $42.4 million is due primarily to the impact of NET Services accrued contract payments of $21.5 million, as well as the disposition of HA Services, which generated a cash inflow of $10.6 million in 2016. Partially offsetting these impacts is the impact of the increase in the accrued settlement related to our former Human Services segment of $9.0 million during 2017 as compared to an increase of $6.0 million in 2016.
- Accrued transportation costs of NET Services generated a cash inflow of $11.2 million in 2017, as compared to a cash inflow of $8.7 million in 2016. The increase in cash inflow of $2.6 million is due primarily to the timing of payments to NET Services transportation providers and increased volume.
- Income taxes payable on sale of business for 2016 includes a cash outflow of $30.2 million related to the sale of our Human Services segment.

Investing activities. Net cash provided by investing activities of $0.8 million in 2017 decreased by $323.1 million as compared to 2016. The decrease was primarily attributable to $371.6 million of proceeds on the Matrix Transaction recorded in 2016, which was partially offset by the impact of $15.6 million in proceeds from the sale of our equity investment in Mission Providence in 2017. Additionally in 2017, we made a cost method investment in Circulation, a technology-based service provider, for $3.0 million. There was also a decrease in funding of our equity investment in Mission Providence of $13.7 million and a decrease in the purchase of property and equipment of $21.3 million. 2016 included purchases of property and equipment of $9.2 million by our discontinued operations.

Financing activities. Net cash used in financing activities of $33.8 million in 2017 decreased $343.0 million as compared to 2016. During 2016, there was a net repayment of debt of $305.0 million, primarily related to the repayment of debt upon the completion of the Matrix Transaction. Additionally, during 2017, we repurchased $41.0 million less of our Common Stock than in 2016. In addition, there was a decrease in proceeds from Common Stock issued pursuant to stock option exercises of $2.2 million.

2016 cash flows compared to 2015

Operating activities. Cash provided by operating activities was $41.8 million for 2016, an increase of $25.7 million compared with 2015. 2016 and 2015 cash flow from operations was driven by net income of $89.8 million and $83.2 million, respectively, non-cash adjustments to reconcile net income to net cash provided by operating activities of negative $32.9 million and negative $1.2 million, respectively, and changes in working capital of negative $15.2 million and negative $65.9 million, respectively. The change in adjustments to reconcile net income to net cash provided by operating activities was due primarily to the impact of the disposition of HA Services in 2016 and Human Services in 2015, as well as, significant stock-based compensation in 2015 and an asset impairment charge in 2016. The change in working capital is primarily driven by the following:

- Accounts receivable generated a cash outflow for 2016 of $19.3 million as compared to an outflow of $86.6 million for 2015. The decrease in cash outflow of $67.3 million was primarily attributable to timing of significant receivable collections of NET Services, increases in WD Services accounts receivable in 2015 related to additional revenue contracts in place during 2015 as compared to 2014, and a cash outflow related to Human Services in 2015.
- Accounts payable and accrued expenses generated a cash inflow of $33.4 million in 2016, as compared to a cash outflow of $21.9 million in 2015. The increase in cash flow of $55.3 million was primarily attributable to our Human

Services segment activity included in 2015, but not in 2016, due to the sale effective November 1, 2015, as well as a decreased change in accrued compensation between periods.

- Deferred revenue generated a cash outflow of $4.0 million in 2016, as compared to a cash inflow of $19.0 million in 2015. The significant cash inflow in 2015 primarily related to WD Services in association with cash received in advance of services being rendered for two large contracts.

- Income taxes payable on sale of business for 2016 includes a cash outflow of $30.2 million related to the sale of our Human Services segment.

Investing activities. Net cash provided by investing activities of $323.9 million in 2016 increased by $180.6 million as compared to 2015. The increase was primarily attributable to $371.6 million of proceeds on the Matrix Transaction recorded in 2016, which was partially offset by the impact of $199.9 million in proceeds from the sale of our Human Services segment in 2015. There was also an increase in the purchase of property and equipment of $6.1 million from 2015 to 2016.

Financing activities. Net cash used in financing activities of $376.8 million in 2016 increased $142.7 million as compared to 2015. During 2016, there was a net repayment of debt of $305.0 million, primarily related to the repayment of debt upon the completion of the Matrix Transaction, compared to a net repayment of debt of $271.1 million in 2015 upon the sale of our Human Services segment. Additionally, during 2016, we repurchased $33.5 million more of our Common Stock than in 2015. 2015 includes $80.7 million received from the issuance of preferred stock as well as a contingent consideration payment of $7.5 million associated with our purchase of Ingeus UK Holdings Limited and its wholly and partly-owned subsidiaries and associates.

Obligations and commitments

Current Credit Facility

The Credit Agreement provides for a revolving credit facility of $200.0 million, $25.0 million of which is available for letters of credit. As of December 31, 2017 we had no borrowings outstanding under the Credit Facility and seven letters of credit in the aggregate amount of $11.1 million outstanding. At December 31, 2017, our available credit under the Credit Facility was $188.9 million. The Credit Facility matures on August 2, 2018.

Under the Credit Agreement, we have an option to request an increase in the amount of the revolving credit facility and/or the term loan facility from time to time (on substantially the same terms as apply to the existing facilities) in an aggregate amount of up to $75.0 million with either additional commitments from lenders under the Credit Agreement at such time or new commitments from financial institutions acceptable to the administrative agent in its reasonable discretion, so long as no default or event of default exists at the time of any such increase. We may not be able to access additional funds under this increase option as no lender is obligated to participate in any such increase under the Credit Facility.

We may prepay any outstanding principal under the Credit Facility in whole or in part, at any time without premium or penalty, subject to reimbursement of the lenders' breakage and redeployment costs in connection with prepayments of London Interbank Offered Rate, or LIBOR, loans. The unutilized portion of the commitments under the Credit Facility may be irrevocably reduced or terminated by us at any time without penalty.

Interest on the outstanding principal amount of any loans accrues, at our election, at a per annum rate equal to LIBOR, plus an applicable margin or the base rate plus an applicable margin. The applicable margin ranges from 2.25% to 3.25% in the case of LIBOR loans and 1.25% to 2.25% in the case of the base rate loans, in each case, based on our consolidated leverage ratio as defined in the Credit Agreement. Interest on any loans is payable quarterly in arrears. In addition, we are obligated to pay a quarterly commitment fee based on a percentage of the unused portion of each lender's commitment under the Credit Facility and quarterly letter of credit fees based on a percentage of the maximum amount available to be drawn under each outstanding letter of credit. The commitment fee and letter of credit fee range from 0.25% to 0.50% and 2.25% to 3.25%, respectively, in each case, based on our consolidated leverage ratio.

The Credit Facility also requires us (subject to certain exceptions as set forth in the Amended and Restated Credit Agreement) to prepay the outstanding loans in an aggregate amount equal to 100% of the net cash proceeds received from certain asset dispositions, debt issuances, insurance and casualty awards and other extraordinary receipts.

The Credit Agreement contains customary affirmative and negative covenants and events of default. The negative covenants include restrictions on our ability to, among other things, incur additional indebtedness, create liens, make investments, give guarantees, pay dividends, repurchase shares, sell assets, and merge and consolidate. We are subject to financial covenants, including consolidated net leverage and consolidated interest coverage covenants. The Company's consolidated net leverage ratio may not be greater than 3.00:1.00 as of the end of any fiscal quarter and the Company's

consolidated interest coverage ratio may not be less than 3.00:1.00 as of the end of any fiscal quarter. We were in compliance with all covenants as of December 31, 2017.

Our obligations under the Credit Facility are guaranteed by all of our present and future domestic subsidiaries, excluding certain domestic subsidiaries, which includes our insurance captive. Our obligations under, and each guarantor's obligations under its guaranty of, the Credit Facility are secured by a first priority lien on substantially all of our respective assets, other than our

equity investment in Matrix, including a pledge of 100% of the issued and outstanding stock of our domestic subsidiaries, excluding our insurance captive, and 65% of the issued and outstanding stock of our first tier foreign subsidiaries.

Credit Facility Background

On August 2, 2013, we entered into the Credit Agreement with Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer, SunTrust Bank, as syndication agent, Merrill Lynch, Pierce, Fenner & Smith Incorporated and SunTrust Robinson Humphrey, Inc., as joint lead arrangers and joint book managers and other lenders party thereto. The Credit Agreement provided us with a senior secured credit facility, in aggregate principal amount of $225.0 million, comprised of a $60.0 million term loan facility and a $165.0 million revolving credit facility. The Credit Facility includes sublimits for swingline loans and letters of credit in amounts of up to $10.0 million and $25.0 million, respectively. On August 2, 2013, we borrowed the entire amount available under the term loan facility and $16.0 million under our revolving credit facility and used the proceeds thereof to refinance certain of our existing indebtedness.

On May 28, 2014, we entered into the first amendment to the Credit Agreement (the "First Amendment"). The First Amendment provided for, among other things, an increase in the aggregate amount of the Credit Facility from $165.0 million to $240.0 million and other modifications in connection with the consummation of the acquisition of Ingeus.

On October 23, 2014, we entered into the Second Amendment to the Credit Agreement (the "Second Amendment") to (i) add a new term loan tranche in aggregate principal amount of up to $250.0 million to partly finance the acquisition of Matrix and make certain other modifications in connection with the consummation of the acquisition of Matrix and (ii) add an excess cash flow mandatory prepayment provision.

On September 3, 2015, we entered into the Third Amendment to the Credit Agreement (the "Third Amendment"). Pursuant to the Third Amendment, the lenders under the Credit Agreement consented to Providence's sale of the Human Services segment and certain other amendments to the terms of the Credit Agreement to reflect such consents.

On August 28, 2016, we entered into the Fourth Amendment and Consent (the "Fourth Amendment") to the Credit Agreement. In accordance with the Fourth Amendment, which provided for the lenders' consent to the Matrix Transaction, a portion of the net cash proceeds received by the Company in connection with the Matrix Transaction were applied to the prepayment of outstanding term loans and revolving loans. Additionally, effective following the repayment of the outstanding term loans in full on October 20, 2016, the Fourth Amendment further (i) reduced the aggregate revolving commitments under the Credit Agreement to $200.0 million, (ii) amended the consolidated net leverage ratio covenant such that the Company's consolidated net leverage ratio may not be greater than 3.00:1.00 as of the end of any fiscal quarter and (iii) replaced the existing consolidated fixed charge coverage ratio covenant with a covenant that the Company's consolidated interest coverage ratio may not be less than 3.00:1.00 as of the end of any fiscal quarter.

Rights Offering

We completed a rights offering on February 5, 2015, allowing all of the Company's existing common stockholders the non-transferrable right to purchase their pro rata share of $65.5 million of Preferred Stock at a price equal to $100.00 per share (the "Rights Offering"). The Preferred Stock was convertible into shares of our Common Stock at a conversion price equal to $39.88, which was the closing price of our Common Stock on the NASDAQ Global Select Market on October 22, 2014.

Stockholders exercised subscription rights to purchase 130,884 shares of the Company's Preferred Stock. Pursuant to the terms and conditions of the Standby Purchase Agreement between Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Coliseum Capital Co-Invest, L.P. and Blackwell Partners, LLC (collectively, the "Standby Purchasers") and the Company, the remaining 524,116 shares of the Company's Preferred Stock was purchased by the Standby Purchasers at the $100.00 per share subscription price. The Standby Purchasers beneficially owned approximately 94% of our outstanding Preferred Stock after giving effect to the Rights Offering and the Standby Purchase Agreement. The Company received $65.5 million in aggregate gross proceeds from the consummation of the Rights Offering and Standby Purchase Agreement, which it used to repay the related party unsecured subordinated bridge note that was outstanding as of December 31, 2014.

Additionally, on March 12, 2015, the Standby Purchasers exercised their right to purchase an additional 150,000 shares of the Company's convertible preferred stock at a $105 per share subscription price.

We may pay a noncumulative cash dividend on each share of convertible preferred stock, when, as and if declared by a committee of our Board, at the rate of 5.5% per annum on the liquidation preference then in effect. Following the issue date of the convertible preferred stock, on or before the third business day immediately preceding each fiscal quarter, we determine our

intention whether or not to pay a cash dividend with respect to that ensuing quarter and give notice of our intention to each holder of convertible preferred stock as soon as practicable thereafter.

In the event we do not declare and pay a cash dividend, the liquidation preference will be increased to an amount equal to the liquidation preference in effect at the start of the applicable dividend period, plus an amount equal to such then applicable liquidation preference multiplied by 8.5% per annum, computed on the basis of a 365-day year and the actual number of days elapsed from the start of the applicable dividend period to the applicable date of determination.

Cash dividends are payable quarterly in arrears on January 1, April 1, July 1 and October 1 of each year, and, if declared, will begin to accrue on the first day of the applicable dividend period. Payment in kind ("PIK") dividends, if applicable, will accrue and be cumulative on the same schedule as set forth above for cash dividends and will also be compounded at the applicable annual rate on each applicable subsequent dividend date. PIK dividends are paid upon the occurrence of a liquidation event, conversion or redemption in accordance with the terms of the convertible preferred stock. Cash dividends were declared each quarter for the years ended December 31, 2017 and 2016 and totaled $4.4 million each year.

Reinsurance and Self-Funded Insurance Programs

Reinsurance

We historically reinsured a substantial portion of our automobile, general and professional liability and workers' compensation costs under reinsurance programs primarily through our wholly-owned captive insurance subsidiary, Social Services Providers Captive Insurance Company, or SPCIC. As of May 16, 2017, SPCIC did not renew the expiring reinsurance policies. SPCIC will continue to resolve claims under the historical policy years.

At December 31, 2017, the cumulative reserve for expected losses since inception of these historical automobile, general and professional liability and workers' compensation reinsurance programs was $1.1 million, $0.7 million and $5.0 million, respectively. Based on an independent actuarial report, our expected losses related to workers' compensation, automobile and general and professional liability in excess of our liability under our associated historical reinsurance programs at December 31, 2017 was $5.7 million. We recorded a corresponding receivable from third-party insurers and liability at December 31, 2017 for these expected losses, which would be paid by third-party insurers to the extent losses are incurred.

Further, we had restricted cash of $6.3 million and $14.1 million at December 31, 2017 and December 31, 2016, respectively, which was primarily restricted to secure the reinsured claims losses under the historical automobile, general and professional liability and workers' compensation reinsurance programs.

Health Insurance

We offer our NET Services, U.S. based WD Services, and corporate employees an option to participate in self-funded health insurance programs. Additionally, we historically offered this option to our HA Services and Human Services segments' employees. During the year ended December 31, 2017, health claims were self-funded with a stop-loss umbrella policy with a third-party insurer to limit the maximum potential liability for individual claims generally to $275,000 per person, subject to an aggregating stop-loss limit of $400,000. In addition, the program has a total stop-loss limit for total claims, in order to limit our exposure to catastrophic claims.

Health insurance claims are paid as they are submitted to the plan administrator. We maintain accruals for claims that have been incurred but not yet reported to the plan administrator, and therefore, have not been paid. The incurred but not reported reserve is based on an established cap and current payment trends of health insurance claims. The liability for the self-funded health plan of $2.2 million and $3.0 million as of December 31, 2017 and 2016, respectively, was recorded in "Reinsurance liability and related reserve" in our consolidated balance sheets.

We charge our employees a portion of the costs of our self-funded group health insurance programs. We determine this charge at the beginning of each plan year based upon historical and projected medical utilization data. Any difference between our projections and our actual experience is borne by us, up to the stop-loss limit. We estimate potential obligations for liabilities under this program to reserve what we believe to be a sufficient amount to cover liabilities based on our past

experience. Any significant increase in the number of claims or costs associated with claims made under this program above what we reserve could have a material adverse effect on our financial results.

Contractual cash obligations.

The following is a summary of our future contractual cash obligations as of December 31, 2017:

	At December 31, 2017				
Contractual cash obligations (000's)	**Total**	**Less than 1 Year**	**1-3 Years**	**3-5 Years**	**After 5 Years**
Capital Leases	$ 2,984	$ 2,400	$ 584	$ —	$ —
Interest (1)	467	467	—	—	—
Purchased services commitments (2)	8,448	2,966	5,482	—	—
Guarantees (3)	43,287	42,768	519	—	—
Letters of credit (3)	11,074	11,074	—	—	—
Operating Leases (4)	62,092	20,875	23,114	14,164	3,939
Total	$ 128,352	$ 80,550	$ 29,699	$ 14,164	$ 3,939

(1) Future interest payments have been calculated at the current rates as of December 31, 2017.

(2) Our purchase obligations represent the minimum obligations we have under agreements with certain of our vendors. These minimum obligations are less than our projected use for those periods. Payments may be more than the minimum obligations based on actual use.

(3) Guarantees and letters of credit ("LOCs") are commitments that represent funding responsibilities that may require our performance in the event of third-party demands or contingent events. Guarantees include surety bonds we provide to certain customers to protect against potential non-delivery of our non-emergency transportation services. Of the outstanding balance of our stand-by LOCs, $11.1 million directly reduces the amount available to us from our Credit Facility. The surety bonds and LOC amounts in the above table represent the amount of commitment expiration per period.

(4) The operating leases are for office space and related office equipment. We account for these leases on a monthly basis. Certain leases contain periodic rent escalation adjustments and renewal options.

Other than the items described above, we do not have any off-balance sheet arrangements as of December 31, 2017.

Stock repurchase programs

On November 4, 2015, our Board authorized us to engage in a repurchase program to repurchase up to $70.0 million in aggregate value of our Common Stock during the twelve-month period following November 4, 2015. This plan terminated on November 3, 2016. A total of 1,360,249 shares were purchased through this plan for $63.0 million, excluding commission payments.

On October 26, 2016, our Board authorized us to engage in a repurchase program to repurchase up to $100.0 million in aggregate value of our Common Stock during the twelve-month period following October 26, 2016. As of October 26, 2017, we spent $30.4 million, excluding commission payments, to purchase 770,808 shares of our Common Stock under this plan.

On November 2, 2017, the Board approved the extension of the Company's existing stock repurchase program, authorizing the Company to engage in a repurchase program to repurchase up to $69.6 million (the amount remaining from the $100.0 million repurchase amount authorized in 2016) in aggregate value of our Common Stock through December 31, 2018. As of December 31, 2017, 180,270 shares were purchased under this plan for $10.5 million, excluding commission payments, after it was extended on November 2, 2017. In addition, during the period January 1, 2018 to March 5, 2018, the Company repurchased an additional 527,825 shares for $33.3 million, and $25.8 million was available under the plan to repurchase shares.

Purchases under the repurchase program may be made from time-to-time through a combination of open market repurchases (including Rule 10b5-1 plans), privately negotiated transactions, and accelerated share repurchase transactions, at

the discretion of our officers, and as permitted by securities laws, covenants under existing bank agreements, and other legal requirements.

Off-balance sheet arrangements

As of December 31, 2017 and 2016, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

New Accounting Pronouncements

The new accounting pronouncements that impact our business are included in Note 2, *Significant Accounting Policies and Recent Accounting Pronouncements,* to our consolidated financial statements and are incorporated herein by reference.

Item 7A. ***Quantitative and Qualitative Disclosures About Market Risk.***

Foreign currency risk

As of December 31, 2017, we conducted business in 10 countries outside the U.S. As such, our cash flows and earnings are subject to fluctuations from changes in foreign currency exchange rates. We do not currently hedge against the possible impact of currency fluctuations. For 2017, we generated $288.5 million of our net operating revenues from operations outside the U.S.

A 10% reduction in the foreign currency exchange rate from British Pounds to U.S. dollars would have a $18.8 million negative impact on consolidated revenue, and a negligible impact on net income. A 10% reduction in other foreign currency exchange rates would not have a significant impact on our financial results.

We assess the significance of foreign currency risk on a periodic basis and may implement strategies to manage such risk as we deem appropriate.

Item 8. ***Financial Statements and Supplementary Data.***

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting for the registrant, as such term is defined in Rule 13a-15(f) of the Exchange Act. We designed our internal control over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting can provide only reasonable assurance with respect to financial statement preparation and presentation. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. The Company conducts periodic evaluations of its internal controls to enhance, where necessary, its procedures and controls.

The Company, under the supervision and with the participation of its management, including its principal executive officer and principal financial officer, conducted an evaluation of the effectiveness of the Company's internal control over financial reporting as of December 31, 2017, based on the criteria set forth in the Internal Control–Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on such evaluation, the Company concluded that its internal control over financial reporting was effective as of December 31, 2017.

KPMG LLP, an independent registered public accounting firm that audited the Company's consolidated financial statements included in this Annual Report on Form 10-K, has issued an audit report on the effectiveness of the Company's internal control over financial reporting which is presented in Part II, Item 8 of this Annual Report on Form 10-K.

Report of Independent Registered Public Accounting Firm

To the stockholders and board of directors
The Providence Service Corporation:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of The Providence Service Corporation and subsidiaries (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes and financial statement schedule II (collectively, the "consolidated financial statements"). In our opinion, based on our audits and the report of the other auditors, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 9, 2018 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

We did not audit the financial statements of Mercury Parent, LLC, (a 46.6 percent owned investee company) as of and for the year ended December 31, 2017. The Company's investment in Mercury Parent, LLC at December 31, 2017 was $169.7 million, and its equity in net gain of Mercury Parent, LLC was $13.4 million for the year ended December 31, 2017. The financial statements of Mercury Parent, LLC were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for Mercury Parent, LLC, is based solely on the report of the other auditors.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits and the report of the other auditors provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2008.

Stamford, Connecticut
March 9, 2018

Report of Independent Registered Public Accounting Firm

To the stockholders and board of directors
The Providence Service Corporation:

Opinion on Internal Control Over Financial Reporting

We have audited The Providence Service Corporation and subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Company as of December 31, 2017 and 2016, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes and financial statement schedule II (collectively, the "consolidated financial statements"), and our report dated March 9, 2018 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

Stamford, Connecticut
March 9, 2018

The Providence Service Corporation
Consolidated Balance Sheets
(in thousands except share and per share data)

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 95,310	$ 72,262
Accounts receivable, net of allowance of $5,762 in 2017 and $5,901 in 2016	158,926	162,115
Other receivables	5,759	12,639
Prepaid expenses and other	35,243	37,895
Restricted cash	1,091	3,192
Total current assets	296,329	288,103
Property and equipment, net	50,377	46,220
Goodwill	121,668	119,624
Intangible assets, net	43,939	49,124
Equity investments	169,912	161,363
Other assets	12,028	8,397
Restricted cash, less current portion	5,205	10,938
Deferred tax asset	4,632	1,510
Total assets	$ 704,090	$ 685,279
Liabilities, redeemable convertible preferred stock and stockholders' equity		
Current liabilities:		
Current portion of long-term obligations	$ 2,400	$ 1,721
Accounts payable	15,404	22,177
Accrued expenses	103,838	102,381
Accrued transportation costs	83,588	72,356
Deferred revenue	17,381	20,522
Reinsurance and related liability reserves	4,319	8,639
Total current liabilities	226,930	227,796
Long-term obligations, less current portion	584	1,890
Other long-term liabilities	21,386	22,380
Deferred tax liabilities	41,627	57,973
Total liabilities	290,527	310,039
Commitments and contingencies (Note 18)		
Redeemable convertible preferred stock		
Convertible preferred stock, net: Authorized 10,000,000 shares; $0.001 par value; 803,200 and 803,398 issued and outstanding; 5.5%/8.5% dividend rate	77,546	77,565
Stockholders' equity		
Common stock: Authorized 40,000,000 shares; $0.001 par value; 17,473,598 and 17,315,661 issued and outstanding (including treasury shares)	17	17
Additional paid-in capital	313,955	302,010
Retained earnings	204,818	156,718
Accumulated other comprehensive loss, net of tax	(25,805)	(33,449)
Treasury shares, at cost, 4,126,132 and 3,478,676 shares	(154,803)	(125,201)
Total Providence stockholders' equity	338,182	300,095
Noncontrolling interest	(2,165)	(2,420)

Total stockholders' equity	336,017	297,675
Total liabilities, redeemable convertible preferred stock and stockholders' equity	$ 704,090	$ 685,279

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Consolidated Statements of Income
(in thousands except share and per share data)

	Year ended December 31,		
	2017	**2016**	**2015**
Service revenue, net	$ 1,623,882	$ 1,578,245	$ 1,478,010
Operating expenses:			
Service expense	1,489,044	1,452,110	1,381,154
General and administrative expense	72,336	69,911	70,986
Asset impairment charge	—	21,003	—
Depreciation and amortization	26,469	26,604	23,998
Total operating expenses	1,587,849	1,569,628	1,476,138
Operating income	36,033	8,617	1,872
Other expenses:			
Interest expense, net	1,278	1,583	1,853
Other income	(5,363)	—	—
Equity in net (gain) loss of investees	(12,054)	10,287	10,970
Gain on sale of equity investment	(12,377)	—	—
Loss (gain) on foreign currency transactions	345	(1,375)	(857)
Income (loss) from continuing operations before income taxes	64,204	(1,878)	(10,094)
Provision for income taxes	4,401	17,036	14,583
Income (loss) from continuing operations, net of tax	59,803	(18,914)	(24,677)
Discontinued operations, net of tax	(5,983)	108,760	107,871
Net income	53,820	89,846	83,194
Net (gain) loss attributable to noncontrolling interests	(451)	2,082	502
Net income attributable to Providence	$ 53,369	$ 91,928	$ 83,696
Net income available to common stockholders (Note 14)	$ 41,865	$ 74,374	$ 67,999
Basic earnings (loss) per common share:			
Continuing operations	$ 3.52	$ (1.45)	$ (1.83)
Discontinued operations	(0.44)	6.52	6.09
Basic earnings per common share	$ 3.08	$ 5.07	$ 4.26
Diluted earnings (loss) per common share:			
Continuing operations	$ 3.50	$ (1.45)	$ (1.83)
Discontinued operations	(0.44)	6.52	6.09
Diluted earnings per common share	$ 3.06	$ 5.07	$ 4.26
Weighted-average number of common shares outstanding:			
Basic	13,602,140	14,666,896	15,960,905

Diluted	13,673,314	14,666,896	15,960,905

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Consolidated Statements of Comprehensive Income
(in thousands)

	Year ended December 31,		
	2017	**2016**	**2015**
Net income	$ 53,820	$ 89,846	$ 83,194
Net loss (income) attributable to noncontrolling interest	(451)	2,082	502
Net income attributable to Providence	53,369	91,928	83,696
Other comprehensive income (loss):			
Foreign currency translation adjustments, net of tax	7,117	(16,618)	(8,075)
Reclassification of translation loss realized upon sale of equity investment	527	—	—
Other comprehensive income (loss)	7,644	(16,618)	(8,075)
Comprehensive income	61,464	73,228	75,119
Comprehensive loss (income) attributable to noncontrolling interest	(255)	1,968	508
Comprehensive income attributable to Providence	$ 61,209	$ 75,196	$ 75,627

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Consolidated Statements of Stockholders' Equity
(in thousands except share data)

	Common Stock		Additional Paid-In	Retained Earnings (Accumulated	Accumulated Other Comprehensive Loss, Net of	Treasury Stock		Non-Controlling	
	Shares	Amount	Capital	Deficit)	Tax	Shares	Amount	Interest	Total
Balance at December 31, 2014	16,870,285	$ 17	$ 261,155	$ (13,366)	$ (8,756)	1,014,108	$ (17,686)	$ 50	$221,414
Stock-based compensation	—	—	26,622	—	—	—	—	—	26,622
Exercise of employee stock options, including net tax benefit of $2,706	247,333	—	7,899	—	—	5,718	(299)	—	7,600
Restricted stock issued	65,447	—	—	—	—	15,961	(759)	—	(759)
Stock repurchase	—	—	—	—	—	816,468	(34,111)	—	(34,111)
Shares surrendered by employees to pay employee taxes related to shares released from escrow	—	—	—	—	—	43,743	(1,968)	—	(1,968)
Conversion of convertible preferred stock to common stock	3,715	—	150	—	—	—	—	—	150
Beneficial conversion feature related to preferred stock	—	—	1,071	—	—	—	—	—	1,071
Convertible preferred stock dividends	—	—	(2,814)	(1,121)	—	—	—	—	(3,935)
Accretion of convertible preferred stock discount	—	—	(1,071)	—	—	—	—	—	(1,071)
Foreign currency translation adjustments, net of tax	—	—	—	—	(8,075)	—	—	—	(8,075)
Noncontrolling interests	—	—	—	—	—	—	—	(502)	(502)
Net income attributable to Providence	—	—	—	83,696	—	—	—	—	83,696
Balance at December 31, 2015	17,186,780	17	293,012	69,209	(16,831)	1,895,998	(54,823)	(452)	290,132
Stock-based compensation	—	—	5,154	—	—	—	—	—	5,154
Exercise of employee stock options, including net tax benefit of $276	105,788	—	3,832	—	—	—	—	—	3,832
Restricted stock issued	22,793	—	—	—	—	2,736	(130)	—	(130)
Stock repurchase	—	—	—	—	—	1,579,942	(70,248)	—	(70,248)
Conversion of convertible preferred stock to common stock	300	—	12	—	—	—	—	—	12
Convertible preferred stock dividends	—	—	—	(4,419)	—	—	—	—	(4,419)
Foreign currency translation adjustments, net of tax	—	—	—	—	(16,618)	—	—	114	(16,504)
Noncontrolling interests	—	—	—	—	—	—	—	(2,082)	(2,082)
Net income attributable to Providence	—	—	—	91,928	—	—	—	—	91,928
Balance at December 31, 2016	17,315,661	17	302,010	156,718	(33,449)	3,478,676	(125,201)	(2,420)	297,675
Stock-based compensation	—	—	7,619	—	—	—	—	—	7,619
Exercise of employee stock options	91,400	—	2,423	—	—	5,665	(238)	—	2,185
Restricted stock issued	36,623	—	—	—	—	19,556	(878)	—	(878)
Performance restricted stock issued	3,773	—	(96)	—	—	—	—	—	(96)
Shares issued for bonus settlement and director stipends	25,646	—	1,107	—	—	—	—	—	1,107
Stock repurchase	—	—	—	—	—	622,235	(28,486)	—	(28,486)
Conversion of convertible preferred stock to common stock	495	—	20	(1)	—	—	—	—	19
	—	—	—	(4,418)	—	—	—	—	(4,418)

Convertible preferred stock dividends									
Foreign currency translation adjustments, net of tax	—	—	—	—	7,117	—	—	(196)	6,921
Reclassification of translation loss realized upon sale of equity investments	—	—	—	—	527	—	—	—	527
Noncontrolling interests	—	—	—	—	—	—	—	451	451
Other	—	—	22	—	—	—	—	—	22
Net income attributable to Providence	—	—	—	53,369	—	—	—	—	53,369
Cumulative effect adjustment from change in accounting principle	—	—	850	(850)	—	—	—	—	—
Balance at December 31, 2017	17,473,598	$ 17	$ 313,955	$ 204,818	$ (25,805)	4,126,132	$(154,803)	$ (2,165)	$336,017

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Consolidated Statements of Cash Flows
(in thousands)

	Year ended December 31,		
	2017	**2016**	**2015**
Operating activities			
Net income	$ 53,820	$ 89,846	$ 83,194
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	18,542	21,699	20,234
Amortization	7,927	26,026	38,067
Provision for doubtful accounts	1,372	3,759	2,539
Stock-based compensation	7,543	5,136	26,622
Deferred income taxes	(22,996)	(14,130)	(10)
Amortization of deferred financing costs and debt discount	682	1,754	2,041
Write-off of deferred financing charges	—	2,302	—
Gains on remeasurement of contingent consideration	—	—	(2,469)
Asset impairment charge	—	21,003	1,593
Equity in net (gain) loss of investee	(12,054)	10,287	10,970
Gain on sale of equity investment	(12,377)	—	—
Gain on sale of business	—	(167,895)	(123,129)
Deferred income taxes and income taxes payable on gain on sale of business	—	58,492	22,797
Other non-cash charges (credits)	296	(1,323)	(419)
Changes in operating assets and liabilities, net of effects of acquisitions:			
Accounts receivable	5,715	(19,332)	(86,627)
Prepaid expenses and other	15,457	(4,058)	14,654
Reinsurance liability reserve	(5,731)	(4,110)	(611)
Accounts payable and accrued expenses	(9,064)	33,365	(21,900)
Income taxes payable on gain from sale of business	—	(30,153)	—
Accrued transportation costs	11,232	8,654	9,045
Deferred revenue	(4,691)	(4,019)	19,043
Other long-term liabilities	(629)	4,462	463
Net cash provided by operating activities	55,044	41,765	16,097
Investing activities			
Purchase of property and equipment	(19,923)	(41,216)	(35,072)
Proceeds from sale of property	—	1,039	—
Proceeds from sale of equity investment	15,593	—	—
Acquisitions, net of cash acquired	—	—	(3,433)
Sale of business, net of cash sold	—	371,580	199,943
Purchase of equity investment	—	(13,663)	(16,072)
Purchase of cost method investments	(3,000)	—	—
Restricted cash for reinsured claims losses	7,834	5,926	(2,058)
Other investing activities	310	239	(18)
Net cash provided by investing activities	814	323,905	143,290
Financing activities			
Proceeds from issuance of preferred stock, net of issuance costs	—	—	80,667
Preferred stock dividends	(4,418)	(4,419)	(3,928)
Repurchase of common stock, for treasury	(29,364)	(70,378)	(36,838)

Proceeds from common stock issued pursuant to stock option exercise	1,921	4,108	4,894
Proceeds from long-term debt	—	52,500	34,000
Repayment of long-term debt	—	(357,450)	(305,125)
Payment of contingent consideration	—	—	(7,496)
Other financing activities	(1,927)	(1,182)	(286)
Net cash used in financing activities	(33,788)	(376,821)	(234,112)
Effect of exchange rate changes on cash	978	(1,357)	(911)
Net change in cash	23,048	(12,508)	(75,636)
Cash at beginning of period	72,262	84,770	160,406
Cash at end of period	$ 95,310	$ 72,262	$ 84,770

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Supplemental Cash Flow Information
(in thousands)

Supplemental cash flow information	Year ended December 31, 2017	2016	2015
Cash included in current assets of discontinued operations held for sale	$ —	$ —	$ 5,014
Cash paid for interest	$ 987	$ 9,768	$ 16,699
Cash paid for income taxes	$ 18,128	$ 55,827	$ 21,555
Proceeds receivable from option exercise	$ 562	$ —	$ —
Purchases of equipment in accounts payable and accrued liabilities	$ 1,362	$ 983	$ 930
Accrued unfunded future equity investment capital contributions	$ —	$ —	$ 4,654
Note receivable issued for sale of property	$ —	$ 3,130	$ —
Purchase of equipment through capital lease obligation	$ 1,474	$ 4,547	$ —
Acquisitions:			
Purchase price	$ —	$ —	$ —
Less:			
Working capital adjustments to purchase price	—	—	(3,433)
Acquisitions, net of cash acquired	$ —	$ —	$ 3,433

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Notes to Consolidated Financial Statements
December 31, 2017
(in thousands except share and per share data)

1. Organization and Basis of Presentation

Description of Business

The Providence Service Corporation ("we", the "Company" or "Providence") owns subsidiaries and investments primarily engaged in the provision of healthcare services in the United States and workforce development services internationally. The subsidiaries and other investments in which the Company holds interests comprise the following segments:

- Non-Emergency Transportation Services ("NET Services") – Nationwide manager of non-emergency medical transportation ("NET") programs for state governments and managed care organizations.
- Workforce Development Services ("WD Services") – Global provider of employment preparation and placement services, legal offender rehabilitation services, youth community service programs and certain health related services to eligible participants of government sponsored programs.
- Matrix Investment – Minority interest in CCHN Group Holdings, Inc. and its subsidiaries ("Matrix"), a nationwide provider of in-home care optimization and management solutions, including comprehensive health assessments ("CHAs"), to members of managed care organizations, accounted for as an equity method investment. On February 16, 2018, Matrix acquired HealthFair, expanding its service offerings to include mobile health assessments, advanced diagnostic testing, and additional care optimization services.

In addition to its segments' operations, the Corporate and Other segment includes the Company's activities at its corporate office that include executive, accounting, finance, internal audit, tax, legal, public reporting, certain strategic and corporate development functions and the results of the Company's captive insurance company.

Discontinued Operations

During the periods presented, the Company completed the following transactions, which resulted in the presentation of the operations as Discontinued Operations. On November 1, 2015, the Company completed the sale of its Human Services segment. In addition to the results through the sale date, the Company has recorded additional expenses related to legal proceedings as described in Note 18, *Commitment and Contingencies*, related to an indemnified legal matter. On October 19, 2016, affiliates of Frazier Healthcare Partners purchased a 53.2% equity interest in Matrix with Providence retaining a 46.8% equity interest (the "Matrix Transaction"). Prior to the closing of the Matrix Transaction, the financial results of Matrix were included in the Company's Health Assessment Services ("HA Services") segment.

Basis of Presentation

The Company follows accounting standards set by the Financial Accounting Standards Board ("FASB"). The FASB establishes accounting principles generally accepted in the United States ("GAAP"). Rules and interpretive releases of the Securities and Exchange Commission ("SEC") under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. References to GAAP issued by the FASB in these footnotes are to the FASB *Accounting Standards Codification* ("ASC"), which serves as a single source of authoritative non-SEC accounting and reporting standards to be applied by non-governmental entities. All amounts are presented in U.S. dollars, unless otherwise noted.

The Company holds investments that are accounted for using the equity method. The Company does not control the decision-making process or business management practices of these affiliates. While the Company has access to certain information and performs certain procedures to review the reasonableness of information, the Company relies on management of these affiliates to provide accurate financial information prepared in accordance with GAAP. The Company receives audit reports relating to such financial information from the significant affiliates' independent auditors on an annual basis. The Company is not aware of any errors in or possible misstatements of the financial information provided by its equity affiliates that would have a material effect on the Company's consolidated financial statements.

Reclassifications

The Company has reclassified certain amounts relating to its prior period results to conform to its current period presentation. See Note 2, *Significant Accounting Policies and Recent Accounting Pronouncements*, for additional information on other reclassifications.

2. Significant Accounting Policies and Recent Accounting Pronouncements

Principles of Consolidation

The accompanying consolidated financial statements include The Providence Service Corporation, its wholly-owned subsidiaries, and entities it controls, or in which it has a variable interest and is the primary beneficiary of expected cash profits or losses. The Company records its investments in entities that it does not control, but over which it has the ability to exercise significant influence, using the equity method. The Company has eliminated significant intercompany transactions and accounts.

Accounting Estimates

The Company uses estimates and assumptions in the preparation of the consolidated financial statements in accordance with GAAP. Those estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the Company's consolidated financial statements. These estimates and assumptions also affect the reported amount of net income or loss during any period. The Company's actual financial results could differ significantly from these estimates. The significant estimates underlying the Company's consolidated financial statements include revenue recognition; allowance for doubtful accounts; accrued transportation costs; accrued restructuring; income taxes; recoverability of current and long-lived assets, including equity method investments; intangible assets and goodwill; loss contingencies; accounting for business combinations, including amounts assigned to definite and indefinite lived intangibles and contingent consideration; loss reserves for reinsurance and self-funded insurance programs; and stock-based compensation.

Cash and Cash Equivalents

Cash and cash equivalents include all cash balances and highly liquid investments with an initial maturity of three months or less. Investments in cash equivalents are carried at cost, which approximates fair value. The Company places its temporary cash investments with high credit quality financial institutions. At times, such investments may be in excess of the federally insured limits.

At December 31, 2017 and 2016, $40,127 and $21,411, respectively, of cash was held in foreign countries. Such cash is generally used to fund foreign operations, although it may be used also to repay intercompany indebtedness or similar arrangements. As of December 31, 2017, cash held in foreign countries included approximately $15,593 of proceeds from the sale of the Company's joint venture Mission Providence Pty Ltd ("Mission Providence").

Restricted Cash

At December 31, 2017 and 2016, the Company had $6,296 and $14,130, respectively, of restricted cash:

	December 31,	
	2017	**2016**
Collateral for letters of credit - Reinsured claims losses	$ —	$ 2,265
Escrow/Trust - Reinsured claims losses	6,296	11,865
Restricted cash for reinsured claims losses	6,296	14,130
Less current portion	1,091	3,192
Restricted cash, less current portion	$ 5,205	$ 10,938

Of the restricted cash amount at December 31, 2017 and 2016:

- $0 and $2,265, respectively, served as collateral for irrevocable standby letters of credit to secure any reinsured claims losses under the Company's reinsurance program;

- the remaining $6,296 and $11,865, respectively, is primarily related to restricted cash held in trusts for reinsurance claims losses under the Company's historical workers' compensation, general and professional liability and auto liability reinsurance programs, as well as amounts restricted for withdrawal under our self-insured medical and benefits plans.

Accounts Receivable and Allowance for Doubtful Accounts

The Company records accounts receivable amounts at the contractual amount, less an allowance for doubtful accounts. The Company maintains an allowance for doubtful accounts at an amount it estimates to be sufficient to cover the risk that an account will not be collected. The Company regularly evaluates its accounts receivable, especially receivables that are past due, and reassesses its allowance for doubtful accounts based on identified customer collection issues. In circumstances where the Company is aware of a customer's inability to meet its financial obligation, the Company records a specific allowance for doubtful accounts to reduce its net recognized receivable to an amount the Company reasonably expects to collect. The Company also provides a general allowance, based upon historical experience. Under certain contracts of NET Services, final payment is based on a reconciliation of actual utilization and cost, and the final reconciliation may require a considerable period of time. As of December 31, 2017 and 2016, accounts receivable under these reconciliation contracts totaled $42,054 and $45,287, respectively. In addition, certain government entities which WD Services serves remit payment substantially beyond the payment terms. The Company monitors these amounts due to the aging of receivables, but generally believes the balances are collectible. However, factors within those government entities could change and there can be no assurance that such changes would not result in an inability to collect the receivables.

The Company's provision for doubtful accounts expense from continuing operations for the years ended December 31, 2017, 2016 and 2015 was $1,372, $2,892 and $1,369, respectively.

Property and Equipment

Property and equipment are stated at historical cost, net of accumulated depreciation, or at fair value if the assets were initially recorded as the result of a business combination or if the asset was remeasured due to an impairment. Depreciation is calculated using the straight-line method over the estimated useful life of the asset. Maintenance and repairs are expensed as incurred. Gains and losses resulting from the disposition of an asset are reflected in operating expense.

Recoverability of Goodwill

In accordance with ASC 350, *Intangibles-Goodwill and Other*, the Company reviews goodwill for impairment annually, or more frequently, if events and circumstances indicate that an asset may be impaired. Such circumstances could include, but are not limited to: (1) the loss or modification of significant contracts, (2) a significant adverse change in legal factors or in business climate, (3) unanticipated competition, (4) an adverse action or assessment by a regulator, or (5) a significant decline in the Company's stock price. We perform the annual goodwill impairment test for all reporting units as of October 1.

First, we perform qualitative assessments for each reporting unit to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the qualitative assessment suggests that it is more likely than not that the fair value of a reporting unit is less than its carrying value amount, then we perform a quantitative assessment and compare the fair value of the reporting unit to its carrying value.

We adopted ASU No. 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ("ASU 2017-04") effective April 1, 2017. ASU 2017-04 removes the requirement to compare the implied fair value of goodwill with its carrying amount as part of step two of the goodwill impairment test. Instead, if we deem it necessary to perform the quantitative goodwill impairment test in an annual or interim period, we recognize an impairment charge equal to the excess, if any, of a reporting unit's carrying amount over its fair value, not to exceed the total amount of goodwill allocated to the reporting unit.

The Company estimates the fair value of the Company's reporting units using either an income approach, a market valuation approach, a transaction valuation approach or a blended approach. The income approach produces an estimated fair value of a reporting unit based on the present value of the cash flows the Company expects the reporting unit to generate in the future. Estimates included in the discounted cash flow model include the discount rate, which the Company determines based

on adjusting an industry-wide weighted-average cost of capital for size, geography, and company specific risk factors, long-term rates of growth and profitability of the Company's business, working capital effects and planned capital expenditures. The market approach produces an estimated fair value of a reporting unit based on a comparison of the reporting unit to comparable publicly traded entities in similar lines of business. The transaction valuation approach produces an estimated fair value of a reporting unit

based on a comparison of the reporting unit to publicly available transactional data involving both publicly traded and private entities in similar lines of business. The Company's significant estimates in both the market and transaction approach include the selected similar companies with comparable business factors such as size, growth, profitability, risk and return on investment and the multiples the Company applies to revenue and earnings before interest, taxes, depreciation and amortization ("EBITDA") to estimate the fair value of the reporting unit.

As discussed in Note 6, *Goodwill and Intangibles*, the Company determined that goodwill was impaired for the WD Services segment during the year ended December 31, 2016, and the Company recorded an asset impairment charge related to its goodwill of $5,224. The Company did not record any impairment charges for the year ended December 31, 2017. The Company recorded $1,593 of impairment charges related to its Human Services segment during the year ended December 31, 2015, which is included in "Discontinued operations, net of tax" in the consolidated statements of income.

Recoverability of Intangible Assets Subject to Amortization and Other Long-Lived Assets

Intangible assets subject to amortization and other long-lived assets are carried at cost and are amortized or depreciated on a straight-line basis over their estimated useful lives of 5 to 15 years. In accordance with ASC 360, *Property, Plant, and Equipment*, the Company reviews the carrying value of long-lived assets or groups of assets to be used in operations whenever events or changes in circumstances indicate that the carrying amount of the assets may be impaired. Factors that may necessitate an impairment assessment include, among others, significant adverse changes in the extent or manner in which an asset or group of assets is used, significant adverse changes in legal factors or the business climate that could affect the value of an asset or group of assets or significant declines in the observable market value of an asset or group of assets. The presence or occurrence of those events indicates that an asset or group of assets may be impaired. In those cases, the Company assesses the recoverability of an asset or group of assets by determining whether the carrying value of the asset or group of assets exceeds the sum of the projected undiscounted cash flows expected to result from the use and eventual disposition of the assets over the remaining economic life of the asset or the primary asset in the group of assets. If such testing indicates the carrying value of the asset or group of assets is not recoverable, the Company estimates the fair value of the asset or group of assets using appropriate valuation methodologies, which would typically include an estimate of discounted cash flows. If the fair value of those assets or groups of assets is less than carrying value, the Company records an impairment loss equal to the excess of the carrying value over the estimated fair value. As discussed in Note 6, *Goodwill and Intangibles*, the Company determined that the WD Services segment's intangible assets and property and equipment were impaired during the year ended December 31, 2016, and the Company recorded asset impairment charges of $9,983 and $4,381 to property and equipment and customer relationship intangible assets, respectively. The Company did not record any impairment charges for the years ended December 31, 2017 and 2015.

Accrued Transportation Costs

Eligible members of our customers schedule transportation through the Company's central reservation system. NET Services generally contracts with third-party providers to provide the transportation. The cost of transportation is recorded in the month the services are rendered, based upon contractual rates and mileage estimates. Transportation providers provide invoices once the trip is completed. Any trips that have not been invoiced require an accrual, based upon the expected cost as well as an estimate for cancellations, as the Company is generally only obligated to pay the transportation provider for completed trips. These estimates are based upon the historical trend associated with each contract's population and the transportation provider network servicing the program. There may be differences between actual invoiced amounts and estimated costs, and any resulting adjustments are included in expense. Accrued transportation costs were $83,588 and $72,356 at December 31, 2017 and 2016, respectively.

Deferred Financing Costs and Debt Discounts

The Company capitalizes direct expenses incurred in connection with its credit facilities and other borrowings, and amortizes such expenses over the life of the respective credit facility or other borrowings. Fees charged by lenders on the revolving facility and all fees charged by third parties are recorded as deferred financing costs and fees charged by lenders on term loans are recorded as a debt discount. Deferred financing costs, net of amortization, totaling $388 and $1,070 as of December 31, 2017 and 2016, respectively, are included in "Prepaid expenses and other" and "Other assets", respectively, on the consolidated balance sheet as there were no borrowings outstanding under the Company's credit facility.

Revenue Recognition

The Company recognizes revenue when it is earned and realizable based on the following criteria: persuasive evidence that an arrangement exists, services have been rendered, the price is fixed or determinable and collectability is reasonably assured.

NET Services

Capitated contracts. The majority of NET Services revenue is generated under capitated contracts with customers where the Company assumes the responsibility of meeting the covered transportation requirements of a specific geographic population based on per-member per-month fees for the number of members in the customer's program. Revenue is recognized based on the population served during the period. In some capitated contracts, partial payment is received as a prepayment during the month service is provided. These partial payments may be due back to the customer, or additional payments may be due to the Company, after each reconciliation period, based on a reconciliation of actual utilization and cost compared to the prepayment made.

Fee for service contracts. Revenues earned under fee for service ("FFS") contracts are based upon contractually established billing rates. Revenues are recognized when the service is provided based upon contractual amounts.

Flat fee contracts. Revenues earned under flat fee contracts are recognized ratably over the covered service period based upon contractually established fees which do not fluctuate with any changes in the membership population who are eligible to receive the transportation services.

For most contracts, the Company arranges for transportation of members through its network of independent transportation providers, whereby it remits payment to the transportation providers. However, for certain contracts, the Company only provides administrative management services to support the customers' efforts to serve its clients, and the amount of revenue recognized is based upon the management fee earned.

WD Services

WD Services revenues are primarily generated from providing workforce development and offender rehabilitation services, both of which include employment preparation and placement, apprenticeship and training, youth community service programs and certain health related services to clients on behalf of governmental and private entities. While the specific terms vary by contract and country, the Company often receives four types of revenue streams under contracts with government entities: referral/attachment fees, job placement/job outcome fees, sustainment fees and incentive fees. Referral/attachment fees are typically upfront payments that are payable when a client is referred by the contracting government entity or that client enters the program. Job placement fees are typically payable when a client is employed. Job outcome fees are typically payable when a client attains and holds employment for a specified minimum period of time. Sustainment fees are typically payable when clients maintain a job outcome past specified employment tenure milestones. Incentive fees are generally based upon a calculation that includes a variety of factors and inputs, such as average sustainment rates and client referral rates. Incentive fees vary greatly by contract.

Referral/attachment fee revenue is recognized ratably over the period of service, based upon an estimated period of time general services will be provided (i.e. the person is placed in a job or reaches the maximum time period for the program). The estimated period of time services will be rendered is based upon historical data. Job placement, job outcome and sustainment fee revenue is recognized when certain milestones are achieved, and amounts become billable. Incentive fee revenue is generally recognized when fixed and determinable, frequently at the end of the cumulative calculation period, unless contractual terms allow for earned payments on a fixed or ratable basis.

Revenue is also earned under fixed FFS arrangements, based upon contractual rates established at the outset of the contract or the applicable contract year, although the rate may be prospectively adjusted during the contract year based upon actual volumes.

If the rate is adjusted but the Company is unable to adjust its costs accordingly, or if the volume or types of referrals are lower than estimated, our profitability may be negatively impacted. Volume levels are typically not guaranteed under contracts.

Deferred Revenue

At times we may receive funding for certain services in advance of services being rendered. These amounts are reflected in the consolidated balance sheets as "Deferred revenue" until the services are rendered.

Stock-Based Compensation

The Company follows the fair value recognition provisions of ASC Topic 718 – *Compensation – Stock Compensation* ("ASC 718"), which requires companies to measure and recognize compensation expense for all share based payments at fair value.

- The Company calculates the fair value of stock options using the Black-Scholes option-pricing formula. The fair value of non-vested restricted stock grants is determined based on the closing market price of the Company's Common Stock on the date of grant. Stock-based compensation expense charged against income for stock options and stock grants is based on the grant-date fair value. Forfeitures are recorded as they occur. The expense for stock-based compensation awards is amortized on a straight-line basis over the requisite service period, which is typically the vesting period.

- The Company records restricted stock units ("RSUs") that may be settled by the holder in cash, rather than shares, as a liability and remeasures these liabilities at fair value at the end of each reporting period. Upon settlement of these awards, the total compensation expense recorded over the vesting period of the awards will equal the settlement amount, which is based on the Company's stock price on the settlement date.

- Performance-based RSUs vest upon achievement of certain company specific performance conditions. On the date of grant, the Company determines the fair value of the performance-based award using the fair value of the Company's Common Stock at that time and it assesses whether it is probable that the performance targets will be achieved. If assessed as probable, the Company records compensation expense for these awards over the requisite service period. At each reporting period, the Company reassesses the probability of achieving the performance targets and the performance period required to meet those targets. The estimation of whether the performance targets will be achieved and of the performance period required to achieve the targets requires judgment, and to the extent actual results or updated estimates differ from the Company's current estimates, the cumulative effect on current and prior periods of those changes will be recorded in the period estimates are revised, or the change in estimate will be applied prospectively depending on whether the change affects the estimate of total compensation cost to be recognized or merely affects the period over which compensation cost is to be recognized. The ultimate number of shares issued and the related compensation expense recognized will be based on a comparison of the final performance metrics to the specified targets.

- The Company calculates the fair value of market-based stock awards, including the Company's 2015 Holding Company LTI Program (the "HoldCo LTIP") awards, using the Monte-Carlo simulation valuation model. Forfeitures are recorded as they occur. Compensation expense for market-based awards is recognized over the requisite service period regardless of whether the market conditions are expected to be achieved.

Income Taxes

Deferred income taxes are determined by the liability method in accordance with ASC Topic 740 - *Income Taxes*. Under this method, deferred tax assets and liabilities are determined based on differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and are measured using the enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. The Company considers many factors when assessing the likelihood of future realization of deferred tax assets, including recent earnings experience by jurisdiction, expectations of future taxable income, and the carryforward periods available for tax reporting purposes, as well as other relevant factors. The Company establishes a valuation allowance to reduce deferred tax assets to the amount that is more likely than not to be realized. Due to inherent complexities arising from the nature of the Company's businesses, future changes in income tax law or variances between the Company's actual and anticipated operating results, the Company makes certain judgments and estimates. Therefore, actual income taxes could materially vary from these estimates.

The Company has recorded a valuation allowance which includes amounts for net operating losses and tax credit carryforwards, as more fully described in Note 17, *Income Taxes,* for which the Company has concluded that it is more likely than not that these net operating loss and tax credit carryforwards will not be realized in the ordinary course of operations.

The Company recognizes interest and penalties related to income taxes as a component of income tax expense.

The Company accounts for uncertain tax positions based on a two-step process of evaluating recognition and measurement criteria. The first step assesses whether the tax position is more likely than not to be sustained upon examination by the tax authority, including resolution of any appeals or litigation, based on the technical merits of the position. If the tax position meets the more likely than not criteria, the portion of the tax benefit greater than 50% likely to be realized upon settlement with the tax authority is recognized in the consolidated financial statements.

On December 22, 2017, the U.S. bill commonly referred to as the Tax Cuts and Jobs Act ("Tax Reform Act") was enacted as more fully described in Note 17, *Income Taxes*.

Foreign Currency Translation

Local currencies generally are considered the functional currencies outside the U.S. Assets and liabilities for operations in local-currency environments are translated at month-end exchange rates of the period reported. Income and expense items are translated at the average exchange rate for each applicable month. Cumulative translation adjustments are recorded as a component of accumulated other comprehensive loss, net of tax, in stockholders' equity within the consolidated balance sheets.

Loss Reserves for Certain Reinsurance and Self-Funded Insurance Programs

The Company historically reinsured a substantial portion of its automobile, general and professional liability and workers' compensation costs under reinsurance programs primarily through the Company's wholly-owned subsidiary, Social Services Providers Captive Insurance Company ("SPCIC"), a licensed captive insurance company domiciled in the State of Arizona. As of May 16, 2017, SPCIC did not renew the expiring reinsurance policies. SPCIC will continue to resolve claims under the historical policy years.

The Company utilizes a report prepared by an independent actuary to estimate the gross expected losses related to historical automobile, general and professional and workers' compensation liability reinsurance policies, including the estimated losses in excess of SPCIC's insurance limits, which would be reimbursed to SPCIC to the extent such losses were incurred. As of December 31, 2017 and 2016, the Company had reserves of $6,699 and $11,240, respectively, for the automobile, general and professional liability and workers' compensation reinsurance policies, net of expected receivables for losses in excess of SPCIC's historical insurance limits. The gross reserve as of December 31, 2017 and 2016 of $12,448 and $16,505, respectively, is classified as "Reinsurance liability reserves" and "Other long-term liabilities" in the consolidated balance sheets. The estimated amount to be reimbursed to SPCIC as of December 31, 2017 and 2016 was $5,749 and $5,265, respectively, and is classified as "Other receivables" and "Other assets" in the consolidated balance sheets.

The Company also maintains a self-funded health insurance program with a stop-loss umbrella policy with a third-party insurer to limit the maximum potential liability for individual claims generally to $275 per person, subject to an aggregating stop-loss limit of $400. In addition, the program has a total stop-loss limit for total claims, in order to limit the Company's exposure to catastrophic claims. With respect to this program, the Company considers historical and projected medical utilization data when estimating its health insurance program liability and related expense. As of December 31, 2017 and 2016, the Company had $2,229 and $3,022, respectively, in reserve for its self-funded health insurance programs. The reserves are classified as "Reinsurance and related liability reserves" in the consolidated balance sheets.

The Company utilizes analysis prepared by third-party administrators and independent actuaries based on historical claims information with respect to the general and professional liability coverage, workers' compensation coverage, automobile liability, automobile physical damage, and health insurance coverage to determine the amount of required reserves.

The Company regularly analyzes its reserves for incurred but not reported claims, and for reported but not paid claims related to its reinsurance and self-funded insurance programs. The Company believes its reserves are adequate. However, significant judgment is involved in assessing these reserves, such as assessing historical paid claims, average lag times between the claims' incurred date, reported dates and paid dates, and the frequency and severity of claims. There may be differences between actual settlement amounts and recorded reserves and any resulting adjustments are included in expense once a probable amount is known.

Restructuring, Redundancy and Related Reorganization Costs

The Company has engaged in employee headcount optimization actions within the WD Services segment which require management to estimate the timing and amount of severance and other employee separation costs for workforce reduction. The Company accrues for severance and other employee separation costs under these actions when it is probable that benefits will be paid and the amount is reasonably estimable. The amounts used in determining severance accruals are based on an estimate of the salaries and related benefit costs payable under existing plans, and are included in accrued expenses to the extent they have not been paid.

Noncontrolling Interests

Noncontrolling interests represent the noncontrolling holders' percentage share of income or losses from a subsidiary in which the Company holds a majority, but less than 100%, ownership interest and the results of which are consolidated and included in the Company's consolidated financial statements. The Company has a 90% ownership in The Reducing Reoffending Partnership Limited, which commenced operations in 2015.

Discontinued Operations

In determining whether a group of assets disposed (or to be disposed) of should be presented as a discontinued operation, the Company makes a determination of whether the criteria for held-for-sale classification is met and whether the disposition represents a strategic shift that has (or will have) a major effect on the entity's operations and financial results. If these determinations can be made affirmatively, the results of operations of the group of assets being disposed of (as well as any gain or loss on the disposal transaction) are aggregated for separate presentation apart from continuing operating results of the Company in the consolidated financial statements. See Note 20, *Discontinued Operations,* for a summary of discontinued operations.

Earnings Per Share

The Company computes basic earnings per share by taking net income attributable to the Company available to common stockholders divided by the weighted average number of common shares outstanding during the period, including restricted stock and stock held in escrow if such shares are participating securities. Diluted earnings per share includes the potential dilution that may occur from stock-based awards and other stock-based commitments using the treasury stock or the as-if converted methods, as applicable. For additional information on how the Company computes earnings per share, see Note 14, *Earnings Per Share*.

Fair Value of Financial Instruments

The Company discloses the fair value of its financial instruments based on the fair value hierarchy using the following three categories:

Level 1 – Quoted prices in active markets for identical assets or liabilities that are accessible at the measurement date.

Level 2 – Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company may be required to pay additional consideration in relation to certain acquisitions based on the achievement of certain earnings targets. Acquisition-related contingent consideration is initially measured and recorded at fair value as an element of consideration paid in connection with an acquisition with subsequent adjustments recognized in "General and administrative expense" in the consolidated statements of income. The Company determines the fair value of acquisition-related contingent consideration, and any subsequent changes in fair value using a discounted probability-weighted approach. This approach takes into consideration Level 3 unobservable inputs including probability assessments of expected future cash flows over the period in which the obligation is expected to be settled and applies a discount factor that captures the uncertainties associated with the obligation. Changes in these unobservable inputs could significantly impact the fair value of the obligation recorded in the accompanying consolidated balance sheets and operating expenses in the consolidated statements of income.

The carrying amounts of cash and cash equivalents, restricted cash, accounts receivable and accounts payable approximate their fair value because of the relatively short-term maturity of these instruments.

Recent Accounting Pronouncements

The Company adopted the following accounting pronouncements during the year ended December 31, 2017:

In November 2015, the FASB issued Accounting Standards Update ("ASU") No. 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes* ("ASU 2015-17"), which changes how deferred taxes are classified on organizations' balance sheets. The ASU eliminates the current requirement for organizations to present deferred tax liabilities and assets as current and noncurrent in a classified balance sheet. Instead, organizations will be required to classify all deferred tax assets and liabilities as noncurrent. The amendments apply to all organizations that present a classified balance

sheet. For public companies, the amendments are effective for financial statements issued for annual periods beginning after December 16, 2016, and interim periods within those annual periods. The Company adopted ASU 2015-17 retrospectively on January 1, 2017, which resulted in the reclassification of the December 31, 2016 deferred tax assets-current balance of $6,825 and non-current deferred tax assets of $2,493 to long-term deferred tax liabilities in the amount of $9,318.

In March 2016, the FASB issued ASU No. 2016-07, *Investments - Equity Method and Joint Ventures (Topic 323): Simplifying the Transition to the Equity Method of Accounting* ("ASU 2016-07"). ASU 2016-07 eliminates the requirement that when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of influence, an investor must adjust the investment, results of operations, and retained earnings retroactively on a step-by-step basis as if the equity method had been in effect during all previous periods that the investment had been held. ASU 2016-07 instead specifies that the investor should add the cost of acquiring the additional interest in the investee to the current basis of the investor's previously held interest and apply the equity method of accounting as of the date the investment became qualified for equity method accounting. ASU 2016-07 is effective for all entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2016 and should be applied prospectively. The Company adopted ASU 2016-07 on January 1, 2017. The adoption of ASU 2016-07 had no impact on the Company's financial statements or disclosures.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"). ASU 2016-09 is intended to improve the accounting for employee share-based payments and affect all organizations that issue share-based payment awards to their employees. Several aspects of the accounting for share-based payment award transactions are simplified, including income tax consequences, classification of awards as either equity or liabilities and classification in the statement of cash flows. For public companies, the amendments are effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. The Company adopted ASU 2016-09 on January 1, 2017, and elected to recognize forfeitures as they occur. As a result, the Company recorded a cumulative effect adjustment of $850 to retained earnings as of January 1, 2017. Upon adoption, all excess tax benefits and tax deficiencies related to employee share-based payments are recognized through income tax expense prospectively.

The Company excluded the related tax benefits when applying the treasury stock method for computing diluted shares outstanding on a prospective basis resulting in a decrease in diluted weighted average shares outstanding of 4,642 shares for the year ended December 31, 2017.

The adoption of ASU 2016-09 subjects our tax rate to quarterly volatility from the effects of stock award exercises and vesting activities, including the adverse impact on our income tax provision for awards which result in a tax deduction less than the amount recorded for financial reporting purposes based upon the fair value of the award at the grant date. For the year ended December 31, 2017, the Company recorded excess tax deficiencies, net, of $3,604 as an increase to the provision for income taxes. This deficiency primarily related to the Company's Holdco LTIP. As further explained in Note 12, *Stock-Based Compensation and Similar Arrangements*, no shares were distributed under the Company's HoldCo LTIP as the volume weighted average of Providence's stock price over the 90-day trading period ended on December 31, 2017 did not exceed $56.79. As this market condition was not satisfied, a related tax deficiency was recognized during the year ended December 31, 2017 of $3,590.

The Company elected to apply the change in classification of cash flows resulting from excess tax benefits or deficiencies on a retrospective basis. This resulted in an increase in cash flows provided by operating activities of $282, offset by an increase of $282 in cash flows used in financing activities in the consolidated statement of cash flows for the year ended December 31, 2016, and an increase in cash flows provided by operating activities of $2,857, offset by an increase of $2,857 in cash flows used in financing activities in the consolidated statement of cash flows for the year ended December 31, 2015. Additionally, ASU 2016-09 requires that employee taxes paid when an employer withholds shares for tax-withholding purposes be reported as financing activities in the consolidated statements of cash flows, which is how the Company has historically classified these amounts.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business* ("ASU 2017-01"). ASU 2017-01 clarifies the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The definition of a business affects many areas of accounting including acquisitions, disposals, goodwill, and consolidation. ASU 2017-01 is effective for annual periods beginning after December 15, 2017, including interim periods within those periods. The Company adopted ASU 2017-01 on April 1, 2017. The adoption of ASU 2017-01 had no impact on the Company's financial statements or disclosures.

In January 2017, the FASB issued ASU No. 2017-03, *Accounting Changes and Error Corrections (Topic 250) and Investments - Equity Method and Joint Ventures (Topic 323)* ("ASU 2017-03"). ASU 2017-03 expands required qualitative disclosures when registrants cannot reasonably estimate the impact that adoption of an ASU will have on the financial

statements. Such qualitative disclosures would include a comparison of the registrant's new accounting policies, if determined, to current accounting policies, a description of the status of the registrant's process to implement the new standard and a description of the significant implementation matters yet to be addressed by the registrant. The Company implemented ASU 2016-15 in its consolidated financial statements for the year ended December 31, 2017 resulting in enhanced qualitative disclosures regarding future adoption of new ASUs.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ("ASU 2017-04"). ASU 2017-04 removes the requirement to compare the implied fair value of goodwill with its carrying amount as part of step two of the goodwill impairment test. As a result, under ASU 2017-04, an entity should perform its annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and should recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value; however, the impairment loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. This guidance is effective prospectively for fiscal years beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed after January 1, 2017. The Company adopted ASU 2017-04 on April 1, 2017. The adoption of ASU 2017-04 had no impact on the Company's financial statements or disclosures.

Recent accounting pronouncements that were not yet adopted by the Company through December 31, 2017 are as follows:

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* ("ASU 2014-09"). ASU 2014-09 introduced FASB Accounting Standards Codification Topic 606 ("ASC 606"), which will replace most currently applicable existing revenue recognition guidance and is intended to improve and converge with international standards the financial reporting requirements for revenue from contracts with customers. The core principle of ASC 606 is that an entity should recognize revenue for the transfer of goods or services equal to the amount that it expects to be entitled to receive for those goods or services. ASC 606 also requires additional disclosures about the nature, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments. ASU 2014-09 allows for adoption either on a full retrospective basis to each prior reporting period presented or on a modified retrospective basis with the cumulative effect of initially applying the new guidance recognized at the date of initial application, which is effective for the Company on January 1, 2018.

The Company has substantially completed its adoption plan, under which it performed conceptual and detailed contract reviews to determine the impact of ASC 606 on its financial statements, internal controls and operational processes. The guidance in ASC 606 on the following topics was critical to the Company's analysis:

- the effect of specified clauses on the term of many of the Company's contracts with customers;
- the nature of the promises in many of the Company's contracts with customers to perform integrated services over a period of time;
- whether and how much variable consideration to include when determining the transaction prices for its contracts with customers;
- whether any of the Company's customer contracts require performance over a series of distinct service periods and the impact on determining and allocating the transaction price; and
- the manner in which the Company will measure its progress towards fully satisfying its performance obligations, including a determination of whether the Company may be able to use certain practical expedients.

The impact of adoption on revenue for each segment is as follows:

NET Services – For non-emergency transportation solutions, the Company will primarily use the right-to-invoice practical expedient to account for revenue when the Company has a right to consideration from a customer in an amount that corresponds directly with the value of the entity's performance completed to date. This is consistent with the Company's current revenue recognition policy. The only impact identified for NET Services is the presentation of one contract on a net basis which is currently accounted for on a gross basis, as the Company does not control the service, as defined under the new standard.

WD Services – WD Services has a number of contracts which include variable consideration, whereby it earns revenues if certain contractually defined outcomes occur in the future. When the related performance obligations are satisfied over time, the Company will recognize revenue in the proportion that the outcome has been earned based on services provided. The amount of revenue is based upon the Company's estimate of the final amount of outcome fees to be earned. The Company will evaluate probability using either the expected value method or the most likely amount method, as appropriate. At each reporting period, the Company will update its estimate of outcome fees, based upon actual results as well as refined estimates of future results, and will record an adjustment to revenue, based upon services performed to date. Under the new

standard, the Company may recognize revenues for outcome fees earlier under the new standard, as revenue is currently recognized upon the final resolution of the contingency, i.e. the outcome is able to be invoiced. However, under certain contracts the Company receives up-front fees, which may be recognized over a longer period under the new standard as compared to current guidance. As of adoption, such impacts are not material to the consolidated financial statements.

The new standard will require the Company to recognize contract assets and liabilities on its balance sheet as appropriate. Additionally, the Company will be required to make additional disclosures about the nature of its contracts and the related performance obligations.

The Company is in its final stages of quantifying the financial impacts of the new guidance based on the contracts that exist at the date of adoption, as well as evaluating presentation of our revenues and required enhancements to disclosures. We have implemented both process and information systems changes to identify and assess contracts that are impacted by the new revenue recognition criteria and accumulate data to satisfy new disclosure requirements. As discussed above, we expect the new standard will have an immaterial impact on our consolidated financial statements, other than increased disclosures, upon adoption. Changes to revenue recognition as a result of applying the new standard will largely arise from outcome fees as described above, as well as the timing of revenue recognition for up-front fees. The Company will use the modified retrospective adoption method, and plans to adopt the standard on January 1, 2018.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* ("ASU 2016-02"). ASU 2016-02 introduced FASB Accounting Standards Codification Topic 842 ("ASC 842"), which will replace ASC 840, *Leases*. Under ASC 842, lessees will be required to recognize the following for all leases (with the exception of short-term leases) at the commencement date: a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term.

ASU 2016-02 is effective for publicly held entities for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early application is permitted. Lessees must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach does not require transition accounting for leases that expired before the earliest comparative period presented. Lessees may not apply a full retrospective transition approach. The Company has not entered into significant lease agreements in which it is the lessor; however, the Company does have lease agreements in which it is the lessee. The Company is assessing the impact of applying ASC 842 to its lease agreements. It is in the process of developing an adoption plan, assembling a cross-functional project team and assessing the impacts of applying ASC 842 to the Company's financial statements, information systems and internal controls. The assessment of applying ASU 2016-02 is ongoing and, therefore, the Company has not yet determined whether the impacts will be material to the Company's consolidated financial statements.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments – Credit Losses (Topic 326)* ("ASU 2016-13"). The amendments in ASU 2016-13 will supersede or clarify much of the existing guidance for reporting credit losses for assets held at amortized cost basis and available for sale debt securities. The amendments in ASU 2016-13 affect loans, debt securities, trade receivables, net investments in leases, off balance sheet credit exposures, reinsurance receivables, and any other financial assets not excluded from the scope that have the contractual right to receive cash. ASU 2016-13 is effective for financial statements issued for fiscal years beginning after December 15, 2019, with early adoption permitted for fiscal years beginning after December 15, 2018. The Company has not evaluated the impact of ASU 2016-13 on its consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"). ASU 2016-15 provides guidance for eight targeted changes with respect to how cash receipts and cash payments are classified in the statements of cash flows, with the objective of reducing diversity in practice. ASU 2016-15 is effective for financial statements issued for fiscal years beginning after December 15, 2017, with early adoption permitted. The Company will adopt ASU 2016-15 on January 1, 2018. The adoption is not expected to have a significant impact on the Company's consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash* ("ASU 2016-18"). ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. ASU 2016-18 is effective for public entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period; however, any adjustments must be reflected as of the beginning of the fiscal year that includes that interim period. ASU 2016-18 must be adopted retrospectively. The Company will adopt ASU 2016-15 on January 1, 2018. The adoption will impact the Company's consolidated statements of cash flow as the Company has restricted cash totaling $6,296 at December 31, 2017. Additionally, the Company will be required to make

additional disclosures detailing the balance sheet line items that are included in the sum of cash, cash equivalents and restricted cash in the consolidated statements of cash flow.

In May 2017, the FASB issued ASU No. 2017-09, *Compensation–Stock Compensation (Topic 718): Scope of Modification Accounting* ("ASU 2017-09"). ASU 2017-09 provides guidance about which changes to the terms of a share-based payment award

should be accounted for as a modification. A change to an award should be accounted for as a modification unless the fair value of the modified award is the same as the original award, the vesting conditions do not change, and the classification as an equity or liability instrument does not change. This guidance is effective for fiscal years beginning after December 15, 2017. Early adoption is permitted. The Company will adopt ASU 2016-15 on January 1, 2018. The adoption of ASU 2017-09 is not expected to have a material impact on the Company's consolidated financial statements.

3. Equity Investment

Matrix

Prior to the closing of the Matrix Transaction on October 19, 2016, the financial results of Matrix were included in the Company's HA Services segment. Subsequent to the closing of the Matrix Transaction, the Company owned a 46.8% noncontrolling interest in Matrix. As of December 31, 2017, the Company owned a 46.6% noncontrolling interest in Matrix. Pursuant to a Shareholder's Agreement, affiliates of Frazier Healthcare Partners hold rights necessary to control the fundamental operations of Matrix. The Company accounts for this investment in Matrix under the equity method of accounting and the Company's share of Matrix's income or losses are recorded as "Equity in net (gain) loss of investees" in the accompanying consolidated statements of income.

The carrying amount of the assets included in the Company's consolidated balance sheet and the maximum loss exposure related to the Company's interest in Matrix as of December 31, 2017 and 2016 totaled $169,699 and $157,202, respectively.

Summary financial information for Matrix on a standalone basis is as follows:

	December 31,	
	2017	**2016**
Current assets	$ 37,563	$ 28,589
Long-term assets	597,613	614,841
Current liabilities	27,718	25,791
Long-term liabilities	240,513	281,348

	Twelve months ended December 31, 2017	**October 19, 2016 through December 31, 2016**
Revenue	$ 227,872	$ 41,635
Operating income (loss)	11,870	(4,079)
Net income (loss)	26,665	(4,200)

Included in Matrix's standalone net income of $26,665 for the year ended December 31, 2017 is depreciation and amortization of $33,512, transaction related expenses of $3,537, which includes $2,679 of transaction incentive compensation, equity compensation of $2,639, management fees paid to Matrix's shareholders of $2,331, merger and acquisition due diligence related costs of $685, interest expense of $14,818 and an income tax benefit of $29,613. The income tax benefit primarily related to the re-measurement of deferred tax liabilities arising from a lower U.S. corporate tax rate as a result of the Tax Reform Act. Included in Matrix's standalone net loss of $4,200 for the year ended December 31, 2016 is depreciation and amortization of $6,356, transaction related expenses of $6,367, which includes $4,033 of transaction incentive compensation, equity compensation of $407, management fees paid to Matrix's shareholders of $396, interest expense of $2,949 and an income tax benefit of $2,828.

See Note 20, *Discontinued Operations*, for Matrix's January 1, 2016 through October 19, 2016 results of operations, as well as the results of operations for the year ended December 31, 2015.

Mission Providence

The Company entered into a joint venture agreement in November 2014 with Mission Australia ACN ("Mission Australia") to form Mission Providence. Mission Providence delivers employment preparation and placement services in Australia. The

Company had a 60% ownership interest in Mission Providence, and had rights to 75% of Mission Providence's distributions of cash or profit surplus twice per calendar year. The Company accounted for this investment under the equity method of accounting and the Company's share of Mission Providence's income or losses was recorded as "Equity in net (gain) loss of investees" in the accompanying consolidated statements of income. Cash contributions made to Mission Providence in exchange for its equity interests are included in the consolidated statements of cash flows as "Purchase of equity investments".

On September 29, 2017, the Company and Mission Australia completed the sale of 100% of the stock of Mission Providence pursuant to a share sale agreement. Upon the sale of Mission Providence, the Company received AUD 20,184, or $15,823 of proceeds, for its equity interest, net of transaction fees. Subsequently, a working capital adjustment was finalized in December 2017 resulting in the return of $229 of the proceeds. The related gain on sale of Mission Providence totaling $12,377 is recorded as "Gain on sale of equity investment" in the accompanying consolidated statements of income. The carrying amount of the assets included in the Company's consolidated balance sheet related to the Company's interest in Mission Providence was $4,021 at December 31, 2016.

Summary financial information for Mission Providence on a standalone basis is as follows:

	December 31, 2016
Current assets	$ 4,640
Long-term assets	10,473
Current liabilities	12,844
Long-term liabilities	1,655

	Nine months ended September 30, 2017	Twelve months ended December 31, 2016
Revenue	$ 30,125	$ 36,546
Operating loss	(1,765)	(9,664)
Net loss	(1,934)	(8,843)

4. Prepaid Expenses and Other

Prepaid expenses and other were comprised of the following:

	December 31,	
	2017	2016
Prepaid income taxes	$ 1,106	$ 1,467
Escrow funds	10,000	10,000
Prepaid insurance	2,121	3,153
Prepaid taxes and licenses	906	3,570
Note receivable	3,224	3,130
Prepaid rent	2,268	2,013
Deposits held for leased premises and bonds	2,849	2,609
Other	12,769	11,953
Total prepaid expenses and other	$ 35,243	$ 37,895

Escrow funds represent amounts related to indemnification claims from the sale of the Human Services segment, which was completed on November 1, 2015. The Company has accrued $15,000 as a contingent liability for the settlement of potential indemnification claims, which is included in "Accrued expenses" in the consolidated balance sheet as of

December 31, 2017. The escrow funds will be used to satisfy a portion of this settlement. See Note 18, *Commitments and Contingencies*, for further information.

5. Property and Equipment

Property and equipment consisted of the following:

	Estimated Useful Life (years)			December 31, 2017	December 31, 2016
Computer and telecom equipment	3	—	5	$ 35,915	$ 31,854
Software	3	—	5	32,989	26,883
Leasehold improvements	Shorter of 7 years or lease term			17,890	16,720
Furniture and fixtures	5	—	10	6,416	8,070
Automobiles	5			3,797	3,597
Construction and development in progress	N/A			13,384	5,831
				110,391	92,955
Less accumulated depreciation				60,014	46,735
Total property and equipment, net				$ 50,377	$ 46,220

Depreciation expense from continuing operations was $18,542, $18,038 and $14,488 for the years ended December 31, 2017, 2016 and 2015, respectively.

The Company sold the building and land that included holding company office space in Arizona effective December 31, 2016 resulting in an asset impairment charge of $1,415 for the year ended December 31, 2016. The Company recorded an asset impairment charge of $9,983 for the year ended December 31, 2016 related to its WD Services segment based on its review of the carrying value of long-lived assets. The impairment charges are reflected in "Asset impairment charge" in the consolidated statement of income for the year ended December 31, 2016. See Note 6, *Goodwill and Intangibles,* for further discussion of the impairment charges incurred related to the WD Services segment during 2016. Construction in progress as of December 31, 2017 is primarily comprised of NET Services, which has incurred substantial software development costs for its LCAD NextGen technology system. Such amounts are expected to be placed into service during 2018.

6. Goodwill and Intangibles

Impairment

The Company did not record any impairment charges for the year ended December 31, 2017. During the fourth quarter of 2016, the Company reviewed WD Services for impairment, primarily due to lower than expected volumes and unfavorable service mix shifts under a large contract in the United Kingdom ("UK") impacting future projections; additional clarity into the anticipated size and structure of the Work and Health Programme in the UK; the absence of additional details regarding the restructuring of the offender rehabilitation contract in the UK; and a change in senior management at WD Services during the fourth quarter. As a result, the Company performed a quantitative test comparing the fair value of the asset groupings comprising WD Services with the carrying amounts and recorded an asset impairment charge of $4,381 to definite-lived customer relationship intangible assets, which is recorded in "Asset impairment charge" on the Company's consolidated statement of operations. In addition, the Company reviewed the carrying value of goodwill of WD Services, noting the carrying value exceeded the fair value. Therefore, the Company performed the second step of the impairment test, in which the fair value of the reporting unit is allocated to all of the assets and liabilities, on a fair value basis, with any excess representing the implied value of goodwill of the reporting unit. The fair value was determined using an income approach, which estimates the present value of future cash flows based on management's forecast of revenue growth rates and operating margins, working capital requirements and capital expenditures. Based on this analysis, the carrying value of goodwill of the WD Services reporting unit exceeded the implied fair value and the Company recorded an asset impairment charge of $5,224, which is included in "Asset impairment charge" on the Company's consolidated statement of operations. The Company reviewed the carrying value of other long-lived assets and goodwill, and noted no indicators of impairment for NET Services

or the Matrix Investment during the year ended December 31, 2016. The Company recorded $1,593 of impairment charges related to its Human Services segment during the year ended December 31, 2015, which is included in “Discontinued operations, net of tax” in the consolidated statements of income.

Goodwill

Changes in goodwill were as follows:

	NET Services	WD Services	Consolidated Total
Balances at December 31, 2015			
Goodwill	$ 191,215	$ 40,784	$ 231,999
Accumulated impairment losses	(96,000)	(6,041)	(102,041)
	95,215	34,743	129,958
Asset impairment charge	—	(5,224)	(5,224)
Foreign currency translation adjustment	—	(5,110)	(5,110)
Balances at December 31, 2016			
Goodwill	191,215	35,674	226,889
Accumulated impairment losses	(96,000)	(11,265)	(107,265)
	95,215	24,409	119,624
Foreign currency translation adjustment	—	2,044	2,044
Balances at December 31, 2017			
Goodwill	191,215	37,718	228,933
Accumulated impairment losses	(96,000)	(11,265)	(107,265)
	$ 95,215	$ 26,453	$ 121,668

The total amount of goodwill that was deductible for income tax purposes related to acquisitions as of December 31, 2017 and 2016 was $4,222.

Intangible Assets

Intangible assets are comprised of acquired customer relationships, trademarks and trade names, and developed technology. Intangible assets consisted of the following:

		December 31,			
		2017		2016	
	Estimated Useful Life (Yrs)	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Customer relationships	15	$ 48,128	$ (33,136)	$ 48,020	$ (29,941)
Customer relationships	10	30,583	(11,871)	27,915	(8,147)
Trademarks and Trade Names	10	14,525	(5,205)	13,282	(3,431)
Developed technology	5	3,228	(2,313)	2,951	(1,525)
Total		$ 96,464	$ (52,525)	$ 92,168	$ (43,044)

The gross carrying amount as of December 31, 2017 and 2016 includes the asset impairment charge of $4,381 to definite-lived customer relationship intangible assets of WD Services recorded during the year ended December 31, 2016. The weighted-average amortization period at December 31, 2017 for intangibles was 12.3 years. No significant residual value is estimated for these intangible assets. Amortization expense from continuing operations was $7,927, $8,566 and $9,510 for the years ended December 31, 2017, 2016 and 2015, respectively.

The total amortization expense is estimated to be as follows for the next five years and thereafter as of December 31, 2017 based upon the applicable foreign exchange rates as of December 31, 2017:

Year	Amount
2018	$ 8,126
2019	7,749
2020	7,473
2021	7,387
2022	7,025
Thereafter	6,179
Total	$ 43,939

7. Accrued Expenses

Accrued expenses consisted of the following:

	December 31,	
	2017	2016
Accrued compensation and related	$ 33,653	$ 23,050
NET Services accrued contract payments	17,487	32,836
Accrued settlement	15,000	6,000
Income taxes payable	3,723	372
Other	33,975	40,123
Total accrued expenses	$ 103,838	$ 102,381

8. Restructuring, Redundancy and Related Reorganization Costs

WD Services has two active redundancy programs at December 31, 2017. During the year ended December 31, 2017, WD Services had four redundancy programs. Of these four redundancy plans, two were approved in 2015 and have been completed; a plan related to the termination of employees delivering services under an offender rehabilitation program ("Offender Rehabilitation Program") and a plan related to the termination of employees delivering services under the Company's employability and skills training programs and certain other employees in the United Kingdom ("UK Restructuring Program"). In addition, a redundancy plan related to the termination of employees as part of a value enhancement project ("Ingeus Futures' Program") to better align costs with revenue for certain contracts in the UK and to improve overall operating performance was approved in 2016 and a further redundancy program to align costs with revenue for offender rehabilitation services ("Delivery First Program") was approved in the fourth quarter of 2017. The Company recorded severance and related charges of $2,577 and $8,511 during the years ended December 31, 2017 and 2016, respectively, relating to the termination benefits for employee groups and specifically identified employees impacted by these plans. The severance charges incurred are recorded as "Service expense" in the accompanying consolidated statements of income.

The initial estimates of severance and related charges for the plans were based upon the employee groups impacted, average salary and benefits, and redundancy benefits pursuant to the existing policies. Additional charges above the initial estimates were incurred for the redundancy plans related to the actualization of termination benefits for specifically identified employees impacted under these plans, as well as an increase in the number of individuals impacted by these plans. The final identification of the employees impacted by each program is subject to customary consultation procedures. In addition, additional phases of value enhancement projects may be undertaken in the future, if costs and revenue are not aligned.

Summary of Severance and Related Charges

	January 1, 2017	Costs Incurred	Cash Payments	Foreign Exchange Rate Adjustments	December 31, 2017
Ingeus Futures' Program	$ 2,486	$ 1,223	$ (3,386)	$ 159	$ 482
Offender Rehabilitation Program	1,380	(40)	(1,357)	17	—
UK Restructuring Program	50	(53)	—	3	—
Delivery First Program	—	1,447	(184)	24	1,287
Total	$ 3,916	$ 2,577	$ (4,927)	$ 203	$ 1,769

	January 1, 2016	Costs Incurred	Cash Payments	Foreign Exchange Rate Adjustments	December 31, 2016
Ingeus Futures' Program	$ —	$ 2,515	$ —	$ (29)	$ 2,486
Offender Rehabilitation Program	6,538	4,865	(8,924)	(1,099)	1,380
UK Restructuring Program	2,059	1,131	(3,031)	(109)	50
Total	$ 8,597	$ 8,511	$ (11,955)	$ (1,237)	$ 3,916

The total of accrued severance and related costs of $1,769 and $3,916 are reflected in “Accrued expenses” in the consolidated balance sheets at December 31, 2017 and 2016, respectively. The amount accrued as of December 31, 2017 for the Ingeus Futures’ Program and Delivery First Program is expected to be settled principally during 2018.

9. Long-Term Obligations

The Company’s long-term obligations were as follows:

	December 31, 2017	December 31, 2016
$200,000 revolving loan, LIBOR plus 2.25% - 3.25% with interest payable at least once every three months through August 2018	$ —	$ —
Capital lease obligations	2,984	3,611
	2,984	3,611
Less current portion of capital lease obligations	2,400	1,721
Total long-term obligations, less current portion	$ 584	$ 1,890

Annual maturities of capital lease obligations as of December 31, 2017 are as follows:

Year	Amount
2018	$ 2,400
2019	504
2020	80
Total	$ 2,984

Credit Facility

The Company is a party to the amended and restated credit and guaranty agreement, dated as of August 2, 2013 (as amended, the "Credit Agreement"), with Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer, and the other lenders party thereto. The Credit Agreement provides the Company with a $200,000 revolving credit facility (the "Credit Facility"), including a sub-facility of $25,000 for letters of credit. As of December 31, 2017, the Company had no borrowings and seven letters of credit in the amount of $11,074 outstanding under the revolving credit facility. At December 31, 2017, the Company's available credit under the revolving credit facility was $188,926. Under the Credit Agreement, the Company has an option to request an increase in the amount of the revolving credit facility from time to time (on substantially the same terms as apply to the existing facilities) in an aggregate amount of up to $75,000 with either additional commitments from lenders under the Credit Agreement at such time or new commitments from financial institutions acceptable to the administrative agent in its reasonable discretion, so long as no default or event of default exists at the time of any such increase. The Company may not be able to access additional funds under this increase option as no lender is obligated to participate in any such increase under the Credit Facility. The Credit Facility matures on August 2, 2018.

Interest on the outstanding principal amount of loans accrues, at the Company's election, at a per annum rate equal to LIBOR, plus an applicable margin, or the base rate as defined in the agreement plus an applicable margin. The applicable margin ranges from 2.25% to 3.25% in the case of LIBOR loans and 1.25% to 2.25% in the case of the base rate loans, in each case, based on the Company's consolidated leverage ratio as defined in the Credit Agreement. Interest on the loans is payable quarterly in arrears. In addition, the Company is obligated to pay a quarterly commitment fee based on a percentage of the unused portion of each lender's commitment under the Credit Facility and quarterly letter of credit fees based on a percentage of the maximum amount available to be drawn under each outstanding letter of credit. The commitment fee and letter of credit fee range from 0.25% to 0.50% and 2.25% to 3.25%, respectively, in each case, based on the Company's consolidated leverage ratio.

The Company's obligations under the Credit Facility are guaranteed by all of the Company's present and future domestic subsidiaries, excluding certain domestic subsidiaries which include the Company's insurance captive. The Company's obligations under, and each guarantor's obligations under its guaranty of, the Credit Facility are secured by a first priority lien on substantially all of the Company's respective assets, including a pledge of 100% of the issued and outstanding stock of the Company's domestic subsidiaries, excluding the Company's insurance captive, and 65% of the issued and outstanding stock of the Company's first tier foreign subsidiaries.

The Credit Agreement contains customary affirmative and negative covenants and events of default. The negative covenants include restrictions on the Company's ability to, among other things, incur additional indebtedness, create liens, make investments, give guarantees, pay dividends, sell assets, and merge and consolidate. The Company is subject to financial covenants, including consolidated net leverage and consolidated interest coverage covenants.

Capital Leases

NET Services has seven capital leases for information technology hardware and software with termination dates ranging from January 2018 through October 2020. The terms of the leases are between 12 and 36 months, with interest recorded at an incremental borrowing rate of 3.28%. At December 31, 2017, $6,045 represents equipment under capital leases and $1,642 represents accumulated depreciation recognized on this leased equipment.

10. Convertible Preferred Stock, Net

The Company completed a rights offering on February 5, 2015 (the "Rights Offering") providing all of the Company's existing common stock holders the non-transferrable right to purchase their pro rata share of $65,500 of convertible preferred stock at a price equal to $100.00 per share ("Preferred Stock"). The Preferred Stock is convertible into shares of Providence's Company's common stock, $0.001 par value per share ("Common Stock") at a conversion price equal to $39.88 per share, which was the closing price of the Company's Common Stock on the NASDAQ Global Select Market on October 22, 2014.

Stockholders exercised subscription rights to purchase 130,884 shares of the Company's Preferred Stock. Pursuant to the terms and conditions of the Standby Purchase Agreement (the "Standby Purchase Agreement") between Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Coliseum Capital Co-Invest, L.P. and Blackwell Partners, LLC

(collectively, the "Standby Purchasers") and the Company, the remaining 524,116 shares of the Company's Preferred Stock were purchased by the Standby Purchasers at the $100.00 per share subscription price. The Company received $65,500 in aggregate gross proceeds from the consummation of the Rights Offering and Standby Purchase Agreement. Additionally, on March 12, 2015, the Standby Purchasers exercised their right to purchase an additional 150,000 shares of the Company's Preferred Stock, at a purchase price of $105.00

per share or a total purchase price of $15,750, of the same series and having the same conversion price as the Preferred Stock sold in the Rights Offering.

The Company may pay a noncumulative cash dividend on each share of Preferred Stock, if and when declared by a committee of its Board of Directors ("Board"), at the rate of five and one-half percent (5.5%) per annum on the liquidation preference then in effect. On or before the third business day immediately preceding each fiscal quarter, the Company must determine its intention whether or not to pay a cash dividend with respect to that ensuing quarter and will give notice of its intention to each holder of Preferred Stock as soon as practicable thereafter.

In the event the Company does not declare and pay a cash dividend, the Company will declare a payment in kind ("PIK") dividend by increasing the liquidation preference of the convertible Preferred Stock to an amount equal to the liquidation preference in effect at the start of the applicable dividend period, plus an amount equal to the liquidation preference then in effect multiplied by eight and one-half percent (8.5%) per annum, computed on the basis of a 365-day year and the actual number of days elapsed from the start of the applicable dividend period to the applicable date of determination. All holders of the Company's Preferred Stock are able to convert their Preferred Stock into shares of Common Stock at a rate of approximately 2.51 shares of Common Stock for each share of Preferred Stock. As of December 31, 2017, 1,800 shares of Preferred Stock have been converted to 4,510 shares of Common Stock.

Cash dividends are payable quarterly in arrears on January 1, April 1, July 1 and October 1 of each year, and commenced on April 1, 2015, and, if declared, begin to accrue on the first day of the applicable dividend period. PIK dividends, if applicable, accrue cumulatively on the same schedule as set forth above for cash dividends and are also compounded at the applicable annual rate on each applicable subsequent dividend date. Cash dividends on redeemable convertible preferred stock totaling $4,418, or $5.50 per share, $4,419, or $5.50 per share, and $3,928, or $4.88 per share, were distributed to convertible preferred stockholders for the years ended December 31, 2017, 2016 and 2015, respectively.

The Preferred Stock is accounted for outside of stockholders' equity as it may be redeemed upon certain change in control events that are not solely in the control of the Company. Dividends are recorded in stockholders' equity and consist of the 5.5%/8.5% dividend. At the time of issuance of the Preferred Stock, the Company recorded a discount on Preferred Stock related to beneficial conversion features that arose due to the closing price of the Company's Common Stock being higher than the conversion price of the Preferred Stock on the commitment date. The amortization of this discount was recorded in stockholders' equity. The discount was fully amortized as of June 30, 2015.

The following table summarizes the Preferred Stock activity for the years ended December 31, 2017 and 2016:

	Dollar Value	Share Count
Balance at December 31, 2015	$ 77,576	803,518
Conversion to common stock	(12)	(120)
Allocation of issuance costs	1	—
Balance at December 31, 2016	$ 77,565	803,398
Conversion to common stock	(20)	(198)
Allocation of issuance costs	1	—
Balance at December 31, 2017	$ 77,546	803,200

As of December 31, 2017 and 2016, the outstanding shares of Preferred Stock were convertible into 2,014,042 and 2,014,538 shares of Common Stock, respectively.

11. Stockholders' Equity

At December 31, 2017 and 2016 there were 17,473,598 and 17,315,661 shares of the Company's Common Stock issued, respectively, including 4,126,132 and 3,478,676 treasury shares at December 31, 2017 and 2016, respectively.

Subject to the rights specifically granted to holders of any then outstanding shares of the Company's Preferred Stock, the Company's common stockholders are entitled to vote together as a class on all matters submitted to a vote of the Company's common stockholders, and are entitled to any dividends that may be declared by the Board. The Company's

common stockholders do not have cumulative voting rights. Upon the Company's dissolution, liquidation or winding up, holders of the Company's Common Stock are entitled to share ratably in the Company's net assets after payment or provision for all liabilities and any

preferential liquidation rights of the Company's Preferred Stock then outstanding. The Company's common stockholders do not have preemptive rights to purchase shares of the Company's stock. The issued and outstanding shares of the Company's Common Stock are not subject to any redemption provisions and are not convertible into any other shares of the Company's capital stock. The rights, preferences and privileges of holders of the Company's Common Stock will be subject to those of the holders of any shares of the Company's Preferred Stock the Company may issue in the future.

The following table reflects the total number of shares of the Company's Common Stock reserved for future issuance as of December 31, 2017:

Shares of common stock reserved for:	
Exercise of stock options and restricted stock awards	681,608
Conversion of preferred stock to common stock	2,014,042
Issuance of Performance Restricted Stock Units	18,122
Total shares of common stock reserved for future issuance	2,713,772

Share Repurchases

On October 14, 2015, the Company entered into an agreement to repurchase 707,318 of its Common Stock held by former stockholders of Matrix for an aggregate purchase price of $29,000 (or $41.00 per share). The Company funded this purchase through a combination of borrowing on its Credit Facility and cash on hand. The purchase of these shares was completed on October 30, 2015.

On November 4, 2015, the Board authorized the Company to engage in a repurchase program to repurchase up to $70,000 in aggregate value of the Company's Common Stock during the twelve-month period following November 4, 2015. This plan terminated on November 3, 2016. A total of 1,360,249 shares were purchased through this plan for $62,981, excluding commission payments.

On October 26, 2016, the Board authorized a new repurchase program, under which the Company may repurchase up to $100,000 in aggregate value of the Company's Common Stock during the twelve-month period following October 26, 2016. Through October 26, 2017, a total of 770,808 shares were purchased through this plan for $30,360, excluding commission payments.

On November 2, 2017, the Board approved the extension of the Company's October 26, 2016 stock repurchase program, authorizing the Company to engage in a repurchase program to repurchase up to $69,640 (the amount remaining from the $100,000 repurchase amount authorized in 2016) in aggregate value of our Common Stock through December 31, 2018. As of December 31, 2017, 180,270 shares were purchased under this plan after it was extended on November 2, 2017 for $10,503, excluding commission payments.

During the years ended December 31, 2017, 2016 and 2015, the Company withheld 19,556, 2,736 and 15,961 shares, respectively, from employees to cover the settlement of income tax and related benefit withholding obligations arising from vesting of restricted stock awards. In addition, during the years ended December 31, 2017 and 2015, the Company withheld 5,665 and 5,718 shares, respectively, from employees to cover the settlement of income tax and related benefit withholding obligations and the exercise price upon the exercise of stock options. During the year ended December 31, 2015, the Company withheld 43,743 shares to cover the settlement of income tax and related benefit withholding obligations arising from shares held by employees that were released from escrow related to the Matrix acquisition, which shares are treated as treasury stock.

12. Stock-Based Compensation and Similar Arrangements

The Company provides stock-based compensation to employees, non-employee directors, consultants and advisors under the Company's 2006 Long-Term Incentive Plan ("2006 Plan"). The 2006 Plan allows the flexibility to grant or award stock options, stock appreciation rights, restricted stock, unrestricted stock, stock units including restricted stock units and performance awards to eligible persons.

The following table summarizes the activity under the 2006 Plan as of December 31, 2017:

	Number of shares of the Company's Common Stock authorized for issuance	Number of shares of the Company's Common Stock remaining for future grants	Number of shares of the Company's Common Stock subject to	
			Stock Options	Stock Grants
2006 Plan	5,400,000	1,938,666	606,695	111,157

The following table reflects the amount of stock-based compensation, for share settled awards issued to employees and non-employee directors, recorded in each financial statement line item for the years ended December 31, 2017, 2016 and 2015:

	Year Ended December 31,		
	2017	2016	2015
Service expense	$ 491	$ 830	$ 21,480
General and administrative expense	7,052	4,324	5,027
Equity in net (gain) loss of investees	76	18	—
Discontinued operations, net of tax	—	(18)	115
Total stock-based compensation	$ 7,619	$ 5,154	$ 26,622

Stock-based compensation included in service expense is related to the following segments:

	Year Ended December 31,		
	2017	2016	2015
NET Services	$ 434	$ 841	$ 724
WD Services (a)	57	(11)	20,756
Total stock-based compensation in service expense	$ 491	$ 830	$ 21,480

(a) WD Services includes $16,078 for the year ended December 31, 2015 related to the acceleration of awards pursuant to the separation agreements for two executives.

The amounts above exclude tax benefits of $2,885, $2,072 and $2,322 for the years ended December 31, 2017, 2016 and 2015, respectively.

Stock Options

During the year ended December 31, 2016, the Company did not grant any stock options. The fair value of each stock option awarded to employees is estimated on the date of grant using the Black-Scholes option-pricing formula based on the following assumptions for the years ended December 31, 2017 and 2015:

	Year Ended December 31,					
	2017			2015		
Expected dividend yield	0.0%			0.0%		
Expected stock price volatility	19.45%	—	42.95%	33.8%	—	46.14%
Risk-free interest rate	0.95%	—	2.23%	0.4%	—	1.35%
Expected life of options (years)	0.03	—	6.50	0.03	—	4.00

The risk-free interest rate was based on the U.S. Treasury security rate in effect as of the date of grant which corresponds to the expected life of the award. The expected stock price volatility was based on the Company's historical data. The expected

lives of options were based on the Company's historical data, a simplified method for plain vanilla options, or the Company's best estimate where appropriate.

During the fourth quarter of 2017, James Lindstrom resigned from the Company as Chief Executive Officer ("CEO") and board member of the Company. As a result of Mr. Lindstrom's resignation as CEO, a separation agreement was entered into between the Company and Mr. Lindstrom. As a result of this separation agreement, Mr. Lindstrom was granted 125,000 stock options with an exercise price of $61.33 per share that were immediately vested. The options are exercisable through December 31, 2018.

During the year ended December 31, 2017, the Company issued 91,400 shares of its Common Stock in connection with the exercise of employee stock options under the Company's 2006 Plan.

The following table summarizes the stock option activity for the year ended December 31, 2017:

	Year ended December 31, 2017			
	Number of Shares Under Option	Weighted-average Exercise Price	Weighted-average Remaining Contractual Term	Aggregate Intrinsic Value
Balance at beginning of period	355,598	$ 33.48		
Granted	371,775	57.08		
Exercised	(115,825)	29.77		
Forfeited/Cancelled	(854)	46.44		
Expired	(3,999)	24.59		
Outstanding at end of period	606,695	$ 48.70	2.62	$ 6,705
Vested or expected to vest at end of period	606,695	$ 48.70	2.62	$ 6,705
Exercisable at end of period	357,984	$ 44.65	2.10	$ 5,508

The weighted-average grant-date fair value for options granted, total intrinsic value and cash received by the Company related to options exercised during the years ended December 31, 2017, 2016 and 2015 were as follows:

	Year ended December 31,		
	2017	2016	2015
Weighted-average grant date fair value per share	$ 9.05	$ —	$ 8.77
Options exercised:			
Total intrinsic value	$ 2,010	$ 979	$ 6,659
Cash received	$ 1,921	$ 4,108	$ 4,894

Stock Option Modifications

During the fourth quarter of 2017, as a result of the separation agreement between the Company and Mr. Lindstrom, Mr. Lindstrom's outstanding stock options from his grants of 11,319 on August 6, 2015 and 9,798 on March 15, 2017 were modified to accelerate the vesting date of both awards to November 15, 2017 and allow exercise of the stock options until December 31, 2018. As a result of the modification to the terms of the original stock options granted to Mr. Lindstrom, the Company recognized an accelerated expense of $83 on the award for the year ended December 31, 2017.

During the second quarter of 2015, Warren Rustand terminated his role as CEO and board member of the Company, but remained employed as a Senior Advisor through the end of 2015. As a result of Mr. Rustand's termination as CEO, a separation agreement was entered into between the Company and Mr. Rustand. As a result of this separation agreement, Mr. Rustand's outstanding stock options from his grant of 200,000 stock options on September 11, 2014 were modified to

accelerate the vesting date for the second tranche of options from June 30, 2015 to June 5, 2015, and the exercise period for all vested options of 133,332 was lengthened. In addition, the third tranche of options, consisting of 66,668 options, was cancelled. As a result of the modifications

to the terms of the original stock options granted to Mr. Rustand, the Company recognized additional stock-based compensation expense of $737 for the year ended December 31, 2015.

Restricted Stock Awards

During the year ended December 31, 2017, the Company granted 33,420 shares of restricted stock ("RSAs") to non-employee directors of its Board, executive officers and certain key employees. The awards primarily vest in three equal installments on the first, second and third anniversaries of the date of grant.

During the year ended December 31, 2017, the Company issued 36,623 shares of its Common Stock to non-employee directors, executive officers and key employees upon the vesting of certain RSAs granted in 2016, 2015 and 2014 under the Company's 2006 Plan. As of December 31, 2017 and 2016, 10,134 shares were vested but not released due to an additional holding period required by the grant agreement.

The following table summarizes the activity of the shares and weighted-average grant date fair value of the Company's unvested restricted Common Stock during the year ended December 31, 2017:

	Shares		Weighted-average grant date fair value
Non-vested at beginning of period	72,198	$	44.44
Granted	33,420	$	43.91
Vested	(36,623)	$	43.42
Forfeited or cancelled	(4,216)	$	47.17
Non-vested at end of period	64,779	$	44.82

As of December 31, 2017, there was $4,331 of unrecognized compensation cost related to unvested share settled stock options and RSAs granted under the 2006 Plan. The cost is expected to be recognized over a weighted-average period of 1.2 years. The total fair value of stock options and RSAs vested was $3,550, $1,383 and $3,709 for the years ended December 31, 2017, 2016 and 2015, respectively.

Other Restricted Stock Award Grants

During the year ended December 31, 2014, the Board approved the grant of 596,915 RSAs to two individuals in connection with the Ingeus acquisition. The grants were made outside of the 2006 Plan, as they were related to the acquisition. However, since the term of the awards provided for vesting based on continued employment, the awards were accounted for as stock-based compensation. The shares necessary to settle these awards were placed in an escrow account in 2014, and were releasable from escrow in accordance with the vesting of the awards. Per the original terms of the agreements, the awards vested upon continued employment of the grantees, in four equal installments on the anniversary date of the grant. However, on October 15, 2015, the Company entered into agreements whereby the executives' employment was terminated by mutual agreement and vesting was no longer based upon continued employment. The Company recognized $16,078 in stock-based compensation expense at the time of the modification, which otherwise would have been recognized over the remainder of the vesting period. Additionally, the Company recognized accelerated deferred compensation expense of $4,714 related to these agreements during the year ended December 31, 2015. As of December 31, 2017, 149,228 underlying shares to settle the awards are held in the escrow account and will be released in 2018, although all expense was recognized as of December 31, 2015.

Restricted Stock Units

During the year ended December 31, 2016, the Company granted 5,930 restricted stock units to a key employee, related to the terms of a separation agreement, that vested on January 3, 2017. The units were settled through a cash payment

of $304 during the year ended December 31, 2017. The award was liability classified, and the expense recorded was based upon the Company's closing stock price at the end of each reporting period and the completed requisite service period.

Performance Restricted Stock Units

The Company had 18,122 performance restricted stock units ("PRSUs") outstanding at December 31, 2017. These awards vest upon the Company or its segments meeting certain performance criteria over a set performance period as determined, and subject to adjustment, by the Company's Compensation Committee of the Board. 13,262 of the outstanding PRSUs at December 31, 2017 have a performance criteria tied to the Company's return on equity ("ROE"), with performance periods ending on December 31, 2017. The grantees will earn 33% of PRSUs granted if the ROE is 12% but less than 15%, and 100% of the PRSUs granted if the ROE is 15% or more. If ROE is less than 12%, no PRSUs will be earned. The Company has determined, subsequent to December 31, 2017, that none of these PRSUs, with a performance period ended December 31, 2017, will vest. 4,860 of the outstanding PRSUs at December 31, 2017 have a performance criteria tied to NET Services' EBITDA and the Company's EBITDA performance with performance periods ending on December 31, 2017. The Company expects all of these PRSUs, with a performance period ended December 31, 2017, to vest. Compensation expense (benefit) related to these awards totaled $19, ($270) and $613 for the years ended December 31, 2017, 2016 and 2015, respectively.

Cash Settled Awards

During the years ended December 31, 2017, 2016 and 2015, respectively, the Company issued 3,097, 3,360 and 4,000 stock equivalent units ("SEUs"), which settle in cash upon vesting, to Coliseum Capital Partners, L.P., in lieu of a grant to Christopher Shackelton, Chairman of the Board, for his service on the Board, which vest one-third upon each anniversary of the vesting date. The fair value of the SEUs is based on the closing stock price on the last day of the period and the completed requisite service period. The Company recorded $235, $287 and $588 of expense for SEUs during the years ended December 31, 2017, 2016 and 2015, respectively.

During the year ended December 31, 2014, the Company issued 200,000 stock option equivalent units ("SOEUs"), with an exercise price of $43.81 per share, which settle in cash, to Coliseum Capital Partners, L.P in lieu of a grant to Christopher Shackelton, for other services rendered. All 200,000 SOEUs were outstanding and exercisable at December 31, 2017. This award vested one-third upon grant, one-third on June 30, 2015 and one-third on June 30, 2016. No additional SOEUs were granted during the years ended December 31, 2017, 2016 and 2015. The Company recorded $2,146 and $1,888 of expense for SOEUs during the years ended December 31, 2017 and 2015, respectively, and a benefit of $1,517 during the year ended December 31, 2016. The expenses and benefit are included in "General and administrative expense" in the consolidated statements of income. The fair value of the SOEUs was estimated as of December 31, 2017, 2016 and 2015 using the Black-Scholes option-pricing formula and amortized over the option's graded vesting periods with the following assumptions:

	Year ended December 31,								
	2017			2016			2015		
Expected dividend yield	0.0%			0.0%			0.0%		
Expected stock price volatility	23.36%	—	32.09%	35.71%	—	41.82%	43.75%	—	45.3%
Risk-free interest rate	1.75%	—	1.95%	1.11%	—	1.64%	1.2%	—	1.70%
Expected life of options (in years)	0.75	—	2.75	1.0	—	3.00	2.75	—	4.75

As of December 31, 2017 and 2016, the Company had a short-term liability of $3,938 and $1,764, respectively, in "Accrued expenses" in the consolidated balance sheet related to unexercised vested and unvested cash settled share-based payment awards. The cash settled share-based compensation benefit in total excluded tax expense of $492 for the year ended December 31, 2016. The cash settled share-based compensation expense in total excluded a tax benefit of $908 and $990 for the years ended December 31, 2017 and 2015. The unrecognized compensation cost for SEUs is expected to be recognized over a weighted average period of 0.8 years; however, the total expense for both SEUs and SOEUs will continue to be adjusted until the awards are settled.

Holdco Long-Term Incentive Plan

On August 6, 2015 (the "Award Date"), the Compensation Committee of the Board adopted the HoldCo LTIP under the 2006 Plan. The Holdco LTIP was designed to provide long-term performance based awards to certain executive officers of

Providence. Under the program, executives would receive shares of Providence Common Stock based on the shareholder value created in excess of an 8.0% compounded annual return between the Award Date and December 31, 2017 (the "Extraordinary Shareholder Value"). The Award Date value was calculated on the basis of the Providence stock price equal to the volume weighted average of the common share price over the 90-day trading period ending on the Award Date. The Extraordinary Shareholder Value was calculated on the basis of the Providence stock price equal to the volume weighted average of the common share price

over the 90-day trading period ending on December 31, 2017. A pool for use in the allocation of awards was created equal to 8.0% of the Extraordinary Shareholder Value.

Participants in the HoldCo LTIP would receive a percentage allocation of any such pool and, following determination of the size of the pool, would be entitled to a number of shares equal to their pro rata portion of the pool divided by the volume weighted average of the Company's per share price over the 90-day trading period ending on December 31, 2017. Of the shares allocated, 60% would be issued to the participant on or shortly following determination of the pool, 25% would vest and be issued on the one-year anniversary of such determination date, subject to continued employment, and the remaining 15% would be issued on the second anniversary of the determination date, subject to continued employment.

It was determined that no shares would be distributed under the Holdco LTIP as the calculation of the pool amount was zero. $4,738, $3,319 and $1,353 of expense is included in "General and administrative expense" in the consolidated statements of income for the years ended December 31, 2017, 2016 and 2015, respectively. As of December 31, 2017, the Company accelerated all remaining unrecognized compensation expense for the Holdco LTIP as there was no further requisite service period associated with the award, resulting in an acceleration of expense of $1,053.

These awards were equity classified and the fair value of the awards was calculated using a Monte-Carlo simulation valuation model. The fair value of the awards granted in 2016 and 2015 were estimated using the following assumptions:

	Year ended December 31,					
	2016			2015		
Forward interest rate	0.24%	—	2.71%	0.04%	—	2.90%
Expected Volatility	40.0%			45.0%		
Dividend Yield	—%			—%		
Fair Value of Total Pool	$12,870			$12,590		

13. Vertical Long-Term Incentive Plan

The Company established Long-Term Incentive Plans ("Vertical LTIPs") for the Company's operating segments, or verticals, during the fourth quarter of 2015. The Vertical LTIPs are consistent in their basic terms, but each were customized for specific aspects of the associated vertical. The awards pay in cash, however up to 50% of the award may be paid in unrestricted stock if the recipient elects this option when the Vertical LTIP offer letter is received. In addition, at the discretion of the Company, the recipients may be able to elect unrestricted stock in lieu of cash compensation at a later date. The Vertical LTIPs reward participants based on certain measures of free cash flow and EBITDA results adjusted as specified in the plan document. The awards vest in three installments: 60% of the award will pay out immediately following December 31, 2017, 25% one year following the performance period (i.e. December 31, 2018) and 15% two years following the performance period (i.e. December 31, 2019). Payout is subject to the participant remaining employed by the Company.

During 2017, the Company revised the structure of the NET Services long-term incentive plan. As a result, the Company finalized the amount payable under the plan at $2,956. The total value will be paid to the awarded participants per the terms of the original agreement and thus the remaining unamortized expense relating to this plan continues to be recognized over the remaining service period. As of December 31, 2017, unamortized compensation expense is $299. For the years ended December 31, 2017, 2016, and 2015, $816, $1,513 and $328 of expense, respectively, is included in "Service expense" in the consolidated statements of income related to this plan. At December 31, 2017, the liability for long-term incentive plans of the Company's operating segments of $2,657 is reflected in "Accrued expenses" and "Other long-term liabilities" in the consolidated balance sheet. At December 31, 2016, the liability for long-term incentive plans of the Company's operating segments of $1,841 is reflected in "Other long-term liabilities" in the consolidated balance sheet.

14. Earnings Per Share

The following table details the computation of basic and diluted earnings per share:

	Year ended December 31,		
	2017	**2016**	**2015**
Numerator:			
Net income attributable to Providence	$ 53,369	$ 91,928	$ 83,696
Less dividends on convertible preferred stock	(4,419)	(4,419)	(3,935)
Less accretion of convertible preferred stock discount	—	—	(1,071)
Less income allocated to participating securities	(7,085)	(13,135)	(10,691)
Net income available to common stockholders	$ 41,865	$ 74,374	$ 67,999
Continuing operations	$ 47,848	$ (21,251)	$ (29,181)
Discontinued operations	(5,983)	95,625	97,180
	$ 41,865	$ 74,374	$ 67,999
Denominator:			
Denominator for basic earnings per share -- weighted-average shares	13,602,140	14,666,896	15,960,905
Effect of dilutive securities:			
Common stock options	66,314	—	—
Performance-based restricted stock units	4,860	—	—
Denominator for diluted earnings per share -- adjusted weighted-average shares assumed conversion	13,673,314	14,666,896	15,960,905
Basic earnings (loss) per share:			
Continuing operations	$ 3.52	$ (1.45)	$ (1.83)
Discontinued operations	(0.44)	6.52	6.09
	$ 3.08	$ 5.07	$ 4.26
Diluted earnings (loss) per share:			
Continuing operations	$ 3.50	$ (1.45)	$ (1.83)
Discontinued operations	(0.44)	6.52	6.09
	$ 3.06	$ 5.07	$ 4.26

The accretion of Preferred Stock discount in the table above related to a beneficial conversion feature of the Company's Preferred Stock that was fully amortized as of June 30, 2015. Income allocated to participating securities is calculated by allocating a portion of net income attributable to Providence, less dividends on convertible stock, to the convertible preferred stockholders on a pro-rata as converted basis; however, the convertible preferred stockholders are not allocated losses.

The following weighted-average shares were not included in the computation of diluted earnings per share as the effect of their inclusion would have been anti-dilutive:

	Year ended December 31,		
	2017	**2016**	**2015**
Stock options to purchase common stock	362,392	22,638	173,925

Convertible preferred stock	803,323	803,442	700,241

15. Operating Leases

The Company has non-cancelable contractual obligations in the form of operating leases for office space, related office equipment and other facilities. The leases expire in various years and generally provide for renewal options. In the normal course of business, it is expected that these leases will be renewed or replaced by leases on other properties.

Certain operating leases provide for increases in future minimum annual rental payments based on defined increases in the Consumer Price Index, subject to certain minimum increases. Several of these lease agreements contain provisions for periods in which rent payments are reduced. The total amount of rental payments due over the lease term is being charged to rent expense on a straight-line basis over the term of the lease. The cumulative difference between rent expense recorded and the amount paid, for continuing operations, as of December 31, 2017 and 2016 was $3,957 and $3,253, respectively, and is included in "Accrued expenses" and "Other long-term liabilities" in the consolidated balance sheets.

Future minimum payments under non-cancelable operating leases for equipment and property with initial terms of one year or more consisted of the following at December 31, 2017:

	Operating Leases
2018	$ 20,875
2019	13,376
2020	9,738
2021	8,022
2022	6,142
Thereafter	3,939
Total future minimum lease payments	$ 62,092

Rent expense for continuing operations related to operating leases was $27,511, $29,316 and $31,191, for the years ended December 31, 2017, 2016 and 2015, respectively. Also, the lease agreements generally require the Company to pay executory costs such as real estate taxes, insurance, and repairs, which are recorded to expense as incurred.

16. Retirement Plan

The Company maintains a qualified defined contribution plan under Section 401(k) of the Internal Revenue Code of 1986, as amended, for all employees of its NET Services operating segment and corporate personnel. The Company, at its discretion, may make a matching contribution to the plan. Any matching contributions vest over 5 years. Unvested matching contributions are forfeitable upon employee termination. Employee contributions are fully vested and non-forfeitable. The Company's contributions to the plan for continuing operations were $320, $248 and $221, for the years ended December 31, 2017, 2016 and 2015, respectively.

WD Services' employees are entitled to benefits under certain retirement plans. The WD Services' segment has separate plans in each country it operates. The plans receive fixed contributions from WD Services' companies and the legal or constructive obligation is limited to these contributions, although the benefits the employees ultimately receive are determined by the plan administrators, which includes government entities and third-party administrators. The Company's contributions to these plans were $8,219, $9,139 and $10,331 for the years ended December 31, 2017, 2016 and 2015, respectively.

The Company also maintains a Deferred Compensation Rabbi Trust Plan for highly compensated employees of NET Services. This plan was put in place to compensate for the inability of highly compensated employees to take full advantage of the Company's 401(k) plan. Additional information is included in Note 18, *Commitments and Contingencies*.

17. Income Taxes

The following table summarizes our U.S. and foreign income (loss) from continuing operations before income taxes:

	Year Ended December 31,		
	2017	**2016**	**2015**
US	48,719	65,559	43,598
Foreign	15,485	(67,437)	(53,692)
Total	$ 64,204	$ (1,878)	$ (10,094)

The federal, state and foreign income tax provision is summarized as follows:

	Year Ended December 31,		
	2017	**2016**	**2015**
Federal:			
Current	$ 18,792	$ 21,202	$ 15,161
Deferred	(19,767)	(6,477)	(1,606)
	(975)	14,725	13,555
State:			
Current	3,975	4,580	2,644
Deferred	723	(938)	(38)
	4,698	3,642	2,606
Foreign:			
Current	1,197	266	523
Deferred	(519)	(1,597)	(2,101)
	678	(1,331)	(1,578)
Total provision for income taxes	$ 4,401	$ 17,036	$ 14,583

A reconciliation of the provision for income taxes with amounts determined by applying the statutory U.S. federal income tax rate to income (loss) from continuing operations before income taxes is as follows:

	Year Ended December 31,		
	2017	2016	2015
Federal statutory rates	35%	35 %	35 %
Federal income tax at statutory rates	$ 22,471	$ (657)	$ (3,533)
Revaluation of net deferred tax liabilities due to U.S. tax reform	(19,397)	—	—
U.S. tax reform impact on equity income of investee	(1,646)	—	—
Change in valuation allowance	2,299	9,480	3,574
Change in uncertain tax positions	7	73	(76)
State income taxes, net of federal benefit	3,203	2,396	1,785
Difference between federal statutory and foreign tax rate	(1,648)	9,427	4,642
Stock compensation	3,400	—	(184)
Meals and entertainment	100	96	81
Amortization of deferred consideration	—	—	9,444
Transaction costs	159	—	(447)
Contingent consideration liability reversal	—	—	(854)
Nontaxable income	(1,203)	—	(965)
Tax credits	(354)	(947)	(456)
Legal expense	(805)	522	284
Depreciation	—	—	649
Equity in net loss of investee	569	624	366
Sale of joint venture	(6,021)	—	—
Asset impairment	—	2,353	—
Foreign exchange	2,925	(7,001)	—
Other	342	670	273
Provision for income taxes	$ 4,401	$ 17,036	$ 14,583
Effective income tax rate	7%	(907)%	(144)%

The Company recognized an income tax provision for the years ended December 31, 2016 and December 31, 2015 despite having losses from continuing operations before income taxes. Because of foreign net operating losses (including equity investee losses) for which the future income tax benefit currently cannot be recognized, and non-deductible expenses such as amortization of deferred consideration related to the Ingeus acquisition, the Company recognized estimated taxable income for these years upon which the income tax provision for financial reporting is calculated.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities are as follows:

	December 31,	
	2017	2016
Deferred tax assets:		
Net operating loss carryforwards	$ 20,496	$ 17,742
Tax credit carryforwards	486	399
Accounts receivable allowance	1,134	1,341
Accrued items and reserves	14,371	18,669
Stock compensation	1,480	4,224
Deferred rent	572	915
Property and equipment depreciation	300	—
Other	173	180
	39,012	43,470
Deferred tax liabilities:		
Deferred financing costs	38	154
Prepaids	1,440	2,103
Property and equipment depreciation	—	1,238
Goodwill and intangibles amortization	5,809	9,568
Equity investment	42,113	59,244
Other	205	203
	49,605	72,510
Net deferred tax liabilities	(10,593)	(29,040)
Less valuation allowance	(26,402)	(27,423)
Net deferred tax liabilities	$ (36,995)	$ (56,463)
Net noncurrent deferred tax assets, net of valuation allowance of $26,402 and $27,423 for 2017 and 2016, respectively	4,632	1,510
Net noncurrent deferred tax liabilities, net of valuation allowance of $0 and $0 for 2017 and 2016, respectively	(41,627)	(57,973)
	$ (36,995)	$ (56,463)

At December 31, 2017, the Company had no federal or state net operating loss carryforwards. The Company had net operating loss carryforwards in the following countries which can be carried forward indefinitely:

Australia	$ 41,256
Canada	728
France	3,882
Saudi Arabia	82
UK	40,090

Realization of the Company's net operating loss carryforwards is dependent on generating sufficient taxable income. Although realization is not assured, management believes it is more likely than not that all of the deferred tax assets will be realized, to the extent they are not covered by a valuation allowance. The amount of the deferred tax asset considered realizable, however, could be reduced in the near term if estimates of future taxable income during the carryforward period are reduced.

The net change in the total valuation allowance for the year ended December 31, 2017 was negative $1,021, of which positive $2,299 related to current operations and negative $3,320 related to the adjustment of the beginning balance. The valuation

allowance includes $25,929 primarily for Australia, France and UK net operating loss carryforwards, and $473 for state tax credit carryforwards for which the Company has concluded that it is more likely than not that these net operating loss and tax credit carryforwards will not be realized in the ordinary course of operations. The Company will continue to assess the valuation allowance, and to the extent it is determined that the valuation allowance should be changed, an appropriate adjustment will be recorded.

U.S. Tax Reform

On December 22, 2017, the Tax Reform Act was enacted which institutes fundamental changes to the taxation of multinational corporations. The Tax Reform Act includes changes to the taxation of foreign earnings by implementing a dividend exemption system, expansion of the current anti-deferral rules, a minimum tax on low-taxed foreign earnings and new measures to deter base erosion. The Tax Reform Act also includes a permanent reduction in the corporate tax rate to 21%, repeal of the corporate alternative minimum tax, expensing of capital investment, and limitation of the deduction for interest expense. Furthermore, as part of the transition to the new tax system, a one-time transition tax is imposed on a U.S. shareholder's historical undistributed earnings and profits ("E&P") of foreign affiliates. Although the Tax Reform Act is generally effective January 1, 2018, GAAP requires recognition of the tax effects of new legislation during the reporting period that includes the enactment date, which was December 22, 2017.

As a result of the reduction in the U.S. corporate income tax rate, the Company revalued its ending net deferred tax liabilities as of December 31, 2017 and recognized a provisional tax benefit of $19,397. The Company has projected net accumulated deficits in foreign E&P; therefore, no provisional tax expense for deemed repatriation has been recognized. For any future foreign earnings, the Company will generally be free of additional U.S. tax consequences due to a dividends received deduction implemented as part of the move to a territorial tax system for foreign subsidiary earnings. The Company continues to assert indefinite reinvestment in outside basis differences. Determination of the amount of unrecognized deferred tax liability on outside basis differences is not practicable because of the complexity of laws and regulations, the varying tax treatment of alternative repatriation scenarios, and the variation due to multiple potential assumptions relating to the timing of any future repatriation.

The global intangible low taxed income ("GILTI") provisions of the Tax Reform Act require the Company to include in its U.S. income tax return foreign subsidiary earnings in excess of an allowable return on the foreign subsidiary's tangible assets. The Company may be subject to incremental U.S. tax on GILTI income beginning in 2018, and has elected to account for GILTI tax in the period in which it is incurred. Therefore, no deferred tax impacts of GILTI have been considered in the Company's consolidated financial statements for the year ended December 31, 2017.

On December 22, 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118") to address the application of GAAP in situations when a registrant does not have the necessary information available, prepared, or analyzed (including computations) in reasonable detail to complete the accounting for certain income tax effects of the Tax Reform Act. In accordance with the SAB 118 guidance, the Company has recognized the provisional tax impacts related to the benefit for the revaluation of deferred tax assets and liabilities in its consolidated financial statements for the year ended December 31, 2017. The final impact of the Tax Reform Act may differ from these provisional amounts, possibly materially, due to, among other things, issuance of additional regulatory guidance, changes in interpretations and assumptions the Company has made, and actions the Company may take as a result of the Tax Reform Act. In accordance with SAB 118, the financial reporting impact of the Tax Reform Act will be completed in the fourth quarter of 2018.

Unrecognized Tax Benefits

The Company expects no material amount of the unrecognized tax benefits to be recognized during the next twelve months. The Company recognizes interest and penalties as a component of income tax expense. During the years ended December 31, 2017, 2016 and 2015, the Company recognized approximately $65, $19 and $27, respectively, in interest and penalties. The Company had approximately $83 and $52 for the payment of penalties and interest accrued as of December 31, 2017 and 2016, respectively.

A reconciliation of the liability for unrecognized income tax benefits is as follows:

	December 31,		
	2017	2016	2015
Unrecognized tax benefits, beginning of year	$ 1,108	$ 271	$ 347
Balance upon acquisition/disposition	—	764	—
Increase (decrease) related to prior year positions	22	37	(47)
Increase related to current year tax positions	101	139	48
Statute of limitations expiration	(116)	(103)	(77)
Unrecognized tax benefits, end of year	$ 1,115	$ 1,108	$ 271

The Company is subject to taxation in the U.S. and various foreign and state jurisdictions. The statute of limitations is generally three years for the U.S., two to five years in foreign countries and between three and four years for the various states in which the Company operates. The Company is subject to the following material taxing jurisdictions: the U.S., UK, Australia, France, Saudi Arabia and Korea. The tax years that remain open for examination by the U.S. and various foreign countries and states principally include the years 2013 to 2017.

18. Commitments and Contingencies

Legal proceedings

On June 15, 2015, a putative stockholder class action derivative complaint was filed in the Court of Chancery of the State of Delaware (the "Court"), captioned Haverhill Retirement System v. Kerley et al., C.A. No. 11149-VCL (the "Haverhill Litigation"). The complaint named Richard A. Kerley, Kristi L. Meints, Warren S. Rustand, Christopher Shackelton (the "Individual Defendants") and Coliseum Capital Management, LLC ("Coliseum Capital Management") as defendants, and the Company as a nominal defendant. The complaint purported to allege that the dividend rate increase term originally in the Company's outstanding Preferred Stock was an impermissibly coercive measure that impaired the voting rights of the Company's stockholders in connection with the vote on the removal of certain voting and conversion caps previously applicable to the Preferred Stock (the "Caps"), and that the Individual Defendants breached their fiduciary duties by approving the dividend rate increase term and attempting to coerce the stockholder vote relating to the Company's Preferred Stock, and by failing to disclose all material information necessary to allow the Company's stockholders to cast an informed vote on the Caps. The complaint also purported to allege derivative claims alleging that the Individual Defendants breached their fiduciary duties to the Company by entering into the subordinated note and standby agreement with Coliseum Capital Management, and granting Coliseum Capital Management certain stock options. The complaint further alleged that Coliseum Capital Management aided and abetted the Individual Defendants in breaching their fiduciary duties. The complaint sought, among other things, an injunction prohibiting the stockholder vote relating to the dividend rate increase, corporate governance reforms, unspecified damages and other relief.

On August 31, 2015, after arms' length negotiations, the parties reached an agreement in principle and executed a Memorandum of Understanding ("MOU") providing for the settlement of claims concerning the dividend rate increase term and stockholder vote and related disclosure. The MOU stated that the Defendants had entered into the partial settlement of the litigation solely to eliminate the distraction, burden, expense, and potential delay of further litigation involving claims that have been settled. Pursuant to the partial settlement, the Company agreed to supplement the disclosures in its definitive proxy statement on Schedule 14A (the "2015 Proxy Statement"), Coliseum Capital Management and certain of its affiliates and the Company entered into an amendment to that certain Series A Preferred Stock Exchange Agreement, by and among Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Coliseum Capital Co-Invest, L.P., Blackwell Partners, LLC, and The Providence Service Corporation dated as of February 11, 2015 described in the 2015 Proxy Statement, and the Board of the Company agreed to adopt a policy related to the Board's determination each quarter as to whether the Company should pay cash dividends or allow dividends to be paid in the form of PIK dividends on the Preferred Stock, as further described in the supplemental proxy disclosures. On September 2, 2015, Providence issued supplemental disclosures through a supplement to the 2015 Proxy Statement. On September 16, 2015, Providence stockholders approved the removal of the Caps. The Company provided notice of the proposed partial settlement to Providence's stockholders by December 11, 2015. At a hearing on February 9, 2016, the court denied approval of the settlement. The Court indicated that plaintiff's counsel could petition the Court for a mootness fee, and that defendants would have the opportunity to oppose any such application.

On January 12, 2016, the plaintiff filed a verified amended class action and derivative complaint (the "first amended complaint"). In addition to the defendants named in the earlier complaint, the first amended complaint named David Shackelton,

Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Blackwell Partners, LLC, Coliseum Capital Co-Invest, L.P. (collectively, and together with Coliseum Capital Management, LLC, "Coliseum") and RBC Capital Markets, LLC ("RBC Capital Markets") as additional defendants. The first amended complaint purported to allege direct and derivative claims for breach of fiduciary duty against some or all of the Individual Defendants and David Shackelton (collectively, the "Amended Individual Defendants") regarding the approval of the subordinated note, the rights offering, the standby agreement with Coliseum Capital Management, and the grant to Coliseum Capital Management of certain stock options. The first amended complaint also purported to allege an additional derivative claim for unjust enrichment against Coliseum and further alleged that Coliseum and RBC Capital Markets aided and abetted the Amended Individual Defendants in breaching their fiduciary duties. The first amended complaint sought, among other things, revision or rescission of the terms of the subordinated note and Preferred Stock, corporate governance reforms, unspecified damages and other relief.

On May 6, 2016, the plaintiff filed a verified second amended class action and derivative complaint (the "second amended complaint"). In addition to the defendants named in the earlier complaint, the second amended complaint named Paul Hastings LLP ("Paul Hastings") and Bank of America, N.A. ("BofA") as additional defendants. In addition to previously asserted claims, the second amended complaint purported to assert direct and derivative claims for breach of fiduciary duties against Coliseum Capital Management, in its capacity as the controlling stockholder of the Company, in connection with the subordinated note, the Company's rights offering of Preferred Stock and the standby purchase agreement with Coliseum Capital Management (the "Financing Transactions"). The second amended complaint also alleged that Paul Hastings breached their fiduciary duties as counsel to the Company in connection with the Financing Transactions and that BofA and Paul Hastings aided and abetted certain of the Amended Individual Defendants in breaching their fiduciary duties in connection with the Financing Transactions. The second amended complaint sought, among other things, revision or rescission of the terms of the subordinated note and Preferred Stock, corporate governance reforms, disgorgement of fees paid to RBC Capital Markets, Paul Hastings and BofA for work relating to the Financing Transactions, unspecified damages and other relief.

On May 20, 2016, the Court granted a six-month stay of the proceeding (which was subsequently extended) to allow a special litigation committee, created by the Board, sufficient time to investigate, review and evaluate the facts, circumstances and claims asserted in or relating to this action and determine the Company's response thereto. On January 20, 2017, the special litigation committee advised the Court that the parties to the litigation and the special litigation committee had reached an agreement in principle to settle all of the claims in the litigation. The parties then entered into a proposed settlement agreement which was submitted to the Court for approval. On September 28, 2017, the Court approved the proposed settlement agreement among the parties that provided for a settlement amount of $10,000 less plaintiff's legal fees and expenses (the "Settlement Amount"), with 75% of the Settlement Amount to be paid to the Company and 25% of the Settlement Amount to be paid to holders of the Company's Common Stock other than certain excluded parties. In November 2017, the Company received a payment of $5,363 from the Settlement Amount, which is included in "Other income" in the consolidated statement of income for the year ended December 31, 2017.

In addition to the matter described above, in the ordinary course of business, the Company is a party to various lawsuits. Management does not expect these lawsuits to have a material impact on the liquidity, results of operations, or financial condition of Providence.

Indemnifications related to Haverhill Litigation

The Company indemnified the Standby Purchasers from and against any and all losses, claims, damages, expenses and liabilities relating to or arising out of (i) any breach of any representation, warranty, covenant or undertaking made by or on behalf of the Company in the Standby Purchase Agreement and (ii) the transactions contemplated by the Standby Purchase Agreement and the 14.0% Unsecured Subordinated Note in aggregate principal amount of $65,500, except to the extent that any such losses, claims, damages, expenses and liabilities are attributable to the gross negligence, willful misconduct or fraud of such Standby Purchaser.

The Company has also indemnified other third parties from and against any and all losses, claims, damages, expenses and liabilities arising out of or in connection with the Company's acquisition of CCHN Group Holdings, Inc. (operating under the tradename Matrix, and formerly included in our HA Services segment) in October 2014 and related financing commitments, except to the extent that any such losses, claims, damages, expenses and liabilities are found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted from the gross negligence, bad faith or willful misconduct of such third parties, or a material breach of such third parties' obligations under the related agreements.

The Company recorded $318, $1,282 and $310 of such indemnified legal expenses related to the Haverhill Litigation during the years ended December 31, 2017, 2016 and 2015, respectively, which is included in “General and administrative expenses” in the consolidated statements of income. Of these amounts, $245, $757 and $310 for the years ended December 31, 2017, 2016

and 2015, respectively, were indemnified legal expenses of related parties. Other legal expenses of the Company related to the Haverhill Litigation are covered under the Company's insurance policies, subject to applicable deductibles and customary review of the expenses by the carrier. The Company recognized expense of $8, $210 and $500 for the years ended December 31, 2017, 2016 and 2015, respectively. While the carrier typically remits payment directly to the respective law firm, the Company accrues for the cost and records a corresponding receivable for the amount to be paid by the carrier. The Company has recognized an insurance receivable of $941 and $1,645 in "Other receivables" in the consolidated balance sheets at December 31, 2017 and 2016, respectively, with a corresponding liability amount recorded to "Accrued expenses".

Other Indemnifications

The Company has provided certain standard indemnifications in connection with the sale of the Human Services segment to Molina Healthcare Inc. ("Molina") effective November 1, 2015. All representations and warranties made by the Company in the Membership Interest Purchase Agreement (the "Purchase Agreement") to sell the Human Services segment ended on February 1, 2017. However, claims made prior to February 1, 2017 by the purchaser of the Human Services segment against these representations and warranties may survive until the claims are settled. In addition, certain representations, including tax representations, survive until the expiration of applicable statutes of limitation, and healthcare representations survive until the third anniversary of the closing date. The Company has received indications from the purchaser of the Human Services segment regarding potential indemnification claims. One potential indemnification claim relates to *Rodriguez v. Providence Community Corrections* (the "Rodriguez Litigation"), a complaint filed in the District Court for the Middle District of Tennessee, Nashville Division (the "Rodriquez Court"), against Providence Community Corrections, Inc. ("PCC"), an entity sold under the Purchase Agreement. On September 18, 2017, the plaintiffs in the Rodriguez Litigation filed an unopposed motion for preliminary approval of a proposed settlement, pursuant to which PCC would pay $14,000 to the plaintiffs and $350 to co-defendant Rutherford County, Tennessee. On October 5, 2017, the Rodriguez Court denied preliminary approval of the settlement and requested additional information. On October 18, 2017, the plaintiffs filed a second unopposed motion for approval of the proposed settlement. On January 2, 2018, the Rodriguez Court granted preliminary approval of the proposed settlement and authorized notice to class members.

On September 15, 2017, Molina and the Company entered into a memorandum of understanding; and on March 1, 2018, Molina and the Company entered into a settlement agreement, regarding a settlement of an indemnification claim by Molina with respect to the Rodriguez Litigation and other matters. As of December 31, 2017, the accrual is $15,000 with respect to an estimate of loss for potential indemnification claims. The Company expects to recover a portion of the settlement through insurance coverage, although this cannot be assured.

Litigation is inherently uncertain and the actual losses incurred in the event that the related legal proceedings were to result in unfavorable outcomes could have a material adverse effect on the Company's business and financial performance.

The Company has provided certain standard indemnifications in connection with its Matrix stock subscription transaction whereby Mercury Fortuna Buyer, LLC ("Subscriber"), Providence and Matrix entered into a stock subscription agreement (the "Subscription Agreement"), dated August 28, 2016. The representations and warranties made by the Company in the Subscription Agreement ended January 19, 2018; however, certain fundamental representations survive through the 36th month following the closing date. The covenants and agreements of the parties to be performed prior to the closing ended January 19, 2018, and all other covenants and agreements survive until the expiration of the applicable statute of limitations in the event of a breach, or for such lesser periods specified therein. The Company is not aware of any indemnification liabilities with respect to Matrix that require accrual at December 31, 2017.

Other Contingencies

On January 25, 2018, the UK Ministry of Justice (the "MOJ") released a report on reoffending statistics for certain offenders who entered probation services during the period October 2015 to March 2016. The report provides statistics for all providers of probation services, including our subsidiary RRP, which is in our WD Services segment. This information is the second data set that is utilized to determine performance payments under the various providers' transforming rehabilitation contracts with the MOJ, as the actual rates of recidivism are compared to benchmark rates established by the MOJ. Performance payments and penalties are linked to two separate measures of recidivism - the binary measure and the frequency measure. The binary measure defines the percentage of offenders within a cohort, formed quarterly, who reoffend in the following 12 months. The frequency measure defines the average number of offenses committed by reoffenders within the same 12-month measurement period. The performance for the frequency measure for most providers has been below the

benchmarks established by the MOJ. As a result, RRP could be required to make payments to the MOJ and the amounts of such payments could be material. The amount of potential payments to the MOJ, if any, under RRP's contracts with the MOJ cannot be estimated at this time, as the MOJ is

reviewing the data to understand the underlying reasons for the increase in certain rates of recidivism and other factors that could impact the contractual measure.

Deferred Compensation Plan

The Company has one deferred compensation plan for management and highly compensated employees of NET Services as of December 31, 2017. The deferred compensation plan is unfunded, and benefits are paid from the general assets of the Company. The total of participant deferrals, which is reflected in "Other long-term liabilities" in the consolidated balance sheets, was $1,806 and $1,430 at December 31, 2017 and 2016, respectively.

19. Transactions with Related Parties

The Company incurred legal expenses under an indemnification agreement with the Standby Purchasers as further discussed in Note 18, *Commitments and Contingencies*. Preferred Stock dividends earned by the Standby Purchasers during the years ended December 31, 2017 and 2016 totaled $4,213 each year.

During the year ended December 31, 2017, the Company made a $566 loan to Mission Providence. The loan was also repaid during the year ended December 31, 2017.

20. Discontinued Operations

Effective October 19, 2016, the Company completed the Matrix Transaction. At the closing, (i) cash consideration of $180,614 was paid by the Subscriber to Matrix based upon an enterprise value of $537,500 and (ii) Matrix borrowed approximately $198,000 pursuant to a credit and guaranty agreement providing for term loans in an aggregate principal amount of $198,000 and revolving loan commitments in an aggregate principal amount not to exceed $10,000, which was not drawn at the closing. At the closing, Matrix distributed $381,163 to Providence, in full satisfaction of a promissory note and accumulated interest between Matrix and Providence. At the closing, Providence made a $5,663 capital contribution to Matrix, as described in the Subscription Agreement, as amended, based upon its pro-rata ownership of Matrix, to fund the near-term cash needs of Matrix. On the day that was fifteen days following the closing date, Providence was, to the extent payable pursuant to the terms of the Subscription Agreement, as amended, entitled to receive from Matrix, or required to pay to Matrix, subsequent working capital adjustment payments. Providence received an initial payment of $5,172 from Matrix in November 2016 which is net of the capital contribution of $5,663 described above, based upon the initial working capital calculation as described in the Subscription Agreement. Additionally, in February 2017, the Company received a $75 payment from Matrix representing the final working capital adjustment payment.

In accordance with ASC 205-20, *Presentation of Financial Statements-Discontinued Operations*, a component of an entity is reported in discontinued operations after meeting the criteria for held for sale classification if the disposition represents a strategic shift that has (or will have) a major effect on the entity's operations and financial results. The Company analyzed the quantitative and qualitative factors relevant to the Matrix stock subscription transaction resulting in the Company no longer owning a controlling interest in Matrix, and determined that those held for sale conditions for discontinued operations presentation were met during the third quarter of 2016. As such, the historical financial results of Matrix, the Company's historical HA Services segment, and the related income tax effects have been presented as discontinued operations for all periods presented in the accompanying consolidated financial statements through October 19, 2016.

The Company has continuing involvement with Matrix through its ownership of 46.6% of the equity interests in Matrix as of December 31, 2017, as well as through a management consulting agreement, not to exceed ten years. Prior to the Matrix Transaction, the Company owned 100% of the equity interest in Matrix. Subsequent to the Matrix Transaction, the Company accounts for its investment in Matrix under the equity method of accounting. The Company's share of Matrix's losses subsequent to the Matrix Transaction, which totaled $13,445 and $1,789, is recorded as "Equity in net (gain) loss of investees" in its consolidated statement of income for the years ended December 31, 2017 and 2016, respectively. Matrix's pretax loss for the year ended December 31, 2017 totaled $2,948 and includes $3,537 of transaction related expenses. Matrix's pretax loss for the period of October 19, 2016 through December 31, 2016 totaled $7,027 and includes $6,367 of transaction related expenses. There have been no cash inflows or outflows from or to Matrix subsequent to the closing of the Matrix Transaction, other than the working capital adjustments discussed above and management fees associated with its ongoing relationship with Matrix, of which $1,103 was received during the year ended December 31, 2017. $247 and $185 are

included in “Other receivables” in the consolidated balance sheets at December 31, 2017 and 2016, respectively, related to management fees receivable.

On September 3, 2015, the Company entered into a Purchase Agreement, pursuant to which the Company agreed to sell all of the membership interests in Providence Human Services, LLC and Providence Community Services, LLC, comprising the

Company's Human Services segment, in exchange for cash proceeds of approximately $200,000 prior to adjustments for estimated working capital, certain seller transaction costs, debt assumed by the buyer, and a $20,099 cash payment received for the Providence Human Services cash and cash equivalents on hand at closing. The net proceeds were $230,703, although $10,000 is held in an indemnity escrow and recorded within "Prepaid expenses and other" in the consolidated balance sheet at December 31, 2017. Proceeds include a customary working capital adjustment of $13,246. During the years ended December 31, 2017 and 2016, the Company recorded additional expenses related to the Human Services segment, principally related to legal proceedings as described in Note 18, *Commitment and Contingences*, related to an indemnified legal matter.

Results of Operations

The following table summarizes the results of operations classified as discontinued operations, net of tax, for the years ended December 31, 2017, 2016 and 2015. The HA Services segment column in the table below for the year ended December 31, 2016 reflects the financial results for HA Services from January 1, 2016 through October 19, 2016.

	Year ended December 31, 2017		
	Human Services Segment	**HA Services Segment**	**Total Discontinued Operations**
Operating expenses:			
General and administrative expense	$ 9,674	$ —	$ 9,674
Total operating expenses	9,674	—	9,674
Loss from discontinued operations before income taxes	(9,674)	—	(9,674)
Income tax benefit	3,691	—	3,691
Discontinued operations, net of tax	$ (5,983)	$ —	$ (5,983)

	Year ended December 31, 2016		
	Human Services Segment	**HA Services Segment**	**Total Discontinued Operations**
Service revenue, net	$ —	$ 166,090	$ 166,090
Operating expenses:			
Service expense	—	120,906	120,906
General and administrative expense	7,966	2,148	10,114
Depreciation and amortization	—	21,121	21,121
Total operating expenses	7,966	144,175	152,141
Operating income (loss)	(7,966)	21,915	13,949
Other expenses:			
Write-off of deferred financing fees	—	2,302	2,302
Interest expense, net	—	9,929	9,929
Income (loss) from discontinued operations before gain on disposition and income taxes	(7,966)	9,684	1,718
Gain on disposition	—	167,895	167,895
(Provision) benefit for income taxes	2,401	(63,254)	(60,853)
Discontinued operations, net of tax	$ (5,565)	$ 114,325	$ 108,760

	Year ended December 31, 2015		
	Human Services Segment	HA Services Segment	Total Discontinued Operations
Service revenue, net	$ 291,510	$ 217,436	$ 508,946
Operating expenses:			
Service expense	264,293	163,211	427,504
General and administrative expense	14,975	2,630	17,605
Asset impairment charge	1,593	—	1,593
Depreciation and amortization	4,831	29,472	34,303
Total operating expenses	285,692	195,313	481,005
Operating income	5,818	22,123	27,941
Other expenses:			
Interest expense, net	2,829	14,359	17,188
Income from discontinued operations before gain on disposition and income taxes	2,989	7,764	10,753
Gain on disposition	123,129	—	123,129
Provision for income taxes	(24,318)	(1,693)	(26,011)
Discontinued operations, net of tax	$ 101,800	$ 6,071	$ 107,871

Interest expense, net

The Company allocated interest expense, including amortization of deferred financing fees, to discontinued operations based on the portion of the debt that was required to be paid with the proceeds from the sale of the Human Services segment and the Matrix Transaction. The total allocated interest expense is included in "Interest expense, net" in the tables above. The total allocated interest expense for the years ended December 31, 2016 and 2015 is as follows:

	Year ended December 31,	
	2016	2015
Human Services Segment	$ —	$ 2,871
HA Services Segment	9,939	14,376
Total	$ 9,939	$ 17,247

Cash Flow Information

The following table presents depreciation, amortization, capital expenditures and significant operating noncash items of the discontinued operations for the years ended December 31, 2016 and 2015:

	For the year ended December 31, 2016		
	Human Services Segment	HA Services Segment	Total Discontinued Operations
Cash flows from discontinued operating activities:			
Depreciation	$ —	$ 3,661	$ 3,661
Amortization	—	17,460	17,460
Stock-based compensation	—	(18)	(18)
Deferred income taxes	—	52,338	52,338
Cash flows from discontinued investing activities:			
Purchase of property and equipment	$ —	$ 9,174	$ 9,174

	For the year ended December 31, 2015		
	Human Services Segment	HA Services Segment	Total Discontinued Operations
Cash flows from discontinued operating activities:			
Depreciation	$ 2,376	$ 3,370	$ 5,746
Amortization	2,455	26,102	28,557
Asset impairment charge	1,593	—	1,593
Stock-based compensation	7	108	115
Deferred income taxes	(5,680)	730	(4,950)
Cash flows from discontinued investing activities:			
Purchase of property and equipment	$ 2,224	$ 8,079	$ 10,303

21. Segments

The Providence Service Corporation owns subsidiaries and investments primarily engaged in the provision of healthcare services in the United States and workforce development services internationally. The subsidiaries and other investments in which the Company holds interests comprise the following segments:

- NET Services – Nationwide manager of non-emergency medical transportation programs for state governments and managed care organizations.
- WD Services – Global provider of employment preparation and placement services, legal offender rehabilitation services, youth community service programs and certain health related services to eligible participants of government sponsored programs.
- Matrix Investment – Minority interest in Matrix, a nationwide provider of in-home care optimization and management solutions, including CHAs, to members of managed care organizations, accounted for as an equity

method investment as a result of the Matrix Transaction on October 19, 2016, which is further discussed in Note 20, *Discontinued Operations*

In addition to its segments' operations, the Corporate and Other segment includes the Company's activities at its corporate office that include executive, accounting, finance, internal audit, tax, legal, public reporting, certain strategic and corporate development functions, and the Company's captive insurance company.

Segment results are based on how the Company's chief operating decision maker ("CODM") manages the Company's business, makes operating decisions and evaluates operating performance. The operating results of the segments include revenue and expenses incurred by the segment, as well as an allocation of direct expenses incurred by Corporate on behalf of the segment. Indirect expenses, including unallocated corporate functions and expenses, such as executive, accounting, finance, internal audit, tax, legal, public reporting, certain strategic and corporate development functions and the results of the Company's captive insurance company as well as elimination entries recorded in consolidation are reflected in Corporate and Other.

The following table sets forth certain financial information from continuing operations attributable to the Company's business segments for the years ended December 31, 2017, 2016 and 2015.

	Year Ended December 31, 2017				
	NET Services	WD Services	Matrix Investment	Corporate and Other	Total
Service revenue, net	$ 1,318,220	$ 305,662	$ —	$ —	$ 1,623,882
Service expense	1,227,426	265,417	—	(3,799)	1,489,044
General and administrative expense	11,779	25,438	—	35,119	72,336
Depreciation and amortization	13,275	12,851	—	343	26,469
Operating income (loss)	$ 65,740	$ 1,956	$ —	$ (31,663)	$ 36,033
Equity in net (gain) loss of investees	$ —	$ 1,391	$ (13,445)	$ —	$ (12,054)
Investment in equity method investee	$ —	$ 213	$ 169,699	$ —	$ 169,912
Total assets	$ 294,127	$ 184,805	$ 169,699	$ 55,459	$ 704,090
Long-lived asset expenditures	$ 15,319	$ 4,527	$ —	$ 77	$ 19,923

	Year Ended December 31, 2016				
	NET Services	WD Services	Matrix Investment	Corporate and Other	Total
Service revenue, net	$ 1,233,720	$ 344,403	$ —	$ 122	$ 1,578,245
Service expense	1,132,857	320,147	—	(894)	1,452,110
General and administrative expense	11,406	30,300	—	28,205	69,911
Asset impairment charge	—	19,588	—	1,415	21,003
Depreciation and amortization	12,375	13,824	—	405	26,604
Operating income (loss)	$ 77,082	$ (39,456)	$ —	$ (29,009)	$ 8,617
Equity in net (gain) loss of investees	$ —	$ 8,498	$ 1,789	$ —	$ 10,287
Investment in equity method investee	$ —	$ 4,161	$ 157,202	$ —	$ 161,363
Total assets	$ 313,371	$ 160,152	$ 157,202	$ 54,554	$ 685,279
Long-lived asset expenditures	$ 10,845	$ 19,810	$ —	$ 1,387	$ 32,042

	Year Ended December 31, 2015			
	NET Services	WD Services	Corporate and Other	Total
Service revenue, net	$ 1,083,015	$ 395,059	$ (64)	$ 1,478,010
Service expense	991,659	393,803	(4,308)	1,381,154
General and administrative expense	10,704	29,846	30,436	70,986
Depreciation and amortization	9,429	13,776	793	23,998
Operating income (loss)	$ 71,223	$ (42,366)	$ (26,985)	$ 1,872
Equity in net (gain) loss of investees	$ —	$ 10,970	$ —	$ 10,970
Long-lived asset expenditures	$ 12,232	$ 11,869	$ 668	$ 24,769

Geographic Information

The following table details the Company's revenue from continuing operations and long-lived assets by geographic location.

	For the year ended December 31, 2017			
	United States	United Kingdom	Other Foreign	Consolidated Total
Service revenue, net	$ 1,335,389	$ 187,655	$ 100,838	$ 1,623,882
Long-lived assets (a)	37,700	9,354	3,323	50,377

	For the year ended December 31, 2016			
	United States	United Kingdom	Other Foreign	Consolidated Total
Service revenue, net	$ 1,250,043	$ 235,061	$ 93,141	$ 1,578,245
Long-lived assets (a)	32,007	9,823	4,390	46,220

	For the year ended December 31, 2015			
	United States	United Kingdom	Other Foreign	Consolidated Total
Service revenue, net	$ 1,099,918	$ 298,386	$ 79,706	$ 1,478,010

(a) Represents property and equipment, net.

Domestic service revenue, net, totaled 82.2%, 79.2% and 74.4% of service revenue, net for the years ended December 31, 2017, 2016 and 2015, respectively. Foreign service revenue, net, totaled 17.8%, 20.8% and 25.6% of service revenue, net for the years ended December 31, 2017, 2016 and 2015, respectively.

At December 31, 2017, $99,071 of the Company's net assets from continuing operations were located in countries outside of the U.S. At December 31, 2016, $76,579 of the Company's net assets from continuing operations were located in countries outside of the U.S.

Customer Information

11.2%, 10.2% and 11.0% of the Company's consolidated revenue was derived from one U.S. state Medicaid program for the years ended December 31, 2017, 2016 and 2015, respectively. 10.7% of the Company's consolidated revenue was derived from one UK governmental agency for the year ended December 31, 2015. In addition, substantially all of the

Company's revenues are generated from domestic and foreign governmental agencies or entities that contract with governmental agencies.

22. Quarterly Results (Unaudited)

The quarterly consolidated financial statements presented below reflect HA Services and Human Services as discontinued operations for all periods presented.

	Quarter ended			
	March 31, 2017 (1)	**June 30, 2017**	**September 30, 2017 (2)**	**December 31, 2017 (3)(4)(5)**
Service revenue, net	$ 399,494	$ 407,983	$ 409,517	$ 406,888
Operating Income	6,788	5,999	6,309	16,937
Income from continuing operations, net of tax	1,915	3,858	14,964	39,066
Discontinued operations, net of tax	(5,866)	(117)	(16)	16
Net income (loss) attributable to Providence	(4,325)	3,915	14,853	38,926
Earnings (loss) per common share (10):				
Basic	$ (0.40)	$ 0.18	$ 0.88	$ 2.43
Diluted	$ (0.40)	$ 0.18	$ 0.88	$ 2.41

	Quarter ended			
	March 31, 2016	**June 30, 2016**	**September 30, 2016 (6)**	**December 31, 2016 (7)(8)(9)**
Service revenue, net	$ 382,036	$ 398,119	$ 412,271	$ 385,819
Operating Income (loss)	8,304	6,712	9,793	(16,192)
Income (loss) from continuing operations, net of tax	1,376	1,624	3,743	(25,657)
Discontinued operations, net of tax	753	2,370	(2,791)	108,428
Net income attributable to Providence	2,235	4,623	650	84,420
Earnings (loss) per common share (10):				
Basic	$ 0.07	$ 0.21	$ (0.05)	$ 4.92
Diluted	$ 0.07	$ 0.21	$ (0.05)	$ 4.92

(1) The Company recorded expenses, net of tax, of $5,866 in Discontinued operations, net of tax, in the quarter ending March 31, 2017 related to the Company's former Human Services segment, which are principally related to an ongoing legal matter.

(2) The Company recorded a gain on sale of equity investment of $12,606, net of tax, related to the sale of its equity interest in Mission Providence during the quarter ended September 30, 2017. During the quarter ended December 31, 2017, the Company recorded a reduction to the gain on sale of $229, related to the finalization of the working capital adjustment per the sale agreement.

(3) Operating income for the quarter ended December 31, 2017 increased as compared to the prior quarters in 2017 as a result of a decrease in service expense as a percentage of revenue for NET Services and WD Services. This was primarily a result of lower operating costs of both segments as well as certain NET Services contractual adjustments recorded in the fourth quarter of 2017.

(4) The quarter ended December 31, 2017 includes the receipt of the Haverhill Litigation settlement of $5,363.

(5) The quarter ended December 31, 2017 includes a net tax benefit of $16,017 related to the enactment of the Tax Reform Act during the fourth quarter of 2017, due to the re-measurement of deferred tax liabilities by

Providence as a result of the reduction in the U.S. corporate tax rate. Providence realized a tax benefit of $19,397, partially offset by $3,379 of increased tax expense resulting from additional equity in net gain of Matrix, due to Matrix' re-

measurement of its deferred tax liabilities. The equity in net gain from Matrix for the quarter ended December 31, 2017 includes a tax benefit of $13,610 related to Matrix's re-measurement of deferred tax liabilities as a result of the Tax Reform Act.

(6) The Company recorded expenses, net of tax, of $5,035 in Discontinued operations, net of tax, in the quarter ended September 30, 2016 related to the Company's former Human Services segment, which are principally related to an ongoing legal matter.

(7) Service revenue, net for the quarter ending December 31, 2016 decreased from the quarter ended September 30, 2016 primarily due to decreased revenue associated with the WD Services' National Citizen Service summer youth programs, which are seasonal in nature. Additionally, the quarter ended September 30, 2016 included revenue of $5,367 under the WD Services' offender rehabilitation program related to the finalization of a contractual adjustment for the contract years ended March 31, 2015 and 2016.

(8) The Company recorded an asset impairment charge of $1,415 related to the building and land utilized by the holding company, which was sold effective December 30, 2016. Also, the Company recorded asset impairment charges in its WD Services segment of $9,983, $4,381 and $5,224 to its property and equipment, intangible assets and goodwill, respectively.

(9) The quarter ended December 31, 2016 includes gain on loss of controlling interest in Matrix, net of tax, of $109,403.

(10) Earnings per share is computed independently for each of the quarters presented. Therefore, the sum of quarterly earnings per share may not equal the total computed for the year.

23. Subsequent Events

On February 16, 2018, Matrix acquired HealthFair, a leading provider of mobile health assessment and advanced diagnostic testing services for a purchase price of $160,000 plus an earnout payment contingent upon HealthFair's 2018 financial performance. Additionally, Matrix entered into a financing transaction consisting of a $330,000 first lien term loan and a $20,000 revolving line of credit, of which none was drawn, and issued an aggregate of approximately 24,200,000 shares of its common units related to a seller roll-over contribution. As a result of the rollover of certain equity interests in HealthFair, Providence's equity ownership is 43.6% as of February 16, 2018.

On November 2, 2017, the Company's Board approved the extension of the Company's existing stock repurchase program, authorizing the Company to engage in a repurchase program to repurchase up to $69,640 (the amount remaining from the $100,000 repurchase amount authorized in 2016) in aggregate value of our Common Stock through December 31, 2018. During the period January 1, 2018 to March 5, 2018, the Company repurchased 527,825 shares for $33,330, and $25,807 was available under the plan to repurchase shares.

Item 9. ***Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.***

None.

Item 9A. ***Controls and Procedures.***

Evaluation of Disclosure Controls and Procedures

The Company, under the supervision and with the participation of its management (including its principal executive officer and principal financial officer), evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures, as defined in Rule 13a-15(e) of the Exchange Act as of the end of the period covered by this Annual Report on Form 10-K (December 31, 2017). Based upon this evaluation, the Company's principal executive and financial officers have concluded that such disclosure controls and procedures were effective to provide reasonable assurance that (i) information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive and financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

Management's report on internal control over financial reporting is presented in Part II, Item 8, of this Annual Report and is hereby incorporated by reference.

Report of Independent Registered Public Accounting Firm

The attestation report of the registered public accounting firm on the Company's internal control over financial reporting is presented in Part II, Item 8, of this Annual Report and is hereby incorporated by reference.

Changes in Internal Control Over Financial Reporting

The principal executive and financial officers also conducted an evaluation of whether any changes in the Company's internal control over financial reporting occurred during the quarter ended December 31, 2017 that have materially affected or which are reasonably likely to materially affect such control. Such officers have concluded that no such changes have occurred.

Item 9B. ***Other Information.***

Effective March 12, 2018, Matthew Umscheid, our current Senior Vice President, Strategic Services, is being transferred to employment in such role at our LogistiCare business, pursuant to an offer letter dated March 6, 2018. In connection with this transfer, Mr. Umscheid is resigning as an officer of the Company. Under the terms of his offer letter with LogistiCare, Mr. Umscheid's annual base salary will remain at $350,000, his target annual bonus for 2018 will remain at 75% of his base salary, and there is no term of employment. In his new role, Mr. Umscheid will also be eligible to participate in other compensation and benefit programs made available to LogistiCare's senior executives, including a long-term incentive plan.

PART III

Item 10. ***Directors, Executive Officers and Corporate Governance.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2018 annual meeting of stockholders; provided that if such proxy statement is not filed on or before April 30, 2018, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

Code of Ethics

We have adopted a code of ethics that applies to our senior management, including our chief executive officer, chief financial officer, controller and persons performing similar functions, as well as our directors, officers and employees. This code of ethics is part of our broader Compliance and Ethics Plan and Code of Conduct, which is available free of charge in the Investor Relations section of our website at www.prscholdings.com. We intend to disclose any amendment to, or waiver from, a provision of the code of ethics that applies to our principal executive officer, principal financial officer or principal accounting officer on our website. The information contained on our website is not part of, and is not incorporated in, this Annual Report on Form 10-K or any other report we file with or furnish to the SEC.

Item 11. ***Executive Compensation.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2018 annual meeting of stockholders; provided that if such proxy statement is not filed on or before April 30, 2018, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2018 annual meeting of stockholders; provided that if such proxy statement is not filed on or before April 30, 2018, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2018 annual meeting of stockholders; provided that if such proxy statement is not filed on or before April 30, 2018, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

Item 14. ***Principal Accounting Fees and Services.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2018 annual meeting of stockholders; provided that if such proxy statement is not filed on or before April 30, 2018, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

PART IV

Item 15. ***Exhibits, Financial Statement Schedules.***

(a)(1) Financial Statements

The following consolidated financial statements including footnotes are included in Item 8.

- Consolidated Balance Sheets at December 31, 2017 and 2016;
- Consolidated Statements of Income for the years ended December 31, 2017, 2016 and 2015;
- Consolidated Statements of Comprehensive Income for the years ended December 31, 2017, 2016 and 2015;
- Consolidated Statements of Stockholders' Equity for the years ended December 31, 2017, 2016 and 2015; and
- Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2016 and 2015.

(2) Financial Statement Schedules

Schedule II Valuation and Qualifying Accounts

	Balance at beginning of period	Additions: Charged to costs and expenses	Additions: Charged to other accounts	Deductions	Balance at end of period
Year Ended December 31, 2017:					
Allowance for doubtful accounts	$ 5,901	$ 815	$ (466) (1)	$ 488 (2)	$ 5,762
Year Ended December 31, 2016:					
Allowance for doubtful accounts	$ 4,380	$ 3,298	$ 1,058 (1)	$ 2,835 (2)	$ 5,901
Year Ended December 31, 2015:					
Allowance for doubtful accounts	$ 3,198	$ 1,928	$ 1,152 (1)	$ 1,898 (2)	$ 4,380

Notes:

Schedule above has been recast from prior year to exclude activity related to discontinued operations.

(1) Amounts primarily include the allowance for contractual adjustments related to our non-emergency transportation services operating segment that are recorded as adjustments to non-emergency transportation services revenue. Amount additionally includes impact from change in foreign currency rates.

(2) Write-offs, net of recoveries.

All other schedules are omitted because they are not applicable or the required information is shown in our financial statements or the related notes thereto.

(3) Exhibits

Exhibit Number	Description
2.1	Share Sale Agreement, dated as of March 31, 2014, by and among The Providence Service Corporation, Pinnacle Australia Holdco Pty Ltd, Thérèse Virginia Rein, Gregory Kenneth Ashmead and GK Ashmead Holdings Pty Limited (as trustee of the GK Ashmead Nominees Trust) (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on April 1, 2014).
2.2	Australian Share Sale Agreement Side Deed, dated as of March 31, 2014, by and among The Providence Service Corporation, Pinnacle Australia Holdco Pty Ltd, Thérèse Virginia Rein, Gregory Kenneth Ashmead, GK Ashmead Holdings Pty Limited (as trustee of the GK Ashmead Nominees Trust) and Deloitte LLP (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on April 1, 2014).
2.3	Membership Interest Purchase Agreement, dated September 3, 2015, by and among The Providence Service Corporation, Ross Innovative Employment Solutions Corp. and Molina Healthcare, Inc. (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on September 8, 2015).
2.4	Amendment to Membership Interest Purchase Agreement, dated October 30, 2015, by and among The Providence Service Corporation, Ross Innovative Employment Solutions Corp. and Molina Pathways, LLC, as assignee of Molina Healthcare, Inc. (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on November 5, 2015).
2.5	Stock Subscription Agreement, dated as of August 28, 2016, by and among The Providence Service Corporation, CCHN Group Holdings, Inc. and Mercury Fortuna Buyer, LLC (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 31, 2016).
2.6	Amendment No. 1, dated as of October 19, 2016, to the Stock Subscription Agreement, dated August 28, 2016, by and among The Providence Service Corporation, CCHN Group Holdings, Inc. and Mercury Fortuna Buyer, LLC (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on October 25, 2016).
3.1	Second Amended and Restated Certificate of Incorporation of The Providence Service Corporation, including Certificate of Designation of Series A Junior Participating Preferred Stock, as filed with the Secretary of State of Delaware on December 9, 2011 (Incorporated by reference from an exhibit to the registrant's annual report on Form 10-K for the year ended December 31, 2011 filed with the SEC on March 15, 2012).
3.2	Certificate of Amendment of the Certificate of Incorporation of The Providence Service Corporation, dated as of May 6, 2015 (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on May 7, 2015).
3.3	Amended and Restated Bylaws of The Providence Service Corporation, effective March 10, 2010 (Incorporated by reference from an exhibit to the registrant's annual report on Form 10-K for the year ended December 31, 2009 filed with the SEC on March 12, 2010).
4.1	Certificate of Designations of Series A Convertible Preferred Stock of The Providence Service Corporation, dated as of February 6, 2015 (Incorporated by reference from an exhibit to Amendment No. 1 to the registrant's annual report on Form 10-K/A for the year ended December 31, 2014 filed with the SEC on April 30, 2015).

10.1	Amended and Restated Credit and Guaranty Agreement, dated as of August 2, 2013 (the "Credit Agreement"), by and among The Providence Service Corporation and certain of its subsidiaries party thereto, Bank of America, N.A., SunTrust Bank, BMO Harris Bank, Merrill Lynch, Pierce, Fenner & Smith Incorporated and SunTrust Robinson Humphrey, Inc. and the lenders party thereto (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 5, 2013).
10.2	Amended and Restated Pledge Agreement, dated as of August 2, 2013, by and among The Providence Service Corporation, certain of its subsidiaries party thereto, and Bank of America, N.A., as administrative agent (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 5, 2013).
10.3	Amended and Restated Security Agreement, dated as of August 2, 2013, by and among The Providence Service Corporation, certain of its subsidiaries party thereto, and Bank of America, N.A., as administrative agent (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 5, 2013).

10.4	First Amendment to Amended and Restated Credit and Guaranty Agreement and Consent, dated as of May 28, 2014, by and among The Providence Service Corporation, the Guarantors named therein, the New Subsidiaries named therein, the Lenders and New Lender named therein and Bank of America, N.A., as administrative agent (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on June 3, 2014).
10.5	Second Amendment to the Amended and Restated Credit and Guaranty Agreement and Consent, dated as of October 23, 2014, by and among The Providence Service Corporation, certain of its subsidiaries party thereto, Bank of America, N.A., SunTrust Bank, Royal Bank of Canada, BMO Harris Bank, N.A., HSBC Bank USA, National Association, the other Lenders party thereto, Merrill Lynch, Pierce, Fenner & Smith Incorporated, SunTrust Robinson Humphrey, Inc., and RBC Capital Markets (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on October 24, 2014).
10.6	Third Amendment and Consent to the Amended and Restated Credit and Guaranty Agreement, dated as of September 3, 2015, by and among The Providence Service Corporation, certain of its subsidiaries party thereto, Bank of America, N.A., Sun Trust Bank, Royal Bank of Canada, BMO Harris Bank, N.A., HSBC Bank USA, National Association, the other lenders party thereto, Merrill Lynch Pierce, Fenner & Smith Incorporated, Sun Trust Robinson Humphrey, Inc. and RBC Capital Markets (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on September 8, 2015).
10.7	Fourth Amendment and Consent to the Amended and Restated Credit and Guaranty Agreement, dated as of August 28, 2016, by and among The Providence Service Corporation, the guarantors party thereto, the lenders party thereto and Bank of America, N.A., as Administrative Agent (Incorporated by reference to an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 31, 2016).
10.8+	Employment Agreement, dated January 14, 2015, by and between The Providence Service Corporation and James Lindstrom (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on January 21, 2015).
10.9+	Employment Agreement, dated August 6, 2015, by and between The Providence Service Corporation and James Lindstrom (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 11, 2015).
10.10+	Separation Agreement and General Release, dated November 15, 2017, between The Providence Service Corporation and James Lindstrom (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on November 15, 2017).
10.11+	Employment Agreement, dated as of September 28, 2015, by and between The Providence Service Corporation and David Shackelton (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on November 20, 2015).
10.12+	Amended & Restated Employment Agreement, dated January 9, 2018, by and between The Providence Service Corporation and David Shackelton (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on January 16, 2018).
10.13+	Employment Agreement, dated April 4, 2016, between The Providence Service Corporation and Sophia Tawil (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2016 filed with the SEC on May 6, 2016).
10.14+	

	Amended & Restated Employment Agreement, dated January 9, 2018, by and between The Providence Service Corporation and Sophia Tawil (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on January 16, 2018).
10.15+	Employment Agreement, dated November 15, 2017, between The Providence Service Corporation and R. Carter Pate (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on November 15, 2017).
10.16+	Letter agreement, dated January 10, 2018, by and between The Providence Service Corporation and William Severance (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on January 16, 2018).
10.17+	The Providence Service Corporation 2006 Long-Term Incentive Plan, as amended and restated, effective June 30, 2015 (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended September 30, 2015 filed with the SEC on November 9, 2015).
10.18+	The Providence Service Corporation 2006 Long-Term Incentive Plan, as amended and restated effective July 27, 2016 (Incorporated by reference from an appendix to the registrant's definitive proxy statement on Schedule 14A filed with the SEC on June 14, 2016).
10.19+	Form of Restricted Stock Agreements (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2011 filed with the SEC on May 6, 2011).

10.20+	Form of Stock Option Agreements (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2011 filed with the SEC on May 6, 2011).
10.21+	Form of Special Incentive Stock Option Award Agreement (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 11, 2015).
10.22+	Form of Matching Incentive Stock Option Award Agreement (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 11, 2015).
10.23+	2015 Holding Company LTI Program (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 11, 2015).
10.24+	2015 Holding Company LTI Program, as amended and effective on November 4, 2016 (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended September 30, 2016 filed with the SEC on November 9, 2016).
10.25	Amended and Restated Limited Liability Company Agreement of Mercury Parent, LLC, by and between Prometheus Holdco, LLC and Mercury Fortuna Buyer, LLC, dated as of October 19, 2016 (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on October 25, 2016).
10.26*	Second Amended and Restated Limited Liability Company Agreement of Mercury Parent, LLC, by and between Prometheus Holdco, LLC and Mercury Fortuna Buyer, LLC, dated February 16, 2018.
10.27+	Form of Matching Stock Option Agreement (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2017 filed with the SEC on May 10, 2017).
10.28+*	Form of Stock Option Agreement.
10.29+*	Letter agreement, dated September 21, 2015, between The Providence Service Corporation and Matthew Umscheid.
12.1*	Statement re Computation of Ratios of Earnings to Fixed Charges.
21.1*	Subsidiaries of the Registrant.
23.1*	Consent of KPMG LLP.
23.2*	Consent of Deloitte & Touche LLP (Mercury Parent, LLC financial statements).
23.3*	Consent of KPMG LLP (Mercury Parent, LLC financial statements).
31.1*	Certification pursuant to Securities Exchange Act Rules 13a-14 and 15d-14 of the Chief Executive Officer.
31.2*	Certification pursuant to Securities Exchange Act Rules 13a-14 and 15d-14 of the Chief Financial Officer.
32.1*	

	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, of the Chief Executive Officer.
32.2*	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, of the Chief Financial Officer.
99.1*	Financial Statements of Mercury Parent, LLC.
101. INS*	XBRL Instance Document
101.SCH*	XBRL Schema Document
101.CAL*	XBRL Calculation Linkbase Document
101.LAB*	XBRL Label Linkbase Document
101.PRE*	XBRL Presentation Linkbase Document
101.DEF*	XBRL Definition Linkbase Document

+ Management contract or compensatory plan or arrangement.

* Filed herewith.

Item 16. Form 10-K Summary.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

THE PROVIDENCE SERVICE CORPORATION

By: /s/ R. Carter Pate
R. Carter Pate
Interim Chief Executive Officer

Dated: March 9, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/S/ R. CARTER PATE R. Carter Pate	Interim Chief Executive Officer (Principal Executive Officer)	March 9, 2018
/S/ DAVID C. SHACKELTON David C. Shackelton	Chief Financial Officer (Principal Financial Officer)	March 9, 2018
/S/ WILLIAM SEVERANCE William Severance	Chief Accounting Officer (Principal Accounting Officer)	March 9, 2018
/S/ CHRISTOPHER S. SHACKELTON Christopher S. Shackelton	Chairman of the Board	March 9, 2018
/S/ TODD J. CARTER Todd J. Carter	Director	March 9, 2018
/S/ DAVID A. COULTER David A. Coulter	Director	March 9, 2018
/S/ RICHARD A. KERLEY Richard A. Kerley	Director	March 9, 2018
/S/ KRISTI L. MEINTS Kristi L. Meints	Director	March 9, 2018
/S/ LESLIE V. NORWALK Leslie V. Norwalk	Director	March 9, 2018
/S/ FRANK J. WRIGHT Frank J. Wright	Director	March 9, 2018

This page is intentionally left blank

10-K 1 prsc20161231_10k.htm FORM 10-K

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2016

OR

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number 001-34221

The Providence Service Corporation
(Exact name of registrant as specified in its charter)

Delaware	**86-0845127**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
700 Canal Street, Third Floor, Stamford, CT	**06902**
(Address of principal executive offices)	**(Zip code)**

Registrant's telephone number, including area code: (203) 307-2800

Securities registered pursuant to Section 12(b) of the Act:

Title of each Class	**Name of each exchange on which registered**
Common Stock, $0.001 par value per share	**The NASDAQ Global Select Market**

Securities registered pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☐ Yes ☒ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). ☒ Yes ☐ No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☒
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). ☐ Yes ☒ No

The aggregate market value of the voting and non-voting common equity of the registrant held by non-affiliates based on the closing price for such common equity as reported on The NASDAQ Global Select Market on the last business day of the registrant's most recently completed second fiscal quarter (June 30, 2016) was $563.9 million.

As of March 6, 2017, there were outstanding 13,500,436 shares (excluding treasury shares of 3,833,420) of the registrant's Common Stock, $.001 par value per share, which is the only outstanding capital stock of the registrant.

DOCUMENTS INCORPORATED BY REFERENCE

All or a portion of Items 10 through 14 in Part III of this Form 10-K are incorporated by reference to our definitive proxy statement on Schedule 14A for our 2017 stockholder meeting; provided that if such proxy statement is not filed on or before May 1, 2017, such information will be included in an amendment to this Report on Form 10-K filed on or before such date.

TABLE OF CONTENTS

Part I

In this Annual Report on Form 10-K, the words the "Company", the "registrant", "we", "our", "us", "Providence" and similar terms refer to The Providence Service Corporation and, except as otherwise specified herein, to our subsidiaries. When such terms are used in reference to the Company's common stock, $0.001 par value per share (the "Common Stock), and the Series A Convertible Preferred Stock, $0.001 par value per share (the "Preferred Stock"), they refer specifically to The Providence Service Corporation.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains certain statements that may be deemed "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including statements related to the Company's strategies or expectations about revenues, liabilities, results of operations, cash flows, ability to fund operations, profitability, ability to meet financial covenants, contracts or market opportunities. The Company may also make forward-looking statements in other reports filed with the Securities and Exchange Commission (the "SEC"), in materials delivered to stockholders and in press releases. In addition, the Company's representatives may from time to time make oral forward-looking statements. In certain cases, you may identify forward looking-statements by words such as "may", "will", "should", "could", "expect", "plan", "project", "intend", "anticipate", "believe", "seek", "estimate", "predict", "potential", "target", "forecast", "likely", the negative of such terms or comparable terminology. In addition, statements that are not historical statements of fact should also be considered forward-looking statements. These forward-looking statements are based on the Company's current expectations, assumptions, estimates and projections about its business and industry, and involve risks, uncertainties and other factors that may cause actual events to be materially different from those expressed or implied by such forward-looking statements. These risks and uncertainties include, but are not limited to, the risks described under Item 1A in Part I of this Annual Report on Form 10-K.

You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date the statement was made. The Company is under no obligation to (and expressly disclaims any such obligation to) update any of the information in any forward-looking statement if such forward-looking statement later turns out to be inaccurate, whether as a result of new information, future events or otherwise.

Item 1. ***Business.***

Background

The Providence Service Corporation is a holding company which owns interests in subsidiaries and other companies that are primarily engaged in the provision of healthcare and workforce development services for public and private sector entities seeking to control costs and promote positive outcomes. The subsidiaries and other companies in which we hold interests comprise the following segments:

- Non-Emergency Transportation Services ("NET Services") – Nationwide provider of non-emergency medical transportation ("NET") programs for state governments and managed care organizations.
- Workforce Development Services ("WD Services") – Global provider of employment preparation and placement and legal offender rehabilitation services to eligible participants of government sponsored programs.
- Matrix Investment – Minority interest in nationwide provider of in-home care optimization and management solutions, including comprehensive health assessments ("CHAs"), to members of managed care organizations, accounted for as an equity method investment.

Ingeus UK Holdings Limited and its wholly and partly-owned subsidiaries and associates (collectively, "Ingeus"), which make up the majority of WD Services, were acquired on May 30, 2014. On November 1, 2015, we completed the sale of our Human Services segment (the "Human Services Sale"), which is accounted for as a discontinued operation.

Matrix Investment is comprised of our interest in Mercury Parent, LLC, a newly formed parent of CCHN Group Holdings, Inc. CCHN Group Holdings, Inc. and its subsidiaries are referred to as "Matrix". Matrix was acquired by the Company on October 23, 2014. On October 19, 2016, affiliates of Frazier Healthcare Partners purchased a 53.2% equity interest in Matrix, with Providence retaining a 46.8% equity interest (the "Matrix Transaction"). Prior to the closing of the Matrix Transaction, the financial results of Matrix were included in our Health Assessment Services ("HA Services") segment. The Company now owns a noncontrolling interest in Matrix. The Company's proportionate share of Matrix's net assets and financial results for the period following the closing of the Matrix Transaction are presented under the equity method. The assets, liabilities and financial results of Matrix for the period prior to the closing of the Matrix Transaction are presented within discontinued operations. For additional information regarding the Matrix Transaction, see Note 21, *Discontinued Operations,* to our consolidated financial statements.

As of December 31, 2016, NET Services and WD Services operated in 40 states and the District of Columbia in the United States ("U.S."), and in 9 countries outside of the U.S.

The Company is a Delaware corporation formed in 1996 and headquartered in Stamford, Connecticut.

Business Strategies

While our segments report into our holding company management team, each is managed in a decentralized manner and pursues strategies reflective of their respective industries and operating models.

Our holding company strategy is designed to increase shareholder value through a focus on building intrinsic value on a per share basis, which in turn is predicated upon the growth, continuous improvement and efficient delivery of high quality, technology-enabled services within our segments. In order to successfully pursue our strategies, our priorities at the holding company level include: 1) pursuing the highest standards of governance, values and compliance, 2) ensuring operating excellence by attracting, developing, and retaining empowered and accountable segment level leadership with significant industry experience, and 3) allocating capital opportunistically in markets that may be inefficient or where we have an ability to invest at a discount to intrinsic value, particularly where our experience, analysis, and long-term perspective can provide an advantage over competitors. As demonstrated in 2016 with the Matrix Transaction and in 2015 with the Human Services Sale, we also may enter into strategic partnerships or dispose of current or future segments, based on a variety of factors, including availability of alternative opportunities to deploy capital or otherwise maximize shareholder value as well as other strategic considerations. While infrequent, we may also pursue acquisitions and investments in industries not served by our existing segments.

Our strategic priorities and service offerings are based upon a common purpose of delivering exceptional value in the healthcare and workforce development industries, primarily through technology-enabled service platforms. Our segments seek to deliver disciplined and industry leading sales growth (excluding the impact of acquisitions) and generate industry-leading margins, cash flow and returns on capital. To accomplish these goals, we continuously improve our offerings in the areas of quality, cost and innovation through multiple operational levers. We pursue both organic and inorganic growth through entry into adjacent markets and complementary service lines, particularly with offerings that may leverage the advantages inherent in our large-scale networks. Our segments' core competencies include developing and managing large provider networks, tailoring healthcare and workforce development service offerings to the unique needs of diverse communities and populations, and implementing technology-enabled delivery models to achieve superior outcomes in low cost settings.

Holding Company Competition

In identifying, evaluating and selecting strategic opportunities, we may encounter intense competition from other entities having similar business objectives, such as strategic investors, private equity groups and special purpose acquisition corporations. Many of these entities are well established and have extensive experience identifying and executing transactions directly or through affiliates. These competitors may possess greater human and other resources than us, and our financial resources may be relatively limited in comparison. Any of these factors may place us at a competitive disadvantage in contrast to our competitors.

Financial Information About our Segments

The Company operates in two principal business segments, NET Services and WD Services. In addition, Providence holds a noncontrolling interest in Matrix, which is a reportable segment for financial reporting purposes, Matrix Investment. Financial information about segments and geographic areas, including revenues, operating income (loss), and long-lived assets of each segment, is included in Note 22, *Segments*, to our consolidated financial statements and is incorporated herein by reference. See Item 1A, Risk Factors, for a discussion of risks related to our operations and investments.

Our Segments

NET Services

Services offered. NET Services provides non-emergency transportation solutions to clients in 39 states and the District of Columbia. As of December 31, 2016, approximately 26.1 million individuals were eligible to receive our transportation services, and during 2016, NET Services managed 69.0 million trips. For 2016, 2015 and 2014, NET Services accounted for 78.2%, 73.3% and 80.9%, respectively, of Providence's consolidated revenue.

NET Services primarily contracts with state Medicaid programs and managed care organizations ("MCOs" and collectively "NET customers") for the coordination of their members' ("NET end-users") non-emergency transportation needs. NET end-users are typically Medicaid or Medicare eligible members, whose limited mobility or financial resources would otherwise hinder their ability to access necessary healthcare and social services. We believe our transportation services enable access to care that not only improves the quality of life and health of the populations we serve, but also enables many of the individuals we serve to pursue independent living in their homes rather than in more expensive institutional care settings.

Our programs are dependent upon our highly-integrated technology platform and the management of a multifaceted network of transportation providers. Our technology platform is integrated with our network constituents and purpose-built for the unique needs of our industry. Our platform is highly scalable and can support substantial growth in our current membership base. Our platform provides for broad interconnectivity between NET end users, transportation providers and our clients, and, we believe, uniquely positions us as a future focal point in the evolving healthcare industry to introduce additional population insights. In 2016, we introduced new technological features for NET end users to improve service levels, lower costs and build the foundation for additional data analytics capabilities.

To fulfill the transportation needs of NET end-users, we apply our proprietary technology platform to an extensive system of approximately 5,500 transportation resources. This includes our in-network roster of fully contracted transportation providers who operate sedans, wheelchair equipped vehicles, multi-passenger vans and ambulances. Our system also utilizes partnerships with mass transit entities, mileage reimbursement programs and taxis. To promote safety, quality, and compliance, our in-network transportation providers undergo an in-depth credentialing and education process. In 2016, we introduced additional sources of transportation capacity, including on-demand transportation systems in certain markets, to increase our service levels and lower costs. Through these additional sources of transportation, we may use integrated solutions using our proprietary technology platform and our external partners' application program interfaces to improve on-time and on-demand performance, provide real time information and analytics, minimize cancellations and better allow for the scale required to provide an effective, nationwide service.

Revenue and customers. In 2016, contracts with state Medicaid agencies and MCOs represented 58.9% and 41.1%, respectively, of NET Services' revenue. NET Services derived 13.1%, 15.0% and 17.0% of its revenue from a single Medicaid agency for the years ended December 31, 2016, 2015 and 2014, respectively. The next four largest NET Services customers in the aggregate comprised 22.6%, 24.2% and 26.2% of NET Services' revenue for the years ended December 31, 2016, 2015 and 2014, respectively.

Contracts with state Medicaid agencies are typically for three to five years with multiple renewal options. Contracts with MCOs are typically of indefinite duration until terminated by either party upon reasonable notice (as determined in accordance with the contract), and allow for regular price adjustments based upon utilization and transportation cost. On average, approximately 20% of the total revenue generated by NET Services under state Medicaid contracts is subject to renewal within the next 12 months, although this percentage can be much higher, as certain contracts represent a significant portion of revenue. As of December 31, 2016, 33.8% of NET Services revenue was generated under state Medicaid contracts that were subject to renewal within the next 12 months, which includes our contract with the state of New Jersey, which represented 13.1% of NET Services' revenue in 2016.

78.3% of NET Services' revenue in 2016 was generated under capitated contracts where we assume the responsibility of meeting the covered healthcare related transportation requirements of a specific population. Capitated contracts are generally structured with fixed per-member, per-month payment rates. The remainder of the revenue was generated under other types of fee arrangements, including administrative services only, fee for service ("FFS"), cost plus and flat fee contracts, under which fees are generated based upon billing rates for specific services or defined membership populations.

Seasonality. While revenue is generally fixed, primarily as a result of the capitated nature of the majority of our contracts, service expense varies based on the utilization of our services. The quarterly operating income and cash flows of NET Services normally fluctuate as a result of seasonal variations in the business, principally due to lower transportation demand during the winter season and higher demand during the summer season.

Competition. We compete with a variety of regional organizations that provide similar healthcare and social services related transportation, such as American Medical Response, Inc., Medical Transportation Management Inc., SoutheasTrans, Inc. and Veyo LLC, as well as local and regional providers. Most local competitors seek to win contracts for specific counties or small geographic territories whereas we and other larger competitors seek to win contracts for an entire state or large regional area. We compete based upon a number of factors, including our nationwide network, technical expertise, experience, service capability, and price.

Business development. Our sales and marketing strategy relies on a concentrated business development effort, with centralized marketing programs. Due to the critical nature of our services, our customers rely upon our past delivery performance record, network development and management expertise, technical expertise and specialized knowledge. A significant portion of our revenue is generated from long-term, repeat customers. Our long-term strategy is to improve our position as the preferred provider of transportation, complementary network-based services and data analytics offerings to both state Medicaid agencies and MCOs. Key elements of our long-term strategy include continued investment in our technologies, enabling us to both lower costs and improve service delivery. We also consider opportunistic acquisitions of businesses that serve our market or leverage our nationwide infrastructure, consistent with our stated holding company strategy.

In 2016, we launched a strategic initiative to enhance member satisfaction and drive greater operational efficiencies. This initiative focuses on developing and deploying new processes and technologies needed to progress towards an industry-leading call center and reservation scheduling platform; improve member communication, accessibility, and satisfaction; optimize the utilization of our extensive network of transportation providers; and build the foundation for additional analytical capabilities. The implementation of the initiative is expected to be substantially completed by the end of 2017.

WD Services

Services offered. WD Services provides workforce development and legal reoffender rehabilitation services, which include employment preparation and placement, apprenticeship and training, youth community service programs and certain health related services. For 2016, 2015 and 2014, WD Services accounted for 21.8%, 26.7% and 19.1%, respectively, of Providence's consolidated revenue.

WD Services' end user client base ("WD end-users") is broad and includes both the recently and long-term unemployed, disabled, and individuals seeking new skills, as well as individuals that are coping with medical illnesses, are newly graduated from educational institutions, or have been recently released from incarceration.

As of December 31, 2016, WD Services operated in 10 countries, including the United Kingdom ("UK"), Australia, France, Saudi Arabia, South Korea, Canada, the U.S., Germany, Spain and Switzerland. We expect to launch operations in Singapore in 2017. Operations in Sweden and Poland ceased during 2016.

Revenue, customers and clients. The majority of WD Services' revenue is generated through the provision of employability and training programs to national government entities seeking to reduce unemployment or recidivism rates. For the years ended December 31, 2016, 2015 and 2014, 68.3%, 75.5% and 66.6%, respectively, of WD Services' revenue was derived from operations in the UK. Additionally, 28.9%, 40.0% and 57.2% of WD Services' revenue was derived from a contract with the UK government's Department of Work and Pensions during the years ended December 31, 2016, 2015 and 2014, respectively. During the years ended December 31, 2016 and 2015, 25.9% and 28.2% of WD Services' revenue was derived from a contract with the UK government's Ministry of Justice.

The revenue earned by WD Services under its contracts is often derived through a combination of different revenue channels including, but not limited to, fees contingent upon: (1) the volume of WD end-users referred to and/or admitted into a specific program, (2) the achievement of defined outcomes for specific individuals, such as a job placement or continued employment and (3) the achievement of defined outcomes for a population of individuals over a specific time period, such as aggregate employment or recidivism rates. The relative contributions of different revenue channels under a specific contract can fluctuate meaningfully over the life of a contract and thus contribute to significant earnings volatility. In particular, revenue recognition related to our National Citizen Services ("NCS") youth programs can be particularly volatile due to the nature of the payment cycle and services provided. WD Services also earns revenue under fixed FFS arrangements, based upon contractual rates established at the outset of the contract or the applicable contract year, although the rate may be prospectively adjusted during the contract year based upon actual volumes. Volume levels are typically not guaranteed under contracts.

The nature of the services offered by WD Services often relies on our ability to improve a certain set of outcomes at a reduced cost versus previously utilized in-sourced delivery models. As a result, as we commence new contracts using transformational delivery models, we are required to invest significant upfront capital for information technology, human resources, facilities and other onboarding costs, such as consultants and redundancy payments. The level of upfront funding required is dependent upon the size and nature of the contract. Although significant upfront funding may be required, revenues are often payable only as services are delivered and, in some cases, only after incentive measures have been achieved over a multi-year period. As a result of these two factors, there can be significant variability in our earnings from quarter-to-quarter and year-to-year. In addition, under the majority of WD Services' contracts, the Company relies on its customers, which include government agencies, to provide referrals, for whom the Company can provide services and earn revenue. The timing and magnitude of referrals can fluctuate significantly, leading to volatility in revenue. As a result, we often measure a contracts success over the entire term of the contract and believe the financial results of WD Services are best viewed over a multi-year perspective.

Seasonality. While there has been period-to-period variability in WD Services' earnings due to the factors discussed above and also set forth in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations – Revenues and Expenses – WD Services", there has not been a material seasonal effect on WD Services' results of operations.

Competition. In the UK, Australia and Saudi Arabia, the workforce development market is served by large multi-national corporations and regional for-profit and non-profit entities. In Canada, France, Germany, South Korea, Spain, Switzerland, and the U.S., our competition primarily consists of small, privately owned companies. In the UK, the offender rehabilitation market is served by large corporations, often working with charitable sector providers. Our larger competitors include Maximus, Capita, G4S, Sodexo, Interserve, Seetec, The Reed Group, Staffline and Serco.

The market for services to governments is competitive and subject to change and pricing pressure, particularly during the bidding for new contracts and contract renewals. However, due to the critical nature of our offerings and the WD end-users we serve, market entry can be difficult for new entrants or those without prior established track-records. Other barriers to entry include operational service complexity and significant upfront investments. This can include establishment of complex IT systems, significant monitoring and reporting obligations, delivery from sites across wide geographies, and management and development of supply chains.

Business development. Our business development activities are performed both locally and centrally in WD Services' London headquarters. Through local and global networks and relationships, we become aware of new opportunities for which we develop bids through competitive processes. The nature of the competitive processes varies from highly competitive to being one of a few providers, or the sole provider, to bid on a contract. In late 2015, our bidding process was overhauled with an improved focus on pursuing only those contracts that meet certain investment criteria, including risk-weighted return on capital thresholds, and involve the provision of services where we believe our experience will allow us to deliver differentiated and improved outcomes for our clients.

In 2016, in order to build upon its leadership position in the UK employment services industry, enhance client satisfaction and drive greater operational efficiencies, WD Services launched the Ingeus Futures program. This program includes organizational restructuring, the development and deployment of new processes and technologies, and increased business development resources. Each aspect is aimed at improving operational efficiencies and client services as well as developing the internal capabilities necessary to ensure long-term profitable growth in the employment, training and healthcare industries. The implementation of the initiative is expected to be substantially completed during 2017.

Matrix Investment

On October 19, 2016, the Company completed a stock subscription transaction, pursuant to which affiliates of Frazier Healthcare Partners (the "Frazier Subscriber") purchased a 53.2% equity interest in Matrix with Providence retaining a 46.8% equity interest. On that same date, a subsidiary of the Company and the Frazier Subscriber entered into an Amended and Restated Limited Liability Company Agreement (the "Operating Agreement") of Mercury Parent, LLC, a newly formed company through which the parties hold their equity interests in Matrix. The Operating Agreement sets forth certain terms and conditions regarding the ownership by the Company and Frazier Subscriber of interests in Mercury Parent and their indirect ownership of common stock of Matrix, and provides for, among other things, certain liquidity and governance rights and other obligations and rights, in each case, on the terms and conditions contained therein.

Services offered. Matrix provides in-home care optimization and care management solutions, which include CHAs. Matrix utilizes a national network of over 1,100 nurse practitioners ("NPs"), located across 36 states, to provide its services primarily to members of Medicare Advantage ("MA") health plans.

Matrix primarily generates revenue from CHAs, which obtain a health plan members' information related to health status, social, environmental and medical risks and help the MA plans improve the accuracy of such information. Matrix's services typically commence with a member analysis that utilizes client data, such as medical claims data, to maximize its ability to improve client and member outcomes as a result of the assessment process. Through Matrix's contact centers, which include almost 175 colleagues, Matrix pursues additional data collection and schedules assessments. Matrix's NPs then spend approximately 60 minutes in the member's home conducting a CHA, which is comprised of a physical examination and other diagnostic services.

Matrix's services are dependent upon its technology platform which integrates the NP network, operations infrastructure, call centers and clients. Matrix's purpose-built platform is designed for the unique needs of its industry, is highly scalable and can support substantial growth. We believe Matrix's network and platform positions Matrix as a future focal point in the evolving healthcare industry in the introduction of both additional population insights and care management services. As a further step towards the provision of these additional data analytics and care management services, Matrix launched a chronic care management offering in 2015. With data provided by its health plan clients, Matrix utilizes analytics to determine for which members it can most effectively lower costs and improve outcomes through face-to-face engagements with clinicians. Each program is customized and is served by a comprehensive team of case managers, nurse practitioners, registered nurses, and trained call center colleagues.

Revenue, customers and clients. As of December 31, 2016, Matrix's customers included almost 40 health plans, including for-profit multi-state health plans and non-profit health plans that operate in only one state or several counties within one state. Matrix serves many of the largest and most prestigious health plans and health systems in the U.S. For the year ended December 31, 2016, Matrix's top five customers accounted for 71.8% of its revenue, and its largest customer accounted for 27.8% of its revenue. Matrix enters into annual or multi-annual contracts with its customers under which it is paid on a per assessment basis.

Seasonality. Matrix has historically experienced higher CHA volume in the second half of the calendar year as a result of an accelerating demand towards calendar year-end. However, in 2016, CHAs were performed more evenly throughout the year as Matrix worked to balance volume to more efficiently utilize NP capacity.

Competition. We believe that Matrix and CenseoHealth are the largest independent providers of CHAs to the health plan market. There are many smaller competitors, including Advance Health, EMSI Healthcare Services, MedXM, and Inovalon, Inc. Some health plans in-source CHA services. Matrix's chronic care management competitors include Landmark Healthcare, PopHealthcare and Optum.

Employees

In the execution of our holding company strategy, our holding company staff utilizes their experience in both public and private markets, previous operational leadership in a variety of industries, as well as other typical public holding company capabilities, including competencies in the areas of accounting, tax, human resources, information technology and legal. Our colleagues may also supplement our segment leadership teams in the areas of strategic development, operational and financial improvement, and cross segment sales or operational synergies on a selective basis.

As of December 31, 2016, there were approximately 30 employees at our holding company. In addition, as of December 31, 2016, we employed approximately 7,590 clinical, client service and administrative personnel. Of these employees, approximately 3,760 work in NET Services and approximately 3,830 work in WD Services.

None of our U.S. employees are members of a union. We have nearly 2,380 and 370 full-time employees in the UK and France, respectively. Certain of our UK employees are members of the NAPO and Unison unions and certain of our employees in France are members of the Confederation Generale du Travail. Unionized employees in both countries have collective bargaining rights. Participation in unions is confidential under European employment laws. We believe we have good relationships with our employees, both unionized and non-unionized, in the U.S. and internationally.

Regulatory Environment

Overview

Our segments are subject to numerous federal, state and local laws, regulations and agency guidance (collectively, "Laws"). These Laws significantly affect the way in which our segments operate various aspects of their businesses. Our segments must also comply with state and local licensing requirements, state and federal requirements for participation in Medicare and Medicaid, requirements for contracting with MA plans, and contractual requirements imposed upon them by the federal, state and local agencies and third-party commercial customers to which they provide services. Failure to follow the rules and requirements of these programs can significantly affect our segments' ability to be paid for the services they provide and be authorized to provide services on an ongoing basis.

In addition, our segments' revenue is largely derived from contracts that are directly or indirectly paid or funded by government agencies, including Medicare and Medicaid. A significant decline in government expenditures for such programs, or shift of program parameters or funding, could cause customers to reduce their payments under those contracts or to not renew such contracts, either of which could have a negative impact on our segments' future operating results. As funding for our contracts is dependent in part upon federal funding, such funding changes could have a significant effect on our business.

The Medicare and Medicaid programs are governed by significant and complex federal Laws. Because each of the Medicare and Medicaid is financed, at least in part, with federal funds, direct or indirect recipients of those funds are subject to federal fraud, waste and abuse Laws. In addition, there are federal privacy and security Laws that govern the healthcare industry. State Laws primarily pertain to the licensure of certain categories of healthcare professionals and providers and the state's interest in regulating the quality of healthcare in the state, regardless of the source of payment, but may also include state Laws pertaining to fraud, waste and abuse, privacy and security Laws, and the state's regulation of its Medicaid program. Federal or state regulatory laws that may affect our segments' businesses, include, but are not limited to the following:

- false and other improper claims or false statements pertaining to reimbursement;
- the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") and its privacy, security, breach notification and enforcement and code set regulations, along with evolving state laws protecting patient privacy and requiring notifications of unauthorized access to, or use of, patient medical information;
- civil monetary penalties law;
- anti-kickback laws;
- the Stark Law and other self-referral and financial inducement laws;
- CMS regulations pertaining to Medicare as well as CMS releases applicable to the operation of MA plans, such as reimbursement rates, risk adjustment and data collection methodologies, adjustments to quality management measurements and other relevant factors; and
- state licensure laws.

A violation of certain of these Laws could result in civil and criminal penalties, the refund of monies paid by government or private payers, our segments' exclusion from participation in federal healthcare payer programs, or the loss of our segments' license to conduct business within a particular state's boundaries. Although our segments believe that they are able to maintain material compliance with all applicable Laws, these Laws are complex and a review of our segments' practices by a court, or applicable law enforcement or regulatory authority, could result in an adverse determination that could harm our segments' businesses. Furthermore, the Laws applicable to our segments' businesses are subject to change, interpretation and amendment, which could adversely affect our segments' ability to conduct our business.

Federal Law

Federal healthcare laws apply in any case in which our segments are providing an item or service that is reimbursable or provide information to our segments' customers that results in reimbursement by a federal healthcare payer program to our segments or them. The principal federal Laws that affect our segments' businesses include those that prohibit the filing of false or improper claims or other data with federal healthcare payer programs and those that prohibit unlawful inducements for the referral of business reimbursable under federal healthcare payer programs.

False and Other Improper Claims

Under the federal False Claims Act (31 U.S.C. §§ 3729-3733) and similar state Laws, the government may impose civil liability on our segments if they knowingly submit, or participate in submitting, any claims for payment to the federal or state government that are false or fraudulent, or that contain false or misleading information. The False Claims Act defines a claim as a demand for money or property made directly to the government or to a contractor, grantee, or other recipient if the money is to be spent on the government's behalf or if the government will reimburse the contractor or grantee. Liability can be incurred for submitting (or causing another to submit) false claims with actual knowledge or for submitting false claims with reckless disregard or deliberate ignorance. Liability can also be incurred for knowingly making or using a false record or statement to receive payment from the federal government or for knowingly and improperly avoiding or decreasing an obligation to pay or transmit money or property to the government. Consequently, a provider need not take an affirmative action to conceal or avoid an obligation to the government, but the mere retention of an overpayment from the government could lead to potential liability under the False Claims Act.

If our segments are ever found to have violated the False Claims Act, they could be required to make significant payments to the government (including damages and penalties in addition to the return of reimbursements previously collected) and could be excluded from participating in federal healthcare programs or providing services to entities which contract with those programs. Many states also have similar false claims statutes. In addition, healthcare fraud is a priority of the U.S. Department of Justice, the Department of Health and Human Services ("DHHS"), its program integrity contractors and its Office of Inspector General, the Federal Bureau of Investigation and state Attorneys General. These agencies have devoted a significant amount of resources to investigating healthcare fraud.

While the criminal statutes generally are reserved for instances evidencing fraudulent intent, the civil and administrative penalty statutes are being applied by the federal government in an increasingly broad range of circumstances. Examples of the types of activities giving rise to liability for filing false claims include billing for services not rendered, misrepresenting services rendered (i.e., miscoding), applications for duplicate reimbursement and providing false information that results in reimbursement or impacts reimbursement amounts. Additionally, the federal government takes the position that a pattern of claiming reimbursement for unnecessary services violates these statutes if the claimant should have known that the services were unnecessary. The federal government also takes the position that claiming reimbursement for services that are substandard is a violation of these statutes if the claimant should have known that the care was substandard. Criminal penalties also are available even in the case of claims filed with private insurers if the federal government shows that the claims constitute mail fraud or wire fraud or violate any of the federal criminal healthcare fraud statutes.

State Medicaid agencies and state Attorneys General also have authority to seek criminal or civil sanctions for fraud and abuse violations. In addition, private insurers may bring actions under state false claim laws. In certain circumstances, federal and state laws authorize private whistleblowers to bring false claim or "qui tam" suits on behalf of the government against providers and reward the whistleblower with a portion of any final recovery. In addition, the federal government has engaged a number of private audit organizations to assist it in tracking and recovering claims for healthcare services that may have been improperly submitted.

Governmental investigations and whistleblower "qui tam" suits against healthcare companies have increased significantly in recent years, and have resulted in substantial penalties and fines and exclusions of persons and entities from participating in government healthcare programs. Although our segments monitor their billing practices for compliance with applicable laws, such laws are very complex, and they might not be able to detect all errors or interpret such laws in a manner consistent with a court or an agency's interpretation.

Health information practices

Under HIPAA, DHHS issued rules to define and implement standards for the electronic transactions and code sets for the submission of transactions such as claims, and privacy and security of individually identifiable health information in whatever manner it is maintained.

The Final Rule on Enforcement of the HIPAA Administrative Simplification provisions, including the transaction standards, the security standards and the privacy rule, published by DHHS addresses, among other issues, DHHS's policies for determining violations and calculating civil monetary penalties, how DHHS will address the statutory limitations on the imposition of civil monetary penalties, and various procedural issues. The rule extends enforcement provisions currently applicable to the healthcare privacy regulations to other HIPAA standards, including security, transactions and the appropriate use of service code sets.

The Health Information Technology for Economic and Clinical Health Act ("HITECH"), enacted as part of the American Recovery and Reinvestment Act of 2009, extends certain of HIPAA's obligations to parties providing services to healthcare entities covered by HIPAA known as "business associates," imposes new notice of privacy breach reporting obligations, extends enforcement powers to state attorney generals and amends the HIPAA privacy and security laws to strengthen the civil and criminal enforcement of HIPAA. HITECH establishes four categories of violations that reflect increasing levels of culpability, four corresponding tiers of penalty amounts that significantly increase the minimum penalty amount for each violation, and a maximum penalty amount of $1.5 million for all violations of an identical provision. With the additional HIPAA enforcement power under HITECH, the Office of Civil Rights of the Department of Health and Human Services and states are increasing their investigations and enforcement of HIPAA compliance. Our segments have taken steps to ensure compliance with HIPAA and we are monitoring compliance on an ongoing basis.

Additionally, the HITECH Final Rule imposes various requirements on covered entities and business associates, and expands the definition of "business associates" to cover contractors of business associates. Even when our segments are not operating as covered entities, they may be deemed to be "business associates" for HIPAA rule purposes of such covered entities. Our segments monitor their compliance obligations under HIPAA as modified by HITECH, and implement operational and systems changes, associate training and education, conduct risk assessments and allocate resources as needed. Any noncompliance with HIPPA requirements could expose our segments to the criminal and increased civil penalties provided under HITECH and require them to incur significant costs in order to seek to comply with its requirements or to remediate potential issues that may arise.

Federal and state anti-kickback laws

Federal law commonly known as the "Anti-Kickback Statute" prohibits the knowing and willful offer, solicitation, payment or receipt of anything of value (direct or indirect, overt or covert, in cash or in kind) which is intended to induce: the referral of an individual for a service for which payment may be made by Medicare, Medicaid or certain other federal healthcare programs; or the ordering, purchasing, leasing, or arranging for, or recommending the purchase, lease or order of, any service or item for which payment may be made by Medicare, Medicaid or certain other federal healthcare programs.

Interpretations of the Anti-Kickback Statute have been very broad and under current Law, courts and federal regulatory authorities have stated that the Anti-Kickback Statute is violated if even one purpose (as opposed to the sole or primary purpose) of the arrangement is to induce referrals. Even bona fide investment interests in a healthcare provider may be questioned under the Anti-Kickback Statute if the government concludes that the opportunity to invest was offered as an inducement for referrals.

This act is subject to numerous statutory and regulatory "safe harbors." Compliance with the requirements of a safe harbor offers defenses against Anti-Kickback Statute allegations. Failure of an arrangement to satisfy all of the requirements of a particular safe harbor does not mean that the arrangement is unlawful. However, it may mean that such an arrangement will be subject to scrutiny by the regulatory authorities.

While our segments believe that their operations are in compliance with applicable Medicare and Medicaid fraud and abuse laws, there can be no guarantee. Our segments seek to structure all applicable arrangements to comply with applicable safe harbors where possible. There is a risk however, that the federal government might investigate such arrangements and conclude they violate the Anti-Kickback Statute. If our segments' arrangements are found to violate the Anti-Kickback Statute, our segments, along with their clients would be subject to civil and criminal penalties, which may include exclusion from participation in government reimbursement programs, and our segments' arrangements would not be legally enforceable, which could materially and adversely affect their business.

Many states, including some where our segments do business, have adopted anti-kickback laws that are similar to the federal Anti-Kickback Statute. Some of these state laws are very closely patterned on the federal Anti-Kickback Statute; others, however, are broader and reach reimbursement by private payers. If our segments' activities were deemed to be inconsistent with state anti-kickback or illegal remuneration laws, they could face civil and criminal penalties or be barred from such activities, any of which could harm our segments' businesses.

Federal and State Self-Referral Prohibitions

Our segments may be subject to federal and state statutes banning payments for referrals of patients and referrals by physicians to healthcare providers with whom the physicians have a financial relationship. Section 1877 of the Social Security Act, also known as the "Stark Law", prohibits physicians from making a "referral" for "designated health services" for Medicare (and in many cases Medicaid) patients from entities or facilities in which such physicians directly or indirectly hold a "financial relationship".

A financial relationship can take the form of a direct or indirect ownership, investment or compensation arrangement. A referral includes the request by a physician for, or ordering of, or the certifying or recertifying the need for, any designated health services.

Certain services that our segments provide may be identified as "designated health services" for purposes of the Stark Law. Our segments cannot provide assurance that future regulatory changes will not result in other services our segments provide becoming subject to the Stark Law's ownership, investment or compensation prohibitions in the future.

Many states, including some states where our segments do business, have adopted similar or broader prohibitions against payments that are intended to induce referrals of clients. Moreover, many states where our segments operate have laws similar to the Stark Law prohibiting physician self-referrals. While our segments believe that they are operating in compliance with the Stark Law, there can be no guarantee that violations will not occur.

Healthcare Reform

On March 23, 2010, the President of the United States signed into law comprehensive health reform through the Patient Protection and Affordable Care Act (Pub. L. 11-148) ("PPACA"). On March 30, 2010, the President signed a reconciliation budget bill that included amendments to the PPACA (Pub. L. 11-152). These laws in combination form the "ACA" referred to herein. The changes to various aspects of the healthcare system in the ACA are far-reaching and include, among many others, substantial adjustments to Medicare reimbursement, establishment of individual mandates for healthcare coverage, extension of coverage to certain populations, expansion of Medicaid, restrictions on physician-owned hospitals, and increased efficiency and oversight provisions.

Some of the provisions of the ACA took effect immediately, while others will take effect later or will be phased in over time, ranging from a few months following approval to ten years. Due to the complexity of the ACA, it is likely that additional legislation will be considered and enacted. The ACA requires the promulgation of regulations that will likely have significant effects on the healthcare industry and third party payers. Thus, the healthcare industry and our operations may be subjected to significant new statutory and regulatory requirements and contractual terms and conditions, and consequently to structural and operational changes and challenges.

The ACA also implements significant changes to healthcare fraud and abuse laws that will intensify the risks and consequences of enforcement actions. These include expansion of the False Claims Act by: (a) narrowing the public disclosure bar; and (b) explicitly stating that violations of the Anti-Kickback Statute trigger false claims liability. In addition, the ACA lessens the intent requirements under the Anti-Kickback Statute to provide that a person may violate the statute without knowledge or specific intent. The ACA also provides new funding and expanded powers to investigate fraud, including through expansion of the Medicare Recovery Audit Contractor ("RAC") program to Medicare Parts C and D and Medicaid and authorizing the suspension of Medicare and Medicaid payments to a provider of services pending an investigation of a credible allegation of fraud. Finally, the legislation creates enhanced penalties for noncompliance, including increased criminal penalties and expansion of administrative penalties under Medicare and Medicaid. Collectively, such changes could have a material adverse impact on our segments' operations.

On January 20, 2017, U.S. President Donald J. Trump issued an executive order that directs federal agencies to take steps to ensure the government's implementation of the ACA minimizes the burden on impacted parties (individuals, states, etc.). The underlying intent of the executive order is to take the first steps to repeal and replace the ACA. The executive order specifically instructs agencies to "waive, defer, grant exemptions from, or delay implementation of provisions" that place a "fiscal burden on any State" or that impose a "cost, fee, tax, penalty, or regulatory burden" on stakeholders including patients, providers, and insurers. The order states that any changes should be made only to the extent "permitted by law" and should comply with the law governing administrative rule-making. The executive order does not, however, provide specifics on next steps or provisions that will be reexamined nor is it clear how the executive branch will be reconciled with Republican congressional efforts to repeal and replace the ACA or what portions of the ACA may continue in any replacement legislation. There are multiple pending legislative proposals to amend the ACA which, among other effects, could repeal all or parts of the ACA without replacing its extension of coverage to expansion populations and materially restructure the Medicaid and other government health care programs.

Surveys and audits

Our segments' programs are subject to periodic surveys by government authorities or their contractors to ensure compliance with various requirements. Regulators conducting periodic surveys often provide reports containing statements of deficiencies for alleged failures to comply with various regulatory requirements. In most cases, if a deficiency finding is made by a reviewing agency, our segments will work with the reviewing agency to agree upon the steps to be taken to bring our program into compliance with applicable regulatory requirements. In some cases, however, an agency may take a number of adverse actions against a program, including:

- the imposition of fines or penalties or the recoupment of amounts paid;
- temporary suspension of admission of new clients to our program's service;
- in extreme circumstances, exclusion from participation in Medicaid, Medicare or other programs;
- revocation of our license; or

- contract termination.

While our segments believe that our programs are in compliance with Medicare, Medicaid and other program certification requirements and state licensure requirements, failure to comply with these requirements could have a material adverse impact on our segments' businesses and their ability to enter into contracts with other agencies to provide services.

Billing/claims reviews and audits

Agencies and other third-party commercial payers periodically conduct pre-payment or post-payment medical reviews or other audits of our segments' claims or other audits in conjunction with their obligations to comply with the requirements of Medicare or Medicaid. In order to conduct these reviews, payers request documentation from our segments and then review that documentation to determine compliance with applicable rules and regulations, including the eligibility of clients to receive benefits, the appropriateness of the care provided to those clients, and the documentation of that care. Any determination that our segments have not complied with applicable rules and regulations could result in adjustment of payments or the incurrence of fines and penalties, or in situations of significant compliance failures review or non-renewal of related contracts.

Corporate practice of medicine and fee splitting

Some states in which our segments operate prohibit general business entities, such as our segments are, from "practicing medicine," which definition varies from state to state and can include employing physicians, as well as engaging in fee-splitting arrangements with these healthcare providers. Among other things, our segments currently contract with and employ NPs to perform CHAs. We believe that our segments have structured their operations appropriately; however, they could be alleged or found to be in violation of some or all of these laws. If a state determines that some portion of our segments' businesses violate these laws, it may seek to have our segments discontinue or restructure those portions of their operations or subject them to increased costs, penalties, fines, certain license requirements or other measures. Any determination that our segments have acted improperly in this regard may result in liability to them. In addition, agreements between the corporation and the professional may be considered void and unenforceable.

Professional licensure and other requirements

Many of our segments' employees are subject to federal and state laws and regulations governing the ethics and practice of their professions. For example, our mid-level practitioners (e.g., NPs) are subject to state laws requiring physician supervision and state laws governing mid-level scope of practice. As the use of mid-levels by physicians increases, state governing boards are implementing more robust regulations governing mid-levels and their scope of practice under physician supervision. Our segments' ability to provide mid-level practitioner services may be restricted by the enactment of new state laws governing mid-level scope of practice and by state agency interpretations and enforcement of such existing laws. In addition, professionals who are eligible to participate in Medicare and Medicaid as individual providers must not have been excluded from participation in government programs at any time. Our segments' ability to provide services depends upon the ability of their personnel to meet individual licensure and other requirements and maintain such licensure in good standing.

International Regulation of WD Services

As a provider of workforce development services in multiple international jurisdictions, we are subject to numerous national and local laws and regulations. These laws and regulations significantly affect the way in which we operate various aspects of our business. We must also comply with contract-specific technical and infrastructure requirements. Failure to follow the rules and requirements of these programs can significantly affect our ability to be paid for the services we provide. In addition, our revenue is primarily derived from contracts that are funded by national governments that are seeking to reduce the overall unemployment rate, or improve job placement success for targeted cohorts, and the recidivism rate. Further, the revenue we receive from these contracts is typically tied to milestones that are largely uncontrolled by us. Such milestones include the job placement success of clients, duration and tenure of clients in jobs once they are placed, and various other market and industry factors including the overall unemployment rate. A significant decline in national and local government initiatives to provide funding for employment programs, or shift of expenditures or funding, could cause government sponsors to reduce their expenditures under those contracts or not renew such contracts, either of which could have a negative impact on our future operating results.

WD Services is also subject to the European Union's and other countries' data security and protection laws and regulations. These laws and regulations impose broad obligations on the organizations which collects such data, as well as confer broad rights on individuals about whom such data is collected. These laws and regulations may also restrict the flow of information, including information about employees or service users, from this segment to the Company in the U.S. In certain instances, informed consent to the data transfer must be given by the affected employee or service user. Compliance with such laws and regulations may make it more difficult for the Company to gather data necessary to ensure the appropriate operation of its internal controls or to detect corruption resulting in the need for additional controls or increasing the Company's costs to maintain appropriate controls.

Failure to comply with such laws and regulations could result in fines, penalties or prison sentences as well as significant adverse publicity.

Further, our international operations are subject to various U.S. and foreign statutes that prohibit bribery and corruption, including the U.S. Foreign Corrupt Practices Act and the UK's Bribery Act. These statutes generally require organizations to prohibit bribery by or for the organization and demand the implementation of systems to counter bribery, including risk management, training and guidance and the maintenance of adequate record-keeping and internal accounting practices. The statutes also, among other things, prevent the provision of anything of value to government officials for the purposes of influencing official decisions or obtaining or retaining business or otherwise obtaining favorable treatment. In addition, many countries in which we operate have antitrust or competition regulations which, among other things, prohibit collusive tendering or bid-rigging behavior. Failure to comply with any of these statutes and regulations could result in fines or penalties, or in some cases prison sentences, and could result in significant adverse publicity.

Additional Information

The Company's website at www.prscholdings.com provides access to its periodic reports, certain corporate governance documents, press releases, interim shareholder reports and links to its subsidiaries' websites. The Company makes available to the public on its website its annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after it electronically files such material with, or furnishes such material to, the SEC. Copies are also available, without charge, upon request to The Providence Service Corporation, 700 Canal Street, Third Floor, Stamford, CT 06902, (203) 307-2800, Attention: Corporate Secretary. The information contained on our website is not part of, and is not incorporated by reference in, this Annual Report on Form 10-K or any other report we file with or furnish to the SEC.

Item 1A. ***Risk Factors.***

You should consider and read carefully all of the risks and uncertainties described below, as well as other information included in this Annual Report on Form 10-K, including our consolidated financial statements and related notes. The risks described below are not the only ones facing us. The occurrence of any of the following risks or additional risks and uncertainties not presently known to us or that we currently believe to be immaterial could materially and adversely affect our business, financial condition and results of operations. This Annual Report on Form 10-K also contains forward-looking statements and estimates that involve risks and uncertainties. Our actual results could differ materially from those anticipated in any forward-looking statements as a result of specific factors, including the risks and uncertainties described below.

Risks Related to Our Business

Certain of our segments' contracts can be terminated prior to expiration, without cause and without penalty to the payers. In addition, our NET Services contracts are subject to frequent renewal. There can be no assurance that our contracts will survive until the end of their stated terms, or that upon their expiration will be renewed or extended on satisfactory terms, if at all. Disruptions to, the early expiration of or the failure to renew our contracts could have a material adverse impact on our financial condition and results of operations.

With respect to many of our contracts, the payer may terminate the contract without cause, at will and without penalty to the payer, either immediately or upon the expiration of a short notice period in the event that, among other reasons, government appropriations supporting the programs serviced by the contract are reduced or eliminated or the payer deems our performance under the contract to be unsatisfactory. The failure of payers to renew or extend significant contracts or their early termination of significant contracts could adversely affect our financial performance. For example, many of the state Medicaid contracts held by NET Services, which represented 58.9% in the aggregate of NET Services revenue for the year ended December 31, 2016, have terms ranging from two to five years and are typically subject to a competitive bidding process near the end of the term. Typically, approximately 20% of revenue generated by NET Services under state government contracts in a twelve-month period is subject to renewal within the following twelve-month period, although this percentage can be much higher, as certain contracts represent a significant portion of revenue. NET Services also contracts with MCOs. For the year ended December 31, 2016, contracts with MCOs represented 41.1% in the aggregate of NET Services revenue. MCO contracts are typically of indefinite duration until terminated by either party upon reasonable notice (as determined in accordance with the contract). We cannot anticipate if, when or to what extent we will be successful in renewing our state government contracts or retaining our MCO contracts. During 2016, certain state government clients notified NET Services that their existing contracts will not be renewed, which we expect to result in a decline in operating income as a percentage of revenue of at least approximately 100 to 125 basis points, beginning in the first quarter of 2017. While we pursue new contract awards and also undertake efficiency measures, there can be no assurance that such measures will fully offset the impact of contracts that are not renewed or are cancelled on our operating income and results of operations.

We cannot anticipate if, when or to what extent a payer might terminate its contract with us prior to its expiration or fail to renew or extend a contract with us. If we are unable to retain or renew our contracts, or replace lost contracts, on satisfactory terms our financial conditions and results of operations could be materially adversely affected.

We obtain a significant portion of our business through responses to government requests for proposals and we may not be awarded contracts through this process in the future, or contracts we are awarded may not be profitable.

We obtain, and will continue to seek to obtain, a significant portion of our business from national, state, and local government entities. To obtain business from government entities, we are often required to respond to requests for proposals ("RFPs"). To propose effectively, we must accurately estimate our cost structure for servicing a proposed contract, the time required to establish operations and the terms of the proposals submitted by competitors. We must also assemble and submit a large volume of information within rigid and often short timetables. Our ability to respond successfully to RFPs will greatly impact our business.

To facilitate our ability to procure or retain government-sponsored contracts, we rely in part on establishing and maintaining relationships with officials of various government entities and agencies. These relationships enable us to provide informal input and advice to the government entities and agencies prior to the development of an RFP or program for privatization of healthcare and workforce development services and we believe they enhance our chances of procuring contracts with these payers. We may be unable to successfully manage our relationships with government entities and agencies and with elected officials and appointees due to, among other things, changes in the personnel holding various government offices or changes in our personnel who have these relationships. Any failure to establish, maintain or manage relationships with government and agency personnel may hinder our ability to procure or retain government-sponsored contracts.

Our ability to win contracts to administer and manage programs traditionally administered by government employees is also dependent on the impact of government unions. Many government employees belong to labor unions with considerable financial resources and lobbying networks. These unions could apply opposing political pressure on legislators and other officials seeking to privatize government programs. Union opposition could result in our losing government contracts, being precluded from providing services under government contracts, or maintaining or renewing existing contracts. If we could not renew certain contracts or obtain new contracts due to opposition political actions, it could have a material adverse impact on our operating results.

Any acquisition that we undertake could be difficult to integrate, disrupt our business, dilute stockholder value or have a material adverse impact on our operating results.

We have made, and anticipate that we will continue to make, acquisitions. We have made a number of acquisitions since our inception. The success of these and future acquisitions depends in part on our ability to integrate acquired companies into our business operations. Integration of any acquired companies will place significant demands on our management, systems, internal controls and financial and physical resources. This could require us to incur significant expense for, among other things, hiring additional qualified personnel, retaining professionals to assist in developing the appropriate control systems and expanding our information technology infrastructure. The nature of our business is such that qualified management personnel can be difficult to find. Our inability to manage growth effectively could have a material adverse effect on our financial results.

There can be no assurance that the companies acquired will generate income at the historical or projected levels on which we based our acquisition decisions, that we will be able to maintain or renew the acquired companies' contracts, that we will be able to realize operating and economic efficiencies upon integration of acquired companies or that the acquisitions will not adversely affect our results of operations or financial condition.

We continually review opportunities to acquire other businesses that would complement our current services, expand our markets or otherwise offer prospects for growth. In connection with our acquisition strategy, we could issue stock that would dilute existing stockholders' percentage ownership, or we could incur or assume substantial debt or contingent liabilities. Acquisitions involve numerous risks, including, but not limited to, the following:

- challenges and unanticipated costs assimilating the acquired operations;
- known and unknown legal or financial liabilities associated with an acquisition;
- diversion of management's attention from our core businesses;
- adverse effects on existing business relationships with customers;
- entering markets in which we have limited or no experience;
- potential loss of key employees of purchased organizations;
- incurrence of excessive leverage in financing an acquisition;
- failure to maintain and renew contracts and other revenue streams of the acquired business;
- costs associated with litigation or other claims arising in connection with the acquired company;
- unanticipated operating, accounting or management difficulties in connection with an acquisition; and
- dilution to our earnings per share.

We cannot assure you that we will be successful in overcoming problems encountered in connection with any acquisition and our inability to do so could disrupt our operations and adversely affect our business. Our failure to address these risks or other problems encountered in connection with past or future acquisitions and investments could cause us to fail to realize the anticipated benefits of such acquisitions or investments, incur unanticipated liabilities and harm our business generally.

Our investments in joint ventures and unconsolidated entities could be adversely affected by our lack of sole decision-making authority, our reliance on our joint venture partners' financial condition, any disputes that may arise between us and our joint venture partners and our exposure to potential losses from the actions of our joint venture partners.

In October 2016, we completed the Matrix Transaction, pursuant to which we retained a 46.8% equity interest in Matrix, but sold our controlling interest in Matrix, which constituted our former HA Services segment. As a result of the Matrix Transaction we no longer have unilateral power to direct the activities that most significantly impact Matrix's economic performance. In November 2014, we entered into a joint venture agreement to form Mission Providence, whereby we have a 60% ownership in Mission Providence and rights to 75% of Mission Providence's distributions of cash or profit surplus twice per calendar year, but do not have unilateral power to direct the activities that most significantly impact Mission Providence's economic performance. Our future growth may depend, in part, on future similar arrangements, any of which could be material to our financial condition and results of operations. These arrangements involve risks not present with respect to our wholly-owned subsidiaries, which may negatively impact our financial condition and results of operations or make the arrangements less successful than anticipated, including the following:

- we may be unable to take actions that we believe are appropriate but that are opposed by our joint venture partners under arrangements that require us to cede or share decision-making authority over major decisions affecting the ownership or operation of the joint venture and any property owned by the joint venture, such as the sale or financing of the business or the making of additional capital contributions for the benefit of the business;
- our joint venture partners may take actions that we oppose;
- we may be unable to sell or transfer our interest in a joint venture to a third party if we fail to obtain the prior consent of our joint venture partners;

- our joint venture partners may become bankrupt or fail to fund their share of required capital contributions, which could adversely impact the joint venture or increase our financial commitment to the joint venture;
- our joint venture partners may have business interests or goals with respect to a business that conflict with our business interests and goals, including with respect to the timing, terms and strategies for investment, which could increase the likelihood of disputes regarding the ownership, management or disposition of the business;
- disagreements with our joint venture partners could result in litigation or arbitration that increases our expenses, distracts our officers and directors, and disrupts the day-to-day operations of the business, including the delay of important decisions until the dispute is resolved; and
- we may suffer losses as a result of actions taken by our joint venture partners with respect to our joint venture investments.

We derive a significant amount of our revenues from a few payers, which puts our financial condition and results of operations at risk. Any changes in the funding, financial viability or our relationships with these payers could have a material adverse impact on our financial condition and results of operations.

We generate a significant amount of the revenues in our segments from a few payers under a small number of contracts. For example, for the years ended December 31, 2016, 2015 and 2014, we generated 47.9%, 54.6% and 58.1%, respectively, of our consolidated revenue from ten payers. Additionally, five payers related to NET Services represented, in the aggregate, 35.6%, 39.2% and 43.2%, respectively, of NET Services revenue for the years ended December 31, 2016, 2015 and 2014. A single payer related to WD Services represented 28.9%, 40.0% and 57.2% of our WD Services revenue for the years ended December 31, 2016 and 2015, and the period from May 31, 2014 to December 31, 2014, respectively. Additionally, a single payer related to Matrix represented 27.8%, 31.1% and 43.2% of Matrix revenue for the years ended December 31, 2016 and 2015, and the period from October 24, 2014 to December 31, 2014, respectively. The loss of, reduction in amounts generated by, or changes in methods or regulations governing payments for our services under these contracts could have a material adverse impact on our revenue and results of operations. In addition, any consolidation of any of our private payers could increase the impact that any such risks would have on our revenue and results of operations.

If we fail to satisfy our contractual obligations, we could be liable for damages and financial penalties, which may place existing pledged performance and payment bonds at risk as well as harm our ability to keep our existing contracts or obtain new contracts and future bonds.

Our failure to comply with our contractual obligations could, in addition to providing grounds for immediate termination of the contract for cause, negatively impact our financial performance and damage our reputation, which, in turn, could have a material adverse effect on our ability to maintain current contracts or obtain new ones. Our failure to meet contractual obligations could also result in substantial actual and consequential financial damages. The termination of a contract for cause could, for instance, subject us to liabilities for excess costs incurred by a payer in obtaining similar services from another source. In addition, our contracts require us to indemnify payers for our failure to meet standards of care, and some of them contain liquidated damages provisions and financial penalties that we must pay if we breach these contracts.

If we fail to estimate accurately the cost of performing certain contracts, we may experience reduced or negative margins.

During 2016, 2015 and 2014, 78.3%, 83.6% and 84.1% of our NET Services revenue, respectively, was generated under capitated contracts with the remainder generated through FFS and flat fee contracts. WD Services also provides services under FFS and flat fee contracts. Under most of NET Services' capitated contracts, we assume the responsibility of managing the needs of a specific geographic population by contracting out transportation services to local transportation companies on a per ride or per mile basis. We use "pricing models" to determine applicable contract rates, which takes into account factors such as estimated utilization, state specific data, previous experience in the state or with similar services, the medically covered programs outlined in the contract, identified populations to be serviced, estimated volume, estimated transportation provider rates and availability of mass transit. The amount of the fixed per-member, monthly fee is determined in the bidding process, but is predicated on actual historical transportation data for the subject geographic region as provided by the payer, actuarial work performed in-house as well as by third party actuarial firms and actuarial analyses provided by the payer. If the utilization of our services is more than we estimated, the contract may be less profitable than anticipated, or may not be profitable at all. Under our FFS contracts, we receive fees based on our interactions with government-sponsored clients. To earn a profit on these contracts, we must accurately estimate costs incurred in providing services. Our risk relating to these contracts is that our client population is not large enough to cover our fixed costs, such as rent and overhead. Our FFS contracts are not reimbursed on a cost basis and therefore, if we fail to estimate our costs accurately, we may experience reduced margins or losses on these contracts. Revenue under certain contracts may be adjusted prospectively if client volumes are below expectations. If the Company is unable to adjust its costs accordingly, our profitability may be negatively impacted. In addition, certain contracts with state Medicaid agencies are renewable at the state's option without an adjustment to pricing terms. If such renewed contracts require us to incur higher costs, including inflation or regulatory changes, than originally anticipated, our results of operations and financial condition may be adversely affected.

In WD Services, we often provide services to a client based on a unit price for delivery of a service or achievement of a defined outcome. If we fail to estimate costs accurately, we may have minimal ability to change the unit price to ensure profitability. While we may be able to alter our cost structure to reflect lower than anticipated volumes and other changes in service need, there are certain fixed costs which are difficult to alter while still ensuring we can meet our contractual obligations. Further, many contracts require us to undertake significant onboarding projects, including making redundancies and changes to properties and IT. If we fail to anticipate the cost of these change programs, we may be unable to recover startup costs throughout the life of the contract.

We may incur costs before receiving related revenues, which could impact our liquidity.

When we are awarded a contract to provide services, we may incur expenses before we receive any contract payments. These expenses include leasing office space, purchasing office equipment, instituting information technology systems, development of supply chains, hiring personnel and releasing certain personnel. As a result, in certain contracts where the government does not fund program start-up costs, we may be required to make significant investments before receiving any related contract payments or payments sufficient to cover start-up costs. For example, WD Services incurred start-up costs in 2016 related to the offender rehabilitation program in the UK, start-up costs in France, and in certain employability contracts in Australia. In addition, payments due to us from payers may be delayed due to billing cycles or as a result of failures to approve government budgets in a timely manner. Moreover, any resulting mismatch in expenses and revenue, especially under FFS arrangements, could be exacerbated if we fail either to invoice the payer correctly or to collect our fee in a timely manner. Such amounts may exceed our available cash, and any resulting liquidity shortages may require additional financing, which may not be available on satisfactory terms, or at all. This could have a material adverse impact on our ongoing operations and our financial position.

Our business is subject to risks of litigation.

The services we provide are subject to lawsuits and claims. A substantial award payable by the Company could have a material adverse impact on our operations and cash flows, and could adversely impact our ability to continue to purchase appropriate liability insurance. We can be subject to claims for negligence or intentional misconduct (in addition to professional liability type claims) by an employee or a third party we engage to assist with the provision of services, including but not limited to claims arising out of accidents involving vehicle collisions, workforce development placements or CHAs and various claims that could result from employees or contracted third parties driving to or from interactions with clients or while providing direct client services. We can be subject to employee-related claims such as wrongful discharge, discrimination or a violation of equal employment laws and permitting issues. While we attempt to insure against for these types of claims, damages exceeding our insurance limits or outside our insurance coverage, such as a claim for fraud, certain wage and hour violations or punitive damages, could adversely affect our cash flow and financial condition.

We depend on our key personnel. We face substantial competition in attracting and retaining experienced professionals, and we may be unable to sustain or grow our business if we cannot attract and retain qualified employees.

Our success depends to a significant degree on our ability to identify, attract, develop, motivate and retain highly qualified and experienced professionals who possess the skills and experience necessary to deliver high-quality services to our clients, with the continued contributions of our senior management being especially critical to our success. Our objective of providing the highest quality of service to our clients is a significant consideration when we evaluate the education, experience and qualifications of potential candidates for employment as direct care and administrative staff. To that end, we attempt to hire professionals and others with requisite educational backgrounds and professional certifications. These employees are in great demand and are likely to remain a limited resource for the foreseeable future.

Our ability to attract and retain employees with the requisite experience and skills depends on several factors including, but not limited to, our ability to offer competitive wages, benefits and professional growth opportunities. While we have established programs to attract new employees and provide incentives to retain existing employees, particularly our senior management, we cannot assure you that we will be able to attract new employees or retain the services of our senior management or any other key employees in the future. Some of the companies with which we compete for experienced personnel have greater financial, technical, political and marketing resources, name recognition and a larger number of clients and payers than we do, which may prove more attractive to employment candidates. The inability to attract and retain experienced personnel could have a material adverse effect on our business.

The performance of each of our business segments also depends on the talents and efforts of our highly skilled information technology professionals. For example, technological improvement is a key component of the strategic initiative at NET Services to enhance member satisfaction and drive greater operational efficiencies and as NET Services expands our transportation network capacity beyond its traditional transportation provider network, increases on-time and on-demand performance, provides real time analytics and minimizes cancellations. Competition for skilled intellectual technology professionals can be intense. Our success depends on our ability to recruit, retain and motivate these individuals.

Effective succession planning is also important to our future success. If we fail to ensure the effective transfer of senior management knowledge and smooth transitions involving senior management across our various businesses, including NET Services, whose chief executive officer stepped down in January 2017, our ability to execute short and long-term strategic, financial and operating goals, as well as our business, financial condition and results of operations generally, could be adversely affected.

We may have difficulty successfully completing divestitures.

As demonstrated in 2016 with the Matrix Transaction and in 2015 with the Human Services Sale, we may dispose of all or a portion of current or future investments, based on a variety of factors, including availability of alternative opportunities to deploy capital or otherwise maximize shareholder value as well as other strategic considerations. Divestitures could result in difficulties in the separation of operations, services, products and personnel, the diversion of management's attention, the disruption of our business and the potential loss of key employees and customers. A disposition may be subject to the satisfaction of pre-closing conditions as well as to obtaining necessary regulatory and government approvals, which, if not satisfied or obtained, may prevent us from completing the disposition, whether or not the disposition has been publicly announced. Divestitures may also involve continued financial involvement in the divested assets and businesses, such as indemnities or other financial obligations, in which the performance of the divested assets or businesses could impact our results of operations. Further, such divestitures may result in proceeds to us in an amount less than we expect or less than our assessment of the value of those assets. Any sale of our assets could result in a loss on divestiture. Any of the foregoing could adversely affect our financial condition and results of operations.

The indemnification provisions of acquisition and disposition agreements by which we have acquired or sold companies may result in liabilities.

We rely heavily on the representations and warranties and related indemnities provided to us by the sellers of acquired companies, including as they relate to creation, ownership and rights in intellectual property and compliance with laws and contractual requirements. However, the liability of the former owners is limited under the relevant acquisition agreements, and certain sellers may be unable to meet their indemnification responsibilities. Similarly, the purchasers of our divested operations may from time to time agree to indemnify us for operations of such businesses after the closing. We cannot be assured that any of these indemnification provisions will fully protect us, and as a result we may face unexpected liabilities that adversely affect our consolidated results of operations, financial condition and cash flows.

In addition, we have provided certain indemnifications in connection with the Human Services Sale in 2015 and the Matrix Transaction in 2016. To the extent we choose to divest other operations of our businesses in the future, we expect to provide certain indemnifications in connection with these divestitures. We may face liabilities in connection with these current or future indemnification obligations that may adversely affect our consolidated results of operation, financial condition and cash flows. The Company has received indications from the purchaser of its former Human Services segment regarding certain potential indemnification claims. As of December 31, 2016, the Company had established an accrual of $6 million with respect to an estimate of loss for such potential indemnification claims. Such purchaser has also threatened to assert other claims against the Company related to the acquisition, which the Company intends to vigorously defend itself against. Litigation is inherently uncertain, and the losses incurred in the event that the legal proceedings related to such claims were to result in unfavorable outcomes could have a material adverse effect on the Company's business and financial performance. For more information on these potential indemnification obligations, see Note 19, *Commitments and Contingencies*, to our consolidated financial statements.

Our success depends on our ability to compete effectively in the marketplace.

We compete for clients and for contracts with a variety of organizations that offer similar services. Many organizations of varying sizes compete with us, including local not-for-profit organizations and community-based organizations, larger companies, organizations that currently provide or may begin to provide similar NET management services, and large multi-national corporations that currently provide or may begin to provide workforce development services and CHA providers. Some of these companies have greater financial, technical, political, marketing, name recognition and other resources and a larger number of clients or payers than we do. In addition, some of these companies offer more services than we do. We have experienced, and expect to continue to experience, competition from new entrants into the markets in which we operate. Increased competition may result in pricing pressures, loss of or failure to gain market share or loss of or failure to gain clients or payers, any of which could have a material adverse effect on our operating results.

We may be adversely impacted by inadequacies in, or security breaches of, our information technology systems.

Our information technology systems are critically important to our operations. We provide services to individuals, including services that require us to maintain sensitive and personal client information, including information relating to their health, social security numbers and other identifying data. Therefore, our information technology systems store client information protected by numerous federal, state and foreign regulations. We also rely on our information technology systems (some of which are outsourced to third parties) to manage the data, communications and business processes for all other functions, including our marketing, sales, logistics, customer service, accounting and administrative functions. Further, our systems include interfaces to third-party stakeholders, often connected via the Internet. In addition, certain of our services or information related to our services are carried out or hosted within our customers' IT systems, and any failure or weaknesses in their IT systems may negatively impact our ability to deliver the services, for which we may not receive relief from contractual performance obligations or compensation for services provided. As a result of the data we maintain and third-party access, we are subject to increasing cybersecurity risks. The nature of our business, where services are often performed outside a secured location, adds additional risk.

If we do not allocate and effectively manage the resources necessary to build, sustain and protect an appropriate technology infrastructure, our business or financial results could be negatively impacted. Furthermore, computer hackers and data thieves are increasingly sophisticated and operate large scale and complex automated attacks and our information technology systems may be vulnerable to material security breaches (including the access to or acquisition of customer, employee or other confidential data), cyber-based attacks or other material system failures. Any breach of our data security could result in an unauthorized release or transfer of customer or employee information, or the loss of valuable business data or cause a disruption in our business. These events could give rise to unwanted media attention, damage our reputation, damage our customer relationships and result in lost sales, fines or lawsuits. We may also be required to expend significant capital and other resources to protect against or respond to or alleviate problems caused by a security breach. If we are unable to prevent material failures, our operations may be impacted, and we may suffer other negative consequences such as reputational damage, litigation, remediation costs, a requirement not to operate our business until defects are remedied or penalties under various data privacy laws and regulations.

There are risks associated with our international operations that are different from the risks associated with our operations in the U.S., and our exposure to the risks of a global market could hinder our ability to maintain and expand international operations.

We have operation centers in Australia, Canada, France, Germany, Saudi Arabia, South Korea, Spain, Switzerland, the UK and the U.S. We also expect to launch operations in Singapore in 2017. In implementing our international strategy, we may face barriers to entry and competition from local companies and other companies that already have established global businesses, as well as the risks generally associated with conducting business internationally. The success and profitability of international operations are subject to numerous risks and uncertainties, many of which are outside of our control, such as:

- political or economic instability;
- changes in governmental regulation or taxation;
- currency exchange fluctuations;
- difficulties and costs of staffing and managing operations in certain foreign countries;
- work stoppages or other changes in labor conditions; and
- taxes and other restrictions on repatriating foreign profits back to the U.S.

In addition, changes in policies or laws of the U.S. or foreign governments resulting in, among other changes, higher taxation, tariffs or similar protectionist laws could reduce the anticipated benefits of international operations and could have a material adverse effect on our results of operations and financial condition. We have currency exposure arising from both sales and purchases denominated in foreign currencies, including intercompany transactions outside the U.S., and we currently do not conduct hedging activities. The value of the U.S. dollar against other foreign currencies has seen significant volatility recently. Our financial condition and results of operations are reported in multiple currencies, and are then translated into U.S. dollars at the applicable exchange rate for inclusion in our consolidated financial statements. Appreciation of the U.S. dollar against these other currencies will have a negative impact on our reported net revenue and operating income while depreciation of the U.S. dollar against such currencies will have a positive effect on reported net revenue and operating income. We cannot predict with precision the effect of future exchange-rate fluctuations on our business and operating results, and significant rate fluctuations could have a material adverse effect on our results of operations and financial condition.

We operate and are in a taxable income position in multiple tax jurisdictions, and face the risk of double taxation if one jurisdiction does not acquiesce to the tax claims of another jurisdiction.

We currently operate in the U.S. and 9 foreign countries and are subject to income taxation in those countries and the specific states or provinces where we operate. In the event one taxing jurisdiction disagrees with another taxing jurisdiction with respect to the amount or applicability of a particular type of tax, or the amount or availability of a particular type of tax refund or credit, we could experience temporary or permanent double taxation and increased professional fees to resolve such taxation matters.

Our results of operations will continue to fluctuate due to seasonality.

Our quarterly operating results and operating cash flows normally fluctuate as a result of seasonal variations in our business. NET Services experiences fluctuations in demand for its non-emergency transportation services during the summer and winter seasons. Due to higher demand in the summer months and lower demand in the winter months, coupled with a primarily fixed revenue stream based on a per-member, per-month payment structure, NET Services normally experiences lower operating margins during the summer season and higher operating margins during the winter season. WD Services is impacted by both the timing of commencement and expiration of major contracts. WD Services and Matrix Investment typically do not experience seasonal fluctuations in operating results. However, quarterly volatility in revenue and earnings is common in the case of WD Services due to the timing of commencement and expiration of certain major contracts as well as fluctuations in referrals provided by its customers. In addition, Matrix Investment experiences quarterly volatility in earnings due to uneven demand for services.

Our reported financial results could suffer if there is an impairment of goodwill or other intangible assets.

Goodwill may be impaired if the estimated fair value of one or more of our reporting units is less than the carrying value of the respective reporting unit. As a result of our growth, in part through acquisitions, goodwill and other intangible assets represent a significant portion of our assets. We perform an analysis on our goodwill balances to test for impairment on an annual basis. Interim impairment tests may also be required in advance of our annual impairment test if events occur or circumstances change that would more likely than not reduce the fair value, including goodwill, of one or more of our reporting units below the reporting unit's carrying value. Such circumstances could include but are not limited to: (1) loss of significant contracts, (2) a significant adverse change in legal factors, government regulations or in the climate of our business, (3) unanticipated competition, (4) an adverse action or assessment by a regulator or (5) a significant decline in our stock price. In the fourth quarter of 2016, we recorded an asset impairment charge of $19.6 million related to WD Services as discussed below in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations – Critical Accounting Policies and Estimates". Any impairment charges could have a material adverse impact on our results of operations and financial position.

Our use of a reinsurance program to cover certain claims for losses suffered and costs or expenses incurred could negatively impact our business.

We reinsure a substantial portion of our automobile, general liability, professional liability and workers' compensation insurance. We also reinsured the general liability, professional liability, workers' compensation insurance, automobile liability and automobile physical damage of various members of the network of subcontracted transportation providers and independent third parties over various policy years under reinsurance programs through our two wholly-owned captive insurance subsidiaries. However, effective February 15, 2011, we did not renew our reinsurance agreement and do not assume liabilities for policies that cover the general liability, automobile liability, and automobile physical damage coverage of our independent third-party transportation providers after that date. We will continue to administer existing policies for the foreseeable future and resolve remaining and future claims related to these policies. In the event that actual reinsured losses increase unexpectedly and substantially exceed actuarially determined estimated reinsured losses under the program, the aggregate of such losses could materially increase our liability and adversely affect our financial condition, liquidity, cash flows and results of operations. In addition, as the availability to us of certain traditional insurance coverage diminishes or increases in cost, we will continue to evaluate the levels and types of insurance we include in our reinsurance and self-insurance programs. Any increase to these programs increases our risk exposure and therefore increases the risk of a possible material adverse effect on our financial condition, liquidity, cash flows and results of operations.

Inaccurate, misleading or negative media coverage could damage our reputation and harm our ability to maintain or procure contracts.

There is sometimes media coverage regarding services that we or our competitors provide or contracts that we or our competitors are a party to. Inaccurate, misleading or negative media coverage about us could harm our reputation and, accordingly, our ability to maintain our existing contracts or procure new contracts. In addition, negative media coverage could influence government officials to slow the pace of privatizing or retendering government services.

Regulatory Risks

Our segments conduct business in a heavily regulated healthcare industry. Compliance with existing Laws is costly, and changes in Laws or violations of Laws may result in increased costs or sanctions that could reduce our segments' revenue and profitability.

The healthcare industry is subject to extensive federal and state Laws relating to, among other things:

- professional licensure;
- conduct of operations;
- addition of facilities, equipment and services, including certificates of need;
- coding and billing related to our services; and
- payment for services.

Both federal and state government agencies have increased coordinated civil and criminal enforcement efforts related to the healthcare industry. Regulations related to the healthcare industry are extremely complex and, in many instances, the industry does not have the benefit of significant regulatory or judicial interpretation of those laws. The Patient Protection and Affordable Care Act, as well as the anticipated attempts to repeal all or portions of those laws by the President and Congress, has also introduced some degree of regulatory uncertainty as the industry does not know how the changes it introduced or changes to it will affect many aspects of the industry. Medicare and Medicaid anti-fraud and abuse laws prohibit certain business practices and relationships related to items and services reimbursable under Medicare, Medicaid and other governmental healthcare programs, including the payment or receipt of remuneration to induce or arrange for referral of patients or recommendation for the provision of items or services covered by Medicare or Medicaid or any other federal or state healthcare program. Federal and state laws prohibit the submission of false or fraudulent claims, including claims to obtain reimbursement under Medicare and Medicaid. Our segments have implemented compliance policies to help assure their compliance with these regulations as they become effective; however, different interpretations or enforcement of these laws and regulations in the future could subject our practices to allegations of impropriety or illegality or could require our segments to make changes in their facilities, equipment, personnel, services or the manner in which they conduct our business.

Changes in budgetary priorities of the government entities that fund the services our segments provide could result in our segments' loss of contracts or a decrease in amounts payable to them under their contracts.

Our segments' revenue is largely derived from contracts that are directly or indirectly paid or funded by government agencies. All of these contracts are subject to legislative appropriations and state or national budget approval. The availability of funding under our segments' contracts with state governments is dependent in part upon federal funding to states. Changes in Medicaid methodology may further reduce the availability of federal funds to states in which we provide services. Congress is considering converting the Medicaid program to a block grant format or capping the federal contribution to state Medicaid programs to a fixed amount per beneficiary. CMS has the ability to grant waivers to states relative to the parameters of their Medicaid programs. Such changes, individually or in the aggregate could have a material adverse effect on our segment operations.

Among the alternative Medicaid funding approaches that states have explored are provider assessments as tools for leveraging increased Medicaid federal matching funds. Provider assessment plans generate additional federal matching funds to the states for Medicaid reimbursement purposes, and implementation of a provider assessment plan requires approval by the Centers for Medicare and Medicaid Services in order to qualify for federal matching funds. These plans usually take the form of a bed tax or a quality assessment fee, which were historically required to be imposed uniformly across classes of providers within the state, except that such taxes only applied to Medicaid health plans.

Changes to provider assessment opportunities, the Medicaid programs in states in which our segments operate or in the structure of the federal government's support for those programs can impact the amount of funds available in the programs our segments support. Our segments cannot make any assurances that these Medicaid changes will not negatively affect the funding under their contracts. As funding under our segments' contracts is dependent in part upon federal funding, such funding changes could have a significant effect upon our segments' businesses.

Currently, many of the U.S. states and overseas countries in which our segment operate are facing budgetary shortfalls or changes in budgetary priorities. While many of these states are dealing with budgetary concerns by shifting costs from institutional care to home and community based care such as we provide, there is no assurance that this trend will continue.

Likewise, in many of the overseas countries addressed by WD Services, particularly England, a continued focus following the global financial crisis on austerity measures to reduce national and local budget deficits could lead to further spending cuts or changes to welfare arrangements. This may make availability of funding for outsourcing of such services more difficult to obtain from relevant government departments, which may lead to more challenging terms and conditions including pressure on prices or volumes of services provided.

In the UK, the low unemployment rate has led to a change in the government prioritizing employability services, and a consequent reduction in scale of the Work & Health Programme, the successor program to the Work Programme. While we have the ability to alter a portion of our cost structure to reflect the decreasing volume of these contracts during their term, there may be significant redundancy costs and management time additionally invested to reflect these changes, particularly if programs are discontinued.

Consequently, a significant decline in government expenditures, shift of expenditures or funding away from programs that call for the types of services that we provide, or change in government contracting or funding policies could cause payers to terminate their contracts with our segments or reduce their expenditures under those contracts, either of which could have a negative impact on our segments' operating results.

In WD Services, we conduct business in several countries, each with its own system of regulation. Compliance with existing regulations is costly, and changes in regulations or violations of regulations may result in increased costs or sanctions that could reduce our revenue and profitability.

As of December 31, 2016, our WD Services segment operated in 9 countries outside the U.S. Each of these countries has its own national and municipal laws and regulations, and some countries such as Australia, Germany and Switzerland, have both federal and state regulations. In the UK, certain law making powers are being devolved to Scotland, Wales and Northern Ireland. These laws can differ significantly from country to country. In addition, in Europe, countries (including the UK) are subject to European Union ("EU") laws and rules. We have implemented compliance policies to help assure our compliance with these laws and regulations as they become effective; however, different interpretations or enforcement of these laws and regulations in the future could subject our practices to allegations of impropriety or illegality or could require us to make changes in our facilities, equipment, personnel, services or the manner in which we conduct our business.

Our business could be adversely affected by the referendum on the UK's exit from in the European Union.

On June 23, 2016, the UK held a referendum in which eligible persons voted in favor of a proposal that the UK leave the EU, also known as "Brexit". The result of the referendum increases political and economic uncertainty in the UK for the foreseeable future, in particular during any period where the terms of any UK exit from the EU are negotiated. In turn, Brexit could cause disruptions to and create uncertainty surrounding our business, including affecting our relationships with our existing and future payers and employees, which could have an adverse effect on our financial results, operations and prospects. The impact of Brexit on our business is not yet clear, and will depend on any agreements the UK makes to retain access to EU markets. Such agreements could potentially disrupt the markets we serve and the tax jurisdictions in which we operate and adversely change tax benefits or liabilities in these or other jurisdictions. The terms of any UK exit from the EU could generate restriction on the movement of capital and the mobility of personnel. In addition, Brexit could lead to legal uncertainty and potentially divergent national laws and regulations as the UK determines which EU laws to replace or replicate.

Following the referendum, there was significant volatility in global stock markets and currency exchange rate fluctuations that resulted in the strengthening of the U.S. dollar against foreign currencies in which we conduct business. The strengthening of the U.S. dollar relative to the British pound and other currencies may adversely affect our results of operations as we translate sales and other results denominated in foreign currency into U.S. dollars for our financial statements. During periods of a strengthening dollar, our reported international sales and earnings could be reduced because foreign currencies may translate into fewer U.S. dollars.

Brexit may also create global economic uncertainty, which may cause our payers to closely monitor their costs and reduce their spending budget on our services. Additionally, changes in governmental personnel may impact our current relationships with our payers. Any of these effects of Brexit, among others, could materially adversely affect our business, business opportunities, results of operations, financial condition and cash flows.

Changes to the regulatory landscape applicable to Matrix could have a material adverse effect on our results of operations and financial condition.

The CHA services industry is primarily regulated by federal and state healthcare Laws and the requirements of participation and reimbursement of the MA Program established by CMS. From time to time, CMS considers changes to regulatory guidelines with respect to prospective CHAs or the risk adjusted payment system applicable to Matrix's Medicare Advantage plan customers. CMS could adopt new requirements or guidelines that may, for example, increase the costs associated with CHAs, limit the opportunities and settings available to administer CHAs, or otherwise change the risk adjusted payment system in a way that would adversely impact our business. Further, changes in or adoption of new state laws governing the scope of practice of mid-level practitioners, or more restrictive interpretations of such laws, may restrict Matrix's ability to provide services using nurse practitioners. Any such implementation of additional regulations on the CHA industry by CMS or other regulatory bodies or further regulation of mid-level practitioners could have a material adverse impact on Matrix's revenues and margins, which could have a material adverse impact on our consolidated results of operations.

Our segments could be subject to actions for false claims or recoupment of funds pursuant to certain audits if they do not comply with government coding and billing rules, which could have a material adverse impact on our segments' operating results.

If our segments fail to comply with federal and state documentation, coding and billing rules, our segments could be subject to criminal or civil penalties, loss of licenses and exclusion from the Medicare and Medicaid programs, which could have a material adverse impact on our segments' operating results. In billing for our segments' services to third-party payers, our segments must follow complex documentation, coding and billing rules. These rules are based on federal and state laws, rules and regulations, various government pronouncements, and industry practice. Failure to follow these rules could result in potential criminal or civil liability under the federal False Claims Act, under which extensive financial penalties can be imposed or under various state statutes which prohibit the submission of false claims for services covered. Compliance failure could further result in criminal liability under various federal and state criminal or civil statutes. Our segments may be subject to audits conducted by our clients or their proxies that may result in recoupment of funds. In addition, our segments' clients may be subject to certain audits that may result in recoupment of funds from our clients that may, in turn, implicate our segments' services. For example, Matrix's MA plan clients are subject to Risk Adjustment Data Validation audits, which are aimed at validating the accuracy of the materials supporting the HCC (Hierarchical Condition Category) codes submitted by MA plans for payment. Our segments' businesses could be adversely affected in the event such an audit results in negative findings and recoupment from or penalties to their customers.

In WD Services, particularly in Europe, our contracts are subject to stringent claims and invoice processing regimes which vary depending on the customer and nature of the payment mechanism. Under European procurement legislation which has been implemented in each EU member state, any conviction for fraud can result in a ban from participating in public procurement tenders for up to five years, or until the organization in question has put in place "self clean" measures to the satisfaction of the procuring authority. This could significantly affect our business given that most of our customers in Europe are governmental organizations. Any such breaches or deficiencies in paperwork associated with billing may also be subject to contractual clawback regimes and penalties, which can be enforced many years after the revenue has been paid by the relevant authority.

While our segments carefully and regularly review their documentation, coding and billing practices, the rules are frequently vague and confusing and they cannot assure that governmental investigators, private insurers or private whistleblowers will not challenge their practices. Such a challenge could result in a material adverse effect on our segments' financial position and results of operations.

If our segments fail to comply with the federal Anti-Kickback Statute, they could be subject to criminal and civil penalties, loss of licenses and exclusion from the Medicaid and Medicare programs, all of which could have a material adverse impact on our segments' operating results.

The federal Anti-Kickback Statute prohibits the offer, payment, solicitation or receipt of any form of remuneration in return for referring, ordering, leasing, purchasing or arranging for or recommending the ordering, purchasing or leasing of items or services payable by a federally funded healthcare program. Any of our segments' financial relationships with healthcare providers will be potentially implicated by this statute to the extent Medicare or Medicaid referrals are implicated. Violations of the Anti-kickback Statute could result in substantial civil or criminal penalties, including criminal fines of up to $25,000 per violation, imprisonment of up to five years, civil penalties under the Civil Monetary Penalties Law of up to $50,000 per violation, plus three times the remuneration involved, civil penalties under the False Claims Act of up to $11,000 for each claim submitted, plus three times the amounts paid for such claims and exclusion from participation in the Medicaid and Medicare programs. Any such penalties could have a significant negative effect on our segments' operations. Furthermore, the exclusion, if applied to our segments, could result in significant reductions in our segments' revenues, which could materially and adversely affect our segments' businesses, financial condition and results of their operations. In addition, many states have adopted laws similar to the federal Anti-Kickback Statute with similar penalties.

If our segments fail to comply with physician self-referral laws, to the extent applicable to our operations, they could experience a significant loss of reimbursement revenue.

Our segments may be subject to federal and state statutes and regulations banning payments for referrals of patients and referrals by physicians to healthcare providers with whom the physicians have a financial relationship and billing for services provided pursuant to such referrals if any occur. Violation of these federal and state laws and regulations, to the extent applicable to our segments' operations, may result in prohibition of payment for services rendered, loss of licenses, fines, criminal penalties and exclusion from Medicaid and Medicare programs. To the extent our segments do maintain such financial relationships with physicians, they rely on certain exceptions to self-referral laws that they believe will be applicable to such arrangements. Any failure to comply with such exceptions could result in the penalties discussed above.

Our WD Services segment operates internationally, which exposes the group to risks of bribery, corruption and collusive tendering practices with respect to public officials and tenders.

As an international business whose customers are largely in the public sector, the WD Services segment generally wins work through public tender processes. Various statutes, such as the UK's Bribery Act and the Foreign Corrupt Practices Act in the U.S., generally require organizations to prohibit bribery by or for the organization and demand the implementation of systems to counter bribery, including risk management, training and guidance and the maintenance of adequate record-keeping and internal accounting practices. These statutes also, among other things, prohibit us from providing anything of value to foreign officials for the purposes of influencing official decisions or obtaining or retaining business or otherwise obtaining favorable treatment. In addition, many countries in which we operate have antitrust or competition regulations which, among other things, prohibit collusive tendering or bid-rigging behavior. Policies and procedures we implement to prevent bribery, corruption and anti-competitive conduct may not effectively prevent us from violating these regulations in every transaction in which we may engage, and such a violation could adversely affect our reputation, business, financial condition and results of operations. Further, WD Services is subject to the European Union's and other countries' data security and protection laws and regulations, which may restrict the flow of information, including information about employees or service users, from this segment to the Company in the U.S. In certain instances, informed consent to the data transfer must be given by the affected employee or service user. Compliance with such laws and regulations may make it more difficult for the Company to maintain the records and internal accounting practices necessary to ensure the appropriate operation of our internal controls or to detect corruption or to detect corruption resulting in the need for additional controls or increasing the Company's costs to maintain appropriate controls. Any breach of bribery, corruption and collusive tendering laws could also expose our operations in Europe to a ban from participating in public procurement tenders for up to 5 years, or until the organization in question has put in place "self clean" measures to the satisfaction of the procuring authority.

Our segments are subject to regulations relating to privacy and security of patient and service user information. Failure to comply with privacy and security regulations could result in a material adverse impact on our segments' operating results.

There are numerous federal and state regulations addressing patient information privacy and security concerns. In particular, the federal regulations issued under HIPAA contain provisions that:

- protect individual privacy by limiting the uses and disclosures of patient information;
- require the implementation of security safeguards to ensure the confidentiality, integrity and availability of individually identifiable health information in electronic form; and
- prescribe specific transaction formats and data code sets for certain electronic healthcare transactions.

Compliance with state and federal laws and regulations is costly and requires our segment management to expend substantial time and resources which could negatively impact our segments' results of operations. Further, the HIPAA regulations and state privacy laws expose our segments to increased regulatory risk, as the penalties associated with a failure to comply or with information security breaches, even if unintentional, could have a material adverse effect on our segments' results of operations.

Our WD Services segment has operations in many countries in Europe, and internationally, and these operations have access to significant amounts of sensitive personal information about individuals. In Europe, these operations are subject to European and national data privacy legislation which imposes significant obligations on data processors and controllers with respect to such personal information. Similar regimes exist in other WD Service jurisdictions such as Australia, Canada and South Korea. Some countries, such as Spain, France and Germany, have particularly strong privacy laws which impose even greater obligations on people handling personal information. There are amendments which will come into effect with respect to European data privacy legislation which will significantly increase the fines for any breaches. In addition to fining powers, information privacy regulators in Europe have significant powers to require organizations that breach regulations to put in place measures to ensure that such breaches do not occur again, and require businesses to stop processing personal information until the required measures are in place. Such orders could significantly impact our business given that we are required to handle personal information as part of our service delivery model.

As government contractors, our segments are subject to an increased risk of litigation and other legal actions and liabilities.

As government contractors, our segments are subject to an increased risk of investigation, criminal prosecution, civil fraud, whistleblower lawsuits and other legal actions and liabilities that are not as frequently experienced by companies that do not provide government sponsored services. Companies providing government sponsored services can also become involved in public inquiries which can lead to negative media speculation or potential cancellation or termination of contracts. In WD Services in Europe, European procurement regulations in force in each European Union member state require public procurement authorities to impose a ban from participating in public procurement tenders for up to five years, or until the organization in question has put in place "self clean" measures to the satisfaction of the procuring authority, where companies are found guilty of fraud or certain other criminal offenses. Authorities can also exercise their discretion to blacklist companies for up to two years where they believe they have been involved in acts of gross misconduct or until the organization in question has put in place "self clean" measures to the satisfaction of the procuring authority. The occurrence of any of these actions, regardless of the outcome, could disrupt our operations and result in increased costs, and could limit our ability to obtain additional contracts in other jurisdictions. Further, government tenders in European Union jurisdictions and other countries can be subject to challenge where the procurer has not followed the correct processes, or where they seek to make material amendments to contracts after award. Consequently, it can be very difficult to convince government customers to amend their contracts, even where circumstances have changed significantly, because they are concerned that if challenged they may have to re-procure the entire service. This can pose significant risks in terms of cost management and profitability

Our segments' businesses could be adversely affected by future legislative changes that hinder or reverse the privatization of non-emergency transportation services or workforce development services.

The market for certain of our segments' services depends largely on government sponsored programs. These programs can be modified or amended at any time. Moreover, part of our growth strategy includes aggressively pursuing opportunities created by government initiatives to privatize the delivery of non-emergency transportation services and workforce development services. However, there are opponents to the privatization of these services and, as a result, future privatization is uncertain. If additional privatization initiatives are not proposed or enacted, or if previously enacted privatization initiatives are challenged, repealed or invalidated, there could be a material adverse impact on our segments' operating results.

Our segments' businesses are subject to licensing regulations and other regulatory provisions, including provisions governing surveys and audits. Changes to, or violations of, these regulations could negatively impact our segments' revenues.

In many of the locations where our segments operate, they are required by local laws (both U.S. and foreign) to obtain and maintain licenses. The applicable state and local licensing requirements govern the services our segments provide, the credentials of staff, record keeping, treatment planning, client monitoring and supervision of staff. The failure to maintain these licenses or the loss of a license could have a material adverse impact on our segments' businesses and could prevent them from providing services to clients in a given jurisdiction. Most of our segments' contracts are subject to surveys or audit by their payers or their clients. Our segments are also subject to regulations that restrict their ability to contract directly with a government agency in certain situations. Such restrictions could affect our segments' ability to contract with certain payers and clients, and could have a material adverse impact on our segments' results of operations.

Our segments' contracts are subject to audit and modification by the payers with whom our segments contract, at their sole discretion.

Our segments' businesses depend on their ability to successfully perform under various government funded contracts. Under the terms of these contracts, payers, government agencies or their proxy contractors can review our segments' compliance or performance, as well as our segments' records and general business practices at any time, and may, in their discretion:

- suspend or prevent our segments from receiving new contracts or extending existing contracts because of violations or suspected violations of procurement laws or regulations;
- terminate or modify our segments' existing contracts;
- reduce the amount our segments are paid under our existing contracts; or
- audit and object to our segments' contract related fees.

Any increase in the number or scope of audits could increase our segments' expenses, and the audit process may disrupt the day-to-day operations of our segments' businesses and distract their management. If payers have significant audit findings, or if they make material modifications to our segments' contracts, it could have a material adverse impact on our segments' results of operations.

Contract profitability may decline due to actions by governmental agencies.

WD Services' operating costs and profitability may be significantly impacted by actions required by a government agency, such as the availability of information systems maintained by the government to streamline enrollment into our service programs. In addition, certain contracts may require that we hire former government employees, in relation to offering our service programs. Lastly, revenue under certain contracts may be adjusted prospectively if client volumes are below expectations or client profiles change materially, which may also lead to cost or productivity changes. If the Company is unable to adjust its costs accordingly, profitability is negatively impacted.

Our estimated income taxes could be materially different from income taxes that we ultimately pay.

We are subject to income taxation in both the U.S. and numerous jurisdictions abroad. Significant judgment and estimation is required in determining our provision for income taxes and related matters. In the ordinary course of our business, there are many transactions and calculations for which the ultimate tax determinations are uncertain or otherwise subject to interpretation. Our determination of our income tax liability is always subject to review by applicable tax authorities, and we have been audited by various jurisdictions in prior years. Although we believe our income tax estimates and related determinations are reasonable and appropriate, relevant taxing authorities may disagree. The ultimate outcome of any such audits and reviews could be materially different from the estimates and determinations reflected in our historical income tax provisions and accruals. Any adverse outcome of any such audit or review could have an adverse effect on our financial condition and the results of our operations.

Risks Related to Our Indebtedness

Restrictive covenants in our Credit Agreement may limit our current and future operations, particularly our ability to respond to changes in our business or to pursue our business strategies.

The terms contained in the agreements that govern certain of our indebtedness, including our Amended and Restated Credit and Guaranty Agreement (as amended, supplemented, or modified, the "Credit Agreement"), and the agreements that govern any future indebtedness of ours, may include a number of restrictive covenants that impose significant operating and financial restrictions, including restrictions on our ability to take actions that we believe may be in our best interest. These agreements, among other things, limit our ability to:

- incur additional debt;
- provide guarantees in respect of obligations of other persons;
- issue redeemable stock and preferred stock;
- pay dividends or distributions or redeem or repurchase capital stock;
- make loans, investments and capital expenditures;
- enter into transactions with affiliates;
- create or incur liens;
- make distributions from our subsidiaries;
- sell assets and capital stock of our subsidiaries;
- make acquisitions; and
- consolidate or merge with or into, or sell substantially all of our assets to, another person.

A breach of the covenants or restrictions could result in a default under the applicable agreements that govern our indebtedness. Such default may preclude us from drawing from our senior secured credit facility (the "Credit Facility") or allow the creditors to accelerate the related debt and may result in the acceleration of any other debt to which a cross acceleration or cross-default provision applies. In the event our lenders accelerate the repayment of our borrowings, we cannot assure that we and our subsidiaries would have sufficient assets to repay such indebtedness.

We may incur substantial additional indebtedness in the future, which could impair our financial condition.

We may incur substantial additional indebtedness in the future to fund activities including but not limited to share repurchases, acquisitions, cash dividends and business expansion. Any existing and future indebtedness increases the risk that we may be unable to generate cash sufficient to pay amounts due in respect of such indebtedness. Future substantial indebtedness could have other important consequences on our business. For example, it could:

- make it more difficult for us to satisfy our obligations;

- make it more difficult renew or enter into new contracts with existing and potential future clients;
- limit our ability to borrow additional amounts to fund working capital, capital expenditures, debt service requirements, execution of our business strategy or acquisitions and other purposes;
- require us to dedicate a substantial portion of our cash flow from operations to pay principal and interest on our debt, which would reduce the funds available to us for other purposes;
- restrict our ability to dispose of assets and use the proceeds from any such dispositions;
- restrict our ability to raise debt or equity capital to be used to repay other indebtedness when it becomes due;
- make us more vulnerable to adverse changes in general economic, industry and competitive conditions, as well as in government regulation and to our business;
- expose us to risks inherent in interest rate fluctuations because some of our borrowings are at variable rates of interest, which could result in higher interest expenses in the event of increases in interest rates; and
- make it more difficult to satisfy our financial obligations.

Our ability to satisfy and manage our debt obligations depends on our ability to generate cash flow and on overall financial market conditions. To some extent, this is subject to prevailing economic and competitive conditions and to certain financial, business and other factors, many of which are beyond our control. Our business may not generate sufficient cash flow from operations to permit us to pay principal, premium, if any, or interest on our debt obligations. If we are unable to generate sufficient cash flow from operations to service our debt obligations and meet our other cash needs, we may be forced to reduce or delay capital expenditures, sell or curtail assets or operations, seek additional capital, or seek to restructure or refinance our indebtedness. If we must sell or curtail our assets or operations, it may negatively affect our ability to generate revenue.

On February 11, 2015 and March 12, 2015, we issued $65.5 million and $15.8 million, respectively, of convertible preferred stock. The terms of the convertible preferred stock require us to pay mandatory quarterly dividends, either in cash or through an increase in the stated principal value of such stock. Our ability to satisfy and manage our obligations under our outstanding preferred stock depends, in part, on our ability to generate cash flow and on overall financial market conditions and the other factors discussed above.

Risks Related to Our Common Stock

Our annual operating results and stock price may be volatile or may decline significantly regardless of our operating performance.

Our annual operating results and the market price for our Common Stock may fluctuate significantly in response to a number of factors, many of which we cannot control, including:

- changes in rates or coverage for services by payers;
- changes in Medicaid, Medicare or other U.S. federal or state rules, regulations, policies or applicable foreign regulations, policies and technical guidance, including UK health, employment and criminal justice legislation and guidance, Saudi Arabian licensing and Saudization rules, as well as other foreign laws applicable to our business;
- price and volume fluctuations in the overall stock market;
- market conditions or trends in our industry or the economy as a whole;
- increased competition in any of our segments, including through insourcing of services by our clients and new entrants to the market;
- other events or factors, including those resulting from war, incidents of terrorism, natural disasters or responses to these events; and
- changes in accounting principles.

In addition, the stock markets, and in particular the NASDAQ Global Select Market, have experienced considerable price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many companies. In the past, stockholders have instituted securities class action litigation following periods of market volatility. If we become involved in securities litigation, we could incur substantial costs, and our resources and the attention of management could be diverted from our business.

The Company is a holding company and it depends on its subsidiaries for cash to fund all of its operations and expenses, including to make future dividend payments, if any.

Our operations are conducted entirely through our subsidiaries and our ability to generate cash to fund all of our operations and expenses, to pay dividends or to meet any debt service obligations is highly dependent on the earnings and the receipt of funds from our subsidiaries via dividends or intercompany loans. We do not currently expect to declare or pay dividends on our Common Stock for the foreseeable future; however, to the extent that we determine in the future to pay dividends on our Common Stock, none of our subsidiaries will be obligated to make funds available to us for the payment of dividends. Further, the agreement governing our Credit Agreement significantly restricts the ability of our subsidiaries to pay dividends, make loans or otherwise transfer assets to us. In addition, Delaware law may impose requirements that may restrict our ability to pay dividends to holders of our Common Stock.

If securities or industry analysts do not publish research or publish misleading or unfavorable research about our business, our stock price and trading volume could decline.

The trading market for our Common Stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. If one or more analysts downgrade our stock or publish misleading or unfavorable research about our business, our stock price would likely decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which could cause our stock price or trading volume to decline.

Future sales of shares by existing stockholders could cause our stock price to decline.

Sales of substantial amounts of our Common Stock in the public market, or the perception that these sales could occur, could cause the market price of our Common Stock to decline. As of March 6, 2017, we had 13,500,436 outstanding shares of Common Stock which are freely transferable without restriction or further registration under the Securities Act of 1933, as amended (the "Securities Act"), unless held by or purchased by our "affiliates" as that term is defined in Rule 144 under the Securities Act. Shares of our Common Stock held by or purchased by our affiliates are restricted securities within the meaning of Rule 144 under the Securities Act, but will be eligible for resale subject to applicable volume, means of sale, holding period and other limitations of Rule 144 under the Securities Act.

As of March 6, 2017, shares of our convertible preferred stock were convertible into 2,014,538 shares of Common Stock, all of which are subject to registration rights. In addition, as of March 6, 2017, 1,968,360 shares of Common Stock are beneficially owned by entities for which Coliseum Capital Management acts as investment adviser.

In August 2016, we filed a registration statement under the Securities Act to register the shares of Common Stock to be issued under our equity compensation plans and, as a result, all shares of Common Stock acquired upon exercise of stock options granted under our plans will also be freely tradable under the Securities Act, unless purchased by our affiliates. As of December 31, 2016, there were stock options outstanding to purchase a total of 355,598 shares of our Common Stock and there were 131,540 shares of our Common Stock subject to restricted stock awards. In addition, 2,324,927 shares of our Common Stock are reserved for future issuances.

Future offerings of debt or equity securities that would rank senior to our Common Stock, may adversely affect the market price of our Common Stock.

If, in the future, we decide to issue debt or equity securities that rank senior to our Common Stock, it is likely that such securities will be governed by an indenture or other instrument containing covenants restricting our operating flexibility. Additionally, any convertible or exchangeable securities that we issue in the future may have rights, preferences and privileges more favorable than those of our Common Stock and may result in dilution to owners of our Common Stock. We and, indirectly, our stockholders, will bear the cost of issuing and servicing such securities. Because our decision to issue debt or equity securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of our future offerings. Thus, holders of our Common Stock will bear the risk of our future offerings reducing the market price of our Common Stock and diluting the value of their stock holdings in us.

Fulfilling our obligations incident to being a public company, including with respect to the requirements of and related rules under the Sarbanes-Oxley Act of 2002, is expensive and time-consuming, and any delays or difficulties in satisfying these obligations could have a material adverse effect on our future results of operations and our stock price.

We are subject to the reporting and corporate governance requirements, under the listing standards of the NASDAQ Global Select Market ("NASDAQ") and the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), that apply to issuers of listed equity, which impose certain significant compliance costs and obligations upon us. The changes necessitated by being a publicly listed company require a significant commitment of additional resources and management oversight resulting in increased operating costs. These requirements also place additional demands on our finance and accounting staff and on our financial accounting and information systems. Other expenses associated with being a public company include increases in auditing, accounting and legal fees and expenses, investor relations expenses, increased directors' fees and director and officer liability insurance costs, registrar and transfer agent fees and listing fees, as well as other expenses. As a public company, we are required, among other things, to define and expand the roles and the duties of our Board of Directors ("Board") and its committees and institute more comprehensive compliance and investor relations functions.

Anti-takeover provisions in our second amended and restated certificate of incorporation and amended and restated by-laws could discourage, delay or prevent a change of control of our company and may affect the trading price of our Common Stock.

Our second amended and restated certificate of incorporation and amended and restated bylaws include a number of provisions that may be deemed to have anti-takeover effects, which include when and by whom special meetings of our stockholders may be called, and may discourage, delay or prevent a change in our management or control over us that stockholders may consider favorable. Such provisions may prevent our stockholders from receiving the benefit from any premium to the market price of our Common Stock offered by a bidder in a takeover context. Even in the absence of a takeover attempt, the existence of these provisions may adversely affect the prevailing market price of our Common Stock if the provisions are viewed as discouraging takeover attempts in the future. Our second amended and restated certificate of incorporation and amended and restated by-laws may also make it difficult for stockholders to replace or remove our management. These provisions may facilitate management entrenchment that may delay, deter, render more difficult or prevent a change in our control, which may not be in the best interests of our stockholders.

We do not expect to pay dividends on our Common Stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our Common Stock.

We currently do not expect to declare and pay dividends on our Common Stock for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth, to develop our business, for working capital needs and for general corporate purposes. Therefore, you are not likely to receive any dividends on your Common Stock for the foreseeable future and the success of an investment in shares of our Common Stock will depend upon any future appreciation in their value. There is no guarantee that shares of our Common Stock will appreciate in value or even maintain the price at which stockholders have purchased their shares.

Item 1B. ***Unresolved Staff Comments.***

None.

Item 2. ***Properties.***

Our holding company principal executive offices are located in Stamford, Connecticut, and we lease additional office space in Tucson, Arizona. On December 30, 2016, we sold the building in which our Tucson office space is located to a third party. As of March 6, 2017, NET Services leases space in approximately 40 locations, WD Services leases space in approximately 250 locations, and Matrix leases space in three locations. The lease terms vary and we believe are generally at market rates. We believe that our properties are adequate for our current business needs, and believe that we can obtain adequate space, if needed, to meet our foreseeable business needs.

Item 3. ***Legal Proceedings.***

On June 15, 2015, a putative stockholder class action derivative complaint was filed in the Court of Chancery of the State of Delaware, (the "Court"), captioned Haverhill Retirement System v. Kerley et al., C.A. No. 11149-VCL. The complaint named Richard A. Kerley, Kristi L. Meints, Warren S. Rustand, Christopher Shackelton (the "Individual Defendants") and Coliseum Capital Management, LLC ("Coliseum Capital Management") as defendants, and the Company as a nominal defendant. The complaint purported to allege that the dividend rate increase term originally in the Company's outstanding convertible preferred stock was an impermissibly coercive measure that impaired the voting rights of the Company's stockholders in connection with the vote on the removal of certain voting and conversion caps previously applicable to the preferred stock (the "Caps"), and that the Individual Defendants breached their fiduciary duties by approving the dividend rate increase term and attempting to coerce the stockholder vote relating to the Company's preferred stock, and by failing to disclose all material information necessary to allow the Company's stockholders to cast an informed vote on the Caps. The complaint also purported to allege derivative claims alleging that the Individual Defendants breached their fiduciary duties to the Company by entering into the subordinated note and standby agreement with Coliseum Capital Management, and granting Coliseum Capital Management certain stock options. The complaint further alleged that Coliseum Capital Management aided and abetted the Individual Defendants in breaching their fiduciary duties. The complaint sought, among other things, an injunction prohibiting the stockholder vote relating to the dividend rate increase, corporate governance reforms, unspecified damages and other relief.

On August 31, 2015, after arms' length negotiations, the parties reached an agreement in principle and executed a Memorandum of Understanding ("MOU") providing for the settlement of claims concerning the dividend rate increase term and stockholder vote and related disclosure. The MOU stated that the Defendants had entered into the partial settlement of the litigation solely to eliminate the distraction, burden, expense, and potential delay of further litigation involving claims that have been settled. Pursuant to the partial settlement, the Company agreed to supplement the disclosures in its definitive proxy statement on Schedule 14A (the "2015 Proxy Statement"), Coliseum Capital Management and certain of its affiliates and the Company entered into an amendment to that certain Series A Preferred Stock Exchange Agreement, by and among Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Coliseum Capital Co-Invest, L.P., Blackwell Partners, LLC, and The Providence Service Corporation dated as of February 11, 2015 described in the 2015 Proxy Statement, and the Board agreed to adopt a policy related to the Board's determination each quarter as to whether the Company should pay cash dividends or allow dividends to be paid in the form of PIK dividends on the preferred stock, as further described in the supplemental proxy disclosures. On September 2, 2015, Providence issued supplemental disclosures through a supplement to the 2015 Proxy Statement. On September 16, 2015, Providence stockholders approved the removal of the Caps. The Company provided notice of the proposed partial settlement to Providence's shareholders by December 11, 2015. At a hearing on February 9, 2016, the court denied approval of the settlement. The Court indicated that plaintiff's counsel could petition the Court for a mootness fee, and that defendants would have the opportunity to oppose any such application.

On January 12, 2016, the plaintiff filed a verified amended class action and derivative complaint (the "first amended complaint"). In addition to the defendants named in the earlier complaint, the first amended complaint named David Shackelton, Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Blackwell Partners, LLC, Coliseum Capital Co-Invest, L.P. (collectively, and together with Coliseum Capital Management, LLC, "Coliseum") and RBC Capital Markets, LLC ("RBC Capital Markets") as additional defendants. The first amended complaint purported to allege direct and derivative claims for breach of fiduciary duty against some or all of the Individual Defendants and David Shackelton (collectively, the "Amended Individual Defendants") regarding the approval of the subordinated note, the rights offering, the standby agreement with Coliseum Capital Management, and the grant to Coliseum Capital Management of certain stock options. The first amended complaint also purported to allege an additional derivative claim for unjust enrichment against Coliseum and further alleged that Coliseum and RBC Capital Markets aided and abetted the Amended Individual Defendants in breaching their fiduciary duties. The first amended complaint sought, among other things, revision or rescission of the terms of the subordinated note and preferred stock, corporate governance reforms, unspecified damages and other relief.

On May 6, 2016, the plaintiff filed a verified second amended class action and derivative complaint (the "second amended complaint"). In addition to the defendants named in the earlier complaint, the second amended complaint named Paul Hastings LLP ("Paul Hastings") and Bank of America, N.A. ("BofA") as additional defendants. In addition to previously asserted claims, the second amended complaint purported to assert direct and derivative claims for breach of fiduciary duties against Coliseum Capital Management, in its capacity as the controlling stockholder of the Company, in connection with the subordinated note, the Company's rights offering of preferred stock and the standby purchase agreement with Coliseum Capital Management (the "Financing Transactions"). The second amended complaint also alleged that Paul Hastings breached their fiduciary duties as counsel to the Company in connection with the Financing Transactions and that BofA and Paul Hastings aided and abetted certain of the Amended Individual Defendants in breaching their fiduciary duties in connection with the Financing Transactions. The second amended complaint sought, among other things, revision or rescission of the terms of the subordinated note and preferred stock, corporate governance reforms, disgorgement of fees paid to RBC Capital Markets, Paul Hastings and BofA for work relating to the Financing Transactions, unspecified damages and other relief.

On May 20, 2016, the Court granted a six-month stay of the proceeding from the date of such order to allow a special litigation committee, created by the Board, sufficient time to investigate, review and evaluate the facts, circumstances and claims asserted in or relating to this action and determine the Company's response thereto. On October 10, 2016, the Court granted an extension of the stay of the proceeding from November 20, 2016 until January 20, 2017, to allow the special litigation committee additional time to complete its investigation and review, and to determine the Company's response thereto. On January 20, 2017, the special litigation committee advised the court that the parties to the litigation and the special litigation committee had reached an agreement in principle to settle all of the claims in the litigation. The parties are working to finalize and document the settlement, which will then be presented to the Court for approval.

Item 4. ***Mine Safety Disclosures***

Not applicable.

PART II

Item 5. ***Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.***

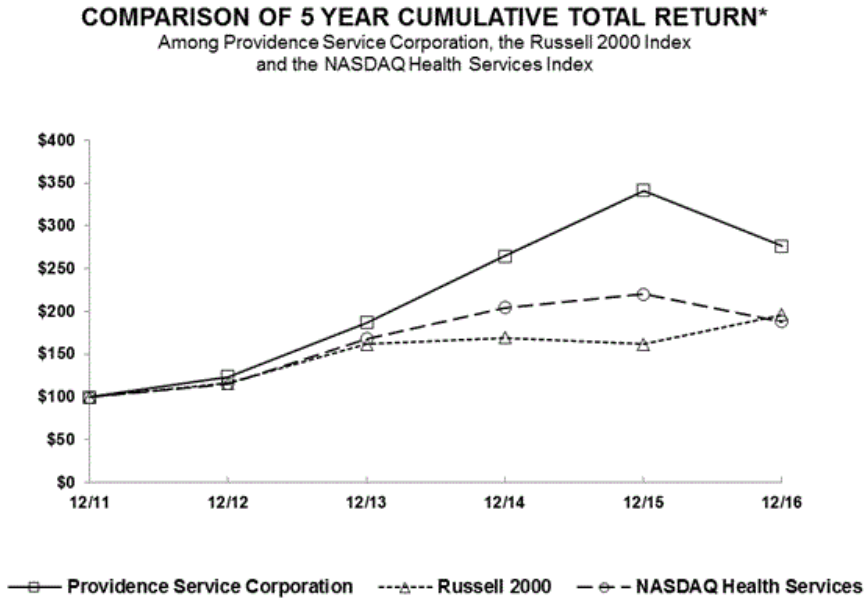
Market for our common stock

Our Common Stock, our only class of common equity, has been quoted on NASDAQ under the symbol "PRSC" since August 19, 2003. Prior to that time there was no public market for our Common Stock. As of March 6, 2017, there were 20 holders of record of our Common Stock. The following table sets forth the high and low sales prices per share of our Common Stock for the period indicated, as reported on NASDAQ Global Select Market:

	High	Low
2016		
Fourth Quarter	$ 49.97	$ 34.89
Third Quarter	$ 50.30	$ 43.01
Second Quarter	$ 53.38	$ 43.77
First Quarter	$ 55.28	$ 42.03
2015		
Fourth Quarter	$ 56.92	$ 41.80
Third Quarter	$ 53.49	$ 39.08
Second Quarter	$ 55.99	$ 40.52
First Quarter	$ 53.60	$ 36.03

Stock Performance Graph

The following graph shows a comparison of the cumulative total return for our Common Stock, NASDAQ Health Index and Russell 2000 Index assuming an investment of $100 in each on December 31, 2011.



*$100 invested on 12/31/11 in stock or index, including reinvestment of dividends.
Fiscal year ending December 31.

Dividends

We have not paid any cash dividends on our Common Stock and currently do not expect to pay dividends on our Common Stock. In addition, our ability to pay dividends on our Common Stock is limited by the terms of our Credit Agreement and our Preferred Stock. The payment of future cash dividends, if any, will be reviewed periodically by the Board and will depend upon, among other things, our financial condition, funds from operations, the level of our capital and development expenditures, any restrictions imposed by present or future debt or equity instruments, and changes in federal tax policies, if any.

Issuer Purchases of Equity Securities

Period	Total Number of Shares of Common Stock Purchased (1)	Average Price Paid per Share	Total Number of Shares of Common Stock Purchased as Part of Publicly Announced Program (2)	Maximum Dollar Value of Shares of Common Stock that May Yet Be Purchased Under Program (2) (in thousands)
Fourth quarter:				
October 1, 2016 to October 31, 2016	101,224	$ 47.17	101,224	$ 6,991
November 1, 2016 to November 30, 2016 (3)	1,500	$ 37.75	-	$ 100,000
December 1, 2016 to December 31, 2016 (4)	330,659	$ 37.63	328,843	$ 87,616
Total	433,383	$ 39.86	430,067	

(1) Includes (i) shares that were acquired from employees in connection with the settlement of income tax and related benefit withholding obligations arising from vesting in restricted stock awards; (ii) shares that were acquired through open market trades by the Company's Chief Executive Officer ("CEO"); (iii) the repurchase of shares under the repurchase program authorized by the Board on November 4, 2015; and (iv) the repurchase of shares under the repurchase program authorized by the Board on October 26, 2016. For more information on these repurchases, see Note 12, *Stockholders' Equity*, to our consolidated financial statements.

(2) On November 4, 2015, our Board authorized the Company to engage in a repurchase program to repurchase up to $70.0 million in aggregate value of the Company's Common Stock during the twelve-month period following November 4, 2015. This plan terminated on November 3, 2016. A total of 1,360,249 shares were purchased through this plan for $63.0 million, including commission payments.

On October 26, 2016, our Board authorized a new repurchase program, under which the Company may repurchase up to $100.0 million in aggregate value of the Company's Common Stock during the twelve-month period following October 26, 2016. As of December 31, 2016, a total of 328,843 shares were purchased through this plan for $12.4 million, including commission payments. For additional information, see Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and capital resources".

(3) Includes open market purchase by the CEO of 1,500 shares at an average price paid per share of $37.75 as disclosed in Mr. Lindstrom's Form 4 filed with the SEC on November 23, 2016.

(4) Includes open market purchase by the CEO of 1,500 shares at an average price paid per share of $36.47 as disclosed in Mr. Lindstrom's Form 4 filed with the SEC on December 2, 2016.

Equity Compensation Plan Information

The following table provides certain information as of December 31, 2016 with respect to our equity based compensation plans.

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	(b) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders (1)	355,598	$ 33.48	2,324,927
Equity compensation plans not approved by security holders	—	—	—
Total	355,598	$ 33.48	2,324,927

(1) The number of shares shown in column (b) represents the number of shares available for issuance pursuant to stock options and other stock-based awards that could be granted in the future under the 2006 Long-Term Incentive Plan, as amended.

Item 6. ***Selected Financial Data.***

We have derived the following selected financial data from the consolidated financial statements and related notes. The information set forth below is not necessarily indicative of future results. This information should be read in conjunction with our consolidated financial statements and the related notes, and Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations", all of which are included elsewhere in this report.

	Year Ended December 31,				
	2016 (1)(2)(3)(4)(5)(8)	2015 (1)(3)(4)(5)(8)	2014 (1)(3)(4)(6)(7)	2013 (1)(3)(8)	2012 (1)(3)(8)
	(dollars and shares in thousands, except per share data)				
Statement of operations data:					
Service revenue, net	$ 1,578,889	$ 1,478,010	$ 1,092,880	$ 798,766	$ 777,010
Total operating expenses	1,570,272	1,476,138	1,049,893	771,590	771,365
Operating income	8,617	1,872	42,987	27,176	5,645
Other expenses	10,495	11,966	10,187	7,446	7,513
Income (loss) from continuing operations, before income taxes	(1,878)	(10,094)	32,800	19,730	(1,868)
Provision for income taxes	17,036	14,583	8,289	6,625	494
Income (loss) from continuing operations, net of tax	(18,914)	(24,677)	24,511	13,105	(2,362)
Discontinued operations, net of tax	108,760	107,871	(4,236)	6,333	10,844
Net income	89,846	83,194	20,275	19,438	8,482
Net loss attributable to noncontrolling interests	2,082	502	-	-	-
Net income attributable to Providence	$ 91,928	$ 83,696	$ 20,275	$ 19,438	$ 8,482
Diluted earnings per common share:					
Continuing operations	$ (1.45)	$ (1.83)	$ 1.63	$ 0.95	$ (0.18)
Discontinued operations	6.52	6.09	(0.28)	0.46	0.82
Total	$ 5.07	$ 4.26	$ 1.35	$ 1.41	$ 0.64
Weighted-average number of common shares outstanding:					
Diluted	14,667	15,961	15,019	13,810	13,225

	As of December 31,				
	2016 (1)(2)	2015 (3)	2014 (6)(7)	2013	2012
	(dollars in thousands)				
Balance sheet data:					
Cash and cash equivalents	$ 72,262	$ 79,756	$ 121,538	$ 75,156	$ 26,250
Total assets	694,394	1,050,202	1,168,934	425,954	391,737
Long-term obligations, including current portion	3,611	300,071	574,613	123,500	130,000
Other liabilities	315,543	382,423	372,907	151,817	143,050
Convertible preferred stock	77,565	77,576	-	-	-
Total stockholders' equity	297,675	290,132	221,414	150,637	118,687

(1) On October 19, 2016, we completed the Matrix Transaction. Accordingly, the results of operations and financial condition of our HA Services segment have been presented in discontinued operations for all periods presented. Included in 2016 is a gain on the transaction, net of tax, totaling $109.4 million. Additionally, we recorded $1.8 million in equity in net loss of investee related to our equity method investment in Matrix from the period of October 19, 2016 through December 31, 2016. The investment in Matrix at December 31, 2016 of $157.2 million is included in "Equity investments" in our consolidated balance sheet. In conjunction with the completion of this transaction, we fully repaid the amounts outstanding on our term loans and Credit Facility.

(2) During the fourth quarter of 2016, WD Services recorded asset impairment charges of $10.0 million, $4.4 million and $5.2 million to its property and equipment, intangible assets and goodwill, respectively, primarily due to lower than expected volumes and unfavorable service mix shifts under a large contract in the UK impacting future projections; additional clarity into the anticipated size and structure of the Work and Health Programme in the UK; and the absence of additional details regarding the restructuring of the offender rehabilitation contract in the UK.

(3) On November 1, 2015, we completed the sale of our Human Services segment. Accordingly, the results of operations and financial condition of our Human Services segment have been presented in discontinued operations for all periods presented. Included in 2015 is a gain on the sale of the Human Services segment, net of tax, totaling $100.3 million.

(4) The Company incurred $20.9 million of accelerated expense in 2015 related to restricted shares and cash placed into escrow at the time of the Ingeus acquisition. The shares and cash were placed into escrow concurrent with the payments of the acquisition consideration paid in 2014 for Ingeus; however, because two sellers of Ingeus remained employees post acquisition, the value of the shares and cash was recognized as compensation expense over the escrow term. Acceleration was triggered in 2015 when the two sellers separated from the Company. In addition, in 2015 and 2014, respectively, the Company incurred $5.9 million and $4.5 million of expense related to the separation of these two employees. Benefits of $2.5 million and $16.1 million associated with the reduction in the fair value of Ingeus contingent consideration are included in general and administrative expenses for 2015 and 2014, respectively. 2016 and 2015 expenses also include $8.5 million and $12.2 million, respectively, of WD Services' redundancy costs and $2.4 million in Ingeus transaction-related expenses in 2015, whereas 2014 includes $11.8 million in acquisition costs primarily related to the acquisitions of Ingeus and Matrix.

(5) Equity in net loss of investees, included in "Other expenses" in the table above, primarily relates to our investment in Mission Providence during 2015 and 2016 and Matrix for the period of October 19, 2016 through December 31, 2016. Matrix became an equity investment upon the completion of the Matrix Transaction.

(6) Two significant acquisitions were completed during 2014. We acquired Ingeus effective May 30, 2014 and we acquired Matrix effective October 23, 2014.

(7) 2014 includes $4.5 million of financing fees that were deferred and fully expensed within interest expense in the fourth quarter of 2014 in relation to bridge financing commitments and $3.0 million of third-party financing fees that are included in general and administrative expense.

(8) We incurred expense (net of benefit of forfeiture of stock-based compensation) of $0.9 million, $0.7 million, $1.3 million and $1.3 million in 2016, 2015, 2013 and 2012, respectively for severance and retirement payments related to former executive officers and key employees.

Item 7. ***Management's Discussion and Analysis of Financial Condition and Results of Operations.***

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with Item 6. "Selected Financial Data" and our consolidated financial statements and related notes included in Item 8. "Financial Statements and Supplementary Data" of this report. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and other factors that may cause actual results to differ materially from those projected in any forward-looking statements, as discussed in "Disclosure Regarding Forward-Looking Statements". These risks and uncertainties include but are not limited to those set forth in Item 1A. "Risk Factors".

Overview of Our Business

Please refer to *Item 1. "Business"* of this Form 10-K for a discussion of our services and corporate strategy. The Providence Service Corporation is a holding company which owns interests in subsidiaries and other companies that are primarily engaged in the provision of healthcare and workforce development services. The subsidiaries and other companies in which we hold interests comprise the following segments:

- NET Services – Nationwide provider of non-emergency medical transportation programs for state governments and managed care organizations.
- WD Services – Global provider of employment preparation and placement and legal offender rehabilitation services to eligible participants of government sponsored programs.
- Matrix Investment – Minority interest in nationwide provider of in-home care optimization and management solutions, including CHAs, to members of managed care organizations, accounted for as an equity method investment.

Business Outlook and Trends

Our performance is affected by a number of trends that drive the demand for our services. In particular, the markets in which we operate are exposed to various trends such as healthcare industry and demographic dynamics in the U.S. and international government outsourcing and employment dynamics. Over the long term, we believe there are numerous factors that could affect growth within the industries in which we operate, including:

- an aging population, which will increase demand for healthcare services;
- a movement towards value-based care models, versus FFS models, and budget pressure on governments, both of which may increase the use of private corporations to provide necessary and innovative services;
- increasing demand for in-home care provision, driven by cost pressures on traditional reimbursement models and technological advances enabling remote engagement;
- technological advancements, which may be utilized by us to improve service and lower costs and by others, which may increase industry competitiveness;
- changes in UK government policy, such as decreased volumes in future welfare-to-work programs, specifically through the UK's Work and Health Programme, which will have a reduced scope and reduced funding compared with the prior programs;
- the results of the referendum on the UK's exit from the EU and related political and economic uncertainty in the UK; and
- the U.S. federal government's expressed intent to repeal the ACA and replace such law with an alternative proposal. The details of both the extent of the provisions that may be repealed as well as the details of any potential replacement legislation are uncertain at this time. Enactment of adverse legislation, regulation or agency guidance, may eliminate or reduce the demand for our business, our ability to conduct some or all of our business and/or reimbursement rates for services performed within our segments.

Historically, our segments have grown through organic expansion into new markets and service lines, organic expansion within existing markets and service lines, increases in the number of members served under contracts we have been awarded, the securing of new contracts and acquisitions. We continue to selectively identify and pursue the acquisition of attractive businesses that are complementary to our business strategies. In addition, as demonstrated in 2016 with the Matrix Transaction and in 2015 with the Human Services Sale, we also may enter into strategic partnerships or dispose of current or future investments, based on a variety of factors, including availability of alternative opportunities to deploy capital or otherwise maximize shareholder value as well as other strategic considerations.

Revenues and Expenses

NET Services

NET Services primarily contracts with state Medicaid agencies and managed care organizations for the coordination of their members' non-emergency transportation needs. Most contracts are capitated, which means we are paid on a per-member, per-month basis for each eligible member. For most contracts, we arrange for transportation of members through our network of independent transportation providers, whereby we remit payment to the transportation providers. However, for certain contracts, we only provide management services, and do not contract with transportation providers for the actual transportation.

WD Services

WD Services primarily provides workforce development and offender rehabilitation services on a global basis that include employment preparation and placement, apprenticeship and training, youth community service programs and certain health-related services to clients on behalf of governmental and private entities. Populations served by WD Services are broad and include both recently and long-term unemployed, disabled, and individuals seeking new skills, as well as individuals that are coping with medical illnesses, are newly graduated from educational institutions, and those that have been released from incarceration. We contract primarily with national and regional government entities that seek to reduce the unemployment and recidivism rates.

The revenue earned by WD Services under its contracts is often derived through a combination of different revenue channels including, but not limited to, fees contingent upon: (1) the volume of WD end-users referred to or admitted into a specific program, (2) the achievement of defined outcomes for specific individuals, such as a job placement or continued employment, and (3) the achievement of defined outcomes for a population of individuals over a specific time period, such as aggregate employment or recidivism rates. The relative contributions of different revenue channels under a specific contract can fluctuate meaningfully over the life of a contract and thus contribute to significant earnings volatility. In particular, revenue recognition related to our NCS youth programs can be particularly volatile due to the nature of the payment cycle and services provided. WD Services also earns revenue under fixed FFS arrangements, based upon contractual rates established at the outset of the applicable contract year, although the rate may be prospectively adjusted during the contract year based upon actual volumes. Volume levels are typically not guaranteed under contracts. We bill according to contractual terms, typically after proof of services have been demonstrated, although certain contracts allow for ratable billings based upon expected levels of services, and require reconciliation at the conclusion of the contract year.

As described above, when WD Services enters into new markets and service lines, it often experiences significant costs, which are expensed as incurred, whereas revenue may not be realized until a later date. As a result, WD Services experiences significant variability in its financial results and we therefore believe the results of WD Services are best viewed over a multi-year period.

Classification of Operating Expenses

Our "Service expense" line item includes the majority of the operating expenses of NET Services and WD Services as well as of our captive insurance company, with the exception of certain costs which are classified as "General and administrative expense". Service expense also excludes asset impairment charges and depreciation and amortization expenses. In the discussion below, we present the breakdown of service expense by the following major categories: purchased services, payroll and related costs, other operating expenses and stock-based compensation. Purchased services includes the amounts we pay to third-party service providers and are typically dependent upon service volume. Payroll and related costs include all personnel costs of our segments. Other operating expenses include general overhead costs, excluding facilities and related charges, of our segments. Stock-based compensation represents the stock-based compensation expense associated with stock grants to employees of our segments as well as the expense related to restricted stock placed into escrow at the time of the Ingeus acquisition.

Our "General and administrative expense" primarily includes the operating expenses of our corporate office, excluding depreciation and amortization, as well as facilities and related charges of our segments and contingent consideration adjustments, as applicable.

Critical Accounting Policies and Estimates

Critical accounting policies and estimates are those that we believe are important in the preparation of our consolidated financial statements because they require that we use judgment and estimates in applying those policies. We prepare our consolidated financial statements and accompanying notes in accordance with generally accepted accounting principles in the United States ("GAAP"). Preparation of the consolidated financial statements and accompanying notes requires that we make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the date of the consolidated financial statements as well as revenue and expenses during the periods reported. We base our estimates on historical experience, where applicable, and other assumptions that we believe are reasonable under the circumstances. Actual results may differ from our estimates under different assumptions or conditions.

There are certain critical estimates that we believe require significant judgment in the preparation of our consolidated financial statements. We consider an accounting estimate to be critical if:

- It requires us to make an assumption because information was not available at the time or it included matters that were highly uncertain at the time the estimate is made; and
- Changes in the estimate or different estimates that could have been selected may have had a material impact on our financial condition or results of operations.

For more information on each of these policies, see Note 2, *Significant Accounting Policies and Recent Accounting Pronouncements*, to our consolidated financial statements. We discuss information about the nature and rationale for our critical accounting estimates below.

Transportation Accrual

We accrue the cost of transportation expense within NET Services based on request for services and the amount we expect to be billed by transportation providers, as we generally only pay transportation providers for completed trips based upon documentation submitted after services have been provided. The transportation accrual requires significant judgment, as the accrual is based upon contractual rates and mileage estimates, as well as an estimated rate for unknown cancellations, as members may have requested transportation but not notified us of cancellation. Based upon historical experience and contract terms, we estimate the amount of expense incurred for invoices which have not yet been submitted as of period end. Actual expense could be greater or less than the amounts estimated due to changes in member or transportation provider behavior.

Business Combinations

We assign the value of the consideration transferred to acquire a business to the tangible assets and identifiable intangible assets acquired and liabilities assumed on the basis of their fair values at the date of acquisition. Any excess purchase price paid over the fair value of the net tangible and intangible assets acquired is allocated to goodwill. When determining the fair values of assets acquired and liabilities assumed, management makes significant estimates and assumptions, especially with respect to intangible assets. Critical estimates in valuing certain intangible assets include but are not limited to future expected cash flows from customer relationships and trade names, and discount rates. Management's estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable. As a result, actual results may differ significantly from estimates.

Recoverability of Goodwill and Definite-Lived Intangible Assets

Goodwill. In accordance with ASC 350, *Intangibles-Goodwill and Other*, we review goodwill for impairment annually, or more frequently, if events and circumstances indicate that an asset may be impaired. Such circumstances could include, but are not limited to: (1) the loss or modification of significant contracts, (2) a significant adverse change in legal factors or in business climate, (3) unanticipated competition, (4) an adverse action or assessment by a regulator, or (5) a significant decline in the Company's stock price. Historically, we have performed the annual goodwill impairment test for all reporting units as of December 31 of each year; however, we elected to change this date to October 1 of each year beginning in 2016 in order to better align the timing of the annual impairment testing with the Company's annual budgeting and forecasting process. We believe that this change in the goodwill impairment testing date is not a material change to the Company's method of applying an accounting principle. Our evaluation of goodwill for impairment involves a two-step process to identify goodwill impairment and measure the amount of goodwill impairment loss. First, we perform a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the qualitative assessment suggests that it is more likely than not that the fair value of a reporting unit is less than its carrying value, we then perform a quantitative assessment and compare the fair value of the reporting unit to its carrying value. If the carrying value of a reporting unit exceeds its fair value, the goodwill of that reporting unit is considered to be potentially impaired and we proceed to step two of the impairment analysis, in which we determine the amount of any impairment loss by comparing the carrying value of the reporting unit's goodwill to its implied fair value. Periodically, we may choose to forgo the initial qualitative assessment and perform only the quantitative analysis in our annual evaluation.

We estimate the fair value of the Company's reporting units using either an income approach, a market valuation approach, a transaction valuation approach or a blended approach. The income approach produces an estimated fair value of a reporting unit based on the present value of the cash flows we expect the reporting unit to generate in the future. Estimates included in the discounted cash flow model include the discount rate, which we determine based on adjusting an industry-wide weighted-average cost of capital for size, geography, and company specific risk factors, long-term rates of growth and profitability of our business, working capital effects, planned capital expenditures and a terminal value. The market approach produces an estimated fair value of a reporting unit based on a comparison of the reporting unit to comparable publicly traded entities in similar lines of business. The transaction valuation approach produces an estimated fair value of a reporting unit based on a comparison of the reporting unit to publicly available transactional data involving both publicly traded and private entities in similar lines of business. Our significant estimates in both the market and transaction approach include the selected similar companies with comparable business factors such as size, growth, profitability, risk and return on investment and the multiples we apply to revenue and earnings before interest, taxes, depreciation and amortization ("EBITDA") to estimate the fair value of the reporting unit.

Long-Lived Assets Including Intangibles. In accordance with ASC 360, *Property, Plant, and Equipment*, we review the carrying value of long-lived assets or groups of assets to be used in operations whenever events or changes in circumstances indicate that the carrying amount of the assets may be impaired. Factors that may necessitate an impairment assessment include, among others, significant adverse changes in the extent or manner in which an asset or group of assets is used, significant adverse changes in legal factors or the business climate that could affect the value of an asset or group of assets or significant declines in the observable market value of an asset or group of assets. The presence or occurrence of those events indicates that an asset or group of assets may be impaired. In those cases, we assess the recoverability of an asset or group of assets by determining whether the carrying value of the asset or group of assets exceeds the sum of the projected undiscounted cash flows expected to result from the use and eventual disposition of the assets over the remaining economic life of the asset or the primary asset in the group of assets. If such testing indicates the carrying value of the asset or group of assets is not recoverable, we estimate the fair value of the asset or group of assets using appropriate valuation methodologies, which would typically include an estimate of discounted cash flows. If the fair value of those assets or groups of assets is less than carrying value, we record an impairment loss equal to the excess of the carrying value over the estimated fair value.

The use of different estimates or assumptions in determining the fair value of our goodwill and intangible assets may result in different values for those assets, which could result in an impairment or, in the period in which an impairment is recognized, could result in a materially different impairment charge.

During the fourth quarter of 2016, the Company reviewed WD Services for impairment, as there were several negative factors impacting the segment, primarily due to lower than expected volumes and unfavorable service mix shifts under a large contract in the UK impacting future projections; additional clarity into the anticipated size and structure of the Work and Health Programme in the UK; the absence of additional details regarding the restructuring of the offender rehabilitation contract in the UK; and a change in senior management at WD Services during the fourth quarter. As a result, the Company performed a quantitative test comparing the fair value of the asset groupings comprising WD Services with their carrying amounts and recorded an asset impairment charge of $10.0 million to property and equipment and $4.4 million to definite-lived customer relationship intangible assets, which is recorded in "Asset impairment charge" on the Company's consolidated statement of operations. In addition, the Company reviewed the carrying value of goodwill of WD Services, noting the carrying value exceeded the fair value. Therefore, the Company performed the second step of the impairment test, in which the fair value of the reporting unit is allocated to all of the assets and liabilities, on a fair value basis, with any excess representing the implied value of goodwill of the reporting unit. The fair value was determined using an income approach, which estimates the present value of future cash flows based on management's forecast of revenue growth rates and operating margins, working capital requirements and capital expenditures. Based on this analysis, the carrying value of goodwill of the WD Services reporting unit exceeded the implied fair value and the Company recorded an impairment charge of $5.2 million, which is included in "Asset impairment charge" on the Company's consolidated statement of operations.

Income Taxes

We record income taxes under the liability method. Deferred tax assets and liabilities reflect our estimation of the future tax consequences of temporary differences between the carrying amounts of assets and liabilities for book and tax purposes. We determine deferred income taxes based on the differences in accounting methods and timing between financial statement and income tax reporting. Accordingly, we determine the deferred tax asset or liability for each temporary difference based on the enacted tax rates expected to be in effect when we realize the underlying items of income and expense. We consider many factors when assessing the likelihood of future realization of our deferred tax assets, including our recent earnings experience by jurisdiction, expectations of future taxable income, and the carryforward periods available to us for tax reporting purposes, as well as other relevant factors. We may establish a valuation allowance to reduce deferred tax assets to the amount we believe is more likely than not to be realized. Due to inherent complexities arising from the nature of our businesses, future changes in income tax law, tax sharing agreements or variances between our actual and anticipated operating results, we make certain judgments and estimates. Therefore, actual income taxes could materially vary from these estimates.

We record liabilities to address uncertain tax positions we have taken in previously filed tax returns or that we expect to take in a future tax return. The determination for required liabilities is based upon an analysis of each individual tax position, taking into consideration whether it is more likely than not that our tax position, based on technical merits, will be sustained upon examination. For those positions for which we conclude it is more likely than not it will be sustained, we recognize the largest amount of tax benefit that is greater than 50 percent likely of being realized upon ultimate settlement with the taxing authority. The difference between the amount recognized and the total tax position is recorded as a liability. The ultimate resolution of these tax positions may be greater or less than the liabilities recorded.

Reinsurance and Self-Insurance Liabilities

We reinsure a substantial portion of our automobile, general and professional liability and workers' compensation costs under reinsurance programs through our wholly-owned subsidiary, Social Services Providers Captive Insurance Company ("SPCIC"), a licensed captive insurance company domiciled in the State of Arizona. In addition, we maintain a self-funded health insurance program for U.S. based employees with a stop-loss umbrella policy with a third party insurer to limit the maximum potential liability for individual claims and for a maximum potential claim liability based on member enrollment. We utilize independent actuarial reports to determine the expected losses and in order to record the appropriate entries associated with our reinsurance programs and self-funded health insurance program. We regularly analyze our reserves for incurred but not reported claims, and for reported but not paid claims related to our reinsurance and self-funded insurance programs. We believe our reserves are adequate. However, significant judgment is involved in assessing these reserves such as assessing historical paid claims, average lags between the claims' incurred date, reported dates and paid dates, and the frequency and severity of claims. There may be differences between actual settlement amounts and recorded reserves and any resulting adjustments are included in expense once a probable amount is known.

Revenue Recognition

NET Services

Capitated contracts. The majority of NET Services revenue is generated under capitated contracts with customers where we assume the responsibility of meeting the covered transportation requirements of a specific geographic population based on per-member per-month fees for the number of members in the customer's program. Revenue is recognized based on the population served during the period. In some capitated contracts, partial payment is received as a prepayment during the month service is provided. These partial payments may be due back to the customer, or additional payments may be due to the Company, after the contract month, based on a reconciliation of actual utilization and cost compared to the prepayment made.

FFS contracts. Revenues earned under FFS contracts are based upon contractually established billing rates. Revenues are recognized when the service is provided based upon contractual amounts.

Flat fee contracts. Revenues earned under flat fee contracts are recognized ratably over the covered service period based upon contractually established fees which do not fluctuate with any changes in the membership population who are eligible to receive the transportation services.

For most contracts, we arrange for transportation of members through our network of independent transportation providers, whereby we remit payment to the transportation providers. However, for certain contracts, we only provide management services, and do not contract with transportation providers for the actual transportation. Under these contracts, the amount of revenue recognized is based upon the management fee earned.

WD Services

WD Services revenues are primarily generated from providing workforce development and offender rehabilitation services which include employment preparation and placement, apprenticeship and training, and certain health related services to clients on behalf of governmental and private entities. While the specific terms vary by contract and country, we primarily receive four types of revenue streams under contracts with government entities: referral/attachment fees, job placement and job outcome fees, sustainment fees and incentive fees. Referral/attachment fees are typically upfront payments that are payable when a client is referred by the contracting government entity or that client enters the program. Job placement fees are typically payable when a client is employed. Job outcome fees are typically payable when a client is employed, and remains employed for a specified period of time. Sustainment fees are typically payable upon certain employment tenure milestones. Incentive fees are generally based upon a calculation that includes a variety of factors and inputs, such as average sustainment rates and client referral rates. Incentive fees vary greatly by contract.

Referral/attachment fee revenue is recognized ratably over the period of service, based upon an estimated period of time general services will be provided (i.e. the person is placed in a job or reaches the maximum time period for the program). The estimated period of time for which services will be rendered is based upon historical data. Job placement, job outcome and sustainment fee revenue is recognized when certain milestones are achieved, and amounts become billable. Incentive fee revenue is generally recognized when fixed and determinable, frequently at the end of the cumulative calculation period, unless contractual terms allow for earned payments on a fixed or ratable basis.

Revenue is also earned under fixed FFS arrangements, based upon contractual rates established at the outset of the contract or the applicable contract year, although the rate may be prospectively adjusted during the contract year based upon actual volumes. If the Company is unable to adjust its costs accordingly, our profitability may be negatively impacted. Volume levels are typically not guaranteed under contracts.

Deferred Revenue

At times we may receive funding for certain services in advance of services being rendered. These amounts are reflected in the consolidated balance sheets as “Deferred revenue” until the services are rendered.

Stock Based Compensation

Our primary form of employee stock-based compensation is stock option awards and restricted stock awards, including certain awards which vest based upon performance conditions. We measure the value of stock option awards on the date of grant at fair value using the appropriate valuation techniques, including the Black-Scholes and Monte Carlo option-pricing models. We recognize the fair value, net of estimated forfeitures, as stock-based compensation expense over the remaining term on a straight-line basis. The pricing models require various highly judgmental assumptions including volatility and expected option term. If any of the assumptions used in the models change significantly, stock-based compensation expense may differ materially in the future from that recorded in the current period.

We record stock-based compensation expense net of estimated forfeitures. In determining the estimated forfeiture rates for stock-based awards, we periodically conduct an assessment of the actual number of awards that have been forfeited to date as well as those expected to be forfeited in the future. We consider many factors when estimating expected forfeitures, including the type of award, the employee class and historical experience. The estimate of stock awards that will ultimately be forfeited requires significant judgment and to the extent that actual results or updated estimates differ from our current estimates, such amounts will be recorded as a cumulative adjustment in the period such estimates are revised.

Restructuring, Redundancy and Related Reorganization Costs

We have engaged in employee headcount optimization actions within WD Services which require management to estimate the timing and amount of severance and other employee separation costs for workforce reduction. We accrue for severance and other employee separation costs under these actions when it is probable that a liability has been incurred and the amount is reasonably estimable. The amounts used in determining severance accruals are based on an estimate of the salaries and related benefit costs payable under existing plans for the number of employees impacted, but the final determination of the actual employees to be terminated is subject to a customary consultation process. The estimate of costs that will ultimately be paid requires significant judgment and to the extent that actual results or updated results differ from our current estimates, such amounts will be recorded as a cumulative adjustment in the period such amounts are determined.

Results of operations

Segment reporting. Our operations are organized and reviewed by management along our segment lines. We operate in two principal business segments: NET Services and WD Services. Our investment in Matrix is also a reportable segment referred to as the "Matrix Investment".

Effective October 19, 2016, we completed the Matrix Transaction resulting in our ownership of a noncontrolling interest in our historical HA Services segment. The HA Services segment results of operations for the periods through October 19, 2016 are separately discussed in the "Discontinued operations, net of tax" section set forth below and are separately discussed in the "Equity in net loss of investees" section set forth below for the subsequent period through December 31, 2016. Additionally, effective November 1, 2015, we completed the sale of our Human Services segment. The Human Services segment results of operations are separately discussed in the "Discontinued operations, net of tax" section set forth below.

Segment results are based on how our chief operating decision maker manages our business, makes operating decisions and evaluates operating performance. The operating results of the two principal business segments include revenue and expenses incurred by the segment, as well as an allocation of direct expenses incurred by our corporate division on behalf of the segment. Indirect expenses, including unallocated corporate functions and expenses, such as executive, finance, accounting, human resources, information technology and legal, as well as the results of our captive insurance company (the "Captive") and elimination entries recorded in consolidation are reflected in "Corporate and Other".

Year ended December 31, 2016 compared to year ended December 31, 2015

The following table sets forth results of operations and the percentage of consolidated total revenues represented by items in our consolidated statements of income for 2016 and 2015 (in thousands):

	Year ended December 31,			
	2016		2015	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	1,578,889	100.0%	1,478,010	100.0%
Operating expenses:				
Service expense	1,452,754	92.0%	1,381,154	93.4%
General and administrative expense	69,911	4.4%	70,986	4.8%
Asset impairment charge	21,003	1.3%	-	0.0%
Depreciation and amortization	26,604	1.7%	23,998	1.6%
Total operating expenses	1,570,272	99.5%	1,476,138	99.9%
Operating income	8,617	0.5%	1,872	0.1%
Non-operating expense:				
Interest expense, net	1,583	0.1%	1,853	0.1%
Equity in net loss of investees	10,287	0.7%	10,970	0.7%
Gain on foreign currency transactions	(1,375)	-0.1%	(857)	-0.1%
Income (loss) from continuing operations before income taxes	(1,878)	-0.1%	(10,094)	-0.7%
Provision for income taxes	17,036	1.1%	14,583	1.0%
Income (loss) from continuing operations	(18,914)	-1.2%	(24,677)	-1.7%
Discontinued operations, net of tax	108,760	6.9%	107,871	7.3%
Net income	89,846	5.7%	83,194	5.6%
Net loss attributable to noncontrolling interest	2,082	0.1%	502	0.0%
Net income attributable to Providence	91,928	5.8%	83,696	5.7%

Service revenue, net. Consolidated service revenue, net for 2016 increased $100.9 million, or 6.8%, compared to 2015. Revenue for 2016 compared to 2015 includes an increase in revenue of NET Services of $151.3 million, which was partially offset by a decrease in revenue of WD Services of $50.7 million. Excluding the effects of changes in currency exchange rates, consolidated service revenue increased 8.9% in 2016 compared to 2015.

Total operating expenses. Consolidated operating expenses for 2016 increased $94.1 million, or 6.4%, compared to 2015. Operating expenses for 2016 compared to 2015 included an increase in expenses attributable to NET Services of $145.5 million and Corporate and Other of $2.2 million. Partially offsetting these expense increases was a decrease in WD Services' operating expenses of $53.6 million. Operating expenses include asset impairment charges of $19.6 million at WD Services and $1.4 million at Corporate and Other during 2016.

Operating income. Consolidated operating income for 2016 increased $6.7 million compared to 2015 due to an increase in operating income of NET Services in 2016 as compared to 2015 of $5.9 million and a decrease in the operating loss of WD Services in 2016 as compared to 2015 of $2.9 million, although WD Services' new offender rehabilitation program incurred an operating loss in 2016 as compared to operating income in 2015. In addition, France continued to experience a significant operating loss in 2016, consistent with 2015. These changes were partially offset by an increase in the operating loss for Corporate and Other of $2.0 million, driven primarily by the asset impairment charge of $1.4 million in 2016.

Interest expense, net. Consolidated interest expense, net for 2016 decreased $0.3 million, or 14.6%, compared to 2015. The decrease is primarily related to the repayment of the related party note during 2015, which was partially offset by higher commitment fees on our Credit Facility for 2016 as compared to 2015.

Equity in net loss of investees. Equity in net loss of investees primarily relates to our investments in Mission Providence and Matrix. Mission Providence, which is part of WD Services, began providing services in July 2015. We record 75% of Mission Providence's profit or loss in equity in net loss of investees. We began reporting Matrix as an equity investment effective October 19, 2016, upon the completion of the Matrix Transaction, and record 46.8% of Matrix's profit or loss in net loss of investees. Our equity in net loss of investees related to WD Services and Matrix totaled $8.5 million and $1.8 million, respectively, for 2016. Included in Matrix's results is interest expense of $2.9 million and transaction related expenses of $6.0 million, which includes $4.0 million of transaction incentive compensation payable to the Matrix management team.

Gain on foreign currency transactions. The foreign currency gains of $1.4 million and $0.9 million for 2016 and 2015, respectively, were primarily due to translation adjustments of our foreign subsidiaries.

Provision for income taxes. We recognized an income tax provision for 2016 and 2015 despite having losses from continuing operations before income taxes. Because of foreign net operating losses (including equity investee losses) for which the future income tax benefit currently cannot be recognized, and non-deductible expenses such as amortization of deferred consideration related to the Ingeus acquisition, the Company recognized estimated taxable income for these years upon which the income tax provision for financial reporting is calculated.

Discontinued operations, net of tax. Discontinued operations, net of tax, includes the activity of our former Human Services segment and our former HA Services segment, composed entirely of our 100% equity interest in Matrix until the completion of the Matrix Transaction on October 19, 2016. Discontinued operations, net of tax for our Human Services segment was a loss of $5.6 million in 2016 and income of $101.8 million in 2015, respectively. 2016 Human Services results include an accrual of $6.0 million with respect to potential indemnification claims, legal costs of $1.1 million related to these potential claims and transaction related expenses of $0.8 million. Discontinued operations, net of tax for our HA Services segment was income of $114.3 million and $6.1 million for 2016 and 2015, respectively. 2016 HA Services segment results include a gain on disposition, net of tax, of $109.4 million. See Note 21, *Discontinued Operations,* to our consolidated financial statements for additional information.

Net loss attributable to noncontrolling interest. Net loss attributable to noncontrolling interests primarily relates to the minority interest associated with our company servicing the offender rehabilitation contract in our WD Services segment. As this contract is currently experiencing losses, as further discussed below, we have a net loss attributable to noncontrolling interests.

Segment Results. The following analysis includes discussion of each of our segments.

NET Services

NET Services financial results are as follows for 2016 and 2015 (in thousands):

	Year Ended December 31,			
	2016		2015	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	1,234,364	100.0%	1,083,015	100.0%
Service expense	1,133,501	91.8%	991,659	91.6%
General and administrative expense	11,406	0.9%	10,704	1.0%
Depreciation and amortization	12,375	1.0%	9,429	0.9%
Operating income	77,082	6.2%	71,223	6.6%

Service revenue, net. Service revenue, net for NET Services in 2016 increased $151.3 million, or 14.0%, compared to 2015. The increase related to the impact of new contracts which contributed $76.4 million of revenue in 2016, including contracts in California and Florida, and an increase in revenue associated with existing contracts of $120.4 million due to the net impact of membership and rate changes, partially offset by the loss of certain contracts that resulted in a decrease in revenue of $45.5 million.

Service expense. Service expense is comprised of the following for 2016 and 2015 (in thousands):

	Year Ended December 31,			
	2016		2015	
	$	Percentage of Revenue	$	Percentage of Revenue
Purchased services	927,965	75.2%	814,632	75.2%
Payroll and related costs	162,000	13.1%	141,669	13.1%
Other operating expenses	42,478	3.4%	34,634	3.2%
Stock-based compensation	1,058	0.1%	724	0.1%
Total service expense	1,133,501	91.8%	991,659	91.6%

Service expense for 2016 increased $141.8 million, or 14.3%, compared to 2015. The increase in service expense was primarily attributable to an increase in purchased transportation services due primarily to higher transportation volume. Purchased services as a percentage of revenue remained constant at 75.2%. Additionally, our payroll and related costs increased for 2016 as compared to 2015 primarily due to the hiring of employees to support new contracts and increased call volume associated with increased utilization, as well as an increase of $1.2 million in expense for the long-term incentive plan for management put into place in the fourth quarter of 2015 and separation related charges for NET Services' former chief executive officer during 2016 of $0.8 million. Our other operating expenses also increased for 2016 as compared to 2015. The increase was primarily attributable to increased bad debt expense, including $2.1 million of expense related to one specific customer, and costs incurred for external resources used in the design and implementation of NET Services member experience and value enhancement initiatives of $2.0 million. Stock-based compensation increased $0.3 million in 2016 as compared to 2015 primarily due to the expense associated with new stock-based compensation awards granted in 2016 that vested in January 2017.

General and administrative expense. General and administrative expenses in 2016 increased $0.7 million, or 6.6%, as compared to 2015, due to increased facility costs resulting from the overall growth of our operations. As a percentage of revenue, general and administrative expense decreased slightly from 1.0% for 2015 to 0.9% for 2016.

Depreciation and amortization expense. Depreciation and amortization expenses increased $2.9 million primarily due to the addition of long-lived assets in our call centers. As a percentage of revenue, depreciation and amortization increased slightly from 0.9% for 2015 to 1.0% for 2016.

WD Services

WD Services financial results are as follows for 2016 and 2015 (in thousands):

	Year Ended December 31,			
	2016		2015	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	344,403	100.0%	395,059	100.0%
Service expense	320,147	93.0%	393,803	99.7%
General and administrative expense	30,300	8.8%	29,846	7.6%
Asset impairment charge	19,588	5.7%	-	0.0%
Depreciation and amortization	13,824	4.0%	13,776	3.5%
Operating income (loss)	(39,456)	-11.5%	(42,366)	-10.7%

Service revenue, net. Service revenue, net in 2016 decreased $50.7 million, or 12.8%, compared to 2015. Excluding the effects of changes in currency exchange rates, service revenue decreased 5.1% in 2016 compared to 2015, which was primarily related to revenue declines associated with declining referrals and an altered pricing structure under the segment's primary employability program in the UK and a revised bidding strategy in certain markets. Implemented in late 2015, the overhauled bidding process emphasized the pursuit of only those contracts that meet certain investment criteria, including risk-weighted return on capital thresholds, and involve the provision of services where we believe our experience will allow us to deliver differentiated and improved outcomes for our clients. As a result of this enhanced criteria and a challenging UK outsourcing industry, new contracts have been more infrequent and smaller in nature. The decrease was partially offset by two new contracts in France that began in 2015 and growth of NCS youth programs in 2016. WD Services additionally recognized revenue of $5.4 million for 2016 under its offender rehabilitation program related to the finalization of a contractual adjustment for contract years ended March 31, 2015 and 2016, which partially offset the decline in revenue under this contract for 2016.

Service expense. Service expense is comprised of the following for 2016 and 2015 (in thousands):

	Year Ended December 31,			
	2016		2015	
	$	Percentage of Revenue	$	Percentage of Revenue
Payroll and related costs	210,293	61.1%	249,130	63.1%
Purchased services	65,363	19.0%	78,498	19.9%
Other operating expenses	44,502	12.9%	45,418	11.5%
Stock-based compensation	(11)	0.0%	20,757	5.3%
Total service expense	320,147	93.0%	393,803	99.7%

Service expense in 2016 decreased $73.7 million, or 18.7%, compared to 2015. Payroll and related costs decreased primarily as a result of the redundancy plans implemented in the fourth quarter of 2015 that were designed to better align headcount with service delivery volumes as well as declining referrals under the segment's primary employability program in the UK. Partially offsetting these decreases was increased payroll and related costs associated with a significant new offender rehabilitation program that began in 2015 and higher payroll expenses in France associated with new programs implemented in 2015 and 2016. As referenced above, both the segment's new offender rehabilitation program and operations in France had significant operating losses in 2016. In addition, $8.5 million in termination benefits related to three redundancy plans contributed to losses in 2016. Purchased services decreased in 2016 compared to 2015 primarily as a result of a decline in client referrals under our primary employability program in the UK which required less use of outsourced services. Stock-based compensation decreased $20.8 million in 2016 as compared to 2015 primarily due to expenses totaling $16.1 million related to the settlement of outstanding awards in the fourth quarter of 2015 in relation to the separation of two executives, who were also sellers of Ingeus to Providence, as further described in Note 13, *Stock-Based Compensation and Similar Arrangements,* to our consolidated financial statements.

General and administrative expense. General and administrative expense in 2016 increased $0.5 million compared to 2015. $2.5 million of the increase relates to the impact of the reduction in the fair value of contingent consideration that was recorded in 2015. Offsetting this increase were decreased facility costs of $2.0 million primarily due to the closure of numerous sites in the UK, partially offset by the opening of new sites in France during 2016.

Asset impairment charge. During the fourth quarter of 2016, WD Services recorded asset impairment charges of $10.0 million, $4.4 million and $5.2 million to its property and equipment, intangible assets and goodwill, respectively, primarily due to lower than expected volumes and unfavorable service mix shifts under a large contract in the UK impacting future projections; additional clarity into the anticipated size and structure of the Work and Health Programme in the UK; and the absence of additional details regarding the restructuring of the offender rehabilitation contract in the UK.

Depreciation and amortization expense. Depreciation and amortization expense for 2016 was flat compared to 2015.

Corporate and Other

Corporate and Other includes the headcount and professional service costs incurred at the holding company level, our captive insurance company, and elimination entries to account for inter-segment transactions. Corporate and Other financial results are as follows for 2016 and 2015 (in thousands):

	Year Ended December 31,	
	2016	2015
	$	$
Service revenue, net (a)	122	(64)
Service expense (a)	(894)	(4,308)
General and administrative expense	28,205	30,436
Asset impairment charge	1,415	-
Depreciation and amortization	405	793
Operating loss	(29,009)	(26,985)

(a)Negative amounts are present for this line item due to elimination entries that are included in Corporate and Other. Offsetting amounts are reflected in the financial results of our operating segments.

Operating loss. Corporate and Other operating loss in 2016 increased by $2.0 million, or 7.5%, as compared to 2015 primarily due to a $4.5 million decrease in benefits associated with favorable claims experiences on our reinsurance and self-insured programs, an asset impairment charge of $1.4 million in 2016 and a $0.4 million net increase in compensation related expenses. The $0.4 million net increase in compensation expenses in 2016 was primarily due to an increase in short-term incentives and $1.0 million of compensation related to the sale of the Company's Human Services segment in 2015. Also included in 2016 were $1.6 million of expenses related to a shareholder lawsuit, an increase of $0.8 million from 2015. These increases in expense were partially offset by a decrease in various professional fees of $4.0 million. The Company anticipates continued reductions in multiple Corporate and Other expense categories in 2017.

Year ended December 31, 2015 compared to year ended December 31, 2014

The following table sets forth results of operations and the percentage of consolidated total revenues represented by items in our consolidated statements of income for 2015 and 2014 (in thousands):

	Year ended December 31,			
	2015		2014	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	1,478,010	100.0%	1,092,880	100.0%
Operating expenses:				
Service expense	1,381,154	93.4%	988,600	90.5%
General and administrative expense	70,986	4.8%	44,080	4.0%
Depreciation and amortization	23,998	1.6%	17,213	1.6%
Total operating expenses	1,476,138	99.9%	1,049,893	96.1%
Operating income	1,872	0.1%	42,987	3.9%
Non-operating expense:				
Interest expense, net	1,853	0.1%	10,224	0.9%
Equity in net loss of investees	10,970	0.7%	-	0.0%
Gain on foreign currency transactions	(857)	-0.1%	(37)	0.0%
Income (loss) from continuing operations before income taxes	(10,094)	-0.7%	32,800	3.0%
Provision for income taxes	14,583	1.0%	8,289	0.8%
Income (loss) from continuing operations	(24,677)	-1.7%	24,511	2.2%
Discontinued operations, net of tax	107,871	7.3%	(4,236)	-0.4%
Net income	83,194	5.6%	20,275	1.9%
Net loss attributable to noncontrolling interest	502	0.0%	-	0.0%
Net income attributable to Providence	83,696	5.7%	20,275	1.9%

Service revenue, net. Consolidated service revenue, net for 2015 increased $385.1 million, or 35.2%, compared to 2014. Revenue for 2015 compared to 2014 includes an increase in revenue attributable to an increase in revenue of WD Services of $186.3 million, as a result of the acquisition of Ingeus on May 30, 2014, and of NET Services of $198.7 million.

Total operating expenses. Consolidated operating expenses for 2015 increased $426.2 million, or 40.6%, compared to 2014. Operating expenses for 2015 compared to 2014 included an increase in expenses attributable to WD Services of $246.2 million, due primarily to the acquisition discussed above, and an increase in expense attributable to NET Services of $195.2 million. Partially offsetting these expense increases was a decrease in Corporate and Other expenses of $15.2 million.

Operating income. Consolidated operating income for 2015 decreased $41.1 million compared to 2014. The decrease was primarily attributable to the decrease in the operating income of WD Services in 2015 as compared to 2014 of $59.9 million. This decrease was partially offset by increased operating income of NET Services of $3.5 million and a decreased operating loss for Corporate and Other of $15.3 million.

Interest expense, net. Consolidated interest expense, net for 2015 decreased $8.4 million compared to 2014. The decrease is primarily related to interest allocated to discontinued operations for the Matrix Transaction, commencing in October 2014, when Matrix was acquired by Providence. The interest allocation is based upon the amount of debt required to be paid off with the proceeds of the Matrix stock subscription transaction.

Equity in net loss of investees. Equity in net loss of investees in 2015 relates to our investment in Mission Providence. Mission Providence began providing services in July 2015 and incurred significant start-up and administrative costs. We record 75% of Mission Providence's profit or loss.

Gain on foreign currency transactions. The foreign currency gain of $0.9 million and $0.04 million for 2015 and 2014, respectively, were primarily due to translation adjustments of our foreign subsidiaries.

Provision for income taxes. Our effective tax rate for 2015 exceeded 100%. The effective tax rate exceeded the U.S. federal statutory rate of 35% primarily due to foreign net operating losses (including equity investment losses) for which the future income tax benefit currently cannot be recognized, significant losses in foreign jurisdictions with tax rates lower than the U.S. rate of 35%, state income taxes, and certain non-deductible expenses, including significant amounts of compensation expense related to two former shareholders of Ingeus who reside in Australia, for which no tax deduction may be claimed. Our effective tax rate for 2014 was 25.3%, due primarily to the reduction in fair value in contingent consideration for the Ingeus acquisition, which is not treated as taxable income.

Discontinued operations, net of tax. Discontinued operations, net of tax, includes the activity of our Human Services segment and our HA Services segment. Discontinued operations, net of tax for our Human Services segment was income of $101.8 million and a loss of $3.6 million for 2015 and 2014, respectively. 2015 Human Services results include a gain on disposition, net of tax, of $100.3 million. Discontinued operations, net of tax for our HA Services segment was income of $6.1 million and a loss of $0.6 million for 2015 and 2014, respectively. See Note 21, *Discontinued Operations,* to our consolidated financial statements for additional information.

Net loss attributable to noncontrolling interest. Net loss attributable to noncontrolling interests primarily relates to the minority interest associated with our offender rehabilitation contract in WD Services. As this program has experienced losses, as further discussed below, we have a net loss attributable to noncontrolling interests.

Segment Results. The following analysis includes discussion of each of our segments.

NET Services

NET Services financial results are as follows for 2015 and 2014 (in thousands):

	Year Ended December 31,			
	2015		2014	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	1,083,015	100.0%	884,287	100.0%
Service expense	991,659	91.6%	800,454	90.5%
General and administrative expense	10,704	1.0%	8,406	1.0%
Depreciation and amortization	9,429	0.9%	7,698	0.9%
Operating income	71,223	6.6%	67,729	7.7%

Service revenue, net. Services revenue, net for 2015 increased $198.7 million, or 22.5%, compared to 2014. The increase related to the impact of new contracts which contributed $51.3 million of revenue in 2015, including contracts in Maine, Rhode Island, Florida and Ohio, and an increase in revenue associated with existing contracts of $175.7 million due to the net impact of membership and rate changes, partially offset by the loss of certain contracts which resulted in a decrease in revenue of $28.3 million.

Service expense. Service expense is comprised of the following for 2015 and 2014 (in thousands):

	Year Ended December 31,			
	2015		2014	
	$	Percentage of Revenue	$	Percentage of Revenue
Purchased services	814,632	75.2%	657,979	74.4%
Payroll and related costs	141,669	13.1%	111,212	12.6%
Other operating expenses	34,634	3.2%	30,676	3.5%
Stock-based compensation	724	0.1%	587	0.1%
Total service expense	991,659	91.6%	800,454	90.5%

Service expense for 2015 increased $191.2 million, or 23.9%, compared to 2014. The increase in service expense is primarily attributable to an increase in purchased transportation services due primarily to higher transportation volume. Purchased transportation services as a percentage of revenue increased slightly, primarily as a result of an increase in utilization, including an increase in utilization by Medicaid expansion members as they became more familiar with the availability of transportation services. Additionally, our payroll and related costs increased for 2015 as compared to 2014 due to additional contracts and increased call volume due to the increased utilization. Our other operating expenses also increased in 2015 as compared to 2014 due to volume, although it decreased slightly as a percentage of revenue.

General and administrative expense. General and administrative expenses in 2015 increased $2.3 million, or 27.3%, as compared to 2014, due to increased facility costs resulting from the overall growth of our operations, including the opening of a new call center in Arizona.

Depreciation and amortization expense. Depreciation and amortization expenses increased $1.7 million primarily due to the addition of long-lived assets in our call centers. As a percentage of revenue, depreciation and amortization remained constant at 0.9%.

WD Services

WD Services' comparative results are significantly impacted due to the acquisition of Ingeus in May 2014. The results presented below include Ingeus for the full-year 2015 as compared to the post-acquisition period in 2014. WD Services financial results are as follows for 2015 and 2014 (in thousands):

	Year Ended December 31,			
	2015		2014	
	$	Percentage of Revenue	$	Percentage of Revenue
Service revenue, net	395,059	100.0%	208,763	100.0%
Service expense	393,803	99.7%	184,919	88.6%
General and administrative expense	29,846	7.6%	(2,072)	-1.0%
Depreciation and amortization	13,776	3.5%	8,406	4.0%
Operating income (loss)	(42,366)	-10.7%	17,510	8.4%

Service revenue, net. Service revenue, net in 2015 increased $186.3 million, or 89.2%, compared to 2014. The increase in 2015 compared to 2014 is primarily related to the inclusion of Ingeus since May 30, 2014, as Ingeus contributed $367.4 million in 2015 compared to $179.3 million in 2014. Additionally, WD Services experienced revenue growth due to a significant new offender rehabilitation program which began in 2015, offset by revenue declines associated with declining referrals and reduced unit pricing under its primary employability program in the UK. Assuming Ingeus was acquired on January 1, 2014, WD Services revenue in 2014 would have been $361.2 million on a pro forma basis.

Service expense. Service expense is comprised of the following for 2015 and 2014 (in thousands):

	Year Ended December 31,			
	2015		2014	
	$	Percentage of Revenue	$	Percentage of Revenue
Payroll and related costs	249,130	63.1%	105,436	50.5%
Purchased services	78,498	19.9%	48,114	23.0%
Other operating expenses	45,418	11.5%	27,938	13.4%
Stock-based compensation	20,757	5.3%	3,431	1.6%
Total service expense	393,803	99.7%	184,919	88.6%

Service expense in 2015 increased $208.9 million, or 113.0%, compared to 2014. The increase in 2015 compared to 2014 is primarily related to the Ingeus acquisition. Payroll and related costs increased primarily as a result of new headcount for a new offender rehabilitation program. Generally, under new contracts, headcount costs increase as new employees are hired and trained prior to significant revenue being earned, resulting in an increase in payroll and related costs as a percentage of revenue. Payroll and related costs for the year ended December 31, 2015 include $12.2 million in termination benefits primarily related to two redundancy plans designed to better align headcount with service delivery volumes. Additionally, on October 15, 2015, we entered into Settlement Deeds whereby two Ingeus executives' (who were also selling shareholders of Ingeus) employment agreements were terminated by mutual agreement. The termination of the employees' employment agreements resulted in $4.8 million of accelerated compensation expense and $16.1 million in accelerated stock-based compensation from restricted shares and cash placed into escrow in 2014, in conjunction with the payment of acquisition consideration of Ingeus. These amounts would otherwise have been recognized over the four year vesting period, which was scheduled to end in May 2018. In addition, in 2015 and 2014, respectively, we incurred $5.9 million and $4.5 million of related compensation and stock-based compensation expense prior to termination. WD Services also incurred $2.4 million in other costs associated with the separation with these two employees which is included in other operating expenses in the table above.

General and administrative expense. General and administrative expense in 2015 increased $31.9 million compared to 2014. $13.6 million of the increase relates to the impact of the reduction in the fair value of contingent consideration, as the reduction recorded in 2015 was $2.5 million as compared to the reduction in 2014 of $16.1 million. The fair value of the contingent consideration was zero at December 31, 2015. Additionally, facility costs increased $18.3 million, to $32.3 million in 2015 from $14.0 million in 2014 primarily due to the Ingeus acquisition, as well as growth associated with our new programs.

Depreciation and amortization expense. Depreciation and amortization expense for 2015 increased $5.4 million compared to 2014, principally attributable to the full year of activity in 2015 for Ingeus.

Corporate and Other

Corporate and Other includes the headcount and professional service costs incurred at the holding company level, our captive insurance company, and elimination entries to account for inter-segment transactions. Corporate and Other financial results are as follows for 2015 and 2014 (in thousands):

	Year Ended December 31,	
	2015	**2014**
	$	$
Service revenue, net (a)	(64)	(170)
Service expense (a)	(4,308)	3,227
General and administrative expense	30,436	37,746
Depreciation and amortization	793	1,109
Operating loss	(26,985)	(42,252)

(a) Negative amounts are present for this line item due to elimination entries that are included in Corporate and Other. Offsetting amounts are reflected in the financial results of our operating segments.

Operating loss. Corporate and Other operating loss in 2015 decreased by $15.3 million as compared to 2014, due primarily to decreased expenses. Service expense for 2015 decreased $7.5 million as compared to 2014 due to favorable claims history in 2015 for our self-insurance and reinsurance programs, as well as a decrease in certain payroll and related costs of $3.8 million primarily due to positions eliminated in 2014.

General and administrative expenses in 2015 decreased $7.3 million, or 19.4%, compared to 2014. The decrease was primarily related to a decrease in acquisition costs of $11.2 million, which were incurred in relation to the acquisitions of Ingeus and Matrix. Additionally, the year ended December 31, 2014 included $3.0 million in financing fees associated with the debt refinancing completed in October 2014. Offsetting these decreases in expenses were increased legal fees in 2015 as compared to 2014, of which $0.8 million related to legal fees associated with a putative stockholder class action derivative complaint. Additional increases in general and administrative expenses related to additional accounting and compliance related fees, recruiting, professional fees and payroll related costs of $5.2 million due primarily to increased costs to integrate Ingeus and Matrix into our internal controls program as well as increased audit costs related to the new companies acquired. We also incurred expense attributable to stock award modifications in the amount of $0.7 million related to a separation agreement with a former chief executive officer and incurred an increase in cash settled stock-based compensation expense of $0.9 million. In addition, in 2015 we incurred $1.4 million in general and administrative expense related to a new stock-based long-term incentive plan designed to provide long-term performance based awards to certain executive officers of Providence.

Seasonality

Our quarterly operating results and operating cash flows normally fluctuate due in part to seasonal factors, uneven demand for services and the timing of new contracts, which impact the amount of revenues earned and expenses incurred. NET Services experiences fluctuations in demand during the summer and winter seasons. Due to higher demand in the summer months, lower demand during the winter, and a primarily fixed revenue stream based on a per-member, per-month payment structure, NET Services normally experiences lower operating margins during the summer season and higher operating margins during the winter. WD Services is impacted by both the timing of commencement and expiration of major contracts. Under many of WD Services' contracts, we invest significant sums of money in personnel, leased office space, purchased or developed technology, and other costs, and generally incur these costs prior to commencing services and receiving payments. This results in significant variability in financial performance and cash flows between quarters and for comparative periods. It is expected that future contracts will be structured in a similar fashion. In addition, under the majority of WD Services' contracts, the Company relies on its customers, which include government agencies, to provide referrals, for whom the Company can provide services and earn revenue. The timing and magnitude of referrals can fluctuate significantly, leading to volatility in revenue. The Matrix Investment experiences quarterly volatility in earnings due to uneven demand for services, and historically, with the exception of the year ended December 31, 2015, has experienced higher volumes in the second half of the calendar year.

Liquidity and capital resources

Short-term capital requirements consist primarily of recurring operating expenses, new contract start-up costs, including workforce restructuring costs. In addition, in order to ensure operational optimization, we periodically perform reviews of our operations and service delivery infrastructure. These reviews may result in the identification of actions or measures which are expected to have long-term benefits, but which could result in short-term capital requirements for restructuring, capital expenditures or implementation costs. In 2016, we launched a strategic initiative to enhance member satisfaction and drive greater operational efficiencies in NET Services. The implementation of the initiative is expected to be substantially completed by the end of 2017. Additionally, in 2016, in order to build upon WD Services' leadership position in the UK employment services industry, enhance client satisfaction and drive greater operational efficiencies, WD Services launched the Ingeus Futures program which includes organizational restructuring, the development and deployment of new processes and technologies, and increased business development resources. The implementation of the initiative is expected to be substantially completed during 2017. We expect to meet any cash requirements through available cash on hand, cash generated from our operating segments, and borrowing capacity under our Credit Facility.

Cash flow from investing activities was our primary source of cash during 2016 due to the completion of the Matrix Transaction in October 2016. Our balance of cash and cash equivalents was $72.3 million and $79.8 million at December 31, 2016 and 2015, respectively, including $21.4 million and $37.5 million held in foreign countries, respectively. Such cash held in foreign countries is generally used to fund foreign operations, although it may also be used to repay intercompany indebtedness existing between Providence and its foreign subsidiaries. Cash included in current assets of discontinued operations held for sale totaled $5.0 at December 31, 2015.

We had restricted cash of $14.1 million and $20.1 million at December 31, 2016 and 2015, respectively, primarily related to contractual obligations and activities of our captive insurance subsidiary. At December 31, 2016 and 2015, our total debt under our Credit Facility was $0 and $305.0 million, respectively.

We may, from time to time, access capital markets to raise equity or debt financing for various business reasons, including acquisitions. We may also raise debt financing to fund future repurchases of our common stock. The timing, term, size, and pricing of any such financing will depend on investor interest and market conditions, and there can be no assurance that we will be able to obtain any such financing.

The cash flow statement for all periods presented includes both continuing and discontinued operations.

Year ended December 31, 2016

Cash flows

Operating activities. We generated net cash flows from operating activities of $41.5 million for 2016. These cash flows included net income of $89.8 million, which includes a non-cash net of tax gain on the Matrix Transaction of $109.4 million. In addition, non-cash items include $26.0 million of amortization expense, $21.7 million of depreciation expense, $21.0 million in asset impairment charges, $5.1 million in stock-based compensation expense and $10.3 million of equity in net loss of investees. In addition, we made income tax payments of $30.2 million in relation to the sale of our Human Services segment, which was partially offset by $8.2 million received from the purchaser of the Human Services segment to reimburse us for a portion of these taxes. Significant non-cash activity from our discontinued operations included $17.5 million of amortization and $3.7 million of depreciation. Changes in working capital items include the following significant items:

- $19.3 million use of cash due to the increase in accounts receivable, the majority of which is due to an increase in NET Services' accounts receivable of $15.2 million. This increase was primarily related to increases in amounts owed under capitated reconciliation contracts, whereby funds are received after a final reconciliation of the number of members served, as well as increases in receivables for FFS and administrative services only contracts. These increases were partially offset by decreased receivables for two customers with significant amounts due to us as of the end of the prior year. Additionally, the accounts receivable of our former HA Services segment, reported as a discontinued operation, increased $3.1 million from December 31, 2015 to the time of the Matrix Transaction, which is reported as a use of cash from operations in the statement of cash flows.

- $33.4 million source of cash due to the increase in accounts payable and accrued expenses primarily related to accrued NET Services contract payments, increased compensation accruals and accruals for legal fees and estimated settlements. These increases were partially offset by $8.6 million paid during 2016 for WD Services' redundancy costs. Additionally, the accounts payable and accrued expenses of our former HA Services segment, increased $10.6 million from December 31, 2015 to the time of the Matrix Transaction, which is reported as a use of cash from operations in the statement of cash flows.
- $8.7 million source of cash due to the increase in accrued transportation costs of NET Services resulting from an increase in trip volume in 2016 over 2015.

Investing activities. Net cash generated by investing activities totaled $323.9 million for 2016. The Matrix Transaction resulted in cash proceeds from investing activities of $371.6 million. $32.0 million of cash was used by our continuing operations to purchase property and equipment primarily related to information technology purchases to support service delivery efficiencies and the growth of our operating segments. Purchases of property and equipment by our discontinued operations totaled $9.2 million. We also used $8.0 million to fund our equity investment in Mission Providence and $5.7 million to fund our equity investment in Matrix.

Financing activities. Net cash used in financing activities totaled $376.5 million for 2016. During 2016, we repaid a net amount of $19.7 million under our Credit Facility and repaid our term loans in the amount of $285.3 million primarily with the use of a portion of our proceeds from the Matrix Transaction. Additionally, cash paid for common stock repurchases pursuant to our $70.0 million stock repurchase program, which terminated on November 3, 2016, totaled $57.9 million, and cash paid for common stock repurchases pursuant to our $100.0 million stock repurchase program, which commenced on October 26, 2016, totaled $12.4 million. We paid convertible preferred stock dividends of $4.4 million and received cash proceeds from the exercise of employee stock option totaling $4.1 million.

Effect of exchange rate changes on cash. There was a negative effect on cash of $1.4 million for 2016 which resulted primarily from the decline in the value of the British pound, as compared to the U.S. dollar. The June 23, 2016 announcement of the passage of the referendum advising for the exit of the UK from the EU adversely impacted global markets, including currencies, and resulted in a decline in the value of the British pound, as compared to the U.S. dollar.

Year ended December 31, 2015

Cash flows

Operating activities. We generated net cash flows from operating activities of $13.2 million for 2015. These cash flows included net income of $83.2 million, which includes a non-cash net of tax gain on sale of our Human Services segment of $100.3 million. In addition, non-cash items include, $38.1 million of amortization expense, $26.6 million in stock-based compensation expense, $20.2 million of depreciation expense, and $11.0 million of equity in net loss of investees. Significant non-cash activity from our discontinued operations included $5.7 million of depreciation, $28.6 million of amortization, and $1.6 million of asset impairment charges. Changes in working capital items, include the following significant items:

- $86.6 million use of cash due to the increase in accounts receivable, the majority of which is due to an increase in NET Services' accounts receivable of $48.0 million due primarily to timing, as two significant customer balances increased at year-end, but were subsequently collected as of February 2016. In addition, $16.2 million of the increase in NET Services' accounts receivable is due to amounts owed under capitated reconciliation contracts, whereby funds are received after a final reconciliation of the number of members served. Additionally, WD Services accounts receivable increased $20.4 million due to additional revenue contracts in place during 2015 as compared to 2014. The accounts receivable of our former Human Services segment, a discontinued operation, increased $9.9 million from December 31, 2014 to the time of sale, which is reported as a use of cash from operations in the statement of cash flows.

- $19.0 million source of cash due to an increase in deferred revenue, of which $15.7 million related to WD Services in association with cash received in advance of services being rendered for two large contracts.

Investing activities. Net cash generated by investing activities totaled $143.3 million for 2015. The sale of our Human Services segment effective November 1, 2015, resulted in cash proceeds from investing activities of $199.9 million. $24.8 million of cash was used to purchase property and equipment to support the growth of our continuing operations, and $16.1 million was used to fund our equity investment in Mission Providence. Purchases of property and equipment by our discontinued operations totaled $10.3 million.

Financing activities. Net cash used in financing activities totaled $231.3 million for 2015. We repaid a net amount of $182.0 million under our Credit Facility during 2015, primarily with the use of a portion of our proceeds from the sale of our Human Services segment. Additionally, scheduled term loan payments totaled $23.6 million. We also repaid the $65.5 million unsecured subordinated related party bridge note from the net proceeds of $80.7 million received from the issuance of preferred stock. Additional use of funds included stock repurchases of $36.8 million, a contingent consideration payment related to the Ingeus acquisition of $7.5 million and preferred stock dividend payments of $3.9 million. Cash proceeds from the exercise of employee stock option exercises were $4.9 million.

Obligations and commitments

Current Credit Facility and Impact of the Matrix Transaction

On August 28, 2016, we entered into the Fourth Amendment and Consent (the "Fourth Amendment") to the Credit Agreement. Pursuant to the Fourth Amendment, which provided for the lenders' consent to the Matrix Transaction, the net cash proceeds received by the Company in connection with the Matrix Transaction were to be applied first, to the prepayment of outstanding term loans, second, to the prepayment of outstanding revolving loans and third, for any purpose not prohibited by the Credit Agreement. Additionally, effective following the repayment of the outstanding term loans in full on October 20, 2016, the Fourth Amendment further (i) reduced the aggregate revolving commitments under the Credit Agreement to $200 million, (ii) amended the consolidated net leverage ratio covenant such that the Company's consolidated net leverage ratio may not be greater than 3.00:1.00 as of the end of any fiscal quarter and (iii) replaced the existing consolidated fixed charge coverage ratio covenant with a covenant that the Company's consolidated interest coverage ratio may not be less than 3.00:1.00 as of the end of any fiscal quarter.

No further amounts may be borrowed under the term loan facility. Upon the repayment, we wrote-off the deferred financing fees associated with the term loans, as well as a portion of deferred financing fees associated with the revolving Credit Facility due to the reduction of the aggregate revolving commitment. The total write-off was $2.3 million which is included in "Discontinued operations, net of tax" in our consolidated statement of income for the year ended December 31, 2016.

We had no borrowings outstanding under the Credit Facility as of December 31, 2016. $25.0 million of the Credit Facility is available to collateralize letters of credit. As of December 31, 2016, six letters of credit in the aggregate amount of $5.4 million were outstanding. At December 31, 2016, our available credit under the Credit Facility was $194.6 million.

Our obligations under the Credit Facility are guaranteed by all of our present and future domestic subsidiaries, excluding certain domestic subsidiaries, which includes our insurance captives. Our obligations under, and each guarantor's obligations under its guaranty of, the Credit Facility are secured by a first priority lien on substantially all of our respective assets, other than our equity investment in Matrix, including a pledge of 100% of the issued and outstanding stock of our domestic subsidiaries, excluding our insurance captives, and 65% of the issued and outstanding stock of our first tier foreign subsidiaries.

Credit Facility Background

On August 2, 2013, we entered into the Credit Agreement with Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer, SunTrust Bank, as syndication agent, Merrill Lynch, Pierce, Fenner & Smith Incorporated and SunTrust Robinson Humphrey, Inc., as joint lead arrangers and joint book managers and other lenders party thereto. The Credit Agreement provided us with a senior secured credit facility, in aggregate principal amount of $225.0 million, comprised of a $60.0 million term loan facility and a $165.0 million revolving credit facility. The Credit Facility includes sublimits for swingline loans and letters of credit in amounts of up to $10.0 million and $25.0 million, respectively. On August 2, 2013, we borrowed the entire amount available under the term loan facility and $16.0 million under our revolving credit facility and used the proceeds thereof to refinance certain of our existing indebtedness.

On May 28, 2014, we entered into the first amendment to the Credit Agreement (the "First Amendment"). The First Amendment provided for, among other things, an increase in the aggregate amount of the Credit Facility from $165.0 million to $240.0 million and other modifications in connection with the consummation of the acquisition of Ingeus.

On October 23, 2014, we entered into the Second Amendment to the Credit Agreement (the “Second Amendment”) to (i) add a new term loan tranche in aggregate principal amount of up to $250.0 million to partly finance the acquisition of Matrix, (ii) provide the consent of the required lenders to consummate the acquisition of Matrix, (iii) permit incurrence of additional debt to fund the acquisition of Matrix and (iv) add an excess cash flow mandatory prepayment provision.

On September 3, 2015, we entered into the Third Amendment to the Credit Agreement (the “Third Amendment”). Pursuant to the Third Amendment, the lenders under the Credit Agreement consented to Providence’s sale of the Human Services segment, provided that a minimum amount equal to 50% of the net cash proceeds, as defined in the Credit Agreement, of the sale was applied pro rata to the prepayment of revolving loans and swingline loans under the Credit Agreement. Further, the lenders consented to our use of 50% of the net cash proceeds of the sale to make restricted payments to repurchase common stock pursuant to a Providence stock repurchase program. The Third Amendment provided for amendments to the terms of the Credit Agreement to reflect such consents.

Under the Credit Agreement, as amended through the Fourth Amendment, we have an option to request an increase in the amount of the revolving credit facility and/or the term loan facility from time to time (on substantially the same terms as apply to the existing facilities) in an aggregate amount of up to $75.0 million with either additional commitments from lenders under the Credit Agreement at such time or new commitments from financial institutions acceptable to the administrative agent in its reasonable discretion, so long as no default or event of default exists at the time of any such increase. We may not be able to access additional funds under this increase option as no lender is obligated to participate in any such increase under the Credit Facility.

The Credit Facility matures on August 2, 2018. We may prepay the Credit Facility in whole or in part, at any time without premium or penalty, subject to reimbursement of the lenders’ breakage and redeployment costs in connection with prepayments of London Interbank Offered Rate, or LIBOR, loans. The unutilized portion of the commitments under the Credit Facility may be irrevocably reduced or terminated by us at any time without penalty.

Interest on the outstanding principal amount of any loans accrues, at our election, at a per annum rate equal to LIBOR, plus an applicable margin or the base rate plus an applicable margin. The applicable margin ranges from 2.25% to 3.25% in the case of LIBOR loans and 1.25% to 2.25% in the case of the base rate loans, in each case, based on our consolidated leverage ratio as defined in the Credit Agreement. Interest on any loans is payable quarterly in arrears. In addition, we are obligated to pay a quarterly commitment fee based on a percentage of the unused portion of each lender’s commitment under the Credit Facility and quarterly letter of credit fees based on a percentage of the maximum amount available to be drawn under each outstanding letter of credit. The commitment fee and letter of credit fee range from 0.25% to 0.50% and 2.25% to 3.25%, respectively, in each case, based on our consolidated leverage ratio.

The Credit Facility also requires us (subject to certain exceptions as set forth in the Amended and Restated Credit Agreement) to prepay the outstanding loans in an aggregate amount equal to 100% of the net cash proceeds received from certain asset dispositions, debt issuances, insurance and casualty awards and other extraordinary receipts.

The Credit Agreement contains customary affirmative and negative covenants and events of default. The negative covenants include restrictions on our ability to, among other things, incur additional indebtedness, create liens, make investments, give guarantees, pay dividends, repurchase shares, sell assets, and merge and consolidate. We are subject to financial covenants, including consolidated net leverage and consolidated interest coverage covenants. We were in compliance with all covenants as of December 31, 2016.

Rights offering. We completed a rights offering on February 5, 2015, allowing all of the Company’s existing common stockholders the non-transferrable right to purchase their pro rata share of $65.5 million of Preferred Stock at a price equal to $100.00 per share (the “Rights Offering”). The Preferred Stock was convertible into shares of our Common Stock at a conversion price equal to $39.88, which was the closing price of our Common Stock on the NASDAQ Global Select Market on October 22, 2014.

Stockholders exercised subscription rights to purchase 130,884 shares of the Company's Preferred Stock. Pursuant to the terms and conditions of the Standby Purchase Agreement between Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Coliseum Capital Co-Invest, L.P. and Blackwell Partners, LLC (collectively, the "Standby Purchasers") and the Company, the remaining 524,116 shares of the Company's Preferred Stock was purchased by Standby Purchasers at the $100.00 per share subscription price. The Standby Purchasers beneficially owned approximately 94% of our outstanding Preferred Stock after giving effect to the Rights Offering and the Standby Purchase Agreement. The Company received $65.5 million in aggregate gross proceeds from the consummation of the Rights Offering and Standby Purchase Agreement, which it used to repay the related party unsecured subordinated bridge note that was outstanding as of December 31, 2014.

Additionally, on March 12, 2015, the Standby Purchasers exercised their right to purchase an additional 150,000 shares of the Company's convertible preferred stock at a $105 per share subscription price.

We may pay a noncumulative cash dividend on each share of convertible preferred stock, when, as and if declared by a committee of our Board, at the rate of 5.5% per annum on the liquidation preference then in effect. Following the issue date of the convertible preferred stock, on or before the third business day immediately preceding each fiscal quarter, we will determine our intention whether or not to pay a cash dividend with respect to that ensuing quarter and will give notice of our intention to each holder of convertible preferred stock as soon as practicable thereafter.

In the event we do not declare and pay a cash dividend, the liquidation preference will be increased to an amount equal to the liquidation preference in effect at the start of the applicable dividend period, plus an amount equal to such then applicable liquidation preference multiplied by 8.5% per annum, computed on the basis of a 365-day year and the actual number of days elapsed from the start of the applicable dividend period to the applicable date of determination.

Cash dividends are payable quarterly in arrears on January 1, April 1, July 1 and October 1 of each year, and, if declared, will begin to accrue on the first day of the applicable dividend period. Paid in kind ("PIK") dividends, if applicable, will accrue and be cumulative on the same schedule as set forth above for cash dividends and will also be compounded at the applicable annual rate on each applicable subsequent dividend date. PIK dividends are paid upon the occurrence of a liquidation event, conversion or redemption in accordance with the terms of the convertible preferred stock. Cash dividends were declared each quarter for the years ended December 31, 2016 and 2015 and totaled $4.4 million and $3.9 million, respectively.

Reinsurance and Self-Funded Insurance Programs

Reinsurance

We reinsure a substantial portion of our NET Services' and historical HA Services and Human Services' automobile, general and professional liability and workers' compensation costs under reinsurance programs through SPCIC, our wholly owned subsidiary. The decision to reinsure these risks was made based on current conditions in the insurance marketplace, an increasing number of coverage limitations, and fluctuating insurance premium rates.

SPCIC, which is a licensed captive insurance company domiciled in the State of Arizona, reinsures third-party insurers for general and professional liability exposures for the first dollar of each and every loss up to $1.0 million per loss and $3.0 million in the aggregate. At December 31, 2016, the cumulative reserve for expected losses was $1.4 million. The excess premium over our expected losses may be used to fund SPCIC's operating expenses, fund any deficit arising in automobile and workers' compensation liability coverage, provide for surplus reserves, and fund any other risk management activities.

SPCIC reinsures a third-party insurer for workers' compensation insurance for the first dollar of each and every loss up to $0.5 million per claim. The cumulative reserve for expected losses at December 31, 2016 was $7.8 million.

SPCIC also reinsures a third-party insurer for automobile liability exposures up to $250,000 per claim. The cumulative reserve for expected losses at December 31, 2016 was $2.0 million.

Based on an independent actuarial report, our expected losses related to workers' compensation, automobile and general and professional liability in excess of our liability under our associated reinsurance programs at December 31, 2016 was $5.3 million. We recorded a corresponding receivable from third-party insurers and liability at December 31, 2016 for these expected losses, which would be paid by third-party insurers to the extent losses are incurred.

SPCIC had restricted cash of $13.8 million and $19.5 million at December 31, 2016 and 2015, respectively, to cover expected claims losses of SPCIC. The full extent of claims may not be fully determined for years. Therefore, the estimates of potential obligations are based on recommendations of an independent actuary using historical data, industry data, and our claims experience.

Health Insurance

We offer our NET Services, U.S. based WD Services, and corporate employees an option to participate in self-funded health insurance programs. Additionally, we historically offered this option to our HA Services and Human Services segments' employees. During the year ended December 31, 2016, health claims were self-funded with a stop-loss umbrella policy with a third party insurer to limit the maximum potential liability for individual claims to $275,000 per person, subject to an aggregating stop-loss limit of $400,000. In addition, the program has a total stop-loss limit for total claims, in order to limit our exposure to catastrophic claims.

Health insurance claims are paid as they are submitted to the plan administrator. We maintain accruals for claims that have been incurred but not yet reported to the plan administrator, and therefore, have not been paid. The incurred but not reported reserve is based on an established cap and current payment trends of health insurance claims. The liability for the self-funded health plan of $3.0 million and $2.4 million as of December 31, 2016 and 2015, respectively, was recorded in "Reinsurance liability and related reserve" in our consolidated balance sheets.

We charge our employees a portion of the costs of our self-funded group health insurance programs. We determine this charge at the beginning of each plan year based upon historical and projected medical utilization data. Any difference between our projections and our actual experience is borne by us, up to the stop-loss limit. We estimate potential obligations for liabilities under this program to reserve what we believe to be a sufficient amount to cover liabilities based on our past experience. Any significant increase in the number of claims or costs associated with claims made under this program above what we reserve could have a material adverse effect on our financial results.

Contractual cash obligations.

The following is a summary of our future contractual cash obligations as of December 31, 2016:

	At December 31, 2016				
Contractual cash obligations (000's)	**Total**	**Less than 1 Year**	**1-3 Years**	**3-5 Years**	**After 5 Years**
Capital Leases	$ 3,611	$ 1,721	$ 1,890	$ -	$ -
Interest (1)	1,476	893	583	-	-
Purchased services commitments (2)	1,944	995	761	188	-
Guarantees (3)	50,276	49,757	519	-	-
Letters of credit (3)	5,414	5,414	-	-	-
Operating Leases (4)	72,076	19,788	24,938	13,275	14,075
Total	$ 134,797	$ 78,568	$ 28,691	$ 13,463	$ 14,075

(1) Future interest payments have been calculated at the current rates as of December 31, 2016.

(2) Our purchase obligations represent the minimum obligations we have under agreements with certain of our vendors. These minimum obligations are less than our projected use for those periods. Payments may be more than the minimum obligations based on actual use.

(3) Guarantees and letters of credit ("LOCs") are commitments that represent funding responsibilities that may require our performance in the event of third-party demands or contingent events. Guarantees include surety bonds we provide to certain customers to protect against potential non-delivery of our non-emergency transportation services. Of the outstanding balance of our stand-by LOCs, $5.4 million directly reduces the amount available to us from our Credit Facility. The surety bonds and LOC amounts in the above table represent the amount of commitment expiration per period.

(4) The operating leases are for office space and related office equipment. We account for these leases on a monthly basis. Certain leases contain periodic rent escalation adjustments and renewal options.

Other than the items described above, we do not have any off-balance sheet arrangements as of December 31, 2016.

Stock repurchase programs

Our Board approved a stock repurchase program on February 1, 2007. Under this stock repurchase program we spent $14.4 million to purchase 756,100 shares of our common stock on the open market. We did not purchase shares of our Common Stock during the period 2008 through 2011 or during the period of 2013 through 2015 under this plan. This plan was formally terminated in January 2016.

On November 4, 2015, our Board authorized us to engage in a repurchase program to repurchase up to $70.0 million in aggregate value of our Common Stock during the twelve-month period following November 4, 2015. This plan terminated on November 3, 2016. A total of 1,360,249 shares were purchased through this plan for $63.0 million, including commission payments.

On October 26, 2016, our Board authorized us to engage in a repurchase program to repurchase up to $100.0 million in aggregate value of our Common Stock during the twelve-month period following October 26, 2016. Purchases under the repurchase program may be made from time-to-time through a combination of open market repurchases (including Rule 10b5-1 plans), privately negotiated transactions, and accelerated share repurchase transactions, at the discretion of our officers, and as permitted by securities laws, covenants under existing bank agreements, and other legal requirements. During 2016, we spent $12.4 million, including commission payments, to purchase 328,843 shares of our Common Stock under this plan.

Off-balance sheet arrangements

As of December 31, 2016 and 2015, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

New Accounting Pronouncements

The new accounting pronouncements that impact our business are included in Note 2, *Significant Accounting Policies and Recent Accounting Pronouncements,* to our consolidated financial statements and are incorporated herein by reference.

Item 7A. ***Quantitative and Qualitative Disclosures About Market Risk.***

Foreign currency risk

As of December 31, 2016, we conducted business in 9 countries outside the U.S. As such, our cash flows and earnings are subject to fluctuations from changes in foreign currency exchange rates. We do not currently hedge against the possible impact of currency fluctuations. For 2016, we generated $328.2 million of our net operating revenues from operations outside the US. As we expand further into international markets, we expect the risk from foreign currency exchange rates to increase.

A 10% adverse change in the foreign currency exchange rate from British Pounds to U.S. dollars would have a $23.5 million impact on consolidated revenue, and a positive $3.2 million impact on net income. A 10% adverse change in other foreign currency exchange rates would not have a significant impact on our financial results.

We assess the significance of foreign currency risk on a periodic basis and may implement strategies to manage such risk as we deem appropriate.

Item 8. ***Financial Statements and Supplementary Data.***

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Management's Report on Internal Control Over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting for the registrant, as such term is defined in Rule 13a-15(f) of the Exchange Act. We designed our internal control over financial reporting to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting can provide only reasonable assurance with respect to financial statement preparation and presentation. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. The Company conducts periodic evaluations of its internal controls to enhance, where necessary, its procedures and controls.

The Company, under the supervision and with the participation of its management, including its principal executive officer and principal financial officer, conducted an evaluation of the effectiveness of the Company's internal control over financial reporting as of December 31, 2016, based on the criteria set forth in the Internal Control–Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on such evaluation, the Company concluded that its internal control over financial reporting was effective as of December 31, 2016.

KPMG LLP, an independent registered public accounting firm that audited the Company's consolidated financial statements included in this Annual Report on Form 10-K, has issued an audit report on the effectiveness of the Company's internal control over financial reporting which is presented in Part II, Item 8 of this Annual Report.

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
The Providence Service Corporation:

We have audited the accompanying consolidated balance sheets of The Providence Service Corporation and subsidiaries (the Company) as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2016. In connection with our audits of the consolidated financial statements, we have also audited the financial statement schedule in Item 15(a)(2). These consolidated financial statements and the financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of The Providence Service Corporation and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material aspects, the information set forth therein.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 10, 2017 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

Phoenix, Arizona
March 10, 2017

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
The Providence Service Corporation:

We have audited The Providence Service Corporation's (the Company) internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying "Management's Report on Internal Control over Financial Reporting". Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, The Providence Service Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of The Providence Service Corporation and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2016, and our report dated March 10, 2017 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Phoenix, Arizona
March 10, 2017

The Providence Service Corporation
Consolidated Balance Sheets
(in thousands except share and per share data)

	December 31, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	$ 72,262	$ 79,756
Accounts receivable, net of allowance of $5,901 in 2016 and $4,380 in 2015	162,311	156,932
Other receivables	12,240	16,298
Prepaid expenses and other	38,081	27,624
Restricted cash	3,192	4,012
Deferred tax assets	6,825	2,891
Current assets of discontinued operations	-	32,211
Total current assets	294,911	319,724
Property and equipment, net	46,220	46,158
Goodwill	119,624	129,958
Intangible assets, net	49,124	69,564
Equity investments	161,363	9,324
Other assets	8,211	17,988
Restricted cash, less current portion	10,938	16,044
Deferred tax asset	4,003	42
Non-current assets of discontinued operations	-	441,400
Total assets	$ 694,394	$ 1,050,202
Liabilities, redeemable convertible preferred stock and stockholders' equity		
Current liabilities:		
Current portion of long-term obligations	$ 1,721	$ 31,375
Accounts payable	22,177	28,019
Accrued expenses	100,872	117,436
Accrued transportation costs	73,191	64,537
Deferred revenue	20,718	28,667
Reinsurance and related liability reserves	8,639	9,389
Current liabilities of discontinued operations	-	15,849
Total current liabilities	227,318	295,272
Long-term obligations, less current portion	1,890	268,696
Other long-term liabilities	22,655	22,855
Deferred tax liabilities	67,291	8,403
Non-current liabilities of discontinued operations	-	87,268
Total liabilities	319,154	682,494
Commitments and contingencies (Note 19)		
Reedeemable convertible preferred stock		
Convertible preferred stock, net: Authorized 10,000,000 shares; $0.001 par value; 803,398 and 803,518 issued and outstanding; 5.5%/8.5% dividend rate	77,565	77,576
Stockholders' equity		
Common stock: Authorized 40,000,000 shares; $0.001 par value; 17,315,661 and 17,186,780 issued and outstanding (including treasury shares)	17	17
Additional paid-in capital	302,010	293,012
Retained earnings	156,718	69,209
Accumulated other comprehensive loss, net of tax	(33,449)	(16,831)
Treasury shares, at cost, 3,478,676 and 1,895,998 shares	(125,201)	(54,823)
Total Providence stockholders' equity	300,095	290,584
Noncontrolling interest	(2,420)	(452)
Total stockholders' equity	297,675	290,132
Total liabilities, redeemable convertible preferred stock and stockholders' equity	$ 694,394	$ 1,050,202

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Consolidated Statements of Income
(in thousands except share and per share data)

	Year ended December 31,		
	2016	**2015**	**2014**
Service revenue, net	$ 1,578,889	$ 1,478,010	$ 1,092,880
Operating expenses:			
Service expense	1,452,754	1,381,154	988,600
General and administrative expense	69,911	70,986	44,080
Asset impairment charge	21,003	-	-
Depreciation and amortization	26,604	23,998	17,213
Total operating expenses	1,570,272	1,476,138	1,049,893
Operating income	8,617	1,872	42,987
Other expenses:			
Interest expense, net	1,583	1,853	10,224
Equity in net loss of investees	10,287	10,970	-
Gain on foreign currency transactions	(1,375)	(857)	(37)
Income (loss) from continuing operations before income taxes	(1,878)	(10,094)	32,800
Provision for income taxes	17,036	14,583	8,289
Income (loss) from continuing operations, net of tax	(18,914)	(24,677)	24,511
Discontinued operations, net of tax	108,760	107,871	(4,236)
Net income	89,846	83,194	20,275
Net loss attributable to noncontrolling interests	2,082	502	-
Net income attributable to Providence	$ 91,928	$ 83,696	$ 20,275
Net income available to common stockholders (Note 15)	$ 74,374	$ 67,999	$ 20,275
Basic earnings (loss) per common share:			
Continuing operations	$ (1.45)	$ (1.83)	$ 1.66
Discontinued operations	6.52	6.09	(0.29)
Basic earnings per common share	$ 5.07	$ 4.26	$ 1.37
Diluted earnings (loss) per common share:			
Continuing operations	$ (1.45)	$ (1.83)	$ 1.63
Discontinued operations	6.52	6.09	(0.28)
Diluted earnings per common share	$ 5.07	$ 4.26	$ 1.35
Weighted-average number of common shares outstanding:			
Basic	14,666,896	15,960,905	14,765,303
Diluted	14,666,896	15,960,905	15,018,561

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Consolidated Statements of Comprehensive Income
(in thousands)

	Year ended December 31,		
	2016	**2015**	**2014**
Net income	$ 89,846	$ 83,194	$ 20,275
Net loss attributable to noncontrolling interest	2,082	502	-
Net income attributable to Providence	91,928	83,696	20,275
Other comprehensive loss:			
Foreign currency translation adjustments, net of tax	(16,618)	(8,075)	(7,337)
Other comprehensive loss	(16,618)	(8,075)	(7,337)
Comprehensive income	73,228	75,119	12,938
Comprehensive income attributable to noncontrolling interest	1,968	508	-
Comprehensive income attributable to Providence	$ 75,196	$ 75,627	$ 12,938

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Consolidated Statements of Stockholders' Equity
(in thousands except share data)

	Common Stock		Additional Paid-In Capital	Retained Earnings (Accumulated Deficit)	Accumulated Other Comprehensive Loss, Net of Tax	Treasury Stock		Non-Controlling Interest	Total
	Shares	Amount				Shares	Amount		
Balance at December 31, 2013	14,477,312	$ 14	$ 194,363	$ (33,641)	$ (1,419)	956,442	$ (15,641)	$ 6,961	$150,637
Stock-based compensation	-	-	7,562	-	-	-	-	-	7,562
Exercise of employee stock options, including net tax benefit of $2,683	512,927	-	13,702	-	-	-	-	-	13,702
Restricted stock issued	74,714	-	-	-	-	18,504	(524)	-	(524)
PSC of Canada Exchange Corp. shares exchanged	261,694	1	6,960	-	-	39,162	(1,521)	(6,961)	(1,521)
Restricted shares issued related to Ingeus acquisition, unvested	596,915	1	(1)	-	-	-	-	-	-
Restricted shares issued related to Matrix acquisition, unvested	946,723	1	38,569	-	-	-	-	-	38,570
Other	-	-	-	-	-	-	-	50	50
Foreign currency translation adjustments, net of tax	-	-	-	-	(7,337)	-	-	-	(7,337)
Net income attributable to Providence	-	-	-	20,275	-	-	-	-	20,275
Balance at December 31, 2014	16,870,285	17	261,155	(13,366)	(8,756)	1,014,108	(17,686)	50	221,414
Stock-based compensation	-	-	26,622	-	-	-	-	-	26,622
Exercise of employee stock options, including net tax benefit of $2,706	247,333	-	7,899	-	-	5,718	(299)	-	7,600
Restricted stock issued	65,447	-	-	-	-	15,961	(759)	-	(759)
Stock repurchase	-	-	-	-	-	816,468	(34,111)	-	(34,111)
Shares surrendered by employees to pay	-	-	-	-	-	43,743	(1,968)	-	(1,968)

employee taxes related to shares released from escrow									
Conversion of convertible preferred stock to common stock	3,715	-	150	-	-	-	-	-	150
Beneficial conversion feature related to preferred stock	-	-	1,071	-	-	-	-	-	1,071
Convertible preferred stock dividends	-	-	(2,814)	(1,121)	-	-	-	-	(3,935)
Accretion of convertible preferred stock discount	-	-	(1,071)	-	-	-	-	-	(1,071)
Foreign currency translation adjustments, net of tax	-	-	-	-	(8,075)	-	-	-	(8,075)
Noncontrolling interests	-	-	-	-	-	-	-	(502)	(502)
Net income attributable to Providence	-	-	-	83,696	-	-	-	-	83,696
Balance at December 31, 2015	17,186,780	17	293,012	69,209	(16,831)	1,895,998	(54,823)	(452)	290,132
Stock-based compensation	-	-	5,154	-	-	-	-	-	5,154
Exercise of employee stock options, including net tax shortfall of $276	105,788	-	3,832	-	-	-	-	-	3,832
Restricted stock issued	22,793	-	-	-	-	2,736	(130)	-	(130)
Stock repurchase	-	-	-	-	-	1,579,942	(70,248)	-	(70,248)
Conversion of convertible preferred stock to common stock	300	-	12	-	-	-	-	-	12
Convertible preferred stock dividends	-	-	-	(4,419)	-	-	-	-	(4,419)
Foreign currency translation adjustments, net of tax	-	-	-	-	(16,618)	-	-	114	(16,504)
Noncontrolling interests	-	-	-	-	-	-	-	(2,082)	(2,082)
	-	-	-	91,928	-	-	-	-	91,928

Net income attributable to Providence									
Balance at December 31, 2016	17,315,661	$ 17	$ 302,010	$ 156,718	$ (33,449)	3,478,676	$(125,201)	$ (2,420)	$297,675

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Consolidated Statements of Cash Flows
(in thousands)

	Year ended December 31,		
	2016	**2015**	**2014**
Operating activities			
Net income	$ 89,846	$ 83,194	$ 20,275
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	21,699	20,234	14,051
Amortization	26,026	38,067	15,437
Provision for doubtful accounts	3,759	2,539	2,589
Stock-based compensation	5,136	26,622	7,562
Deferred income taxes	(14,130)	(10)	(5,208)
Amortization of deferred financing costs and debt discount	1,754	2,041	5,561
Write-off of deferred financing charges	2,302	-	-
Excess tax benefit upon exercise of stock options	(282)	(2,857)	(2,722)
Gains on remeasurement of contingent consideration	-	(2,469)	(16,314)
Asset impairment charge	21,003	1,593	6,915
Equity in net loss of investee	10,287	10,970	-
Gain on sale of business	(167,895)	(123,129)	-
Deferred income taxes and income taxes payable on gain on sale of business	58,492	22,797	-
Other non-cash charges (credits)	(1,323)	(419)	3,088
Changes in operating assets and liabilities, net of effects of acquisitions:			
Accounts receivable	(19,332)	(86,627)	(17,208)
Prepaid expenses and other	(4,058)	14,654	(7,361)
Reinsurance liability reserve	(4,110)	(611)	3,761
Accounts payable and accrued expenses	33,365	(21,900)	28,483
Income taxes payable on gain of sale of business	(30,153)	-	-
Accrued transportation costs	8,654	9,045	530
Deferred revenue	(4,019)	19,043	(3,454)
Other long-term liabilities	4,462	463	(790)
Net cash provided by operating activities	41,483	13,240	55,195
Investing activities			
Purchase of property and equipment	(41,216)	(35,072)	(23,242)
Proceeds from sale of property	1,039	-	-
Net increase (decrease) in short-term investments	239	(18)	(19)
Acquisitions, net of cash acquired	-	(3,433)	(416,986)
Sale of business, net of cash sold	371,580	199,943	-
Equity investment	(13,663)	(16,072)	-
Restricted cash for reinsured claims losses	5,926	(2,058)	(3,108)
Net cash provided by (used in) investing activities	323,905	143,290	(443,355)
Financing activities			
Proceeds from issuance of preferred stock, net of issuance costs	-	80,667	-
Preferred stock dividends	(4,419)	(3,928)	-
Repurchase of common stock, for treasury	(70,378)	(36,838)	(524)
Proceeds from common stock issued pursuant to stock option exercise	4,108	4,894	11,019
Excess tax benefit upon exercise of stock options	282	2,857	2,722
Proceeds from long-term debt	52,500	34,000	501,200
Repayment of long-term debt	(357,450)	(305,125)	(48,625)
Payment of contingent consideration	-	(7,496)	-
Debt financing costs	(247)	(286)	(12,769)
Capital lease payments and other	(935)	-	73
Net cash provided by (used in) financing activities	(376,539)	(231,255)	453,096
Effect of exchange rate changes on cash	(1,357)	(911)	(3,525)
Net change in cash	(12,508)	(75,636)	61,411
Cash at beginning of period	84,770	160,406	98,995
Cash at end of period	$ 72,262	$ 84,770	$ 160,406

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Supplemental Cash Flow Information
(in thousands)

Supplemental cash flow information	Year ended December 31, 2016	2015	2014
Cash included in current assets of discontinued operations held for sale	$ -	$ 5,014	$ 25,148
Cash paid for interest	$ 9,768	$ 16,699	$ 10,726
Cash paid for income taxes	$ 55,827	$ 21,555	$ 18,389
Accrued unfunded future equity investment capital contributions	$ -	$ 4,654	$ -
Note receivable issued for sale of property	$ 3,130	$ -	$ -
Purchase of equipment through capital lease obligation	$ 4,547	$ -	$ -
PSC of Canada Exchange Corp. shares exchanged	$ -	$ -	$ 6,961
PSC of Canada Exchange Corp. shares converted to treasury shares for fulfillment of obligation by sellersof WCG related to dispute with British Columbia	$ -	$ -	$ 1,521
Acquisitions:			
Purchase price	$ -	$ -	$ 525,596
Less:			
Cash acquired	-	-	37,159
Common stock issued for acquistions of business	-	-	38,570
Contingent consideration	-	-	30,095
Note payable to former shareholder	-	-	600
Amount due to former shareholder	-	-	2,186
Working capital adjustments to purchase price	-	(3,433)	-
Acquisitions, net of cash acquired	$ -	$ 3,433	$ 416,986

See accompanying notes to the consolidated financial statements

The Providence Service Corporation
Notes to Consolidated Financial Statements
December 31, 2016
(in thousands except share and per share data)

1. Organization and Basis of Presentation

Description of Business

The Providence Service Corporation ("we", the "Company" or "Providence") is a holding company, which owns interests in subsidiaries and other companies that are primarily engaged in the provision of healthcare and workforce development services for public and private sector entities seeking to control costs and promote positive outcomes. The subsidiaries and other companies in which the Company holds interests comprise the following segments:

- Non-Emergency Transportation Services ("NET Services") – Nationwide provider of non-emergency medical transportation programs for state governments and managed care organizations.
- Workforce Development Services ("WD Services") – Global provider of employment preparation and placement and legal offender rehabilitation services to eligible participants of government sponsored programs.
- Matrix Investment – Minority interest in nationwide provider of in-home care optimization and management solutions, including comprehensive health assessments ("CHAs"), to members of managed care organizations, accounted for as an equity method investment.

Ingeus UK Holdings Limited and its wholly and partly-owned subsidiaries and associates (collectively, "Ingeus"), which make up the majority of WD Services, were acquired on May 30, 2014. On November 1, 2015, the Company completed the sale of its Human Services segment, which is accounted for as a discontinued operation.

Matrix Investment is comprised of Mercury Parent, LLC, a newly formed parent of CCHN Group Holdings, Inc. CCHN Group Holdings, Inc. and its subsidiaries are referred to as "Matrix". Matrix was acquired by the Company on October 23, 2014. On October 19, 2016, affiliates of Frazier Healthcare Partners purchased a 53.2% equity interest in Matrix with Providence retaining a 46.8% equity interest (the "Matrix Transaction"). Prior to the closing of the Matrix Transaction, the financial results of Matrix were included in the Company's Health Assessment Services ("HA Services") segment. The Company now owns a noncontrolling interest in Matrix. The Company's proportionate share of Matrix's net assets and financial results for the period following the closing of the Matrix Transaction are presented under the equity method. Its assets, liabilities and financial results for the period prior to the closing of the Matrix Transaction are presented within discontinued operations. For additional information regarding the Matrix Transaction, see Note 21, *Discontinued Operations*.

As of December 31, 2016, the Company's consolidated subsidiaries operated in 40 states and the District of Columbia in the United States ("U.S."), and in 9 countries outside of the U.S.

Basis of Presentation

The Company follows accounting standards set by the Financial Accounting Standards Board ("FASB"). The FASB establishes accounting principles generally accepted in the United States ("GAAP"). Rules and interpretive releases of the Securities and Exchange Commission ("SEC") under authority of federal securities laws are also sources of authoritative GAAP for SEC registrants. References to GAAP issued by the FASB in these footnotes are to the FASB *Accounting Standards Codification* ("ASC"), which serves as a single source of authoritative non-SEC accounting and reporting standards to be applied by non-governmental entities. All amounts are presented in U.S. dollars, unless otherwise noted.

The Company holds investments that are accounted for using the equity method. The Company does not control the decision making process nor business management practices of these affiliates. Accordingly, the Company relies on management of these affiliates to provide accurate financial information prepared in accordance with GAAP. The Company receives audit reports relating to such financial information from the affiliates' independent auditors on an annual basis. The Company is not aware of any errors in or possible misstatements of the financial information provided by its equity affiliates that would have a material effect on the Company's consolidated financial statements.

Reclassifications

The Company has reclassified certain amounts relating to its prior period results to conform to its current period presentation. Effective January 1, 2016, the Company adopted Accounting Standards Update ("ASU") No. 2015-03, *Interest - Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs* ("ASU 2015-03") and reclassified debt issuance costs to a contra-liability account in the consolidated balance sheet as of December 31, 2015.

During the quarter ended September 30, 2016, Matrix, which comprised the HA Services segment, met the criteria for held for sale classification due to the execution on August 28, 2016 of a stock subscription agreement by the Company pursuant to which a third-party subscribed for a controlling equity interest in Matrix. The transaction was effective October 19, 2016 and resulted in a gain, net of tax, of $109,403. The HA Services segment is presented as a discontinued operation in accordance with GAAP. The assets and liabilities of the HA Services segment are classified as held for sale in the consolidated balance sheet for the year ended December 31, 2015. Additionally, the operating results of this segment, along with the Human Services segment sold on November 1, 2015, are reported as discontinued operations, net of tax, in the consolidated statements of income for all periods presented. See Note 21, *Discontinued Operations.*

2. Significant Accounting Policies and Recent Accounting Pronouncements

Principles of Consolidation

The accompanying consolidated financial statements include The Providence Service Corporation, its wholly-owned subsidiaries, and entities it controls, or in which it has a variable interest and is the primary beneficiary of expected cash profits or losses. The Company records its investments in entities that it does not control, but over which it has the ability to exercise significant influence, using the equity method. The Company has eliminated significant intercompany transactions and accounts.

Accounting Estimates

The Company uses estimates and assumptions in the preparation of the consolidated financial statements in accordance with GAAP. Those estimates and assumptions affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of the date of the Company's consolidated financial statements. These estimates and assumptions also affect the reported amount of net income or loss during any period. The Company's actual financial results could differ significantly from these estimates. The significant estimates underlying the Company's consolidated financial statements include revenue recognition; allowance for doubtful accounts; accrued transportation costs; accrued restructuring; income taxes; recoverability of current and long-lived assets, including equity method investments; intangible assets and goodwill; loss contingencies; accounting for business combinations, including amounts assigned to definite and indefinite lived intangibles and contingent consideration; loss reserves for reinsurance and self-funded insurance programs; and stock-based compensation.

Cash and Cash Equivalents

Cash and cash equivalents include all cash balances and highly liquid investments with an initial maturity of three months or less. Investments in cash equivalents are carried at cost, which approximates fair value. The Company places its temporary cash investments with high credit quality financial institutions. At times, such investments may be in excess of the federally insured limits.

At December 31, 2016 and 2015, $21,411 and $37,467, respectively, of cash was held in foreign countries. Such cash is generally used to fund foreign operations, although it may be used also to repay intercompany indebtedness or similar arrangements.

Restricted Cash

At December 31, 2016 and 2015, the Company had $14,130 and $20,056, respectively, of restricted cash:

	December 31,	
	2016	2015
Collateral for letters of credit - Reinsured claims losses	$ 2,265	$ 3,033
Escrow/Trust - Reinsured claims losses	11,865	17,023
Restricted cash for reinsured claims losses	14,130	20,056
Less current portion	3,192	4,012
Restricted cash, less current portion	$ 10,938	$ 16,044

Of the restricted cash amount at December 31, 2016 and 2015:

- $2,265 and $3,033, respectively, served as collateral for irrevocable standby letters of credit to secure any reinsured claims losses under the Company's reinsurance program;
- of the remaining $11,865 and $17,023:
    - $310 and $565, respectively, was restricted under a historical auto liability program associated with NET Services that ceased providing reinsurance on new claims in 2011; and
    - $11,555 and $16,458, respectively, was restricted and held in trusts for reinsurance claims losses under the Company's workers' compensation, general and professional liability and auto liability reinsurance programs.

Accounts Receivable and Allowance for Doubtful Accounts

The Company records accounts receivable amounts at the contractual amount, less an allowance for doubtful accounts. The Company maintains an allowance for doubtful accounts at an amount it estimates to be sufficient to cover the risk that an account will not be collected. The Company regularly evaluates its accounts receivable, especially receivables that are past due, and reassesses its allowance for doubtful accounts based on identified customer collection issues. In circumstances where the Company is aware of a customer's inability to meet its financial obligation, the Company records a specific allowance for doubtful accounts to reduce its net recognized receivable to an amount the Company reasonably expects to collect. The Company also provides a general allowance, based upon historical experience. Under certain contracts of NET Services, final payment is based on a reconciliation of actual utilization and cost, and the final reconciliation may require a considerable period of time. As of December 31, 2016 and 2015, accounts receivable under these reconciliation contracts totaled $45,287 and $30,242, respectively.

The Company's provision for doubtful accounts expense for the years ended December 31, 2016, 2015 and 2014 was $2,892, $1,369 and $1,014, respectively.

Property and Equipment

Property and equipment are stated at historical cost, net of accumulated depreciation, or at fair value if the assets were initially recorded as the result of a business combination or if the asset was remeasured due to an impairment. Depreciation is calculated using the straight-line method over the estimated useful life of the asset. Maintenance and repairs are expensed as incurred. Gains and losses resulting from the disposition of an asset are reflected in operating expense.

Recoverability of Goodwill

In accordance with ASC 350, *Intangibles-Goodwill and Other*, the Company reviews goodwill for impairment annually, or more frequently, if events and circumstances indicate that an asset may be impaired. Such circumstances could include, but are not limited to: (1) the loss or modification of significant contracts, (2) a significant adverse change in legal factors or in business climate, (3) unanticipated competition, (4) an adverse action or assessment by a regulator, or (5) a significant decline in the Company's stock price. Historically, the Company has performed the annual goodwill impairment test for all reporting units as of December 31 of each year; however, it elected to change this date to October 1 of each year beginning in 2016 in order to better align the timing of the annual impairment testing with the Company's annual budgeting and forecasting process. The Company believes that this change in the goodwill impairment testing date is not a material change to the Company's method of applying an accounting principle. The Company's evaluation of goodwill for impairment involves a two-step process to identify goodwill impairment and measure the amount of goodwill impairment loss. First, the Company performs a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If the qualitative assessment suggests that it is more likely than not that the fair value of a reporting unit is less than its carrying value, the Company then performs a quantitative assessment and compares the fair value of the reporting unit, as determined by that quantitative assessment, to its carrying value. If the carrying value of a reporting unit exceeds its fair value, the goodwill of that reporting unit is considered to be potentially impaired and the Company proceeds to step two of the impairment analysis. In step two of the analysis, the Company determines the amount of any impairment loss by comparing the carrying value of the reporting unit's goodwill to its implied fair value. Periodically, the Company may choose to forgo the initial qualitative assessment and perform only the quantitative analysis in its annual evaluation.

The Company estimates the fair value of the Company's reporting units using either an income approach, a market valuation approach, a transaction valuation approach or a blended approach. The income approach produces an estimated fair value of a reporting unit based on the present value of the cash flows the Company expects the reporting unit to generate in the future. Estimates included in the discounted cash flow model include the discount rate, which the Company determines based on adjusting an industry-wide weighted-average cost of capital for size, geography, and company specific risk factors, long-term rates of growth and profitability of the Company's business, working capital effects and planned capital expenditures. The market approach produces an estimated fair value of a reporting unit based on a comparison of the reporting unit to comparable publicly traded entities in similar lines of business. The transaction valuation approach produces an estimated fair value of a reporting unit based on a comparison of the reporting unit to publicly available transactional data involving both publicly traded and private entities in similar lines of business. The Company's significant estimates in both the market and transaction approach include the selected similar companies with comparable business factors such as size, growth, profitability, risk and return on investment and the multiples the Company applies to revenue and earnings before interest, taxes, depreciation and amortization ("EBITDA") to estimate the fair value of the reporting unit.

As discussed in Note 6, *Goodwill and Intangibles*, the Company determined that goodwill was impaired for the WD Services segment during the year ended December 31, 2016, and the Company recorded an asset impairment charge related to its goodwill of $5,224. The Company did not record any impairment charges for continuing operations for the years ended December 31, 2015 and 2014.

Recoverability of Intangible Assets Subject to Amortization and Other Long-Lived Assets

Intangible assets subject to amortization and other long-lived assets are carried at cost and are amortized or depreciated on a straight-line basis over their estimated useful lives of 5 to 15 years. In accordance with ASC 360, *Property, Plant, and Equipment*, the Company reviews the carrying value of long-lived assets or groups of assets to be used in operations whenever events or changes in circumstances indicate that the carrying amount of the assets may be impaired. Factors that may necessitate an impairment assessment include, among others, significant adverse changes in the extent or manner in which an asset or group of assets is used, significant adverse changes in legal factors or the business climate that could affect the value of an asset or group of assets or significant declines in the observable market value of an asset or group of assets. The presence or occurrence of those events indicates that an asset or group of assets may be impaired. In those cases, the Company assesses the recoverability of an asset or group of assets by determining whether the carrying value of the asset or group of assets exceeds the sum of the projected undiscounted cash flows expected to result from the use and eventual disposition of the assets over the remaining economic life of the asset or the primary asset in the group of assets. If such testing indicates the carrying value of the asset or group of assets is not recoverable, the Company estimates the fair value of the asset or group of assets using appropriate valuation methodologies, which would typically include an estimate of discounted cash flows. If the fair value of those assets or groups of assets is less than carrying value, the Company records an impairment loss equal to the excess of the carrying value over the estimated fair value. As discussed in Note 6, *Goodwill and Intangibles*, the Company determined that the WD Services segment's intangible assets and property and equipment were impaired during the year ended December 31, 2016, and the Company recorded asset impairment charges of $9,983 and $4,381 to property and equipment and customer relationship intangible assets, respectively.

Accrued Transportation Costs

NET Services contracts with third-party providers for transportation services. Eligible members of our customers schedule transportation through the Company's central reservation system. The cost of transportation is recorded in the month the services are rendered, based upon contractual rates and mileage estimates. Transportation providers provide invoices once the trip is completed. Any trips that have not been invoiced require an accrual, based upon the expected cost as well as an estimate for cancellations, as the Company is generally only obligated to pay the transportation provider for completed trips. These estimates are based upon the historical trend associated with each contract's population and the transportation provider network servicing the program. There may be differences between actual invoiced amounts and estimated costs, and any resulting adjustments are included in expense. Accrued transportation costs were $73,191 and $64,537 at December 31, 2016 and 2015, respectively.

Deferred Financing Costs and Debt Discounts

The Company capitalizes direct expenses incurred in connection with its credit facilities and other borrowings, and amortizes such expenses over the life of the respective credit facility or other borrowings. Fees charged by lenders on the revolving facility and all fees charged by third parties are recorded as deferred financing costs and fees charged by lenders on term loans are recorded as a debt discount. Deferred financing costs, net of amortization, totaling $1,070 as of December 31, 2016 is included in "Other assets", in the consolidated balance sheet as there were no borrowings outstanding under the Company's senior secured credit facility ("Credit Facility"). Deferred financing costs and debt discount, net of amortization totaling $4,879 at December 31, 2015, is included in "Long-term obligations, less current portion," in the consolidated balance sheet.

Revenue Recognition

The Company recognizes revenue when it is earned and realizable based on the following criteria: persuasive evidence that an arrangement exists, services have been rendered, the price is fixed or determinable and collectability is reasonably assured.

NET Services

Capitated contracts. The majority of NET Services revenue is generated under capitated contracts with customers where the Company assumes the responsibility of meeting the covered transportation requirements of a specific geographic population based on per-member per-month fees for the number of members in the customer's program. Revenue is recognized based on the population served during the period. In some capitated contracts, partial payment is received as a prepayment during the month service is provided. These partial payments may be due back to the customer, or additional payments may be due to the Company, after the contract month, based on a reconciliation of actual utilization and cost compared to the prepayment made.

Fee for service contracts. Revenues earned under fee for service ("FFS") contracts are based upon contractually established billing rates. Revenues are recognized when the service is provided based upon contractual amounts.

Flat fee contracts. Revenues earned under flat fee contracts are recognized ratably over the covered service period based upon contractually established fees which do not fluctuate with any changes in the membership population who are eligible to receive the transportation services.

For most contracts, the Company arranges for transportation of members through its network of independent transportation providers, whereby it remits payment to the transportation providers. However, for certain contracts, the Company only provides management services, and does not contract with transportation providers for the actual transportation. Under these contracts, the amount of revenue recognized is based upon the management fee earned.

WD Services

WD Services revenues are primarily generated from providing workforce development and offender rehabilitation services, both of which include employment preparation and placement, apprenticeship and training, youth community service programs and certain health related services to clients on behalf of governmental and private entities. While the specific terms vary by contract and country, the Company often receives four types of revenue streams under contracts with government entities: referral/attachment fees, job placement/job outcome fees, sustainment fees and incentive fees. Referral/attachment fees are typically upfront payments that are payable when a client is referred by the contracting government entity or that client enters the program. Job placement fees are typically payable when a client is employed. Job outcome fees are typically payable when a client is employed, and remains employed for a specified period of time. Sustainment fees are typically payable upon certain employment tenure milestones. Incentive fees are generally based upon a calculation that includes a variety of factors and inputs, such as average sustainment rates and client referral rates. Incentive fees vary greatly by contract.

Referral/attachment fee revenue is recognized ratably over the period of service, based upon an estimated period of time general services will be provided (i.e. the person is placed in a job or reaches the maximum time period for the program). The estimated period of time services will be rendered is based upon historical data. Job placement, job outcome and sustainment fee revenue is recognized when certain milestones are achieved, and amounts become billable. Incentive fee revenue is generally recognized when fixed and determinable, frequently at the end of the cumulative calculation period, unless contractual terms allow for earned payments on a fixed or ratable basis.

Revenue is also earned under fixed FFS arrangements, based upon contractual rates established at the outset of the contract or the applicable contract year, although the rate may be prospectively adjusted during the contract year based upon actual volumes. If the rate is adjusted but the Company is unable to adjust its costs accordingly, our profitability may be negatively impacted. Volume levels are typically not guaranteed under contracts.

Deferred Revenue

At times we may receive funding for certain services in advance of services being rendered. These amounts are reflected in the consolidated balance sheets as "Deferred revenue" until the services are rendered.

Stock-Based Compensation

The Company follows the fair value recognition provisions of ASC Topic 718 – *Compensation – Stock Compensation* ("ASC 718"), which requires companies to measure and recognize compensation expense for all share based payments at fair value.

- The Company calculates the fair value of stock options using the Black-Scholes option-pricing formula. The fair value of non-vested restricted stock grants is determined based on the closing market price of the Company's common stock on the date of grant. Stock-based compensation expense charged against income for stock options and stock grants is based on the grant-date fair value, based upon the number of awards expected to vest. Forfeitures estimated at the time of grant are revised as necessary based upon actual vesting. The expense for stock-based compensation awards is amortized on a straight-line basis over the requisite service period, which is typically the vesting period.

- The Company records restricted stock units ("RSUs") that may be settled by the holder in cash, rather than shares, as a liability and remeasures these liabilities at fair value at the end of each reporting period. Upon settlement of these awards, the total compensation expense recorded over the vesting period of the awards will equal the settlement amount, which is based on the Company's stock price on the settlement date.

- Performance-based RSUs vest upon achievement of certain company specific performance conditions. On the date of grant, the Company determines the fair value of the performance-based award using the fair value of the Company's common stock at that time and it assesses whether it is probable that the performance targets will be achieved. If assessed as probable, the Company records compensation expense for these awards over the requisite service period. At each reporting period, the Company reassesses the probability of achieving the performance targets and the performance period required to meet those targets. The estimation of whether the performance targets will be achieved and of the performance period required to achieve the targets requires judgment, and to the extent actual results or updated estimates differ from the Company's current estimates, the cumulative effect on current and prior periods of those changes will be recorded in the period estimates are revised, or the change in estimate will be applied prospectively depending on whether the change affects the estimate of total compensation cost to be recognized or merely affects the period over which compensation cost is to be recognized. The ultimate number of shares issued and the related compensation expense recognized will be based on a comparison of the final performance metrics to the specified targets.

- The Company calculates the fair value of market-based stock awards, including the Company's the 2015 Holding Company LTI Program (the "HoldCo LTIP") awards, using the Monte-Carlo simulation valuation model. Forfeitures estimated at the time of grant are revised as necessary based upon actual vesting. Compensation expense for market-based awards is recognized over the requisite service period regardless of whether the market conditions are expected to be achieved.

Income Taxes

Deferred income taxes are determined by the liability method in accordance with ASC Topic 740 - *Income Taxes*. Under this method, deferred tax assets and liabilities are determined based on differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes and are measured using the enacted tax rates and laws that are expected to be in effect when the differences are expected to reverse. The Company considers many factors when assessing the likelihood of future realization of deferred tax assets, including recent earnings experience by jurisdiction, expectations of future taxable income, and the carryforward periods available for tax reporting purposes, as well as other relevant factors. The Company establishes a valuation allowance to reduce deferred tax assets to the amount that is more likely than not to be realized. Due to inherent complexities arising from the nature of the Company's businesses, future changes in income tax law or variances between the Company's actual and anticipated operating results, the Company makes certain judgments and estimates. Therefore, actual income taxes could materially vary from these estimates.

The Company has recorded a valuation allowance which includes amounts for net operating losses and tax credit carryforwards, as more fully described in Note 18, *Income Taxes,* for which the Company has concluded that it is more likely than not that these net operating loss and tax credit carryforwards will not be realized in the ordinary course of operations.

The Company recognizes interest and penalties related to income taxes as a component of income tax expense.

Residual U.S. income taxes have not been provided on undistributed earnings of the Company's foreign subsidiaries. These earnings are considered to be indefinitely reinvested and, accordingly, no provision for U.S. federal and state income taxes will be provided thereon. Upon distribution of those earnings in the form of dividends or otherwise, the Company may be subject to both U.S. income taxes and withholding taxes payable to various foreign jurisdictions, less an adjustment for foreign tax credits. Funds utilized to repay intercompany amounts are not subject to withholding requirements. Because of the availability of U.S. foreign tax credits, it is not practicable to determine the U.S. federal income tax liability that would be payable if such earnings were not reinvested indefinitely.

The Company accounts for uncertain tax positions based on a two-step process of evaluating recognition and measurement criteria. The first step assesses whether the tax position is more likely than not to be sustained upon examination by the tax authority, including resolution of any appeals or litigation, based on the technical merits of the position. If the tax position meets the more likely than not criteria, the portion of the tax benefit greater than 50% likely to be realized upon settlement with the tax authority is recognized in the consolidated financial statements.

Foreign Currency Translation

Local currencies generally are considered the functional currencies outside the US. Assets and liabilities for operations in local-currency environments are translated at month-end exchange rates of the period reported. Income and expense items are translated at the average exchange rate for each applicable month. Cumulative translation adjustments are recorded as a component of accumulated other comprehensive loss, net of tax, in stockholders' equity within the consolidated balance sheets.

Loss Reserves for Certain Reinsurance and Self-Funded Insurance Programs

The Company reinsures a substantial portion of its automobile, general and professional liability and workers' compensation costs under reinsurance programs through the Company's wholly-owned subsidiary, Social Services Providers Captive Insurance Company ("SPCIC"), a licensed captive insurance company domiciled in the State of Arizona.

The Company and its subsidiaries enter into insurance arrangements with third-party insurers. SPCIC reinsures third-party insurers for automobile liability exposures for $250 per claim. SPCIC also reinsures these third-party insurers for general and professional liability exposures for the first dollar of each loss up to $1,000 per loss and $3,000 in the aggregate. Additionally, SPCIC reinsures a third-party insurer for worker's compensation insurance for the first dollar of each and every loss up to $500 per occurrence. The Company utilizes a report prepared by an independent actuary to estimate the gross expected losses related to automobile, general and professional and workers' compensation liability, including the estimated losses in excess of SPCIC's insurance limits, which would be reimbursed to SPCIC to the extent such losses were incurred. As of December 31, 2016 and 2015, the Company had reserves of $11,195 and $12,988, respectively, for the automobile, general and professional liability and workers' compensation programs, net of expected receivables for losses in excess of SPCIC's insurance limits. The gross reserve as of December 31, 2016 and 2015 of $16,460 and $19,733, respectively, is classified as "Reinsurance liability reserves" and "Other long-term liabilities" in the consolidated balance sheets. The estimated amount to be reimbursed to SPCIC as of December 31, 2016 and 2015 was $5,265 and $6,745, respectively, and is classified as "Other receivables' and "Other assets" in the consolidated balance sheets.

The Company also maintains a self-funded health insurance program with a stop-loss umbrella policy with a third-party insurer to limit the maximum potential liability for individual claims to $275 per person, subject to an aggregating stop-loss limit of $400. In addition, the program has a total stop-loss limit for total claims, in order to limit the Company's exposure to catastrophic claims. With respect to this program, the Company considers historical and projected medical utilization data when estimating its health insurance program liability and related expense. As of December 31, 2016 and 2015, the Company had $3,022 and $2,351, respectively, in reserve for its self-funded health insurance programs. The reserves are classified as "Reinsurance and related liability reserves" in the consolidated balance sheets.

The Company utilizes analyses prepared by third-party administrators and independent actuaries based on historical claims information with respect to the general and professional liability coverage, workers' compensation coverage, automobile liability, automobile physical damage, and health insurance coverage to determine the amount of required reserves.

The Company regularly analyzes its reserves for incurred but not reported claims, and for reported but not paid claims related to its reinsurance and self-funded insurance programs. The Company believes its reserves are adequate. However, significant judgment is involved in assessing these reserves such as assessing historical paid claims, average lags between the claims' incurred date, reported dates and paid dates, and the frequency and severity of claims. There may be differences between actual settlement amounts and recorded reserves and any resulting adjustments are included in expense once a probable amount is known.

Restructuring, Redundancy and Related Reorganization Costs

The Company has engaged in employee headcount optimization actions within the WD Services segment which require management to estimate the timing and amount of severance and other employee separation costs for workforce reduction. The Company accrues for severance and other employee separation costs under these actions when it is probable that benefits will be paid and the amount is reasonably estimable. The amounts used in determining severance accruals are based on an estimate of the salaries and related benefit costs payable under existing plans, and are included in accrued expenses to the extent they have not been paid.

Noncontrolling Interests

Noncontrolling interests represent the noncontrolling holders' percentage share of income or losses from a subsidiary in which the Company holds a majority, but less than 100%, ownership interest and the results of which are consolidated and included in the Company's consolidated financial statements. The Company has a 90% ownership in The Reducing Reoffending Partnership Limited, which commenced operations in 2015.

Discontinued Operations

In determining whether a group of assets disposed (or to be disposed) of should be presented as a discontinued operation, the Company makes a determination of whether the criteria for held-for-sale classification is met and whether the disposition represents a strategic shift that has (or will have) a major effect on the entity's operations and financial results. If these determinations can be made affirmatively, the results of operations of the group of assets being disposed of (as well as any gain or loss on the disposal transaction) are aggregated for separate presentation apart from continuing operating results of the Company in the consolidated financial statements. See Note 21, *Discontinued Operations,* for a summary of discontinued operations.

Earnings Per Share

The Company computes basic earnings per share by taking net income attributable to the Company available to common stockholders divided by the weighted average number of common shares outstanding during the period including restricted stock and stock held in escrow if such shares are participating securities. Diluted earnings per share includes the potential dilution that may occur from stock-based awards and other stock-based commitments using the treasury stock or the as-if converted methods, as applicable. For additional information on how the Company computes earnings per share, see Note 15, *Earnings Per Share*.

Fair Value of Financial Instruments

The Company discloses the fair value of its financial instruments based on the fair value hierarchy using the following three categories:

Level 1 – Quoted prices in active markets for identical assets or liabilities that are accessible at the measurement date.

Level 2 – Observable inputs other than Level 1 prices, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

The Company may be required to pay additional consideration in relation to certain acquisitions based on the achievement of certain earnings targets. Acquisition-related contingent consideration is initially measured and recorded at fair value as an element of consideration paid in connection with an acquisition with subsequent adjustments recognized in "General and administrative expense" in the consolidated statements of income. The Company determines the fair value of acquisition-related contingent consideration, and any subsequent changes in fair value using a discounted probability-weighted approach. This approach takes into consideration Level 3 unobservable inputs including probability assessments of expected future cash flows over the period in which the obligation is expected to be settled and applies a discount factor that captures the uncertainties associated with the obligation. Changes in these unobservable inputs could significantly impact the fair value of the obligation recorded in the accompanying consolidated balance sheets and operating expenses in the consolidated statements of income.

The carrying amounts of cash and cash equivalents, restricted cash, accounts receivable and accounts payable approximate their fair value because of the relatively short-term maturity of these instruments.

Recent Accounting Pronouncements

The Company adopted the following accounting pronouncements during the year ended December 31, 2016:

In April 2015, the FASB issued ASU 2015-03, which requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The Company capitalizes debt issuance costs incurred in connection with its credit facilities, line-of-credit, and other borrowings ("deferred financing costs"), and amortizes such costs over the life of the respective debt liability. Upon adoption of ASU 2015-03 on January 1, 2016, the Company elected to present deferred financing costs for both its credit facilities and line-of credit arrangement as a direct deduction from the carrying amount of the respective debt liability. Accordingly, deferred financing costs, net of amortization, totaling $3,774 at December 31, 2015 have been reclassified from "Other assets" to "Long-term obligations, less current portion" in the consolidated balance sheet.

In February 2015, the FASB issued ASU No. 2015-02, *Consolidation (Topic 810): Amendments to the Consolidation Analysis* ("ASU 2015-02"), which changes the way reporting enterprises evaluate whether (a) they should consolidate limited partnerships and similar entities, (b) fees paid to a decision maker or service provider are variable interests in a variable interest entity ("VIE"), and (c) variable interests in a VIE held by related parties of the reporting enterprise require the reporting enterprise to consolidate the VIE. The new consolidation guidance is effective for public business entities for annual and interim periods in fiscal years beginning after December 15, 2015. The adoption of ASU 2015-02 on January 1, 2016 had no impact on the consolidation of the Company's existing VIEs.

In September 2015, the FASB issued ASU 2015-16, *Business Combinations (Topic 805): Simplifying the Accounting for Measurement-Period Adjustments* ("ASU 2015-16") which eliminates the requirement for an acquirer to retrospectively adjust the financial statements for measurement-period adjustments that occur in periods after a business combination is consummated. The ASU is effective for public business entities for annual periods, including interim periods within those annual periods, beginning after December 15, 2015. The Company adopted ASU 2015-16 on January 1, 2016. The adoption of this ASU did not have an impact on the Company's current accounting and disclosures; however, any future business acquisition transactions may be impacted.

Recent accounting pronouncements that were not yet adopted by the Company through December 31, 2016 are as follows:

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers: Topic 606* ("ASU 2014-09"). ASU 2014-09 introduced FASB Accounting Standards Codification Topic 606 ("ASC 606"). ASC 606 will supersede ASC 605, *Revenue Recognition* and most of the industry-specific guidance on recognizing revenue. The FASB has since issued the following updates that clarify or supplement the guidance in ASU 2014-09:

- In December 2016, the FASB issued ASU No. 2016-20, *Revenue from Contracts with Customers (Topic 606): Technical Corrections and Improvements* ("ASU 2016-20"). ASU 2016-20 makes several narrow-scope improvements or clarifications to ASC 606. Most notably, ASU 2016-20 provides additional guidance on testing contract costs for impairment, applying the guidance on contract modifications, and determining the point at which a contract asset becomes a receivable. Additionally, ASU 2016-20 clarifies the information an entity should include in the disclosure of remaining performance obligations and provides an optional exemption from those disclosure requirements in situations in which an entity is not required to estimate variable consideration to recognize revenue.
- In May 2016, the FASB issued ASU No. 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients* ("ASU 2016-12"). ASU 2016-12 clarifies how an entity should assess collectability, present sales taxes, measure noncash consideration and apply some aspects of the transition guidance in ASU 2014-09.
- In April 2016, the FASB issued ASU No. 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing* ("ASU 2016-10"). ASU 2016-10 clarifies the guidance in ASU 2014-09 for identifying performance obligations and recognizing revenue for licenses of intellectual property.
- In March 2016, the FASB issued ASU No. 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)* ("ASU 2016-08"). ASU 2016-08 clarifies the implementation guidance in ASU 2014-09 on principal versus agent considerations and whether an entity should report revenue on a gross or net basis.

Each of these ASUs are effective for public companies for annual reporting periods (and interim reporting periods within those annual reporting periods) beginning after December 15, 2017 and permit entities to transition using either a full retrospective or modified retrospective methodology. The Company has developed an implementation plan, assembled a cross-functional project team and begun to assess the impacts of applying ASC 606 by completing an analysis of the Company's contracts with its customers. Based upon these preliminary procedures, management anticipates that the following key considerations will impact the Company's accounting and reporting under the new standard:

- identification of what constitutes a contract in the Company's environment,
- timing of revenue recognition (for example, point-in-time versus over time and/or accelerated versus deferred),
- single versus multiple performance obligations, and

- other considerations.

The assessment of applying ASC 606 is ongoing and, therefore, the Company has not yet determined whether those impacts will be material to the Company's consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes* ("ASU 2015-17") which changes how deferred taxes are classified on organizations' balance sheets. The ASU eliminates the current requirement for organizations to present deferred tax liabilities and assets as current and noncurrent in a classified balance sheet. Instead, organizations will be required to classify all deferred tax assets and liabilities as noncurrent. The amendments apply to all organizations that present a classified balance sheet. For public companies, the amendments are effective for financial statements issued for annual periods beginning after December 16, 2016, and interim periods within those annual periods. The Company adopted ASU 2015-17 on January 1, 2017. This ASU impacts the Company's financial statements, as the Company had $6,825 of current deferred tax assets, at December 31, 2016. Application of this guidance as of December 31, 2016 would have resulted in a long-term deferred tax asset of $1,510 and a long-term deferred tax liability of $57,973 in the consolidated balance sheet as of December 31, 2016.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)* ("ASU 2016-02"). ASU 2016-02 introduced FASB Accounting Standards Codification Topic 842 ("ASC 842"), which will replace ASC 840, *Leases*. Under ASC 842, lessees will be required to recognize the following for all leases (with the exception of short-term leases) at the commencement date: a lease liability, which is a lessee's obligation to make lease payments arising from a lease, measured on a discounted basis; and a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term.

ASU 2016-02 is effective for publicly held entities for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early application is permitted. Lessees must apply a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. The modified retrospective approach does not require transition accounting for leases that expired before the earliest comparative period presented. Lessees may not apply a full retrospective transition approach. The Company has not entered into significant lease agreements in which it is the lessor; however, the Company does have lease agreements in which it is the lessee. The Company is in the preliminary stages of assessing the impact of applying ASC 842 to its lease agreements. The assessment of applying ASU 2016-02 is ongoing and, therefore, the Company has not yet determined whether the impacts will be material to the Company's consolidated financial statements.

In March 2016, the FASB issued ASU No. 2016-07, *Investments - Equity Method and Joint Ventures (Topic 323): Simplifying the Transition to the Equity Method of Accounting* ("ASU 2016-07"). ASU 2016-07 eliminates the requirement that when an investment qualifies for use of the equity method as a result of an increase in the level of ownership interest or degree of influence, an investor must adjust the investment, results of operations, and retained earnings retroactively on a step-by-step basis as if the equity method had been in effect during all previous periods that the investment had been held. ASU 2016-07 instead specifies that the investor should add the cost of acquiring the additional interest in the investee to the current basis of the investor's previously held interest and apply the equity method of accounting as of the date the investment became qualified for equity method accounting. ASU 2016-07 is effective for all entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2016 and should be applied prospectively. The Company adopted ASU 2016-07 on January 1, 2017. The adoption of ASU 2016-07 will impact the Company's accounting and disclosures for investments for which it begins applying the equity method after January 1, 2017.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"). ASU 2016-09 is intended to improve the accounting for employee share-based payments and affect all organizations that issue share-based payment awards to their employees. Several aspects of the accounting for share-based payment award transactions are simplified, including income tax consequences, classification of awards as either equity or liabilities and classification on the statement of cash flows. For public companies, the amendments are effective for annual periods beginning after December 15, 2016, and interim periods within those annual periods. The Company adopted ASU 2016-09 on January 1, 2017, and elected to recognize forfeitures as they occur. The Company also elected to apply the change in classification of cash flows resulting from excess tax benefits or deficiencies on a retrospective basis. The adoption resulted in the Company recording a cumulative effect adjustment to retained earnings on January 1, 2017 totaling $841 for the differential between the amount of compensation cost previously recorded and the amount that would have been recorded without an applied estimated forfeiture assumption, as well as the recognition of previously unrecognized excess tax benefits of $6,507 through a cumulative effect adjustment to retained earnings as of January 1, 2017.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments – Credit Losses (Topic 326)* ("ASU 2016-13"). The amendments in ASU 2016-13 will supersede or clarify much of the existing guidance for reporting credit losses for assets held at amortized cost basis and available for sale debt securities. The amendments in ASU 2016-13 affect loans, debt securities, trade receivables, net investments in leases, off balance sheet credit exposures, reinsurance receivables, and any other financial assets not excluded from the scope that have the contractual right to receive cash. ASU 2016-13 is effective for financial statements issued for fiscal years beginning after December 15, 2019, with early adoption permitted for fiscal years beginning after December 15, 2018. The Company has not evaluated the impact of ASU 2016-13 on its consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"). ASU 2016-15 provides guidance for eight targeted changes with respect to how cash receipts and cash payments are classified in the statements of cash flows, with the objective of reducing diversity in practice. ASU 2016-15 is effective for financial statements issued for fiscal years beginning after December 15, 2017, with early adoption permitted. The Company currently is evaluating the impact the adoption of this ASU will have on the presentation of the Company's consolidated statements of cash flows.

In November 2016, the FASB issued ASU No. 2016-18, *Statement of Cash Flows (Topic 230): Restricted Cash* ("ASU 2016-18"). ASU 2016-18 requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. ASU 2016-18 is effective for public entities for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period, however, any adjustments must be reflected as of the beginning of the fiscal year that includes that interim period. ASU 2016-18 must be adopted retrospectively. The Company currently is evaluating the impact the adoption of ASU 2016-18 will have on the presentation of the Company's consolidated statements of cash flows.

3. Equity Investment

Mission Providence

The Company entered into a joint venture agreement in November 2014 to form Mission Providence Pty Ltd ("Mission Providence"). Mission Providence delivers employment preparation and placement services in Australia. The Company has a 60% ownership interest in Mission Providence, and has rights to 75% of Mission Providence's distributions of cash or profit surplus twice per calendar year. The Company provided $8,000 and $16,072 in capital contributions in 2016 and 2015, respectively, to Mission Providence.

The Company determined it has a variable interest in Mission Providence. However, it does not have unilateral power to direct the activities that most significantly impact Mission Providence's economic performance, which include budget approval, business planning, the appointment of key officers and liquidation and distribution of share capital. As a result, the Company is not the primary beneficiary of Mission Providence. The Company accounts for this investment under the equity method of accounting and the Company's share of Mission Providence's losses are recorded as "Equity in net loss of investees" in the accompanying consolidated statements of income. Cash contributions made to Mission Providence in exchange for its equity interests are included in the consolidated statements of cash flows as "Equity investments." The investment is accounted for as part of WD Services.

The following table summarizes the carrying amounts of the assets and liabilities included in the Company's consolidated balance sheet and the maximum loss exposure related to the Company's interest in Mission Providence as of December 31, 2016 and 2015:

	Equity Investments	Accrued Expenses	Maximum Exposure to Loss
December 31, 2016	$ 4,021	$ -	$ 4,021
December 31, 2015	$ 9,324	$ 4,654	$ 9,324

Summary financial information for Mission Providence on a standalone basis is as follows:

	December 31, 2016	December 31, 2015
Current assets	$ 4,640	$ 7,789
Long-term assets	10,473	8,869
Current liabilities	12,844	10,488
Long-term liabilities	1,655	-

	Year ended December 31,	
	2016	2015
Revenue	$ 36,546	$ 11,206
Operating loss	(9,664)	(19,397)
Net loss	(8,843)	(13,106)

Matrix

As a result of the Matrix Transaction, the Company's remaining ownership in Matrix is a noncontrolling interest effective October 19, 2016. In addition, pursuant to a Shareholder's Agreement, the third-party subscriber holds rights necessary to control the fundamental operations of Matrix. The Company accounts for this investment under the equity method of accounting and the Company's share of Matrix's losses are recorded as "Equity in net loss of investee" in the accompanying consolidated statements of income. The Company's retained interest of 46.8% in Matrix upon the closing of the stock subscription transaction was recorded at fair value based upon the fair value of the subscriber's 53.2% interest in Matrix. See additional information on the transaction in Note 21, *Discontinued Operations*.

The carrying amount of the assets included in the Company's consolidated balance sheet and the maximum loss exposure related to the Company's interest in Matrix as of December 31, 2016 totaled $157,202.

Summary financial information for Matrix on a standalone basis is as follows:

	December 31, 2016
Current assets	$ 28,589
Long-term assets	614,841
Current liabilities	25,791
Long-term liabilities	281,348

	October 19, 2016 through December 31, 2016
Revenue	$ 41,635
Operating loss	(4,079)
Net loss	(4,200)

Included in Matrix's operating loss is depreciation and amortization of $6,356 and transaction related expenses of $6,367, which includes $4,033 of transaction incentive compensation.

4. Prepaid Expenses and Other

Prepaid expenses and other were comprised of the following:

	December 31,	
	2016	2015
Prepaid income taxes	$ 1,467	$ 1,607
Escrow funds	10,000	-
Prepaid insurance	3,153	2,971
Prepaid taxes and licenses	3,570	4,895
Note receivable	3,130	-
Prepaid rent	2,013	2,235
Deposits held for leased premises and bonds	2,609	2,574
Other	12,139	13,342
Total prepaid expenses and other	$ 38,081	$ 27,624

Escrow funds relate to the sale of the Human Services segment, which was completed on November 1, 2015. The escrow funds are scheduled to be released fifteen months following the closing, although the amount to be released is subject to reduction to the extent indemnified representation and warranty claims are identified and agreed with the buyer. During 2016, the Company recorded $6,000 in Accrued Liabilities, as an estimate of potential claims against the escrow funds, and as such, the escrow funds have not yet been released. See Note 19, *Commitments and Contingencies*, for further information.

5. Property and Equipment

Property and equipment consisted of the following:

	Estimated Useful Life (years)	December 31, 2016	December 31, 2015
Land	--	$ -	$ 1,182
Building	39	-	5,214
Computer and telecom equipment	3 - 5	31,854	27,046
Software	3 - 5	26,883	19,497
Leasehold improvements	Shorter of 7 years or lease term	16,720	16,122
Furniture and fixtures	5 - 10	8,070	5,815
Automobiles	5	3,597	3,471
Construction and development in progress	--	5,831	1,956
		92,955	80,303
Less accumulated depreciation		46,735	34,145
Total property and equipment, net		$ 46,220	$ 46,158

Depreciation expense from continuing operations was $18,038, $14,488 and $10,241 for the years ended December 31, 2016, 2015 and 2014, respectively.

The Company sold the building and land that included holding company office space in Arizona effective December 30, 2016 resulting in an asset impairment charge of $1,415 for the year ended December 31, 2016. The Company recorded an asset impairment charge of $9,983 related to its WD Services segment based on its review of the carrying value of long-lived assets. The impairment charges are reflected in “Asset impairment charge” in the consolidated statement of income for the year ended December 31, 2016. See Note 6, *Goodwill and Intangibles,* for further discussion of the impairment charges incurred related to the WD Services segment during 2016.

6. Goodwill and Intangibles

Impairment

During the fourth quarter of 2016, the Company reviewed WD Services for impairment, primarily due to lower than expected volumes and unfavorable service mix shifts under a large contract in the United Kingdom ("UK") impacting future projections; additional clarity into the anticipated size and structure of the Work and Health Programme in the UK; the absence of additional details regarding the restructuring of the offender rehabilitation contract in the UK; and a change in senior management at WD Services during the fourth quarter. As a result, the Company performed a quantitative test comparing the fair value of the asset groupings comprising WD Services with the carrying amounts and recorded an asset impairment charge of $4,381 to definite-lived customer relationship intangible assets, which is recorded in "Asset impairment charge" on the Company's consolidated statement of operations. In addition, the Company reviewed the carrying value of goodwill of WD Services, noting the carrying value exceeded the fair value. Therefore, the Company performed the second step of the impairment test, in which the fair value of the reporting unit is allocated to all of the assets and liabilities, on a fair value basis, with any excess representing the implied value of goodwill of the reporting unit. The fair value was determined using an income approach, which estimates the present value of future cash flows based on management's forecast of revenue growth rates and operating margins, working capital requirements and capital expenditures. Based on this analysis, the carrying value of goodwill of the WD Services reporting unit exceeded the implied fair value and the Company recorded an asset impairment charge of $5,224, which is included in "Asset impairment charge" on the Company's consolidated statement of operations.

The Company reviewed the carrying value of other long-lived assets and goodwill, and noted no indicators of impairment for NET Services or the Matrix Investment.

Goodwill

Changes in goodwill were as follows:

	NET Services	WD Services	Consolidated Total
Balances at December 31, 2014			
Goodwill	$ 191,215	$ 42,662	$ 233,877
Accumulated impairment losses	(96,000)	(6,041)	(102,041)
	95,215	36,621	131,836
Foreign currency translation adjustment	-	(1,878)	(1,878)
Balances at December 31, 2015			
Goodwill	191,215	40,784	231,999
Accumulated impairment losses	(96,000)	(6,041)	(102,041)
	95,215	34,743	129,958
Asset impairment charge	-	(5,224)	(5,224)
Foreign currency translation adjustment	-	(5,110)	(5,110)
Balances at December 31, 2016			
Goodwill	191,215	35,674	226,889
Accumulated impairment losses	(96,000)	(11,265)	(107,265)
	$ 95,215	$ 24,409	$ 119,624

The total amount of goodwill that was deductible for income tax purposes related to acquisitions as of December 31, 2016 and 2015 was $4,222.

Intangible Assets

Intangible assets are comprised of acquired customer relationships, trademarks and trade names, and developed technology. Intangible assets consisted of the following:

		December 31,			
		2016		2015	
	Estimated Useful Life (Yrs)	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Customer relationships	15	$ 48,020	$ (29,941)	$ 47,973	$ (26,804)
Customer relationships	10	27,915	(8,147)	38,688	(6,126)
Trademarks and Trade Names	10	13,282	(3,431)	15,936	(2,523)
Developed technology	5	2,951	(1,525)	3,541	(1,121)
Total		$ 92,168	$ (43,044)	$ 106,138	$ (36,574)

The gross carrying amount as of December 31, 2016 includes the asset impairment charge of $4,381 to definite-lived customer relationship intangible assets of WD Services. The weighted-average amortization period at December 31, 2016 for intangibles with a definite life was 12.4 years. No significant residual value is estimated for these intangible assets. Amortization expense from continuing operations was $8,566, $9,510 and $6,973 for the years ended December 31, 2016, 2015 and 2014, respectively. The total amortization expense is estimated to be as follows for the next five years and thereafter as of December 31, 2016 based upon the applicable foreign exchange rates as of December 31, 2016:

Year	Amount
2017	$ 7,682
2018	7,682
2019	7,338
2020	7,092
2021	7,017
Thereafter	12,313
Total	$ 49,124

7. Accrued Expenses

Accrued expenses consisted of the following:

	December 31,	
	2016	2015
Accrued compensation	$ 23,050	$ 20,523
NET Services accrued contract payments	32,001	26,669
Income taxes payable	372	24,200
Other	45,449	46,044
Total accrued expenses	$ 100,872	$ 117,436

8. Restructuring, Redundancy and Related Reorganization Costs

In the fourth quarter of 2016, WD Services approved a redundancy plan related to the termination of employees as part of a value enhancement project ("Ingeus Futures' Program") to better align costs at Ingeus with revenue. In the fourth quarter of 2015, WD Services approved two redundancy plans. The first plan relates to the termination of employees delivering services under an offender rehabilitation program ("Offender Rehabilitation Program"). The second plan primarily relates to the termination of employees delivering services under the Company's employability and skills training programs and certain other employees in the UK ("UK Restructuring Program"). The Company recorded severance and related charges of $8,511 and $10,551 during the years ended December 31, 2016 and 2015, respectively, relating to the termination benefits for employee groups and specifically identified employees impacted by these plans. The severance charges incurred are recorded as "Service expense" in the accompanying consolidated statements of income.

The initial estimate of severance and related charges at December 31, 2015 for the Offender Rehabilitation Program and UK Restructuring Program and at December 31, 2016 for the Ingeus Futures' Program was based upon the employee groups impacted, average salary and benefits, and redundancy benefits pursuant to the existing policies. The charges incurred for the Offender Rehabilitation Program and UK Restructuring Program during 2016 related to the actualization of termination benefits for specifically identified employees impacted, as well as an increase in the number of individuals impacted by these plans. The final identification of the employees impacted by each program is subject to customary consultation procedures. Additionally, the Company anticipates the potential for further redundancy expenses under the Ingeus Futures' Program as further costs become estimable.

Summary of Severance and Related Charges

	January 1, 2016	Costs Incurred	Cash Payments	Foreign Exchange Rate Adjustments	December 31, 2016
Ingeus Futures' Program	$ -	$ 2,456	$ -	$ (29)	$ 2,427
Offender Rehabilitation Program	6,538	4,865	(8,924)	(1,099)	1,380
UK Restructuring Program	2,059	1,190	(3,031)	(109)	109
Total	$ 8,597	$ 8,511	$ (11,955)	$ (1,237)	$ 3,916

	January 1, 2015	Costs Incurred	Cash Payments	Foreign Exchange Rate Adjustments	December 31, 2015
Offender Rehabilitation Program	$ -	$ 8,465	$ (1,839)	$ (88)	$ 6,538
UK Restructuring Program	-	2,086	-	(27)	2,059
Total	$ -	$ 10,551	$ (1,839)	$ (115)	$ 8,597

The total of accrued severance and related costs of $3,916 and $8,597 are reflected in "Accrued expenses" in the consolidated balance sheets at December 31, 2016 and 2015, respectively. The amount accrued as of December 31, 2016 for the Ingeus Futures' Program, Offender Rehabilitation Program and UK Restructuring Program is expected to be settled by the end of 2017.

9. Fair Value Measurements

The fair value of liabilities measured at fair value on a recurring basis was zero at December 31, 2016 and 2015. There were no transfers between Level 1 and Level 2, or into or out of Level 3, during 2016 and 2015.

The changes in Level 3 liabilities measured at fair value on a recurring basis were as follows for the years ended December 31, 2015 and 2014:

	Contingent Consideration Liabilities	
	December 31, 2015	December 31, 2014
Balance at the beginning of year	$ 10,549	$ -
Initial valuation upon acquistion	-	30,095
Payments	(7,496)	-
Gain in general and administrative expense	(2,469)	(16,314)
Foreign exchange revaluation	(584)	(3,232)
Balance at end of year	$ -	$ 10,549

There were no events that occurred during the year ended December 31, 2016 that would indicate a fair value greater than zero for the contingent consideration liabilities. The valuation techniques and significant unobservable inputs used in recurring Level 3 fair value measurements were as follows at December 31, 2015:

December 31, 2015	Fair Value	Valuation Technique	Significant Unobservable Inputs	Value
Contingent consideration liabilities	$ -	Discounted probability-weighted approach	Discount rate	14.12%

Financial liabilities that were not remeasured at fair value were as follows:

		December 31, 2016		December 31, 2015	
	Fair Value Level	Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value
Financial liabilities					
Credit facility	3	$ -	$ -	$ 304,950	$ 308,892

10. Long-Term Obligations

The Company's long-term obligations were as follows:

	December 31, 2016	December 31, 2015
$200,000 revolving loan, LIBOR plus 2.25% - 3.25% with interest payable at least once every three months through August 2018	$ -	$ 19,700
$250,000 term loan, LIBOR plus 2.25% - 3.25% with principal payable quarterly beginning March 31, 2015 and interest payable at least once every three months, repaid October 2016	-	231,250
$60,000 term loan, LIBOR plus 2.25% - 3.25% with principal payable quarterly beginning December 31, 2014 and interest payable at least once every three months, repaid October 2016	-	54,000
Capital lease obligations	3,611	-
	3,611	304,950
Unamortized discount on debt	-	(4,879)
	3,611	300,071
Less current portion	1,721	31,375
Total long-term obligations, less current portion	$ 1,890	$ 268,696

Unamortized discount on debt as of December 31, 2015 includes $3,774 of deferred financing costs related to the Company's term loans and revolving loan. As described below, in conjunction with the Matrix Transaction, the Company permanently repaid the outstanding term loans and reduced the capacity under the revolving loan. As of December 31, 2016, there were no borrowings outstanding under the revolving loan, and thus the deferred financing costs of $1,070 are included in Other Assets.

Annual maturities of capital lease obligations as of December 31, 2016 are as follows:

Year	Amount
2017	$ 1,721
2018	1,763
2019	127
Total	$ 3,611

Current Credit Facility and Impact of the Matrix Transaction

On August 28, 2016, the Company entered into the Fourth Amendment and Consent (the "Fourth Amendment") to the Amended and Restated Credit and Guaranty Agreement (as amended, modified or supplemented, the "Credit Agreement"). The Fourth Amendment provided for the lenders' consent to the Matrix Transaction and additionally required the net cash proceeds received by the Company be applied first, to the prepayment of outstanding term loans, second, to the prepayment of outstanding revolving loans and third, for any purpose not prohibited by the Credit Agreement. Additionally, effective following the repayment of the outstanding term loans in full on October 20, 2016, the Fourth Amendment further (i) reduced the aggregate revolving commitments under the Credit Agreement to $200,000, (ii) amended the consolidated net leverage ratio covenant such that the Company's consolidated net leverage ratio may not be greater than 3.00:1.00 as of the end of any fiscal quarter, (iii) replaced the existing consolidated fixed charge coverage ratio covenant with a covenant that the Company's consolidated interest coverage ratio may not be less than 3.00:1.00 as of the end of any fiscal quarter and (iv) amended the Credit Agreement to make certain other changes to the terms thereof.

The outstanding loans under the Credit Facility were fully paid on October 20, 2016. No further amounts may be borrowed under the term loan facility. Upon the repayment, the Company wrote-off the deferred financing fees associated with the term loans, as well as a portion of deferred financing fees associated with the Credit Facility due to the reduction of the aggregate revolving commitment. The total write-off was $2,302 which is included in "Discontinued operations, net of tax" in the accompanying consolidated statement of income for the year ended December 31, 2016.

The Company had no borrowings outstanding under the Credit Facility as of December 31, 2016. $25,000 of the Credit Facility is available to collateralize certain letters of credit. As of December 31, 2016, six letters of credit in the amount of $5,414 were outstanding. At December 31, 2016, the Company's available credit under the Credit Facility was $194,586.

The Company's obligations under the Credit Facility are guaranteed by all of the Company's present and future domestic subsidiaries, excluding certain domestic subsidiaries which include the Company's insurance captives. The Company's obligations under, and each guarantor's obligations under its guaranty of, the Credit Facility are secured by a first priority lien on substantially all of the Company's respective assets, including a pledge of 100% of the issued and outstanding stock of the Company's domestic subsidiaries, excluding the Company's insurance captives, and 65% of the issued and outstanding stock of the Company's first tier foreign subsidiaries. However, in connection with the completion of the Matrix stock subscription, Matrix was released as a guarantor of the Company's obligations under its Credit Agreement and Matrix's property is no longer pledged to secure such obligations.

Credit Facility Background

On August 2, 2013, the Company entered the Credit Agreement with Bank of America, N.A., as administrative agent, swing line lender and letter of credit issuer, SunTrust Bank, as syndication agent, Merrill Lynch, Pierce, Fenner & Smith Incorporated and SunTrust Robinson Humphrey, Inc., as joint lead arrangers and joint book managers, and other lenders party thereto. The Credit Agreement provided the Company with the Credit Facility in the aggregate principal amount of $225,000, comprised of a $60,000 term loan facility and a $165,000 revolving credit facility. The Credit Facility includes sublimits for swingline loans and letters of credit in amounts up to $10,000 and $25,000, respectively. On August 2, 2013, the Company borrowed the entire amount available under the term loan facility and $16,000 under the revolving credit facility and used the proceeds thereof to refinance certain of the Company's existing indebtedness.

On May 28, 2014 the Company entered into the First Amendment to the Credit Agreement (the "First Amendment"). The First Amendment provided for, among other things, an increase in the aggregate amount of the revolving credit facility from $165,000 to $240,000 and other modifications in connection with the consummation of the acquisition of Ingeus.

On October 23, 2014, the Company entered into the Second Amendment to the Credit Agreement (the "Second Amendment") to amend the Credit Facility to (i) add a new term loan tranche in the aggregate principal amount of up to $250,000 to partly finance the acquisition of Matrix, (ii) provide the consent of the required lenders to consummate the acquisition of Matrix, (iii) permit incurrence of additional debt to fund the acquisition of Matrix and, (iv) add an excess cash flow mandatory prepayment provision.

On September 3, 2015, the Company entered into the Third Amendment to the Credit Agreement (the "Third Amendment") to amend the Credit Agreement to (i) allow the lenders under the Credit Agreement to consent to the Company's sale of the Human Services segment, provided that a minimum amount equal to 50% of the net cash proceeds, as defined in the Credit Agreement, of the sale is applied pro rata to the prepayment of revolving loans and swingline loans under the Credit Agreement and (ii) allow the lenders to consent to the Company's use of 50% of the net cash proceeds of the sale to make restricted payments to repurchase common stock pursuant to a Providence stock repurchase program. The Third Amendment provided for amendments to the terms of the Credit Agreement to reflect such consents.

Under the Credit Agreement, as amended through the Fourth Amendment, the Company has an option to request an increase in the amount of the revolving credit facility and/or the term loan facility from time to time (on substantially the same terms as apply to the existing facilities) in an aggregate amount of up to $75,000 with either additional commitments from lenders under the Credit Agreement at such time or new commitments from financial institutions acceptable to the administrative agent in its reasonable discretion, so long as no default or event of default exists at the time of any such increase. The Company may not be able to access additional funds under this option as no lender is obligated to participate in any such increase under the Credit Facility.

The Credit Facility matures on August 2, 2018. The Company may prepay the Credit Facility in whole or in part, at any time without premium or penalty, subject to reimbursement of the lenders' breakage and redeployment costs in connection with prepayments of London Interbank Offered Rate, or LIBOR, loans. The unutilized portion of the commitments under the Credit Facility may be irrevocably reduced or terminated by the Company at any time without penalty.

Interest on the outstanding principal amount of the loans accrues, at the Company's election, at a per annum rate equal to LIBOR, plus an applicable margin, or the base rate as defined in the agreement plus an applicable margin. The applicable margin ranges from 2.25% to 3.25% in the case of LIBOR loans and 1.25% to 2.25% in the case of the base rate loans, in each case, based on the Company's consolidated leverage ratio as defined in the Credit Agreement. Interest on the loans is payable quarterly in arrears. In addition, the Company is obligated to pay a quarterly commitment fee based on a percentage of the unused portion of each lender's commitment under the Credit Facility and quarterly letter of credit fees based on a percentage of the maximum amount available to be drawn under each outstanding letter of credit. The commitment fee and letter of credit fee range from 0.25% to 0.50% and 2.25% to 3.25%, respectively, in each case, based on the Company's consolidated leverage ratio.

The Credit Facility also requires the Company (subject to certain exceptions as set forth in the Amended and Restated Credit Agreement) to prepay the outstanding loans in an aggregate amount equal to 100% of the net cash proceeds received from certain asset dispositions, debt issuances, insurance and casualty awards and other extraordinary receipts.

The Credit Agreement contains customary affirmative and negative covenants and events of default. The negative covenants include restrictions on the Company's ability to, among other things, incur additional indebtedness, create liens, make investments, give guarantees, pay dividends, sell assets and merge and consolidate. The Company is subject to financial covenants, including consolidated net leverage and consolidated interest coverage covenants.

Capital Leases

NET Services has four capital leases for information technology equipment with termination dates ranging from January 2018 through September 2019. The terms of the leases are between 21 and 36 months, with interest recorded at an incremental borrowing rate of 3.28%. At December 31, 2016, $4,571 represents equipment under capital leases and $460 represents accumulated depreciation recognized on this leased equipment.

11. Convertible Preferred Stock, Net

The Company completed a rights offering on February 5, 2015 (the "Rights Offering") providing all of the Company's existing common stock holders the non-transferrable right to purchase their pro rata share of $65,500 of convertible preferred stock at a price equal to $100.00 per share ("Preferred Stock"). The Preferred Stock is convertible into shares of Providence's Company's common stock, $0.001 par value per share ("Common Stock) at a conversion price equal to $39.88 per share, which was the closing price of the Company's Common Stock on the NASDAQ Global Select Market on October 22, 2014.

Stockholders exercised subscription rights to purchase 130,884 shares of the Company's Preferred Stock. Pursuant to the terms and conditions of the Standby Purchase Agreement (the "Standby Purchase Agreement") between Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Coliseum Capital Co-Invest, L.P. and Blackwell Partners, LLC (collectively, the "Standby Purchasers") and the Company, the remaining 524,116 shares of the Company's Preferred Stock were purchased by the Standby Purchasers at the $100.00 per share subscription price. The Company received $65,500 in aggregate gross proceeds from the consummation of the Rights Offering and Standby Purchase Agreement. Additionally, on March 12, 2015, the Standby Purchasers exercised their right to purchase an additional 150,000 shares of the Company's Preferred Stock, at a purchase price of $105.00 per share or a total purchase price of $15,750, of the same series and having the same conversion price as the Preferred Stock sold in the Rights Offering.

The Company may pay a noncumulative cash dividend on each share of Preferred Stock, if and when declared by a committee of its Board of Directors ("Board"), at the rate of five and one-half percent (5.5%) per annum on the liquidation preference then in effect. On or before the third business day immediately preceding each fiscal quarter, the Company must determine its intention whether or not to pay a cash dividend with respect to that ensuing quarter and will give notice of its intention to each holder of Preferred Stock as soon as practicable thereafter.

In the event the Company does not declare and pay a cash dividend, the Company will declare a paid in kind ("PIK") dividend by increasing the liquidation preference of the convertible Preferred Stock to an amount equal to the liquidation preference in effect at the start of the applicable dividend period, plus an amount equal to the liquidation preference then in effect multiplied by eight and one-half percent (8.5%) per annum, computed on the basis of a 365-day year and the actual number of days elapsed from the start of the applicable dividend period to the applicable date of determination. All holders of the Company's Preferred Stock are able to convert their Preferred Stock into shares of Common Stock at a rate of approximately 2.51 shares of Common Stock for each share of Preferred Stock. As of December 31, 2016, 1,602 shares of Preferred Stock have been converted to 4,015 shares of Common Stock.

Cash dividends are payable quarterly in arrears on January 1, April 1, July 1 and October 1 of each year, which commenced on April 1, 2015, and, if declared, begin to accrue on the first day of the applicable dividend period. PIK dividends, if applicable, accrue cumulatively on the same schedule as set forth above for cash dividends and are also compounded at the applicable annual rate on each applicable subsequent dividend date. Cash dividends totaling $4,419 and $3,928 were distributed to convertible preferred stockholders for the years ended December 31, 2016 and 2015, respectively.

The Preferred Stock is accounted for outside of stockholders' equity as it may be redeemed upon certain change in control events that are not solely in the control of the Company. Dividends are recorded in stockholders' equity and consist of the 5.5%/8.5% dividend. At the time of issuance of the Preferred Stock, the Company recorded a discount on Preferred Stock related to beneficial conversion features that arose due to the closing price of the Company's Common Stock being higher than the conversion price of the Preferred Stock on the commitment date. The amortization of this discount was recorded in stockholders' equity. The discount was fully amortized as of June 30, 2015.

The following table summarizes the Preferred Stock activity for the years ended December 31, 2016 and 2015:

	Dollar Value	Share Count
Balance at December 31, 2014	$ -	-
Shares issued	81,250	805,000
Issuance costs	(3,531)	-
Beneficial conversion feature	(1,071)	-
Amortization of beneficial conversion feature	1,071	-
Conversion to common stock	(149)	(1,482)
Allocation of issuance costs	6	-
Balance at December 31, 2015	$ 77,576	803,518
Conversion to common stock	(12)	(120)
Allocation of issuance costs	1	-
Balance at December 31, 2016	$ 77,565	803,398

As of December 31, 2016 and 2015, the outstanding shares of Preferred Stock were convertible into 2,014,538 and 2,014,840 shares of Common Stock, respectively.

12. Stockholders' Equity

At December 31, 2016 and 2015 there were 17,315,661 and 17,186,780 shares of the Company's Common Stock issued, respectively, including 3,478,676 and 1,895,998 treasury shares at December 31, 2016 and 2015, respectively.

Subject to the rights specifically granted to holders of any then outstanding shares of the Company's Preferred Stock, the Company's common stockholders are entitled to vote together as a class on all matters submitted to a vote of the Company's common stockholders, and are entitled to any dividends that may be declared by the Board. The Company's common stockholders do not have cumulative voting rights. Upon the Company's dissolution, liquidation or winding up, holders of the Company's Common Stock are entitled to share ratably in the Company's net assets after payment or provision for all liabilities and any preferential liquidation rights of the Company's Preferred Stock then outstanding. The Company's common stockholders do not have preemptive rights to purchase shares of the Company's stock. The issued and outstanding shares of the Company's Common Stock are not subject to any redemption provisions and are not convertible into any other shares of the Company's capital stock. The rights, preferences and privileges of holders of the Company's Common Stock will be subject to those of the holders of any shares of the Company's Preferred Stock the Company may issue in the future.

During the year ended December 31, 2014, the sellers of WCG International Consultants Ltd. ("WCG") surrendered 39,162 exchangeable shares of PSC of Canada Exchange Corp. ("PSC") to fulfill their obligation to the Company for the settlement of a dispute and the reimbursement of legal fees. These shares were converted to shares of the Company and transferred to treasury. Additionally, 222,532 exchangeable shares of PSC were exchanged into shares of Common Stock of the Company and distributed to the sellers of WCG, thus eliminating the related noncontrolling interest balance as of December 31, 2014.

During the year ended December 31, 2014, the Company issued stock, with certain escrow restrictions, in conjunction with the acquisitions of Ingeus and Matrix.

The following table reflects the total number of shares of the Company's Common Stock reserved for future issuance as of December 31, 2016:

Shares of common stock reserved for:	
Exercise of stock options and restricted stock awards	437,930
Conversion of preferred stock to common stock	2,014,538
Issuance of Performance Restricted Stock Units	49,208
Total shares of common stock reserved for future issuance	2,501,676

Share Repurchases

On February 1, 2007, the Board approved a stock repurchase program for up to one million shares of its Common Stock under which the Company spent $14,376 to purchase 756,100 shares of its Common Stock in the open market through December 31, 2012. No repurchases have been made since 2012. This program was formally terminated in January 2016.

On October 14, 2015, the Company entered into an agreement to repurchase 707,318 of its Common Stock held by former stockholders of Matrix for an aggregate purchase price of $29,000 (or $41.00 per share). The Company funded this purchase through a combination of borrowing on its Credit Facility and cash on hand. The purchase of these shares was completed on October 30, 2015.

On November 4, 2015, the Board authorized the Company to engage in a repurchase program to repurchase up to $70,000 in aggregate value of the Company's Common Stock during the twelve-month period following November 4, 2015. This plan terminated on November 3, 2016. A total of 1,360,249 shares were purchased through this plan for $62,981, excluding commission payments.

On October 26, 2016, the Board authorized a new repurchase program, under which the Company may repurchase up to $100,000 in aggregate value of the Company's Common Stock during the twelve-month period following October 26, 2016. As of December 31, 2016, 328,843 shares were purchased through this plan for $12,377, excluding commission payments.

During the years ended December 31, 2016, 2015 and 2014, the Company repurchased 2,736, 15,961 and 18,504 shares, respectively, from employees to cover the settlement of income tax and related benefit withholding obligations arising from vesting of restricted stock awards. In addition, in 2015, the Company withheld 5,718 shares for the payment of the exercise price upon the exercise of stock options and 43,743 shares to cover the settlement of income tax and related benefit withholding obligations arising from shares held by employees that were released from escrow related to the Matrix acquisition, which shares are treated as treasury stock.

13. Stock-Based Compensation and Similar Arrangements

The Company provides stock-based compensation to employees, non-employee directors, consultants and advisors under the Company's 2006 Long-Term Incentive Plan ("2006 Plan"). The 2006 Plan allows the flexibility to grant or award stock options, stock appreciation rights, restricted stock, unrestricted stock, stock units including restricted stock units and performance awards to eligible persons. The following table summarizes the activity under the 2006 Plan as of December 31, 2016:

	Number of shares of the Company's common stock authorized for issuance	Number of shares of the Company's common stock remaining available for future grants	Number of shares of the Company's common stock subject to	
			Stock Options	Stock Grants
2006 Plan	5,400,000	2,324,927	355,598	131,540

The following table reflects the amount of stock-based compensation, for share settled awards issued to employees and non-employee directors, recorded in each financial statement line item for the years ended December 31, 2016, 2015 and 2014:

	Year ended December 31,		
	2016	2015	2014
Service expense	$ 830	$ 21,480	$ 4,019
General and administrative expense	4,324	5,027	3,537
Discontinued operations, net of tax	(18)	115	6
Total stock-based compensation	$ 5,136	$ 26,622	$ 7,562

Stock-based compensation included in service expense is related to the following segments:

	Year ended December 31,		
	2016	2015	2014
NET Services	$ 841	$ 724	$ 587
WD Services (a)	(11)	20,756	3,432
Total stock-based compensation in service expense	$ 830	$ 21,480	$ 4,019

(a) WD Services includes $16,078 for the year ended December 31, 2015 related to the acceleration of awards pursuant to the separation agreements for two executives.

The amounts above exclude the tax benefit of $2,072, $2,322 and $1,570 for the years ended December 31, 2016, 2015 and 2014, respectively. For the years ended December 31, 2016, 2015 and 2014, the amount of excess tax benefits resulting from the exercise of stock options was $282, $2,857 and $2,722, respectively. For the years ended December 31, 2016, 2015 and 2014, the Company had tax shortfalls resulting from the exercise of stock options of $558, $151 and $38, respectively. The excess tax benefits resulting from the exercise of stock options are reflected as cash flows from financing activities for the years ended December 31, 2016, 2015 and 2014 in the consolidated statements of cash flows.

Stock Options

During the year ended December 31, 2016, the Company did not grant any stock options. The fair value of each stock option awarded to employees is estimated on the date of grant using the Black-Scholes option-pricing formula based on the following assumptions:

	Year ended December 31,	
	2015	2014
Expected dividend yield	0.0%	0.0%
Expected stock price volatility	33.84% - 46.14%	45.6% - 50.25%
Risk-free interest rate	0.35% - 1.35%	1.1% - 1.88%
Expected life of options (years)	10 days - 4	3.25 - 5.47

The risk-free interest rate was based on the U.S. Treasury security rate in effect as of the date of grant which corresponds to the expected life of the award. The expected lives of options and the expected stock price volatility were based on the Company's historical data, or the Company's best estimate where appropriate.

During the year ended December 31, 2016, the Company issued 105,788 shares of its Common Stock in connection with the exercise of employee stock options under the Company's 2006 Plan.

The following table summarizes the stock option activity for the year ended December 31, 2016:

	Year ended December 31, 2016			
	Number of Shares Under Option	Weighted-average Exercise Price	Weighted-average Remaining Contractual Term	Aggregate Intrinsic Value
Balance at beginning of period	505,452	$ 34.84		
Exercised	(105,788)	38.83		
Forfeited/Cancelled	(27,400)	31.48		
Expired	(16,666)	43.81		
Outstanding at end of period	355,598	$ 33.48	3.41	$ 2,514
Vested or expected to vest at end of period	344,574	$ 33.33	3.46	$ 2,500
Exercisable at end of period	232,141	$ 30.86	4.22	$ 2,355

The weighted-average grant-date fair value for options granted, total intrinsic value and cash received by the Company related to options exercised during the years ended December 31, 2016, 2015 and 2014 were as follows:

	Year ended December 31,		
	2016	2015	2014
Weighted-average grant date fair value	$ -	$ 8.77	$ 17.09
Options exercised:			
Total intrinsic value	$ 979	$ 6,659	$ 9,107
Cash received	$ 4,108	$ 4,895	$ 11,019

Stock Option Modifications

During the second quarter of 2015, Warren Rustand terminated his role as Chief Executive Officer ("CEO") and board member of the Company, but remained employed as a Senior Advisor through the end of 2015. As a result of Mr. Rustand's termination as CEO, a Separation Agreement was entered into between the Company and Mr. Rustand. As a result of this Separation Agreement, Mr. Rustand's outstanding stock options from his grant of 200,000 stock options on September 11, 2014 were modified to accelerate the vesting date for the second tranche of options from June 30, 2015 to June 5, 2015, and the exercise period for all vested options of 133,332 was lengthened. In addition, the third tranche of options, consisting of 66,668 options, was cancelled. As a result of the modifications to the terms of the original stock options granted to Mr. Rustand, the Company recognized additional stock-based compensation expense of $737 for the year ended December 31, 2015.

Restricted Stock Awards

During the year ended December 31, 2016, the Company granted 57,964 shares of restricted stock ("RSAs") to non-employee directors of its Board, executive officers and certain key employees. The awards primarily vest in three equal installments on the first, second and third anniversaries of the date of grant.

During the year ended December 31, 2016, the Company issued 22,793 shares of its Common Stock to non-employee directors, executive officers and key employees upon the vesting of certain RSAs granted in 2015, 2014 and 2013 under the Company's 2006 Plan. An additional 3,307 RSAs vested during the year but were not released to the participant due to an additional holding period required by the grant agreement. As of December 31, 2016 and 2015, 10,134 shares and 6,827 shares, respectively, were vested but not released. In connection with the vesting of these RSAs, 2,736 shares of the Company's Common Stock were surrendered to the Company by the recipients to pay their associated taxes due to the federal and state taxing authorities during 2016. These shares were placed into our treasury account.

The following table summarizes the activity of the shares and weighted-average grant date fair value of the Company's unvested restricted Common Stock during the year ended December 31, 2016:

	Shares	Weighted-average grant date fair value
Non-vested at beginning of period	44,182	$ 38.67
Granted	57,964	$ 44.90
Vested	(26,100)	$ 35.53
Forfeited or cancelled	(3,848)	$ 44.63
Non-vested at end of period	72,198	$ 44.44

As of December 31, 2016, there was $2,220 of unrecognized compensation cost related to unvested share settled stock options and RSAs granted under the 2006 Plan. The cost is expected to be recognized over a weighted-average period of 1.37 years. The total fair value of stock options and RSAs vested was $1,383, $3,709 and $4,155 for the years ended December 31, 2016, 2015 and 2014, respectively.

Other Restricted Stock Award Grants

During the year ended December 31, 2014, the Board approved the grant of 596,915 RSAs to two individuals in connection with the Ingeus acquisition. The grants were made outside of the 2006 Plan, as they were related to the acquisition. However, since the term of the awards provided for vesting based on continued employment, the awards were accounted for as stock-based compensation. The shares necessary to settle these awards were placed in an escrow account in 2014, and were releasable from escrow in accordance with the vesting of the awards. Per the original terms of the agreements, the awards vested upon continued employment of the grantees, in four equal installments on the anniversary date of the grant. However, on October 15, 2015, the Company entered into agreements whereby the executives' employment was terminated by mutual agreement and vesting was no longer based upon continued employment. The Company recognized $16,078 in stock-based compensation expense at the time of the modification, which otherwise would have been recognized over the remainder of the vesting period. Additionally, the Company recognized accelerated deferred compensation expense of $4,714 related to these agreements during the year ended December 31, 2015. As of December 31, 2016, 298,457 underlying shares to settle the awards are held in the escrow account, although all expense was recognized as of December 31, 2015.

Restricted Stock Units

During the year ended December 31, 2016, the Company granted 5,930 restricted stock units to a key employee, related to the terms of a separation agreement, that vested on January 3, 2017. The units will be settled through shares or cash no later than December 31, 2017. The award is liability classified, and the expense recorded is based upon the Company's closing stock price at the end of each reporting period and the completed requisite service period.

Performance Restricted Stock Units

The Company had 49,208 performance restricted stock units ("PRSUs") outstanding at December 31, 2016 to key employees. These awards vest upon the Company or its segments meeting certain performance criteria over a set performance period as determined, and subject to adjustment, by the Company's Compensation Committee of the Board. 35,879 of the outstanding PRSUs at December 31, 2016 have a performance criteria tied to the Company's return on equity ("ROE"), with performance periods ending on December 31, 2016 and 2017. The grantees will earn 33% of PRSUs granted if the ROE is 12% but less than 15%, and 100% of the PRSUs granted if the ROE is 15% or more. If ROE is less than 12%, no PRSUs will be earned. The Company does not expect any of these PRSUs, with a performance period ended December 31, 2016, to vest. 13,329 of the outstanding PRSUs at December 31, 2016 have a performance criteria tied to NET Services' EBITDA and the Company's EBITDA performance with performance periods ending on December 31, 2016 and 2017. The Company expects 6,665 of these PRSUs, with a performance period ended December 31, 2016, to vest. Compensation expense related to these awards totaled ($270), $613 and ($162) for the years ended December 31, 2016, 2015 and 2014, respectively.

Cash Settled Awards

During the years ended December 31, 2016, 2015 and 2014, respectively, the Company issued 3,360, 4,000 and 6,195 stock equivalent units ("SEUs"), which settle in cash upon vesting, to Coliseum Capital Partners, L.P., in lieu of a grant to Christopher Shackelton, Chairman of the Board, for his service on the Board, which vest one-third upon each anniversary of the vesting date. The fair value of the SEUs is based on the closing stock price on the last day of the period and the completed requisite service period. The Company recorded $287, $588 and $375 of expense for SEUs during the years ended December 31, 2016, 2015 and 2014, respectively.

During the year ended December 31, 2014, the Company issued 200,000 stock option equivalent units ("SOEUs"), with an exercise price of $43.81 per share, which settle in cash, to Coliseum Capital Partners, L.P in lieu of a grant to Christopher Shackelton, for other services rendered. All 200,000 SOEUs were outstanding and exercisable at December 31, 2016. This award vested one-third upon grant, one-third on June 30, 2015 and one-third on June 30, 2016. No additional SOEUs were granted during the years ended December 31, 2016 and 2015. The Company recorded ($1,517), $1,888 and $1,249 of expense for SOEUs during the years ended December 31, 2016, 2015 and 2014, respectively. The expense is included in "General and administrative expense" in the consolidated statements of income. The fair value of the SOEUs was estimated as of December 31, 2016, 2015 and 2014 using the Black-Scholes option-pricing formula and amortized over the option's graded vesting periods with the following assumptions:

	Year ended December 31,		
	2016	**2015**	**2014**
Expected dividend yield	0.0%	0.0%	0.0%
Expected stock price volatility	35.71% - 41.82%	43.75% - 45.30%	46.75% - 50.1%
Risk-free interest rate	1.11% - 1.64%	1.24% - 1.70%	1.3% - 1.76%
Expected life of options (in years)	1.0 - 3.0%	2.75 - 4.75	3.75 - 5.75

As of December 31, 2016 and 2015, the Company had a short-term liability of $1,764 and $3,555, respectively, in "Accrued expenses" in the consolidated balance sheet related to unexercised vested and unvested cash settled share-based payment awards. The cash settled share-based compensation expense in total excluded tax expense of $492 for the year ended December 31, 2016. The cash settled share-based compensation expense in total excluded a tax benefit of $990 and $650 for the years ended December 31, 2015 and 2014, respectively. The unrecognized compensation cost is expected to be recognized over a weighted average period of 0.78 years; however, the total expense will continue to be adjusted for the unexercised vested SOEUs until they are exercised.

Holdco Long-Term Incentive Plan

On August 6, 2015 (the "Award Date"), the Compensation Committee of the Board adopted the HoldCo LTIP under the 2006 Plan. The Holdco LTIP is designed to provide long-term performance based awards to certain executive officers of Providence. Under the program, executives will receive shares of Providence Common Stock based on the shareholder value created in excess of an 8.0% compounded annual return between the Award Date and December 31, 2017 (the "Extraordinary Shareholder Value"). The Award Date value is calculated on the basis of the Providence stock price equal to the volume weighted average of the common share price over a 90-day period ending on the Award Date. The value as of December 31, 2017 will be calculated on the basis of a similar 90-day volume weighted average common share price. A pool for use in the allocation of awards was created equal to 8.0% of the Extraordinary Shareholder Value.

Participants in the HoldCo LTIP will receive a percentage allocation of any such pool and, following determination of the size of the pool, will be entitled to a number of shares equal to their pro rata portion of the pool divided by the volume weighted average of the Company's per share price over the 90-day period ending on December 31, 2017. Of the shares allocated, 60% will be issued to the participant on or shortly following determination of the pool, 25% will vest and be issued on the one-year anniversary of such determination date, subject to continued employment, and the remaining 15% will be issued on the second anniversary of the determination date, subject to continued employment. As of December 31, 2016, 88.5% of the award pool had been granted to executives and $3,319 and $1,353 of expense is included in "General and administrative expense" in the consolidated statements of income for the years ended December 31, 2016 and 2015, respectively. As of December 31, 2016, there was $5,361 of unrecognized compensation cost related to non-vested Holdco LTIP shares granted under the 2006 Plan. The cost is expected to be recognized over a weighted-average period of 1.55 years. These awards are equity classified and the fair value of the awards was calculated using a Monte-Carlo simulation valuation model. The fair value of the awards granted in 2015 and 2016 were estimated using the following assumptions:

	Year ended December 31,	
	2016	**2015**
Forward interest rate	0.24% - 2.71%	0.04% - 2.90%
Expected Volatility	40.0%	45.0%
Dividend Yield	0.0%	0.0%
Fair Value of Total Pool	$12,870	$12,590

14. Vertical Long-Term Incentive Plan

The Company established Long-Term Incentive Plans ("Vertical LTIPs") for the Company's operating segments, or verticals, during the fourth quarter of 2015. The Vertical LTIPs are consistent in their basic terms, but each have been customized for specific aspects of the associated vertical. The awards pay in cash, however up to 50% of the award may be paid in unrestricted stock if the recipient elects this option when the Vertical LTIP offer letter is received. In addition, at the discretion of the Company, the recipients may be able to elect unrestricted stock in lieu of cash compensation at a later date. The Vertical LTIPs reward participants based on certain measures of free cash flow and EBITDA results adjusted as specified in the plan document. The awards vest in three installments: 60% of the award will pay out immediately following December 31, 2017, 25% one year following the performance period (i.e. December 31, 2018) and 15% two years following the performance period (i.e. December 31, 2019). Payout is subject to the employee remaining employed by the Company. For the years ended December 31, 2016 and 2015, $1,513 and $328 of expense, respectively, is included in "Service expense" in the consolidated statements of income related to this plan.

15. Earnings Per Share

The following table details the computation of basic and diluted earnings per share:

	Year ended December 31,		
	2016	**2015**	**2014**
Numerator:			
Net income attributable to Providence	$ 91,928	$ 83,696	$ 20,275
Less dividends on convertible preferred stock	(4,419)	(3,935)	-
Less accretion of convertible preferred stock discount	-	(1,071)	-
Less income allocated to participating securities	(13,135)	(10,691)	-
Net income available to common stockholders	$ 74,374	$ 67,999	$ 20,275
Continuing operations	$ (21,251)	$ (29,181)	$ 24,511
Discontinued operations	95,625	97,180	(4,236)
	$ 74,374	$ 67,999	$ 20,275
Denominator:			
Denominator for basic earnings per share -- weighted-average shares	14,666,896	15,960,905	14,765,303
Effect of dilutive securities:			
Common stock options	-	-	236,538
Performance-based restricted stock units	-	-	16,720
Denominator for diluted earnings per share -- adjusted weighted-average shares assumed conversion	14,666,896	15,960,905	15,018,561
Basic earnings (loss) per share:			
Continuing operations	$ (1.45)	$ (1.83)	$ 1.66
Discontinued operations	6.52	6.09	(0.29)
	$ 5.07	$ 4.26	$ 1.37
Diluted earnings (loss) per share:			
Continuing operations	$ (1.45)	$ (1.83)	$ 1.63
Discontinued operations	6.52	6.09	(0.28)
	$ 5.07	$ 4.26	$ 1.35

The accretion of Preferred Stock discount in the table above related to a beneficial conversion feature of the Company's Preferred Stock that was fully amortized as of June 30, 2015. Income allocated to participating securities is calculated by allocating a portion of net income less dividends on convertible stock and amortization of Preferred Stock discount to the Preferred Stock holders on a pro rata, as converted, basis; however, the convertible preferred stockholders are not required to absorb losses.

The following weighted-average shares were not included in the computation of diluted earnings per share as the effect of their inclusion would have been anti-dilutive:

	Year ended December 31,		
	2016	2015	2014
Stock options to purchase common stock	22,638	173,925	92,054
Convertible preferred stock	803,442	700,241	-

16. Operating Leases

The Company has non-cancelable contractual obligations in the form of operating leases for office space, related office equipment and other facilities. The leases expire in various years and generally provide for renewal options. In the normal course of business, it is expected that these leases will be renewed or replaced by leases on other properties.

Certain operating leases provide for increases in future minimum annual rental payments based on defined increases in the Consumer Price Index, subject to certain minimum increases. Several of these lease agreements contain provisions for periods in which rent payments are reduced. The total amount of rental payments due over the lease term is being charged to rent expense on a straight-line basis over the term of the lease. The difference between rent expense recorded and the amount paid, for continuing operations, as of December 31, 2016 and 2015 was $3,253 and $2,217, respectively, and is included in "Other long-term liabilities" in the consolidated balance sheets. Also, the lease agreements generally require the Company to pay executory costs such as real estate taxes, insurance, and repairs.

Future minimum payments under non-cancelable operating leases for equipment and property with initial terms of one year or more consisted of the following at December 31, 2016:

	Operating Leases
2017	$ 19,788
2018	14,422
2019	10,516
2020	7,276
2021	5,999
Thereafter	14,075
Total future minimum lease payments	$ 72,076

Rent expense for continuing operations related to operating leases was $29,316, $31,191 and $16,117, for the years ended December 31, 2016, 2015 and 2014, respectively.

17. Retirement Plan

The Company maintains a qualified defined contribution plan under Section 401(k) of the Internal Revenue Code of 1986, as amended, for all employees of its NET Services operating segment and corporate personnel. The Company, at its discretion, may make a matching contribution to the plan. Any matching contributions vest over five years. Unvested matching contributions are forfeitable upon employee termination. Employee contributions are fully vested and non-forfeitable. The Company's contributions to the plan for continuing operations were $248, $221 and $180, for the years ended December 31, 2016, 2015 and 2014, respectively.

WD Services' employees are entitled to benefits under certain retirement plans. The WD Services' segment has separate plans in each country it operates. The plans receive fixed contributions from WD Services' companies and the legal or constructive obligation is limited to these contributions, although the benefits the employees ultimately receive are determined by the plan administrators, which includes government entities and third-party administrators. The Company's contributions to these plans were $9,139, $10,331 and $2,424 for the years ended December 31, 2016, 2015 and 2014, respectively.

The Company also maintains a Deferred Compensation Rabbi Trust Plan for highly compensated employees of NET Services. This plan was put in place to compensate for the inability of highly compensated employees to take full advantage of the Company's 401(k) plan. Additional information is included in Note 19, *Commitments and Contingencies*.

18. Income Taxes

The following table summarizes our U.S. and foreign income (loss) from continuing operations before income taxes:

	Year ended December 31,		
	2016	**2015**	**2014**
US	$ 65,559	$ 43,598	$ 16,944
Foreign	(67,437)	(53,692)	15,856
Total	$ (1,878)	$ (10,094)	$ 32,800

The federal, state and foreign income tax provision is summarized as follows:

	Year ended December 31,		
	2016	**2015**	**2014**
Federal:			
Current	$ 21,202	$ 15,161	$ 9,534
Deferred	(6,477)	(1,606)	(2,792)
	14,725	13,555	6,742
State:			
Current	$ 4,580	$ 2,644	$ 2,188
Deferred	(938)	(38)	(621)
	3,642	2,606	1,567
Foreign:			
Current	$ 266	$ 523	$ (616)
Deferred	(1,597)	(2,101)	596
	(1,331)	(1,578)	(20)
Total provision for income taxes	$ 17,036	$ 14,583	$ 8,289

A reconciliation of the provision for income taxes with amounts determined by applying the statutory U.S. federal income tax rate to income (loss) from continuing operations before income taxes is as follows:

	Year Ended December 31,		
	2016	2015	2014
Federal statutory rates	35%	35%	35%
Federal income tax at statutory rates	$ (657)	$ (3,533)	$ 11,480
Change in valuation allowance	9,480	3,574	1,758
Change in uncertain tax positions	73	(76)	(1,741)
State income taxes, net of federal benefit	2,396	1,785	1,369
Difference between federal statutory and foreign tax rate	9,427	4,642	(353)
Stock compensation	-	(184)	(524)
Meals and entertainment	96	81	85
Amortization of deferred consideration	-	9,444	1,574
Transaction costs	-	(447)	1,769
Contingent consideration liability reversal	-	(854)	(5,748)
Nontaxable interest income	-	(965)	(660)
Tax credits	(947)	(456)	-
Legal expense	522	284	-
Depreciation	-	649	-
Equity in net loss of investee	624	366	-
Asset Impairment	2,353	-	-
Foreign Exchange	(7,001)	-	-
Other	670	273	(720)
Provision for income taxes	$ 17,036	$ 14,583	$ 8,289
Effective income tax rate	(907)%	(144)%	25%

The Company recognized an income tax provision for the years ended December 31, 2016 and December 31, 2015 despite having losses from continuing operations before income taxes. Because of foreign net operating losses (including equity investee losses) for which the future income tax benefit currently cannot be recognized, and non-deductible expenses such as amortization of deferred consideration related to the Ingeus acquisition, the Company recognized estimated taxable income for these years upon which the income tax provision for financial reporting is calculated.

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities are as follows:

	December 31,	
	2016	2015
Deferred tax assets:		
Net operating loss carryforwds	$ 17,742	$ 16,889
Tax credit carryforwards	399	48
Accounts receivable allowance	1,341	355
Accrued items and reserves	18,669	12,955
Stock compensation	4,224	3,226
Deferred rent	915	614
Deferred financing costs	-	127
Other	180	228
	43,470	34,442
Deferred tax liabilities:		
Deferred financing costs	154	-
Prepaids	2,103	1,181
Property and equipment depreciation	1,238	3,697
Goodwill and intangibles amortization	9,568	13,248
Equity Investment	59,244	-
Other	203	273
	72,510	18,399
Net deferred tax assets	(29,040)	16,043
Less valuation allowance	(27,423)	(21,513)
Net deferred tax assets	$ (56,463)	$ (5,470)
Current deferred tax assets, net of valuation allowance of $163 and $0 for 2016 and 2015, respectively	$ 6,825	$ 2,891
Net noncurrent deferred tax assets, net of valuation allowance of $27,260 and $21,513 for 2016 and 2015, respectively	4,003	42
Net noncurrent deferred tax liabilities, net of valuation allowance of $0 and $0 for 2016 and 2015, repectively	(67,291)	(8,403)
	$ (56,463)	$ (5,470)

At December 31, 2016, the Company had no federal net operating loss carryforwards, and $336 of state net operating loss carryforwards which expire as follows:

2017	$ -
2018	13
2019	-
2020	-
2021	207
Thereafter	116
	$ 336

The Company had net operating loss carryforwards in the following countries which can be carried forward indefinitely:

Australia	$ 32,736
Canada	782
France	3,382
Poland	264
Sweden	201
UK	39,666

Realization of the Company's net operating loss carryforwards is dependent on generating sufficient taxable income prior to expiration of the loss carryforwards. Although realization is not assured, management believes it is more likely than not that all of the deferred tax assets will be realized, to the extent they are not covered by a valuation allowance. The amount of the deferred tax asset considered realizable, however, could be reduced in the near term if estimates of future taxable income during the carryforward period are reduced.

The net change in the total valuation allowance for the year ended December 31, 2016 was $5,910, of which $9,480 related to current operations and negative $3,570 related to the adjustment of the beginning balance. The valuation allowance includes $27,127 primarily for Australia, France and UK net operating loss carryforwards, and $296 for state net operating loss and tax credit carryforwards for which the Company has concluded that it is more likely than not that these net operating loss and tax credit carryforwards will not be realized in the ordinary course of operations. The Company will continue to assess the valuation allowance, and to the extent it is determined that the valuation allowance should be changed, an appropriate adjustment will be recorded.

The Company recognized certain excess tax benefits related to stock option plans for the years ended December 31, 2016, 2015 and 2014 in the amount of $282, $2,857 and $2,722, respectively. Such benefits were recorded as a reduction of income taxes payable and an increase in additional paid-in-capital and are included in "Exercise of employee stock options" in the accompanying statements of stockholders' equity and comprehensive income.

The Company recognized a tax shortfall related to stock option plans for the years ended December 31, 2016, 2015 and 2014 in the amount of $558, $151 and $38, respectively. This was recorded as a reduction of deferred tax assets and a decrease to additional paid-in-capital and is included in "Exercise of employee stock options" in the accompanying statements of stockholders' equity and comprehensive income.

The Company expects no material amount of the unrecognized tax benefits to be recognized during the next twelve months. The Company recognizes interest and penalties as a component of income tax expense. During the years ended December 31, 2016, 2015 and 2014, the Company recognized approximately $19, $27 and $14, respectively, in interest and penalties. The Company had approximately $52 and $48 for the payment of penalties and interest accrued as of December 31, 2016 and 2015, respectively. A reconciliation of the liability for unrecognized income tax benefits is as follows:

	December 31,		
	2016	**2015**	**2014**
Unrecognized tax benefits, beginning of year	$ 271	$ 347	$ 414
Balance upon acquisition/disposition	764	-	1,674
Increase (decrease) related to prior year positions	37	(47)	14
Increase related to current year tax positions	139	48	100
Statute of limitations expiration	(103)	(77)	(1,855)
Unrecognized tax benefits, end of year	$ 1,108	$ 271	$ 347

The Company is subject to taxation in the U.S. and various foreign and state jurisdictions. The statute of limitations is generally three years for the U.S., two to five years in foreign countries and between three and four years for the various states in which the Company operates. The Company is subject to the following material taxing jurisdictions: the U.S., UK, Australia, France, Saudi Arabia and Korea. The tax years that remain open for examination by the U.S. and various foreign countries and states principally include the years 2012 to 2016.

19. Commitments and Contingencies

Legal proceedings

On June 15, 2015, a putative stockholder class action derivative complaint was filed in the Court of Chancery of the State of Delaware, (the "Court"), captioned Haverhill Retirement System v. Kerley et al., C.A. No. 11149-VCL. The complaint named Richard A. Kerley, Kristi L. Meints, Warren S. Rustand, Christopher Shackelton (the "Individual Defendants") and Coliseum Capital Management, LLC ("Coliseum Capital Management") as defendants, and the Company as a nominal defendant. The complaint purported to allege that the dividend rate increase term originally in the Company's outstanding Preferred Stock was an impermissibly coercive measure that impaired the voting rights of the Company's stockholders in connection with the vote on the removal of certain voting and conversion caps previously applicable to the Preferred Stock (the "Caps"), and that the Individual Defendants breached their fiduciary duties by approving the dividend rate increase term and attempting to coerce the stockholder vote relating to the Company's Preferred Stock, and by failing to disclose all material information necessary to allow the Company's stockholders to cast an informed vote on the Caps. The complaint also purported to allege derivative claims alleging that the Individual Defendants breached their fiduciary duties to the Company by entering into the subordinated note and standby agreement with Coliseum Capital Management, and granting Coliseum Capital Management certain stock options. The complaint further alleged that Coliseum Capital Management aided and abetted the Individual Defendants in breaching their fiduciary duties. The complaint sought, among other things, an injunction prohibiting the stockholder vote relating to the dividend rate increase, corporate governance reforms, unspecified damages and other relief.

On August 31, 2015, after arms' length negotiations, the parties reached an agreement in principle and executed a Memorandum of Understanding ("MOU") providing for the settlement of claims concerning the dividend rate increase term and stockholder vote and related disclosure. The MOU stated that the Defendants had entered into the partial settlement of the litigation solely to eliminate the distraction, burden, expense, and potential delay of further litigation involving claims that have been settled. Pursuant to the partial settlement, the Company agreed to supplement the disclosures in its definitive proxy statement on Schedule 14A (the "2015 Proxy Statement"), Coliseum Capital Management and certain of its affiliates and the Company entered into an amendment to that certain Series A Preferred Stock Exchange Agreement, by and among Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Coliseum Capital Co-Invest, L.P., Blackwell Partners, LLC, and The Providence Service Corporation dated as of February 11, 2015 described in the 2015 Proxy Statement, and the Board of the Company agreed to adopt a policy related to the Board's determination each quarter as to whether the Company should pay cash dividends or allow dividends to be paid in the form of PIK dividends on the Preferred Stock, as further described in the supplemental proxy disclosures. On September 2, 2015, Providence issued supplemental disclosures through a supplement to the 2015 Proxy Statement. On September 16, 2015, Providence stockholders approved the removal of the Caps. The Company provided notice of the proposed partial settlement to Providence's shareholders by December 11, 2015. At a hearing on February 9, 2016, the court denied approval of the settlement. The Court indicated that plaintiff's counsel could petition the Court for a mootness fee, and that defendants would have the opportunity to oppose any such application.

On January 12, 2016, the plaintiff filed a verified amended class action and derivative complaint (the "first amended complaint"). In addition to the defendants named in the earlier complaint, the first amended complaint named David Shackelton, Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Blackwell Partners, LLC, Coliseum Capital Co-Invest, L.P. (collectively, and together with Coliseum Capital Management, LLC, "Coliseum") and RBC Capital Markets, LLC ("RBC Capital Markets") as additional defendants. The first amended complaint purported to allege direct and derivative claims for breach of fiduciary duty against some or all of the Individual Defendants and David Shackelton (collectively, the "Amended Individual Defendants") regarding the approval of the subordinated note, the rights offering, the standby agreement with Coliseum Capital Management, and the grant to Coliseum Capital Management of certain stock options. The first amended complaint also purported to allege an additional derivative claim for unjust enrichment against Coliseum and further alleged that Coliseum and RBC Capital Markets aided and abetted the Amended Individual Defendants in breaching their fiduciary duties. The first amended complaint sought, among other things, revision or rescission of the terms of the subordinated note and Preferred Stock, corporate governance reforms, unspecified damages and other relief.

On May 6, 2016, the plaintiff filed a verified second amended class action and derivative complaint (the "second amended complaint"). In addition to the defendants named in the earlier complaint, the second amended complaint named Paul Hastings LLP ("Paul Hastings") and Bank of America, N.A. ("BofA") as additional defendants. In addition to previously asserted claims, the second amended complaint purported to assert direct and derivative claims for breach of fiduciary duties against Coliseum Capital Management, in its capacity as the controlling stockholder of the Company, in connection with the subordinated note, the Company's rights offering of Preferred Stock and the standby purchase agreement with Coliseum Capital Management (the "Financing Transactions"). The second amended complaint also alleged that Paul Hastings breached their fiduciary duties as counsel to the Company in connection with the Financing Transactions and that BofA and Paul Hastings aided and abetted certain of the Amended Individual Defendants in breaching their fiduciary duties in connection with the Financing Transactions. The second amended complaint sought, among other things, revision or rescission of the terms of the subordinated note and Preferred Stock, corporate governance reforms, disgorgement of fees paid to RBC Capital Markets, LLC, Paul Hastings and BofA for work relating to the Financing Transactions, unspecified damages and other relief.

On May 20, 2016, the Court granted a six-month stay of the proceeding from the date of such order to allow a special litigation committee, created by the Board, sufficient time to investigate, review and evaluate the facts, circumstances and claims asserted in or relating to this action and determine the Company's response thereto. On October 10, 2016, the Court granted an extension of the stay of the proceeding from November 20, 2016 until January 20, 2017, to allow the special litigation committee additional time to complete its investigation and review, and to determine the Company's response thereto. On January 20, 2017, the special litigation committee advised the court that the parties to the litigation and the special litigation committee had reached an agreement in principle to settle all of the claims in the litigation. The parties are working to finalize and document the settlement, which will then be presented to the Court for approval.

The Company has indemnified the Standby Purchasers from and against any and all losses, claims, damages, expenses and liabilities relating to or arising out of (i) any breach of any representation, warranty, covenant or undertaking made by or on behalf of the Company in the Standby Purchase Agreement and (ii) the transactions contemplated by the Standby Purchase Agreement and the 14.0% Unsecured Subordinated Note in aggregate principal amount of $65,500, except to the extent that any such losses, claims, damages, expenses and liabilities are attributable to the gross negligence, willful misconduct or fraud of such Standby Purchaser.

The Company has also indemnified other third parties from and against any and all losses, claims, damages, expenses and liabilities arising out of or in connection with the Company's acquisition of CCHN Group Holdings, Inc. (operating under the tradename Matrix, and formerly included in our HA Services segment) in October 2014 and related financing commitments, except to the extent that any such losses, claims, damages, expenses and liabilities are found in a final, non-appealable judgment by a court of competent jurisdiction to have resulted from the gross negligence, bad faith or willful misconduct of such third parties, or a material breach of such third parties' obligations under the related agreements.

The Company recorded $1,282 and $310 of such indemnified legal expenses related to this case during the years ended December 31, 2016 and 2015, respectively, which is included in "General and administrative expenses" in the consolidated statements of income. Of these amounts, $757 and $310 for the years ended December 31, 2016 and 2015, respectively, were indemnified legal expenses of related parties. Other legal expenses of the Company related to this matter are covered under the Company's insurance policies, subject to applicable deductibles and customary review of the expenses by the carrier. The Company recognized expense of $210 and $500 for the years ended December 31, 2016 and 2015, respectively. While the carrier typically remits payment directly to the respective law firm, the Company accrues for the cost and records a corresponding receivable for the amount to be paid by the carrier. The Company has recognized an insurance receivable of $1,645 and $2,210 in "Other receivables" in the consolidated balance sheets at December 31, 2016 and 2015, respectively, with a corresponding liability amount recorded to "Accrued expenses".

In addition to the matter described above, in the ordinary course of business, the Company is a party to various lawsuits. Management does not expect these lawsuits to have a material impact on the liquidity, results of operations, or financial condition of Providence.

Other Indemnifications

The Company has provided certain standard indemnifications in connection with the sale of the Human Services segment to Molina Healthcare Inc. ("Molina") effective November 1, 2015. All representations and warranties made by the Company in the Membership Interest Purchase Agreement (the "Purchase Agreement") to sell the Human Services segment survive through the 15th month following the closing date, and ended on February 1, 2017. However, certain representations, including tax representations, survive until the expiration of applicable statutes of limitation, and healthcare representations survive until the third anniversary of the closing date. The Company has received indications from the purchaser of the Human Services segment regarding potential indemnification claims. One potential indemnification claim relates to *Rodriguez v. Providence Community Corrections,* a complaint filed in the District Court for the Middle District of Tennessee, Nashville Division (the "Rodriquez Litigation"), against Providence Community Corrections, Inc. ("PCC"), an entity sold under the Purchase Agreement. The purchaser of the Human Services segment announced in September 2016 that the parties to the Rodriguez Litigation accepted a mediation proposal for settlement pursuant to which PCC would pay the plaintiffs $14,000, and the parties are in the process of finalizing the settlement agreement. The outcome of any indemnification claim is uncertain but the Company believes that a significant portion of the settlement amount will be paid by PCC or PCC's insurance carriers.

The Company has established an accrual of $6,000 with respect to an estimate of loss for potential indemnification claims related to the Company's former Human Services segment, which is included in "Discontinued operations, net of tax" in the consolidated statements of income for the year ended December 31, 2016. It is reasonably possible losses may be incurred in excess of the $6,000 accrued, given the mediation proposal for settlement described above.

Molina has also threatened to assert other claims against the Company related to Molina's acquisition of PCC. The Company intends to vigorously defend itself against any such claims.

Litigation is inherently uncertain and the actual losses incurred in the event that the related legal proceedings were to result in unfavorable outcomes could have a material adverse effect on the Company's business and financial performance.

The Company has provided certain standard indemnifications in connection with its Matrix stock subscription transaction whereby Mercury Fortuna Buyer, LLC ("Subscriber"), Providence and Matrix entered into a stock subscription agreement (the "Subscription Agreement"), dated August 28, 2016. The representations and warranties made by the Company in the Subscription Agreement survive through the 15th month following the closing date; however, certain fundamental representations survive through the 36th month following the closing date. The covenants and agreements of the parties to be performed prior to the closing survive through the 15th month following the closing date, and all other covenants and agreements survive until the expiration of the applicable statute of limitations in the event of a breach, or for such lesser periods specified therein.

As of December 31, 2016, Matrix has certain malpractice claims that arose prior to the Company's date of purchase. The Company believes it is reasonably possible that a loss has occurred; however, it is not able to reliably estimate the amount of such loss. Although the Company does not believe that the aggregate amount of liability reasonably possible with respect to these matters would have a material adverse effect on its financial results, litigation is inherently uncertain and the actual losses incurred in the event that the Company's legal proceedings were to result in unfavorable outcomes could have a material adverse effect on the Company's business and financial performance. The Company is not aware of any indemnification liabilities with respect to Matrix that require accrual at December 31, 2016.

Deferred Compensation Plan

The Company has one deferred compensation plan for management and highly compensated employees of NET Services as of December 31, 2016. The deferred compensation plan is unfunded, and benefits are paid from the general assets of the Company. The total of participant deferrals, which is reflected in "Other long-term liabilities" in the consolidated balance sheets, was $1,430 and $1,247 at December 31, 2016 and 2015, respectively.

20. Transactions with Related Parties

The Company incurred legal expenses under an indemnification agreement with the Standby Purchasers as further discussed in Note 19, *Commitments and Contingencies*. Preferred Stock dividends earned by the Standby Purchasers during the years ended December 31, 2016 and 2015 totaled $4,213 and $3,739, respectively.

The Company operates a call center in Phoenix, Arizona. The building in which the call center is located was leased to the Company from VWP McDowell, LLC ("McDowell") until July 2014, at which time McDowell sold its interest in the property. Certain immediate family members of the then Chief Executive Officer of NET Services had a partial ownership interest in McDowell. In the aggregate these family members owned an approximate 13% interest in McDowell directly and indirectly through a trust. For 2014, the Company expensed $234 in lease payments to McDowell.

21. Discontinued Operations

Effective October 19, 2016, the Company completed the Matrix Transaction. At the Closing, (i) cash consideration of $180,614 was paid by the Subscriber to Matrix based upon an enterprise value of $537,500 and (ii) Matrix borrowed approximately $198,000 pursuant to a credit and guaranty agreement providing for term loans in an aggregate principal amount of $198,000 and revolving loan commitments in an aggregate principal amount not to exceed $10,000, which was not drawn at the Closing. At the Closing, Matrix distributed $381,163 to Providence, in full satisfaction of a promissory note and accumulated interest between Matrix and Providence. At the Closing, Providence made a $5,663 capital contribution to Matrix, as described in the Subscription Agreement, as amended, based upon its pro-rata ownership of Matrix, to fund the near-term cash needs of Matrix. On the day that was fifteen days following the Closing Date, Providence was, to the extent payable pursuant to the terms of the Subscription Agreement, as amended, entitled to receive from Matrix, or required to pay to Matrix, subsequent working capital adjustment payments. Providence received an initial payment of $5,172 from Matrix in November 2016 which is net of the capital contribution of $5,663 described above, based upon the initial working capital calculation as described in the Subscription Agreement. Additionally, in February 2017, the Company received a $75 payment from Matrix representing the final working capital adjustment payment.

In accordance with ASC 205-20, *Presentation of Financial Statements-Discontinued Operations*, a component of an entity is reported in discontinued operations after meeting the criteria for held for sale classification if the disposition represents a strategic shift that has (or will have) a major effect on the entity's operations and financial results. The Company analyzed the quantitative and qualitative factors relevant to the Matrix stock subscription transaction resulting in the Company no longer owning a controlling interest in Matrix, and determined that those held for sale conditions for discontinued operations presentation were met during the third quarter of 2016. As such, the historical financial results of Matrix, the Company’s historical HA Services segment, and the related income tax effects have been presented as discontinued operations for all periods presented in the accompanying consolidated financial statements through October 19, 2016.

The Company has continuing involvement with Matrix through its retention of 46.8% of the equity interests in Matrix, as well as through a management consulting agreement, not to exceed ten years. Prior to the Matrix Transaction, the Company owned 100% of the equity interest in Matrix. Subsequent to the Matrix Transaction, the Company accounts for its investment in Matrix under the equity method of accounting. The Company’s 46.8% share of Matrix’s losses subsequent to the Matrix Transaction, which totaled $1,789, is recorded as “Equity in net loss of investees” in its consolidated statement of income for the year ended December 31, 2016. Matrix’s pretax loss for the period of October 19, 2016 through December 31, 2016 totaled $7,027 and includes $6,367 of transaction related expenses. There have been no cash inflows or outflows from or to Matrix subsequent to the closing of the Matrix Transaction, other than the working capital adjustments discussed above, however the Company will receive management fees associated with its ongoing relationship with Matrix, of which $185 is included in “Other receivables” in the consolidated balance sheet at December 31, 2016.

On September 3, 2015, the Company entered into a Purchase Agreement, pursuant to which the Company agreed to sell all of the membership interests in Providence Human Services, LLC and Providence Community Services, LLC, comprising the Company’s Human Services segment, in exchange for cash proceeds of approximately $200,000 prior to adjustments for estimated working capital, certain seller transaction costs, debt assumed by the buyer, and a $20,099 cash payment received for the Providence Human Services cash and cash equivalents on hand at closing. The net proceeds were $230,703, although $10,000 is held in an indemnity escrow and recorded within “Prepaid expenses and other” in the consolidated balance sheet at December 31, 2016. Proceeds include a customary working capital adjustment of $13,246. During the year ended December 31, 2016, the Company recorded additional expenses related to the Human Services segment, principally related to legal proceedings as described in Note 19, *Commitment and Contingences*, related to an indemnified legal matter.

Results of Operations

The following table summarizes the results of operations classified as discontinued operations, net of tax, for the years ended December 31, 2016, 2015 and 2014. The HA Services segment column in the table below for the year ended December 31, 2016 reflects the financial results for HA Services from January 1, 2016 through October 19, 2016. The HA Services segment column in the table below for the year ended December 31, 2014 reflects the financial results for HA Services from October 24, 2014 through December 31, 2014.

	Year ended December 31, 2016		
	Human Services Segment	**HA Services Segment**	**Total Discontinued Operations**
Service revenue, net	$ -	$ 166,090	$ 166,090
Operating expenses:			
Service expense	-	120,906	120,906
General and administrative expense	7,966	2,148	10,114
Depreciation and amortization	-	21,121	21,121
Total operating expenses	7,966	144,175	152,141
Operating income (loss)	(7,966)	21,915	13,949
Other expenses:			
Write-off of deferred financing fees	-	2,302	2,302
Interest expense, net	-	9,929	9,929
Income (loss) from discontinued operations before gain on disposition and income taxes	(7,966)	9,684	1,718
Gain on disposition	-	167,895	167,895
(Provision) benefit for income taxes	2,401	(63,254)	(60,853)
Discontinued operations, net of tax	$ (5,565)	$ 114,325	$ 108,760

	Year ended December 31, 2015		
	Human Services Segment	HA Services Segment	Total Discontinued Operations
Service revenue, net	$ 291,510	$ 217,436	$ 508,946
Operating expenses:			
Service expense	264,293	163,211	427,504
General and administrative expense	14,975	2,630	17,605
Asset impairment charge	1,593	-	1,593
Depreciation and amortization	4,831	29,472	34,303
Total operating expenses	285,692	195,313	481,005
Operating income	5,818	22,123	27,941
Other expenses:			
Interest expense, net	2,829	14,359	17,188
Income from discontinued operations beforegain on disposition and income taxes	2,989	7,764	10,753
Gain on disposition	123,129	-	123,129
Provision for income taxes	(24,318)	(1,693)	(26,011)
Discontinued operations, net of tax	$ 101,800	$ 6,071	$ 107,871

	Year ended December 31, 2014		
	Human Services Segment	HA Services Segment	Total Discontinued Operations
Service revenue, net	$ 344,960	$ 43,331	$ 388,291
Operating expenses:			
Service expense	315,008	35,185	350,193
General and administrative expense	19,134	421	19,555
Asset impairment charge	6,915	-	6,915
Depreciation and amortization	6,655	5,619	12,274
Total operating expenses	347,712	41,225	388,937
Operating income (loss)	(2,752)	2,106	(646)
Other expenses:			
Interest expense, net	1,478	2,899	4,377
Loss from discontinued operations	(4,230)	(793)	(5,023)
Benefit for income taxes	588	199	787
Discontinued operations, net of tax	$ (3,642)	$ (594)	$ (4,236)

Interest expense, net

The Company allocated interest expense, including amortization of deferred financing fees, to discontinued operations based on the portion of the debt that was required to be paid with the proceeds from the sale of the Human Services segment and the Matrix Transaction. The total allocated interest expense is included in "Interest expense, net" in the tables above. The total allocated interest expense for the years ended December 31, 2016, 2015 and 2014 is as follows:

	Year ended December 31,		
	2016	**2015**	**2014**
Human Services Segment	$ -	$ 2,871	$ 1,519
HA Services Segment	9,939	14,376	2,904
Total	$ 9,939	$ 17,247	$ 4,423

The following table summarizes the carrying amounts of the major classes of assets and liabilities held for sale in the consolidated balance sheet as of December 31, 2015:

	December 31, 2015
Cash and cash equivalents	$ 5,014
Accounts receivable, net of allowance of $1,208	21,117
Prepaid expenses and other	3,094
Deferred tax assets	2,986
Current assets of discontinued operations held for sale	$ 32,211
Property and equipment, net	$ 11,629
Goodwill	210,071
Intangible assets, net	216,387
Other assets	3,313
Non-current assets of discontinued operations held for sale	$ 441,400
Current portion of long-term obligations	
Accounts payable	$ 1,988
Accrued expenses	13,116
Reinsurance liability reserve	745
Current liabilities of discontinued operations held for sale	$ 15,849
Other long-term liabilities	$ 2,197
Deferred tax liabilities	85,071
Non-current liabilities of discontinued operations held for sale	$ 87,268

The reserve for the estimated loss under the indemnifications in connection with the sale of the Human Services segment, as described in Note 19, *Commitments and Contingencies*, is included within “Accrued expenses” on the consolidated balance sheet at December 31, 2016.

Cash Flow Information

The following table presents depreciation, amortization, capital expenditures and significant operating noncash items of the discontinued operations for the years ended December 31, 2016, 2015 and 2014:

	For the year ended December 31, 2016		
	Human Services Segment	HA Services Segment	Total Discontinued Operations
Cash flows from discontinued operating activities:			
Depreciation	$ -	$ 3,661	$ 3,661
Amortization	-	17,460	17,460
Stock based compensation	-	(18)	(18)
Deferred income taxes	-	52,338	52,338
Cash flows from discontinued investing activities:			
Purchase of property and equipment	$ -	$ 9,174	$ 9,174

	For the year ended December 31, 2015		
	Human Services Segment	HA Services Segment	Total Discontinued Operations
Cash flows from discontinued operating activities:			
Depreciation	$ 2,376	$ 3,370	$ 5,746
Amortization	2,455	26,102	28,557
Asset impairment charge	1,593	-	1,593
Stock based compensation	7	108	115
Deferred income taxes	(5,680)	730	(4,950)
Cash flows from discontinued investing activities:			
Purchase of property and equipment	$ 2,224	$ 8,079	$ 10,303

	For the year ended December 31, 2014		
	Human Services Segment	HA Services Segment	Total Discontinued Operations
Cash flows from discontinued operating activities:			
Depreciation	$ 3,202	$ 608	$ 3,810
Amortization	3,453	5,011	8,464
Asset impairment charge	6,915	-	6,915
Stock based compensation	6	-	6
Deferred income taxes	(155)	683	528
Cash flows from discontinued investing activities:			
Purchase of property and equipment	$ 4,766	$ 2,115	$ 6,881

22. Segments

The Company is a holding company, which owns interests in subsidiaries and other companies that are primarily engaged in the provision of healthcare and workforce development services. The subsidiaries and other companies in which the Company holds interests comprise the following segments:

- NET Services – Nationwide provider of non-emergency medical transportation programs for state governments and managed care organizations.
- WD Services – Global provider of employment preparation and placement and legal offender rehabilitation services to eligible participants of government sponsored programs.

- Matrix Investment – Minority interest in nationwide provider of in-home care optimization and management solutions, including comprehensive health assessments, to members of managed care organizations, accounted for as an equity method investment.

Effective October 19, 2016, pursuant to the Matrix Transaction, the Company no longer owns a controlling interest in Matrix, which historically constituted the HA Services segment as further discussed in Note 21, *Discontinued Operations*. As the HA Services segment, through October 19, 2016, is presented as a discontinued operation, it is not reflected in the Company's segment disclosures. However, the Company accounts for its noncontrolling interest in Matrix from October 19, 2016 through December 31, 2016 as an equity method investment, which solely comprises Matrix Investment in the table below.

Segment results are based on how the Company's chief operating decision maker ("CODM") manages the Company's business, makes operating decisions and evaluates operating performance. The operating results of the segments include revenue and expenses incurred by the segment, as well as an allocation of direct expenses incurred by Corporate on behalf of the segment. Indirect expenses, including unallocated corporate functions and expenses, such as executive, accounting, finance, human resources, information technology and legal, as well as the results of SPCIC and elimination entries recorded in consolidation are reflected in Corporate and Other.

The following table sets forth certain financial information from continuing operations attributable to the Company's business segments for the years ended December 30, 2016, 2015 and 2014.

	Year Ended December 31, 2016				
	NET Services	WD Services	Matrix Investment	Corporate and Other	Total
Service revenue, net	$ 1,234,364	$ 344,403	$ -	$ 122	$ 1,578,889
Service expense	1,133,501	320,147	-	(894)	1,452,754
General and administrative expense	11,406	30,300	-	28,205	69,911
Asset impairment charge	-	19,588	-	1,415	21,003
Depreciation and amortization	12,375	13,824	-	405	26,604
Operating income (loss)	$ 77,082	$ (39,456)	$ -	$ (29,009)	$ 8,617
Loss on equity investment	$ -	$ 8,498	$ 1,789	$ -	$ 10,287
Investment in equity method investee	$ -	$ 4,161	$ 157,202	$ -	$ 161,363
Total assets	$ 313,169	$ 162,644	$ 157,202	$ 61,379	$ 694,394
Long-lived asset expenditures	$ 10,845	$ 19,810	$ -	$ 1,387	$ 32,042

	Year Ended December 31, 2015			
	NET Services	WD Services	Corporate and Other	Total
Service revenue, net	$ 1,083,015	$ 395,059	$ (64)	$ 1,478,010
Service expense	991,659	393,803	(4,308)	1,381,154
General and administrative expense	10,704	29,846	30,436	70,986
Depreciation and amortization	9,429	13,776	793	23,998
Operating income (loss)	$ 71,223	$ (42,366)	$ (26,985)	$ 1,872
Loss on equity investment	$ -	$ 10,970	$ -	$ 10,970
Investment in equity method investee	$ -	$ 9,324	$ -	$ 9,324
Total assets	$ 296,591	$ 213,042	$ 66,958	$ 576,591
Long-lived asset expenditures	$ 12,232	$ 11,869	$ 668	$ 24,769

	Year Ended December 31, 2014			
	NET Services	WD Services	Corporate and Other	Total
Service revenue, net	$ 884,287	$ 208,763	$ (170)	$ 1,092,880
Service expense	800,454	184,919	3,227	988,600
General and administrative expense	8,406	(2,072)	37,746	44,080
Depreciation and amortization	7,698	8,406	1,109	17,213
Operating income (loss)	$ 67,729	$ 17,510	$ (42,252)	$ 42,987
Long-lived asset expenditures	$ 12,477	$ 104,594	$ 473	$ 117,544

During the year ended December 31, 2014, the Company reported its segment activities under a full absorption method, where all corporate direct and indirect costs were allocated to the reporting segments. Additionally, the oversight of two legacy businesses was transferred to the management of WD Services in 2015. In fiscal 2015, a decision was made by the CODM to retain indirect costs at Corporate because the operating segments have no ability to control or manage these costs and the costs have no direct relationship to revenue earned or operating costs incurred by the segment. In addition, the amount of direct expense incurred by Corporate on behalf of the segments was limited, as each of the Company's segments operated and continue to operate with their own infrastructure, workforce and processes, which further supported retaining indirect costs at Corporate rather than allocating all Corporate costs to the segments. Separate reporting of indirect costs within Corporate and Other also allows the CODM to better track and manage these costs and allows the Company's shareholders greater transparency into costs associated with revenue generation and administration of the Company. The segment results for the year ended December 31, 2014 have been recast to reflect the current management of the segments. The operating income (loss) for NET Services and WD Services as originally reported for the year ended December 31, 2014 included an allocation of indirect corporate overhead expense of $11,224 and $8,819, respectively.

Geographic Information

The following table details the Company's revenue from continuing operations and long-lived assets by geographic location.

	For the year ended December 31, 2016			
	United States	United Kingdom	Other Foreign	Consolidated Total
Service revenue, net	$ 1,250,687	$ 235,061	$ 93,141	$ 1,578,889
Long-lived assets (a)	32,007	9,823	4,390	46,220

	For the year ended December 31, 2015			
	United States	United Kingdom	Other Foreign	Consolidated Total
Service revenue, net	$ 1,099,918	$ 298,386	$ 79,706	$ 1,478,010
Long-lived assets (a)	30,947	11,173	4,038	46,158

	For the year ended December 31, 2014			
	United States	United Kingdom	Other Foreign	Consolidated Total
Service revenue, net	$ 902,418	$ 139,065	$ 51,397	$ 1,092,880

(a) Represents property and equipment, net.

Domestic service revenue, net, totaled 79.2%, 74.4% and 82.6% of service revenue, net for the years ended December 31, 2016, 2015 and 2014, respectively. Foreign service revenue, net, totaled 20.8%, 25.6% and 17.4% of service revenue, net for the years ended December 31, 2016, 2015 and 2014, respectively.

At December 31, 2016, $76,579 of the Company's net assets from continuing operations were located in countries outside of the U.S. At December 31, 2015, $108,587 of the Company's net assets from continuing operations were located in countries outside of the U.S.

Customer Information

10.2%, 11.0% and 13.7% of the Company's consolidated revenue was derived from one U.S. state Medicaid program for the years ended December 31, 2016, 2015 and 2014, respectively. 10.7% and 11.2% of the Company's consolidated revenue was derived from the one UK governmental agency for the years ended December 31, 2015 and 2014, respectively. In addition, substantially all of the Company's revenues are generated from domestic and foreign governmental agencies or entities that contract with governmental agencies.

23. Quarterly Results (Unaudited)

The quarterly consolidated financial statements presented below reflect HA Services and Human Services as discontinued operations for all periods presented.

	Quarter ended			
	March 31, 2016 (1)(2)	June 30, 2016 (1)(2)	September 30, 2016 (1)(2)(3)	December 31, 2016 (2)(4)(5)(6)
Service revenue, net	$ 382,058	$ 398,359	$ 412,512	$ 385,960
Operating Income	8,304	6,712	9,793	(16,192)
Income (loss) from continuing operations, net of tax	1,376	1,624	3,743	(25,657)
Discontinued operations, net of tax	753	2,370	(2,791)	108,428
Net income attributable to Providence	2,235	4,623	650	84,420
Earnings (loss) per common share (11):				
Basic	$ 0.07	$ 0.21	$ (0.05)	$ 4.92
Diluted	$ 0.07	$ 0.21	$ (0.05)	$ 4.92

	Quarter ended			
	March 31, 2015 (1)(7)	June 30, 2015 (1)(7)	September 30, 2015 (1)(7)	December 31, 2015 (7)(8)(9)(10)
Service revenue, net	$ 362,398	$ 362,834	$ 379,568	$ 373,210
Operating Income (loss)	14,259	8,870	2,582	(23,839)
Income (loss) from continuing operations, net of tax	4,359	3,450	(3,905)	(28,581)
Discontinued operations, net of tax	1,889	3,125	(1,505)	104,362
Net income (loss) attributable to Providence	6,236	6,634	(5,571)	76,396
Earnings (loss) per common share (11):				
Basic	$ 0.32	$ 0.26	$ (0.41)	$ 4.05
Diluted	$ 0.32	$ 0.26	$ (0.41)	$ 4.05

(1)The Company classified interest expense, net of tax, of $221, $236 and $229 for the quarterly periods ended March 31, 2016, June 30, 2016 and September 30, 2016, respectively, and $251, $246 and $252 for the quarterly periods ended March 31, 2015, June 30, 2015 and September 30, 2015, respectively, to Discontinued Operations. Such amounts were previously classified as continuing operations in the Company's Form 10-Q for the period ended September 30, 2016. These amounts relate to the finalization of interest expense allocated to discontinued operations associated with the debt that was required to be repaid upon the completion of the Matrix stock subscription transaction.

(2)Includes equity in net loss of investee of $2,717, $1,459, $1,544 and $2,801, for the quarters ending March 31, 2016, June 30, 2016, September 30, 2016 and December 31, 2016, respectively, related to the Company's investment in Mission Providence. Includes equity in net loss of investee of $1,789, for the quarter ending December 31, 2016, related to the Company's investment in Matrix.

(3)The Company recorded expenses, net of tax, of $5,035 in Discontinued operations, net of tax, in the quarter ending September 30, 2016 related to the Company's former Human Services segment, which are principally related to an ongoing legal matter.

(4)Service revenue, net for the quarter ending December 31, 2016 decreased from the quarter ended September 30, 2016 primarily due to decreased revenue associated with the WD Services' National Citizen Service summer youth programs, which are seasonal in nature. Additionally, the quarter ended September 30, 2016 included revenue of $5,367 under the WD Services' offender rehabilitation program related to the finalization of a contractual adjustment for the contract years ending March 31, 2015 and 2016.

(5) The Company recorded an asset impairment charge of $1,415 related to the building and land utilized by the holding company, which was sold effective December 30, 2016. Also, the Company recorded asset impairment charges in its WD Services segment of $9,983, $4,381 and $5,224 to its property and equipment, intangible assets and goodwill, respectively.

(6) Includes gain on loss of controlling interest in Matrix, net of tax, of $109,403.

(7) Includes equity in net loss of investee of $2,483, $1,059, $4,465 and $2,962, for the quarters ending March 31, 2015, June 30, 2015, September 30, 2015 and December 31, 2015, respectively, related to the Company's investment in Mission Providence which incurred significant start-up costs during 2015.

(8) The Company incurred $20,944 of expense related to restricted shares and cash placed into escrow at the time of the Ingeus acquisition. The shares and cash were placed into escrow concurrent with the payment of the acquisition consideration paid for Ingeus; however, because two sellers of Ingeus remained employees post acquisition, the value of the shares and cash was recognized as compensation expense over the escrow term. Acceleration of this expense was triggered when the two sellers separated from the Company.

(9) Includes gain on disposition, net of tax, of $100,332, in relation to the sale of the Company's Human Services segment.

(10) Includes a gain due to a reduction in the estimated fair value of contingent consideration of $2,469 in 2015 related to the Ingeus acquisition.

(11) Earnings per share is computed independently for each of the quarters presented. Therefore, the sum of quarterly earnings per share may not equal the total computed for the year.

Item 9. ***Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.***

None.

Item 9A. ***Controls and Procedures.***

Evaluation of Disclosure Controls and Procedures

The Company, under the supervision and with the participation of its management (including its principal executive officer and principal financial officer), evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures, as defined in Rule 13a-15(e) of the Exchange Act as of the end of the period covered by this Annual Report on Form 10-K (December 31, 2016). Based upon this evaluation, the Company's principal executive and financial officers have concluded that such disclosure controls and procedures were effective to provide reasonable assurance that (i) information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and (ii) information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive and financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

Management's report on internal control over financial reporting is presented in Part II, Item 8, of this Annual Report and is hereby incorporated by reference.

Report of Independent Registered Public Accounting Firm

The attestation report of the registered public accounting firm on the Company's internal control over financial reporting is presented in Part II, Item 8, of this Annual Report and is hereby incorporated by reference.

Changes in Internal Control Over Financial Reporting

The principal executive and financial officers also conducted an evaluation of whether any changes in the Company's internal control over financial reporting occurred during the quarter ended December 31, 2016 that have materially affected or which are reasonably likely to materially affect such control. Such officers have concluded that no such changes have occurred.

Item 9B. ***Other Information.***

None.

PART III

Item 10. ***Directors, Executive Officers and Corporate Governance.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2017 annual meeting of stockholders; provided that if such proxy statement is not filed on or before May 1, 2017, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

Code of Ethics

We have adopted a code of ethics that applies to our senior management, including our chief executive officer, chief financial officer, controller and persons performing similar functions, as well as our directors, officers and employees. This code of ethics is part of our broader Compliance and Ethics Plan and Code of Conduct, which is available free of charge in the Investor Relations section of our website at www.prscholdings.com. We intend to disclose any amendment to, or waiver from, a provision of the code of ethics that applies to our principal executive officer, principal financial officer or principal accounting officer on our website. The information contained on our website is not part of, and is not incorporated in, this Annual Report on Form 10-K or any other report we file with or furnish to the SEC.

Item 11. ***Executive Compensation.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2017 annual meeting of stockholders; provided that if such proxy statement is not filed on or before May 1, 2017, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2017 annual meeting of stockholders; provided that if such proxy statement is not filed on or before May 1, 2017, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2017 annual meeting of stockholders; provided that if such proxy statement is not filed on or before May 1, 2017, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

Item 14. ***Principal Accounting Fees and Services.***

This Item is incorporated by reference from our definitive proxy statement on Schedule 14A to be filed with the SEC and delivered to stockholders in connection with our 2017 annual meeting of stockholders; provided that if such proxy statement is not filed on or before May 1, 2017, such information will be included in an amendment to this Annual Report on Form 10-K filed on or before such date.

PART IV

Item 15. ***Exhibits, Financial Statement Schedules.***

(a)(1) Financial Statements

The following consolidated financial statements including footnotes are included in Item 8.

- Consolidated Balance Sheets at December 31, 2016 and 2015;
- Consolidated Statements of Income for the years ended December 31, 2016, 2015 and 2014;
- Consolidated Statements of Comprehensive Income for the years ended December 31, 2016, 2015 and 2014;
- Consolidated Statements of Stockholders' Equity at December 31, 2016, 2015 and 2014; and
- Consolidated Statements of Cash Flows for the years ended December 31, 2016, 2015 and 2014.

(2) Financial Statement Schedules

Schedule II Valuation and Qualifying Accounts

	Balance at beginning of period	Additions: Charged to costs and expenses	Additions: Charged to other accounts	Deductions	Balance at end of period
Year Ended December 31, 2016:					
Allowance for doubtful accounts	$ 4,380	$ 3,298	$ 1,058(1)	$ 2,835(2)	$ 5,901
Year Ended December 31, 2015:					
Allowance for doubtful accounts	$ 3,198	$ 1,928	$ 1,152(1)	$ 1,898(2)	$ 4,380
Year Ended December 31, 2014:					
Allowance for doubtful accounts	$ 2,465	$ 881	$ 2,717(1)	$ 2,865(2)	$ 3,198

Notes:

Schedule above has been recast from prior year to exclude activity related to discontinued operations.

(1) Amounts primarily include the allowance for contractual adjustments related to our non-emergency transportation services operating segment that are recorded as adjustments to non-emergency transportation services revenue. Amount additionally includes impact from change in foreign currency rates.
(2) Write-offs, net of recoveries

All other schedules are omitted because they are not applicable or the required information is shown in our financial statements or the related notes thereto.

(3) Exhibits

Exhibit Number	Description
2.1	Share Sale Agreement, dated as of March 31, 2014, by and among The Providence Service Corporation, Pinnacle Australia Holdco Pty Ltd, Thérèse Virginia Rein, Gregory Kenneth Ashmead and GK Ashmead Holdings Pty Limited (as trustee of the GK Ashmead Nominees Trust) (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on April 1, 2014).
2.2	Australian Share Sale Agreement Side Deed, dated as of March 31, 2014, by and among The Providence Service Corporation, Pinnacle Australia Holdco Pty Ltd, Thérèse Virginia Rein, Gregory Kenneth Ashmead, GK Ashmead Holdings Pty Limited (as trustee of the GK Ashmead Nominees Trust) and Deloitte LLP (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on April 1, 2014).
2.3	Agreement and Plan of Merger, dated as of September 17, 2014, by and among The Providence Service Corporation, Matrix Acquisition Co., CCHN Group Holdings, Inc. and the Holders' Representative named therein (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on September 18, 2014).
2.4	Membership Interest Purchase Agreement, dated September 3, 2015, by and among The Providence Service Corporation, Ross Innovative Employment Solutions Corp. and Molina Healthcare, Inc. (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on September 8, 2015).
2.5	Amendment to Membership Interest Purchase Agreement, dated October 30, 2015, by and among The Providence Service Corporation, Ross Innovative Employment Solutions Corp. and Molina Pathways, LLC, as assignee of Molina Healthcare, Inc. (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on November 5, 2015).
2.6	Stock Subscription Agreement, dated as of August 28, 2016, by and among The Providence Service Corporation, CCHN Group Holdings, Inc. and Mercury Fortuna Buyer, LLC (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 31, 2016).
2.7	Amendment No. 1, dated as of October 19, 2016, to the Stock Subscription Agreement, dated August 28, 2016, by and among The Providence Service Corporation, CCHN Group Holdings, Inc. and Mercury Fortuna Buyer, LLC (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on October 25, 2016).
3.1	Second Amended and Restated Certificate of Incorporation of The Providence Service Corporation, including Certificate of Designation of Series A Junior Participating Preferred Stock, as filed with the Secretary of State of Delaware on December 9, 2011 (Incorporated by reference from an exhibit to the registrant's annual report on Form 10-K for the year ended December 31, 2011 filed with the SEC on March 15, 2012 (SEC file Number 001-34221)).

3.2	Certificate of Amendment of the Certificate of Incorporation of The Providence Service Corporation, dated as of May 6, 2015 (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on May 7, 2015).
3.3	Amended and Restated Bylaws of The Providence Service Corporation, effective March 10, 2010 (Incorporated by reference from an exhibit to the registrant's annual report on Form 10-K for the year ended December 31, 2009 filed with the SEC on March 12, 2010 (SEC file Number 001-34221)).
4.1	Certificate of Designations of Series A Convertible Preferred Stock of The Providence Service Corporation, dated as of February 6, 2015 (Incorporated by reference from an exhibit to Amendment No. 1 to the registrant's annual report on Form 10-K/A for the year ended December 31, 2014 filed with the SEC on April 30, 2015).
10.1	Amended and Restated Credit and Guaranty Agreement, dated as of August 2, 2013 (the "Credit Agreement"), by and among The Providence Service Corporation and certain of its subsidiaries party thereto, Bank of America, N.A., SunTrust Bank, BMO Harris Bank, Merrill Lynch, Pierce, Fenner & Smith Incorporated and SunTrust Robinson Humphrey, Inc. and the lenders party thereto (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 5, 2013).
10.2	Amended and Restated Pledge Agreement, dated as of August 2, 2013, by and among The Providence Service Corporation, certain of its subsidiaries party thereto, and Bank of America, N.A., as administrative agent (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 5, 2013).
10.3	Amended and Restated Security Agreement, dated as of August 2, 2013, by and among The Providence Service Corporation, certain of its subsidiaries party thereto, and Bank of America, N.A., as administrative agent (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 5, 2013).
10.4	First Amendment to Amended and Restated Credit and Guaranty Agreement and Consent, dated as of May 28, 2014, by and among The Providence Service Corporation, the Guarantors named therein, the New Subsidiaries named therein, the Lenders and New Lender named therein and Bank of America, N.A., as administrative agent (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on June 3, 2014).
10.5	Second Amendment to the Amended and Restated Credit and Guaranty Agreement and Consent, dated as of October 23, 2014, by and among The Providence Service Corporation, certain of its subsidiaries party thereto, Bank of America, N.A., SunTrust Bank, Royal Bank of Canada, BMO Harris Bank, N.A., HSBC Bank USA, National Association, the other Lenders party thereto, Merrill Lynch, Pierce, Fenner & Smith Incorporated, SunTrust Robinson Humphrey, Inc., and RBC Capital Markets (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on October 24, 2014).
10.6	Third Amendment and Consent to the Amended and Restated Credit and Guaranty Agreement, dated as of September 3, 2015, by and among The Providence Service Corporation, certain of its subsidiaries party thereto, Bank of America, N.A., Sun Trust Bank, Royal Bank of Canada, BMO Harris Bank, N.A., HSBC Bank USA, National Association, the other lenders party thereto, Merrill Lynch Pierce, Fenner & Smith Incorporated, Sun Trust Robinson Humphrey, Inc. and RBC Capital Markets (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on September 8, 2015).

10.7	Fourth Amendment and Consent to the Amended and Restated Credit and Guaranty Agreement, dated as of August 28, 2016, by and among The Providence Service Corporation, the guarantors party thereto, the lenders party thereto and Bank of America, N.A., as Administrative Agent (Incorporated by reference to an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 31, 2016).
10.8	Standby Purchase Agreement, dated October 23, 2014, by and among The Providence Service Corporation, Coliseum Capital Partners, L.P., Coliseum Capital Partners II, L.P., Coliseum Capital Co-Invest, L.P., and Blackwell Partners, LLC (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on October 24, 2014).
10.9+	Employment Agreement, dated January 14, 2015, by and between The Providence Service Corporation and James Lindstrom (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on January 21, 2015).
10.10+	Employment Agreement, dated August 6, 2015, by and between The Providence Service Corporation and James Lindstrom (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 11, 2015).
10.11+	Employment Agreement, dated as of September 28, 2015, by and between The Providence Service Corporation and David Shackelton (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on November 20, 2015).
10.12+	Employment Agreement, dated April 4, 2016, between The Providence Service Corporation and Sophia Tawil (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2016 filed with the SEC on May 6, 2016).
10.13+	Employment Agreement, dated March 24, 2014, between The Providence Service Corporation and Herman Schwarz (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on March 28, 2014).
10.14+	Extension of Employment Agreement, dated March 24, 2014, between The Providence Service Corporation and Herman Schwarz (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended June 30, 2016 filed with the Securities and Exchange Commission on August 2, 2016).
10.15+	Extension of Employment Agreement, dated March 24, 2014, between The Providence Service Corporation and Herman Schwarz (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended September 30, 2016 filed with the SEC on November 9, 2016).
10.16*+	Extension of Employment Agreement, dated March 24, 2014, between The Providence Service Corporation and Herman Schwarz.
10.17*+	Letter Agreement between Herman Schwarz and The Providence Service Corporation, dated January 4, 2017.
10.18+	The Providence Service Corporation 2006 Long-Term Incentive Plan, as amended and restated, effective June 30, 2015 (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended September 30, 2015 filed with the SEC on November 9, 2015).

10.19+	The Providence Service Corporation 2006 Long-Term Incentive Plan, as amended and restated effective July 27, 2016 (Incorporated by reference from an appendix to the registrant's definitive proxy statement on Schedule 14A filed with the SEC on June 14, 2016).
10.20+	Form of Restricted Stock Agreements (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2011 filed with the SEC on May 6, 2011 (SEC file Number 001-34221)).
10.21+	Form of Stock Option Agreements (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2011 filed with the SEC on May 6, 2011 (SEC file Number 001-34221)).
10.22+	Form of 2011 Performance Restricted Stock Unit Agreements (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2011 filed with the SEC on May 6, 2011 (SEC file Number 001-34221)).
10.23+	Form of 2012 Performance Restricted Stock Unit Agreements (Incorporated by reference from an exhibit to the registrant's annual report on Form 10-K for the year ended December 31, 2011 filed with the SEC on March 15, 2012 (SEC file Number 001-34221)).
10.24+	Form of 2013 Performance Restricted Stock Unit Agreements (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2013 filed with the SEC on May 10, 2013).
10.25+	Form of 2014 Performance Restricted Stock Unit Agreements (Incorporated by reference from an exhibit to Amendment No. 1 to the registrant's annual report on Form 10-K/A for the year ended December 31, 2014 filed with the SEC on April 30, 2015).
10.26+	Form of 2015 Performance Restricted Stock Unit Agreements (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended March 31, 2015 filed with the SEC on May 11, 2015).
10.27+	Form of Special Incentive Stock Option Award Agreement (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 11, 2015).
10.28+	Form of Matching Incentive Stock Option Award Agreement (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 11, 2015).
10.29+	2015 Holding Company LTI Program (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on August 11, 2015).
10.30+	2015 Holding Company LTI Program, as amended and effective on November 4, 2016 (Incorporated by reference from an exhibit to the registrant's quarterly report on Form 10-Q for the quarter ended September 30, 2016 filed with the SEC on November 9, 2016).
10.31	Amended and Restated Limited Liability Company Agreement of Mercury Parent, LLC, by and between Prometheus Holdco, LLC and Mercury Fortuna Buyer, LLC, dated as of October 19, 2016 (Incorporated by reference from an exhibit to the registrant's current report on Form 8-K filed with the SEC on October 25, 2016).

12.1*	Statement re Computation of Ratios of Earnings to Fixed Charges.
21.1*	Subsidiaries of the Registrant.
23.1*	Consent of KPMG LLP.
23.2*	Consent of KPMG LLP (Mercury Parent, LLC financial statements).
23.3*	Consent of KPMG Australia (Mission Providence Pty Limited financial statements).
31.1*	Certification pursuant to Securities Exchange Act Rules 13a-14 and 15d-14 of the Chief Executive Officer.
31.2*	Certification pursuant to Securities Exchange Act Rules 13a-14 and 15d-14 of the Chief Financial Officer.
32.1*	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, of the Chief Executive Officer.
32.2*	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, of the Chief Financial Officer.
99.1*	Financial Statements of Mercury Parent, LLC.
99.2*	Financial Statements of Mission Providence Pty Limited.
101. INS*	XBRL Instance Document
101.SCH*	XBRL Schema Document
101.CAL*	XBRL Calculation Linkbase Document
101.LAB*	XBRL Label Linkbase Document
101.PRE*	XBRL Presentation Linkbase Document
101.DEF*	XBRL Definition Linkbase Document

+ Management contract or compensatory plan or arrangement.

* Filed herewith.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

THE PROVIDENCE SERVICE CORPORATION

By: /s/ James M. Lindstrom
James M. Lindstrom
Chief Executive Officer

Dated: March 10, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/S/ JAMES M. LINDSTROM James M. Lindstrom	Chief Executive Officer and Director (Principal Executive Officer)	March 10, 2017
/S/ DAVID C. SHACKELTON David C. Shackelton	Chief Financial Officer (Principal Financial Officer)	March 10, 2017
/S/ WILLIAM SEVERANCE William Severance	Chief Accounting Officer (Principal Accounting Officer)	March 10, 2017
/S/ CHRISTOPHER S. SHACKELTON Christopher S. Shackelton	Chairman of the Board	March 10, 2017
/S/ TODD J. CARTER Todd J. Carter	Director	March 10, 2017
/S/ DAVID A. COULTER David A. Coulter	Director	March 10, 2017
/S/ RICHARD A. KERLEY Richard A. Kerley	Director	March 10, 2017
/S/ KRISTI L. MEINTS Kristi L. Meints	Director	March 10, 2017
/S/ LESLIE V. NORWALK Leslie V. Norwalk	Director	March 10, 2017
/S/ FRANK J. WRIGHT Frank J. Wright	Director	March 10, 2017

Morningstar® Document Research℠

FORM 10-K

CONDUENT Inc - CNDT

Filed: February 28, 2019 (period: December 31, 2018)

Annual report with a comprehensive overview of the company

Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended: December 31, 2018

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from: _____ to: _____

Commission File Number 001-37817

CONDUENT INCORPORATED

(Exact Name of Registrant as specified in its charter)

New York	**81-2983623**
(State of incorporation)	(IRS Employer Identification No.)
100 Campus Drive, Suite 200 **Florham Park, New Jersey 07932**	**(844) 663-2638**
(Address of principal executive offices)	**(Registrants telephone number, including area code)**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $0.01 par value	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: None

---

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by a check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging growth company ☐

Table of Contents

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by a check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common stock of the registrant held by non-affiliates as of June 30, 2018 was $3,809,514,932.

Indicate the number of shares outstanding of each of the Registrant's classes of common stock, as of the latest practicable date:

Class	Outstanding at January 31, 2019
Common Stock, $0.01 par value	211,601,559

DOCUMENTS INCORPORATED BY REFERENCE

Part III of this Form 10-K incorporates by reference the Registrant's Notice of 2019 Annual Meeting of Shareholders and Proxy Statement (to be filed with the Securities and Exchange Commission pursuant to Regulation 14A no later than 120 days after the close of the fiscal year covered by this report on Form 10-K).

Table of Contents

FORWARD-LOOKING STATEMENTS

From time to time, we and our representatives may provide information, whether orally or in writing, including certain statements in this Annual Report on Form 10-K, which are deemed to be "forward-looking" within the meaning of the Private Securities Litigation Reform Act of 1995 (the "Litigation Reform Act"). These forward-looking statements and other information are based on our beliefs as well as assumptions made by us using information currently available.

The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “will,” “should” and similar expressions, as they relate to us, are intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are subject to certain risks, uncertainties and assumptions. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those expressed or implied herein as anticipated, believed, estimated, expected or intended or using other similar expressions.

In accordance with the provisions of the Litigation Reform Act, we are making investors aware that such forward-looking statements, because they relate to future events, are by their very nature subject to many important factors and uncertainties that could cause actual results to differ materially from those contemplated by the forward-looking statements contained in this Annual Report on Form 10-K, any exhibits to this Form 10-K and other public statements we make.

Such factors include, but are not limited to: government appropriations and termination rights contained in our government contracts; our ability to renew commercial and government contracts awarded through competitive bidding processes; our ability to recover capital and other investments in connection with our contracts; our ability to attract and retain necessary technical personnel and qualified subcontractors; our ability to deliver on our contractual obligations properly and on time; competitive pressures; our significant indebtedness; changes in interest in outsourced business process services; our ability to obtain adequate pricing for our services and to improve our cost structure; claims of infringement of third-party intellectual property rights; the failure to comply with laws relating to individually identifiable information, and personal health information and laws relating to processing certain financial transactions, including payment card transactions and debit or credit card transactions; breaches of our information systems or security systems or any service interruptions; our ability to estimate the scope of work or the costs of performance in our contracts; our continuing emphasis on and shift toward technology-led digital transactions; customer decision-making cycles and lead time for customer commitments; our ability to collect our receivables for unbilled services; a decline in revenues from or a loss or failure of significant clients; fluctuations in our non-recurring revenue; our failure to maintain a satisfactory credit rating; our ability to attract and retain key employees; increases in the cost of telephone and data services or significant interruptions in such services; our failure to develop new service offerings; our ability to modernize our information technology infrastructure and consolidate data centers; our ability to comply with data security standards; our ability to receive dividends or other payments from our subsidiaries; changes in tax and other laws and regulations; changes in government regulation and economic, strategic, political and social conditions; changes in U.S. GAAP or other applicable accounting policies; and other factors that are set forth in the “Risk Factors” section, the “Legal Proceedings” section, the “Management's Discussion and Analysis of Financial Condition and Results of Operations” section and other sections of this Annual Report on Form 10-K, as well as in our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. We do not intend to update these forward-looking statements, except as required by law.

Table of Contents

CONDUENT INCORPORATED
FORM 10-K
December 31, 2018

TABLE OF CONTENTS

Table of Contents

PART I

ITEM 1. BUSINESS

In this Annual Report on Form 10-K, unless the content otherwise dictates, "Conduent", the "Company", "we" or "our" mean Conduent Inc. and its consolidated subsidiaries.

Our Business

Conduent is a leading provider of business process services with expertise in managing operations involving high volume, repeatable and individualized interactions. The Company's portfolio covers both front office and back office operations; however, the majority of its revenue and differentiation derives from engagements where it serves on behalf of its clients to manage end-user interactions across a wide-range of domains. Examples include payments, collections, benefit administration and end-user communication services. The Company creates value for its clients through more efficient service delivery combined with a personalized and seamless experience for the end-user. The Company applies its expertise, technology and innovation to continually modernize its offerings for improved customer and constituent satisfaction and loyalty, increase process efficiency and respond rapidly to changing market dynamics.

On December 31, 2016, Conduent Incorporated (formerly known as the BPO business) spun-off from Xerox Corporation, pursuant to the Separation and Distribution Agreement between the Company and Xerox Corporation (Separation). As a result of the spin-off, we now operate as an independent, publicly traded company on the New York Stock Exchange, under the ticker "CNDT".

With approximately 82,000 employees globally as of December 31, 2018, we provide differentiated services to clients spanning small, medium and large businesses and to governments around the world.

Our Transformation

We have a portfolio of businesses that we are optimizing and effectively targeting attractive growth areas in a rapidly evolving business process services industry. We have taken significant actions to improve our profitability and drive growth with a more focused portfolio of services.

Key initiatives include:

- ***Realigned Delivery.*** During 2018, we reorganized the business to better align to our vertical go-to-market strategy and to our global delivery capabilities. We believe this operating structure will allow us to better integrate and tailor business solutions for our customers.
- ***Divested Non-Core Assets.*** We divested four businesses in 2018 for aggregate proceeds of $703 million in cash. These divestitures enabled us to increase our focus on areas where we have a competitive advantage.
- ***Increased Use of Automation.*** We have developed and deployed a set of advanced software-based automation tools as part of our service delivery operations. These tools reduce the amount of repetitive, manual labor required to deliver many of our services and improve service quality through lower error rates and faster processing times.
- ***Real Estate, Infrastructure and Selling, General and Administrative (SG&A).*** We have significantly reduced the number of our leased and owned properties from 339 to 266 and reduced our information technology infrastructure spending. We have also reduced our SG&A costs from $611 million in 2017 to $560 million in 2018.

We continue to execute on our strategic transformation program to deliver cost savings through infrastructure optimization, labor productivity and automation initiatives, restructuring of unprofitable contracts and other efficiencies. This transformation program has and will enable us to better capitalize on our differentiated service offerings, industry expertise and global delivery excellence and position us for long-term shareholder value creation.

Table of Contents

Our Market Opportunity

We estimate our addressable market size in the global business process service industry at approximately $201 billion in 2018, according to third party industry reports, and we are a leader across several segments of this large, diverse and growing market. Providing business process services is complex and multi-faceted with services that span many industries.

Ongoing competitive pressures and increasing demand for further productivity gains have motivated businesses to outsource elements of their day-to-day operations to accelerate performance and innovation. As a result, our clients have become more focused on their core businesses and the range of outsourced activities has expanded greatly. Increasing globalization has also required many companies to optimize cost structures to retain competitiveness and business process services have become a key component of this strategy.

The ongoing shift to next-generation software and automation technologies is driving greater demand for, and expectation of, efficiency and personalization by the constituents and customers of the businesses and governments we serve. Addressing these business and operational challenges is necessary for business process services companies to capitalize on these trends. In addition, business process services have the potential to meaningfully enhance productivity for businesses and governments and satisfaction for their constituents and customers.

Segments

During 2018, in an effort to better reflect how we manage our business, we segregated our Public Sector segment into Government Services (including Health Enterprise, which was previously reported in Other segment) and Transportation segments. In addition, the Company also reclassified the operating results of our divestitures from the reportable segments to Other segment and separately reflected Shared IT/Infrastructure & Corporate Costs. All prior periods presented have been revised to reflect these changes.

- Our *Commercial Industries* segment provides business process services and customized solutions to clients in a variety of industries. Across the Commercial Industries segment, we deliver end-to-end business-to-business and business-to-customer services that enable our clients to optimize their key processes. Our multi-industry competencies include omni-channel communications, human resource management and finance and accounting services.

- Our *Government Services* segment provides government-centric business process services and subject matter experts to U.S. federal, state and local and foreign governments.

- Our *Transportation* segment provides systems and support to transportation departments and agencies globally. Primary offerings include support for electronic toll collection, public transit, parking and photo enforcement.

Other represents our divestitures and our Student Loan business, which the Company exited in the third quarter of 2018.

We present segment financial information in Note 2 – Segment Reporting to our Consolidated Financial Statements included in Part II, Item 8 of this Form 10-K, which is incorporated herein by reference. The discussion below highlights our segment revenues for the year ended December 31, 2018.

Table of Contents

Commercial Industries

Our Commercial Industries segment is our largest segment, with $2.5 billion in revenues in 2018, representing 47.2% of total revenues. Across the Commercial Industries segment, we deliver end-to-end business-to-business and business-to-customer services that enable our clients to optimize their key processes. Our multi-industry competencies include omni-channel communications, human resource management and finance and accounting services. These services are complemented by innovative industry-specific services such as payment integrity solutions to clients in the healthcare payer space, care and quality analytics, workflow solutions and software adoption services to healthcare provider clients, personalized product information for clients in the automotive industry, source-to-pay solutions for clients in the manufacturing industry, revenue generation and clinical services for clients in the pharmaceutical and life sciences industries, end-user engagement and marketing services for clients in the Retail industry, and mortgage and consumer loan processing for clients in the Financial Services industry.

Government Services

Our Government Services segment generated revenues of $1.4 billion in 2018, representing 25.1% of our total revenues. This segment provides government-centric business process services to U.S. federal, state and local governments for public assistance program administration, transaction processing and payment services. In order to provide targeted support to our government clients, our Government Services segment is organized into several primary businesses:

- ***Federal, State and Local Government:*** We support our government clients with services targeting key civilian agencies within federal, state and local governments, as well as government administrative offices. Our depth of agency-specific expertise combined with our scale allows us to deliver and manage programs at all levels of government. Our broad set of services includes public assistance program administration such as child support, pension administration, records management, electronic benefits, eligibility and payment cards, unclaimed property, disease management and software offerings in support of federal, state and local government agencies.

- ***Payments:*** With more than $75 billion disbursed annually, we are a leader in government payment disbursements for federally sponsored programs like Supplemental Nutritional Assistance Program (SNAP, commonly known as food stamps) and Women, Infant and Children (WIC) as well as government initiated cash disbursements such as child support, unemployment and federal social security. We provide our payment card services which include branded prepaid debit card (Visa and Mastercard), Electronic Benefit Transfer (EBT for SNAP and WIC) and Electronic Child Care to 35 states and the U.S. Treasury with a diversified portfolio consisting of 165 different payment programs nationwide.

- ***Government Healthcare:*** We provide medical management and fiscal agent care management services to Medicaid programs and federally-funded U.S. government healthcare programs in 24 states, Puerto Rico and the District of Columbia. Our services include a range of innovative solutions such as Medicaid management fiscal agent, pharmacy benefits management and clinical program management. These services help states optimize their costs by streamlining access to care and improve patient health outcomes through population health management and help families in need by improving beneficiary support.

Transportation

Our Transportation segment generated revenues of $0.7 billion in 2018, representing 13.5% of our total revenues. This segment provides revenue-generating transportation services to government clients in 24 countries. Our services include support for electronic toll collection, public transit, parking and photo enforcement. Across these offerings, we manage key processes on behalf of our clients including fee collection, compliance and violation management, notifications, statements and reporting. These innovative services significantly improve individual travel experiences, optimize how vehicles and goods move efficiently within cities, digitize integrated modes of transportation and help our government clients to better serve their constituents.

Other

Other includes our divestitures and our Student Loan business, which the Company exited in the third quarter of 2018. In 2018, Other accounted for $0.8 billion of revenues, representing 14.2% of total revenues.

Table of Contents

Our Service Offerings

Our portfolio of business process services includes a combination of industry-specific and multi-industry services. We have subject matter experts who are responsible for implementing each of these services, delivering service excellence to clients, ensuring best practices to improve cost competitiveness, innovating our next generation offerings and supporting worldwide sales.

Industry-Specific Services

Commercial Industry-Specific Services

Examples of the services we offer include personalized product information for automotive clients, source to pay solutions for manufacturing clients, care integration and coordination, member health risk assessments and payment integrity (such as recovering claims from the appropriate payers) for healthcare clients, mortgage and consumer loan processing for financial institution clients and customized workforce learning solutions for aerospace clients.

Transportation Services

The transportation services we offer include support for electronic toll collection, public transit, parking and photo enforcement. Across these offerings, we manage key processes on behalf of our clients including fee collection, compliance and violation management, notifications, statements and reporting.

Government Services

Our broad set of public sector services includes public assistance program administration, pension administration, records management, disease management and software offerings in support of federal, state and local government agencies. It also includes fiscal agent administrative services and providing management information systems in support of Medicaid programs or pharmacy benefits management for Government Healthcare clients.

Multi-Industry Services

Transaction Processing Services

We help our clients to improve communications with their customers and constituents, whether it is on paper, on-line or through other communication channels. By supporting our clients' customer communication processes, we help our clients deliver a better experience to their customers and operate with improved efficiency and greater effectiveness.

We offer a broad array of flexible transaction processing services that include data entry, scanning, image processing, enrollment processing, claims processing, high volume offsite print and mail services and file indexing. Our multi-channel communication capabilities (including secure print, email, text and web) enable the delivery of personalized and targeted communications that are designed to elicit the desired response from customers or other end-users (*e.g.*, on-time bill payment and increased marketing response rates). Our service offerings utilize both proprietary and commercially available third-party technologies, combined with our expertise to ensure continued quality and innovation for our clients.

Payment Services

Prepaid Cards: We are an extensive provider of VISA and MasterCard prepaid debit cards, as well as other electronic payment cards in support of U.S. government benefit programs such as Social Security, the Supplemental Nutrition Assistance Program (formerly known as food stamps), the Special Supplemental Nutrition Program for Women, Infants and Children and other specialized Electronic Benefits Transfer programs. Our secure payment services reduce fraud and eliminate paper checks by disbursing electronic payments directly to end-users, even those without bank accounts. Our proprietary processing platform, significant operational expertise, advanced fraud analytics and adoption of Europay, MasterCard and Visa chip-enabled technology put us in the forefront of the Prepaid Card industry.

Table of Contents

Health Savings Accounts (HSA): We provide clients with a simplified approach to help their employees manage their health care costs and accumulate wealth with tax-advantaged accounts. We consolidate administration of all health spending accounts onto one common platform, including HSA, Health Reimbursement Arrangements, Flexible Spending Accounts and Health Incentive Accounts. By consolidating and integrating the management of health spending accounts, we help our clients improve benefit enrollment and account opening, consolidate customer service, simplify communications and streamline account funding and management. As of December 31, 2018, we had approximately 1 million active HSA accounts and $2.5 billion of assets under management within our HSA offering.

Child Support Payments: We are an industry leader of State Government Disbursement Units in the U.S. for child support payments. We collect payments from non-custodial parents via check, credit card and transfers from employee payroll systems and disburse payments to the beneficiaries.

End-User Engagement

We offer a range of services that help our clients support their end-users. This includes in-bound and out-bound call support for both simple and complex transactions, technical support and patient assistance. We also provide multi-channel communication support (both print and digital) across a range of industries.

Human Resources Services

We help our clients support their employees at all stages of employment from initial on-boarding through retirement, as well as HSA administration. We offer clients a range of customized advisory, technology and administrative services that improve the ability of employees to manage their benefits, professional development and retirement planning. Also, we assist our clients with workers' compensation claims management.

Finance and Accounting Services

We serve clients by managing their critical finance, accounting and procurement processes. Our services include general accounting and reporting, billing and accounts receivable and purchasing, accounts payable and expense management services. We also offer wholesale and retail lockbox services and process auto and mortgage loans in the United States. With a global, dedicated team, we manage the core, end-to-end process areas of finance, accounting and procurement for some of the world’s most recognized brands.

Legal Business Services

We have been providing client support to law firms and corporate legal departments for over 20 years. We work across the litigation lifecycle, with particular focus on the legal discovery and review process. Our offerings include litigation support services, compliance and risk review and managed services support.

Workforce Learning Services

We are a provider of end-to-end learning services, designed to accelerate the productivity and development of our clients’ employees and extended work forces. Our global presence, superior innovation and expertise allow us to deliver performance-based learning services tailored to our clients’ unique strategic business goals. Our offerings include learning strategy and assessment, instructor management and learning administration.

Applied Automation and Analytics Solutions

Many of our service offerings described above incorporate our applied automation and analytics solutions to increase their value and effectiveness to clients across all industries. We deploy these solutions to personalize millions of interactions, optimize service delivery and simplify complex processes. For example, our customer care services harness the power of applied analytics and automation to help our customer service agents work more efficiently across different communication channels. Our applied automation solutions track and learn the most efficient means to address common customer service needs as they occur in real time so that we can solve the same problem faster the next time around. The combination of applied automation and analytics allows us to identify new service demand patterns and opportunities quickly so that we can proactively address them on behalf of our clients.

Table of Contents

Our Competitive Strengths

We possess a number of competitive strengths that distinguish us from our competitors, including:

Leadership in attractive growth markets. We are a leader in business process services. Our clients continue to outsource key business processes to accelerate performance and innovation. Additionally, clients are moving beyond services for back-office functions in order to drive customer satisfaction and loyalty, as well as productivity and efficiency. The increase in globalization and cost competition continues to accelerate, forcing companies to seek ways to stay ahead of the competition. These factors, along with clients and their customers demanding more personalized, seamless and secure solutions, are collectively driving the ongoing shift to next-generation software and automation technologies.

- ***Healthcare.*** U.S. healthcare spending was estimated to have represented 17.9% of GDP in 2017 and is projected to grow at an average rate of 5.5% per year for 2017-2026. As one of the most regulated industries, healthcare providers must balance increased utilization with heightened complexity and new financial pressures such as government budget challenges to significantly reduce reimbursements, reimbursement penalties for hospital readmissions and a shift from fee-for-service to “value-based” population health management. We are widely recognized by industry analysts as a leader in healthcare payer operations, serving 19 of the top 20 U.S. managed healthcare plans and providing administrative and care management solutions to Medicaid programs and federally funded U.S. government healthcare programs in 24 states, Puerto Rico and the District of Columbia.

- ***Transportation.*** Traffic congestion continues to increase as urbanization and changing demographics take hold globally. As a result, optimized transportation systems are becoming critical to increase efficiency while maintaining strict safety requirements. Electronic toll collection, public transit and parking all represent key growth drivers as governments at all levels increasingly focus on transportation infrastructure. We are an award-winning innovator in parking management.

- ***Transaction Processing.*** We provide high volume print and mail services, enrollment processing and personalized and targeted marketing and communications, to large corporations and we believe we are a leading provider in this market.

- ***Prepaid Cards***: We are the leading provider of prepaid payment card services in support of the U.S. government prepaid card services market.

Global delivery expertise. Our scale and global delivery network enables us to deliver our proprietary technology, differentiated service offerings and service capabilities expertly to clients around the world. We have operations in India, Philippines, Jamaica, Guatemala, Mexico, Romania, Dominican Republic and several locations within the United States, giving our customers the option for "onshore" or "offshore" outsourced business process services. This global delivery model enables us to leverage lower-cost production locations, consistent methodologies and processes, time zone advantages and business continuity plans. As of December 31, 2018, 49% of our employees were located in high cost countries and 51% were located in low cost countries.

Differentiated suite of multi-industry service offerings at scale. We manage transaction-intensive processes and work directly with end-users to meet their needs often in real-time. We are unique in our ability to offer our clients these business process services on a large scale and with high quality. Additionally, we are able to leverage our multi-industry services to bring the same scale and quality to our portfolio of industry-specific service offerings, such as healthcare claims management, employee benefits management and public transit fare collection.

Innovation and development. We innovate by developing and acquiring new technologies and capabilities that improve business processes. We are constantly creating the next generation of simple, automated and touchless business processes to drive lower costs, higher quality and increased end-user satisfaction. Analytics allow us to transform big data into useful information that helps identify operational improvements and constituent insights. Additionally, we leverage robotic process automation and predictive analytics and combine this with our deep subject matter expertise to create intelligent services that improve security, increase speed and improve accuracy, quality and regulatory compliance, and uncover insights that support better decision making and outcomes for our clients.

Table of Contents

Stable recurring revenue model supported by a loyal, diverse client base. We have a broad and diverse base of clients in 26 countries across geographies and industries, including Fortune 1000 companies, small and midsize businesses and governmental entities. Our close client relationships and successful client execution support our stable recurring revenue model and high renewal rates. Excluding our strategic decision not to renew certain contracts, renewal rates for 2018 and 2017 were 95% and 94%, respectively.

Our Strategies

Our strategy is to drive leadership in attractive markets by leveraging and building on our competitive strengths. We intend to execute our strategy through increased business portfolio focus and operating discipline, enhanced sales and delivery capabilities and tightly aligned investments. Our strategy is designed to deliver value by delivering profitable growth, expanding operating margins and deploying a disciplined capital allocation strategy.

Specific elements of our strategy include the following:

Expand within attractive industries. The industries in which we operate have attractive revenue growth rates, generally in the mid-single digits. We intend to sharpen our focus and expand our business in industries with strong growth and profitability characteristics. We will employ a disciplined approach to portfolio management to complement our competitive strengths and build depth and breadth in our core businesses. Within the Healthcare industry, we intend to leverage our data analytics, differentiated service offerings and industry know-how to continue to service payer, provider and core government healthcare clients. Within the Transportation industry, we will leverage our global, end-to-end platforms to continue to deliver seamless travel experiences while providing back-end Transaction Processing and Call Center services for government clients globally.

Optimize and strengthen our services capabilities. We plan to optimize our services capabilities and strengthen several core areas, including Transaction Processing, Finance and Accounting and Prepaid Card services by building out our services offerings and continuing to improve our competitive strengths. We have divested non-core assets, refocused our business towards higher margin growing segments and consolidated delivery operations to enable greater productivity. Within Transaction Processing, we intend to continue to build industry-specific service offerings and advance inbound and outbound processing capabilities. Within End-User Engagement, we intend to capitalize on our global scale, cost efficiencies and our ability to provide seamless communications between our clients and their end-users through traditional (e.g., voice) and digital (e.g., web, mobile and Internet of Things) channels. In Prepaid Cards, we plan to continue to leverage our scalable platform to help our clients simplify their payment disbursement processes.

Continue to advance next-generation platforms and capabilities. We intend to maintain our focus on innovation to create next-generation solutions aligned with our clients' future needs and our growth strategies. We plan to advance our current platforms, further automate and personalize business processes and enhance data analytics capabilities to deliver value-added services for our clients.

Engage, develop and support our people. We intend to increasingly develop our employees by investing in training, processes and systems to equip them with modern tools that enable them to perform their jobs more efficiently. Furthermore, we plan to strengthen our sales teams throughout improved and optimized coverage and effective talent management.

Competition

Although we encounter competition in all areas of our portfolio, we lead across many areas of our principal businesses. We compete on the basis of technology, performance, price, quality, reliability and customer service and support. In the current political environment in the U.S. and other territories, we also consider our "onshore" delivery capacity to be a competitive advantage. We participate in a highly competitive and rapidly evolving market, driven by changes in industry standards and demands of customers to become more efficient. Our competitors range from large international companies to relatively small firms. Our competitors include:

- Large multinational service providers such as CGI Group, Accenture, Aon Hewitt, Cognizant, Hewlett-Packard Enterprise, IBM, Teletech and Teleperformance;
- Traditional Business Process Outsourcing companies such as Genpact, ELX Services, Exela Technologies and WNS Global Services;
- Payroll processing and human capital management providers such as ADP and Paychex;

- Healthcare-focused IT and service solutions providers such as Cerner and Maximus;
- U.S. Federal focused government services such as CACI International and DXC Technology;
- Transportation multi-nationals such as Roper/TransCore, Cubic and Kapsch; and
- Smaller niche business processing service providers and in-house departments that perform functions that could be outsourced to us.

Sales and Marketing

We market our business process services to both potential and existing clients through our worldwide sales force and our business development team. Additionally, we have dedicated “solution architects” who work with clients to better understand their situation and develop a custom-tailored solution to meet their unique needs.

Our sales and marketing strategy is to go to market by industry to deliver key industry-specific and multi-industry service offerings to our clients. We focus on developing new prospects through market research and analysis, renewing expiring contracts and leveraging existing client relationships to offer additional services. We leverage our broad, multi-industry service offerings to package solutions through enterprise selling, while maintaining a disciplined approach to pricing and contracting. Our sales efforts typically involve extended selling cycles and our expertise in specific industries is critical to winning new business.

Our Geographies

We provide services globally and we have a diversified geographic delivery network, including a significant presence within the U.S. In 2018, approximately 12% of our revenues were generated by clients outside the United States. In 2018, our revenues by geography were as follows: $4,748 million in the United States (88% of total revenues), $497 million in Europe (9% of total revenues) and $148 million from the rest of the world (3% of total revenues). We present geographical information in Note 2 – Segment Reporting to our Consolidated Financial Statements included in Part II, Item 8 of this Form 10-K, which is incorporated herein by reference.

Innovation and Research and Development

Our innovation and research and development (R&D) capabilities are critical to our client value proposition and competitive positioning. Our investments in innovation align with our growth strategies and are driven by a view of future needs and required competencies developed in close partnership with our clients and R&D partners. We are investing in attractive markets, such as healthcare and transportation, and building on proven platforms to create services that distinguish us from our competitors.

Our innovation and R&D are focused on three key areas: automation, personalization and analytics.

Automation—Create simple, automated and touchless business processes to drive lower costs, higher quality and increased agility. Businesses require agility to quickly respond to market changes and new customer requirements. To enable greater business process agility, our R&D goals are to simplify, automate and enable business processes via flexible platforms that run on robust and scalable infrastructures. Automation of business processes benefits from our strong image, video and robotic processing, as well as our machine learning capabilities. Application of these methods to business processes enables technology to perform tasks that today are performed manually. Examples include providing automation solutions in transportation by aggregating and automatically applying business rules to simplify toll payments, using our state-of-the-art video and image analytics to reduce the need for manual review of license plates in tolling and toll adjustment scenarios, analyzing data on eligibility claims and checking for correctness on applications. The scope of automation is applied across our portfolio of services and is a key element of our ongoing strategy of modern, efficient services.

Table of Contents

Personalization—Augment humans by providing secure, real-time and context-aware personalized products and services. Whether business correspondence, personal communication, manufactured items or information service, personalization increases the value to the recipient. Our R&D investments lead to technologies that improve the efficiency, economics and relevance of business services, such as customer care and health and welfare services. For example, in our current customer care service offerings, the human touch is seamlessly added as our software automatically takes telephony data and merges it with customer records pulled from multiple sources to seamlessly create targeted scripts and flows. This allows the agent to have the caller's data readily available and provide a more personal experience to the customer —whether on the phone or online. In toll systems, our systems automatically pull up a customer's name, verify their information and prompt them for unpaid tolls. In transit systems, our mobile app aggregates and calculates the time, cost, carbon footprint and health benefits from walking, biking, driving, parking and taking public transit. For health and welfare, our systems provide state-of-the-art personalized delivery to ensure the best utilization of funds for the neediest populations.

Analytics—Transform big data into useful information to support better decision making. Competitive advantage can be achieved by better utilizing available and real-time information. Today, information resides in an ever increasing universe of servers, repositories and formats. The vast majority of information is unstructured, including text, images, voice and videos. We seek to better manage large data systems in order to extract business insights to provide our clients with actionable recommendations and new services. Tailoring these methods to various industry applications leads to new customer value propositions. In hospitals, we mine usage and clinical indicators to improve patient experiences. We also help our healthcare clients identify waste and fraud by identifying networks of providers and patients with suspicious behavior, such as sudden and dramatic increases in a provider's level of business or unusual or illogical patient treatment sequences. In transportation, we enable transport and parking operators to better understand and predict commuter needs, including adherence to schedules, passenger loading levels, car park utilization rates and the impact of varying factors, such as weather and schedule variations. In our card payment services business, we perform geo location analytics to predict potential fraud behaviors to assure monies are being distributed to the intended recipients.

Intellectual Property

Our general policy is to seek patent protection for those inventions likely to be incorporated into our products and services or where obtaining such proprietary rights will improve our competitive position. We own approximately 1,011 patents and pending applications. Our patent portfolio evolves as new patents are awarded to us and as older patents expire. These patents expire at various dates, generally 20 years from their original filing dates. While we believe that our portfolio of patents and applications has value, in general, no single patent is essential to our business or any individual segment. In addition, any of our proprietary rights could be challenged, invalidated or circumvented, or may not provide significant competitive advantages.

Our business relies on software provided to an approximately equal extent, by both internal development and external sourcing to deliver our services. With respect to internally developed software, we claim copyright on all such software, registering works which may be accessible to third parties. In addition, we rely on maintaining source code confidentiality to assure our market competitiveness. With respect to externally sourced software, we rely on contracts assuring our continued access for our business usage.

In the United States, we own 87 trademarks, which are either registered or applied for, reflecting the many businesses we participate in. These trademarks may have a perpetual life, subject to renewal every 10 years and may be subject to cancellation or invalidation based on certain use requirements and third party challenges, or on other grounds. We vigorously enforce and protect our trademarks.

People and Culture

We draw on the business and technical expertise of our talented and diverse global workforce to provide our clients with high-quality services. Our business leaders bring a strong diversity of experience in our industry and a track record of successful performance and execution.

Table of Contents

Conduent established its own diversity and inclusion program post-separation, which is overseen by Conduent's human resources department. Conduent promotes understanding and inclusion through a comprehensive set of diversity initiatives and strategies, including addressing under-representation by identifying shortfalls and developing action plans to close those gaps and through work-life programs that assist employees in certain aspects of their personal lives. Additionally, Conduent informs and educates all employees on diversity programs, policies and achievements. As an independent company, we intend to continue our commitment to diversity and inclusion and implement similar policies and programs.

In the United States, Conduent complies with Equal Employment Opportunity guidelines and all applicable federal, state and local laws that govern the hiring and treatment of our employees.

As of December 31, 2018, we had approximately 82,000 employees globally, with 43% located in the United States and the remainder located primarily in India, Philippines, Jamaica, Guatemala and Mexico.

Training and Talent Development

We believe our people are our most important asset, which is why we invest in employee growth and development programs. We are focused on building a workplace where our people can do their best work and have access to the tools and resources they need to perform their jobs more effectively. We are building a culture of learning and have shifted from delivering training to incorporating learning into day-to-day work.

We have a strong performance management system in place that requires all employees to engage with their managers on goal-setting and performance feedback, enabling personal and professional development. There is a strong emphasis on mentorship and coaching, both formal and informal, to help employees get to the next level in their careers. We enable this by developing management capability for our frontline leaders to ensure they are able to coach and mentor their teams and engage in constructive and continuous two-way dialogue.

Corporate Ethics

Our commitment to business ethics represents more than a declaration to do the right thing. It has become an integral part of the way we do business. We operate according to our ethics and compliance program, which is designed to meet general governance and specific industry and regulatory requirements with a focus on values, culture and performance with integrity. Conduent has a business ethics program, which is overseen by the business ethics office, and a code of business conduct (Code), which serves as the foundation of our business ethics program. The Code sets forth our expectations for ethical leadership, performance with integrity and compliance with company policies and the law. In addition, the Code embodies and reinforces Conduent’s commitment to integrity and helps employees resolve ethics and compliance concerns consistent with operating principles and legal and policy controls. In addition, our employees are required to complete business ethics training annually and we periodically solicit their input to gauge the state of Conduent’s ethical culture and help identify areas for improvement.

Our directors must act in accordance with our Code of Business Conduct and Ethics for Members of the Board; our principal executive officer, principal financial officer and principal accounting officer, among others, must act in accordance with our Finance Code of Conduct; and all of our executives and employees must act in accordance with our Code of Business Conduct. Each of these codes of conduct can be accessed through our website at www.conduent.com/corporate-governance. They are also available to any shareholder who requests them in writing addressed to Conduent Incorporated, 100 Campus Drive Suite 200, Florham Park, NJ 07932, Attention: Corporate Secretary. We will disclose any future amendments to, or waivers from, provisions of our Code of Business Conduct and Ethics for members of the Board and, our Code of Business Conduct and our Finance Code of Conduct for our officers on our website as promptly as practicable, and consistent with the requirements of applicable U.S. Securities and Exchange Commission (SEC) and New York Stock Exchange rules.

Seasonality

Our revenues can be affected by various factors such as our clients’ demand pattern for our services. These factors have historically resulted in higher revenues and profits in the fourth quarter.

Table of Contents

Other

Conduent Incorporated is a New York corporation, organized in 2016. Our principal executive offices are located at 100 Campus Drive, Florham Park, New Jersey 07932. Our telephone number is (844) 663-2638.

In the Investor Information section of our Internet website, you will find our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to these reports. We make these documents available as soon as we can after we have filed them with, or furnished them to, the SEC.

Our Internet address is www.conduent.com.

ITEM 1A. RISK FACTORS

Our government contracts are subject to appropriation of funds, termination rights, audits and investigations, which, if exercised, could negatively impact our reputation and reduce our ability to compete for new contracts.

A significant portion of our revenues is derived from contracts with U.S. federal, state and local governments and their agencies, and some of our revenues are derived from contracts with foreign governments and their agencies. Government entities typically finance projects through appropriated funds. While these projects are often planned and executed as multi-year projects, government entities usually reserve the right to change the scope of or terminate these projects for lack of approved funding and/or at their convenience. Changes in government or political developments, including budget deficits, shortfalls or uncertainties, failures to enact appropriation legislation (e.g., a government "shut-down"), government spending reductions (e.g., Congressional sequestration of funds under the Budget Control Act of 2011) or other debt or funding constraints, could result in lower governmental sales and in our projects being reduced in price or scope or terminated altogether, which also could limit our recovery of incurred costs, reimbursable expenses and profits on work completed prior to the termination. Additionally, if the government discovers improper or illegal activities or contractual non-compliance (including improper billing), we may be subject to various civil and criminal penalties and administrative sanctions, which may include termination of contracts, forfeiture of profits, suspension of payments, fines and suspensions or debarment from doing business with the government. Any resulting penalties or sanctions could materially adversely affect our results of operations and financial condition. Moreover, government contracts are generally subject to audits and investigations by government agencies. If the government finds that we inappropriately charged any costs to a contract, the costs are not reimbursable or, if already reimbursed, the cost must be refunded to the government. Further, the negative publicity that could arise from any such penalties, sanctions or findings in such audits or investigations could have an adverse effect on our reputation in the industry and reduce our ability to compete for new contracts and could materially adversely affect our results of operations and financial condition.

We derive significant revenue and profit from commercial and government contracts awarded through competitive bidding processes, including renewals, which can impose substantial costs on us, and we will not achieve revenue and profit objectives if we fail to accurately and effectively bid on such projects.

Many of these contracts are extremely complex and require the investment of significant resources in order to prepare accurate bids and proposals. Competitive bidding imposes substantial costs and presents a number of risks, including: (i) the substantial cost and managerial time and effort that we spend to prepare bids and proposals for contracts that may or may not be awarded to us; (ii) the need to estimate accurately the resources and costs that will be required to implement and service any contracts we are awarded, sometimes in advance of the final determination of their full scope and design; (iii) the expense and delay that may arise if our competitors protest or challenge awards made to us pursuant to competitive bidding and the risk that such protests or challenges could result in the requirement to resubmit bids and in the termination, reduction or modification of the awarded contracts; and (iv) the opportunity cost of not bidding on and winning other contracts we might otherwise pursue. If our competitors protest or challenge an award made to us on a government contract, the costs to defend such an award may be significant and could involve subsequent litigation that could take years to resolve.

Table of Contents

Our ability to recover capital and other investments in connection with our contracts is subject to risk.

In order to attract and retain large outsourcing contracts, we sometimes make significant capital and other investments to enable us to perform our services under those contracts, such as purchases of information technology equipment, facility costs, labor resources and costs incurred to develop and implement software. The net book value of certain assets recorded, including a portion of our intangible assets, could be impaired, and our results of operations and financial condition could be materially adversely affected in the event of the early termination of all or a part of such a contract or a reduction in volumes and services thereunder for reasons such as a customer's or client's merger or acquisition, divestiture of assets or businesses, business failure or deterioration or a customer's or client's exercise of contract termination rights.

We rely to a significant extent on third-party providers, such as subcontractors, a relatively small number of primary software vendors, utility providers and network providers; if they cannot deliver or perform as expected or if our relationships with them are terminated or otherwise change, our results of operations and financial condition could be materially adversely affected.

Our ability to service our customers and clients and deliver and implement solutions depends to a large extent on third-party providers such as subcontractors, a relatively small number of primary software vendors, software application developers, utility providers and network providers meeting their obligations to us and our expectations in a timely, quality manner. Recently, we have experienced suboptimal performance from an inherited legacy technology vendor, which has caused certain operational challenges and customer delivery performance issues that we have been aggressively addressing. Our results of operations and financial condition could be materially adversely affected and we might incur significant additional liabilities (a) if we are unable to adequately renegotiate these legacy contracts, or (b) if any of our third-party providers (1) do not meet their service level obligations, (2) do not meet our or our clients' expectations, (3) terminate or refuse to renew their relationships with us, or (4) offer their products to us with less advantageous prices and other terms than previously offered.

Failure to deliver on our contractual obligations properly and on time could materially adversely affect our results of operations and financial condition.

Our business model depends in large part on our ability to retain existing and attract new work from our base of existing clients, as well as on relationships we develop with our clients so that we can understand our clients' needs and deliver solutions and services that are tailored to meet those needs. In order for our business to grow, we must successfully manage the provision of services under our contracts. If a client is not satisfied with the quality of work performed by us or a subcontractor, or with the type of services or solutions delivered, then we could incur additional costs to address the situation, the profitability of that work might be impaired and the client's dissatisfaction with our services could damage our ability to obtain additional work from that client or obtain new work from other potential clients. In particular, many of our contracts with non-government clients may be terminated by the client, without cause, upon specified advance notice. Accordingly, clients who are not satisfied might seek to terminate existing contracts prior to their scheduled expiration date, which may result in our inability to fully recover our up-front investments. In addition, clients could direct future business to our competitors. We could also trigger contractual credits to clients or a contractual default. Failure to properly transition new clients to our systems, properly budget transition costs or accurately estimate contract operational costs could result in delays in our contract performance, trigger service level penalties, impair fixed or intangible assets or result in contract profit margins that do not meet our expectations or our historical profit margins.

In addition, we incur significant expenditures for the development and construction of system software platforms needed to support our clients' needs. Our failure to fully understand client requirements or implement the appropriate operating systems or databases or solutions which enable the use of other supporting software may delay the project and result in cost overruns or potential impairment of the related software platforms, which could materially adversely affect our results of operations and financial condition.

We face significant competition and our failure to compete successfully could materially adversely affect our results of operations and financial condition.

To remain competitive, we must develop services and applications; periodically enhance our existing offerings; remain cost efficient; and attract and retain key personnel and management. If we are unable to compete successfully, we could lose market share and important customers to our competitors and that could materially adversely affect our results of operations and financial condition.

Table of Contents

Our significant indebtedness could materially adversely affect our results of operations and financial condition.

We have and will continue to have a significant amount of debt and other obligations. Our substantial debt and other obligations could have important consequences. For example, it could (i) increase our vulnerability to general adverse economic and industry conditions; (ii) limit our ability to obtain additional financing for future working capital, capital expenditures, acquisitions and other general corporate requirements; (iii) require us to dedicate a substantial portion of our cash flows from operations to service debt and other obligations thereby reducing the availability of our cash flows from operations for other purposes; (iv) limit our flexibility in planning for, or reacting to, changes in our businesses and the industries in which we operate; (v) place us at a competitive disadvantage compared to our competitors that have less debt; and (vi) become due and payable upon a change in control. If new debt is added to our current debt levels, these related risks could increase.

Our ability to make payments on and to refinance our indebtedness, as well as any future debt that we may incur, will depend on our ability to generate cash in the future from operations, financings or asset sales. Our ability to generate cash is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control.

The terms of our indebtedness may restrict our current and future operations, particularly our ability to incur debt that we may need to fund initiatives in response to changes in our business, the industries in which we operate, the economy and governmental regulations.

The terms of our indebtedness include a number of restrictive covenants that impose significant operating and financial restrictions on us and our subsidiaries and limit our ability to engage in actions that may be in our long-term best interests. These may restrict our and our subsidiaries' ability to take some or all of the following actions:

- incur or guarantee additional indebtedness or sell disqualified or preferred stock;
- pay dividends on, make distributions in respect of, repurchase or redeem, capital stock;
- make investments or acquisitions;
- sell, transfer or otherwise dispose of certain assets, including accounts receivable;
- create liens;
- enter into sale/leaseback transactions;
- enter into agreements restricting the ability to pay dividends or make other intercompany transfers;
- consolidate, merge, sell or otherwise dispose of all or substantially all of our or our subsidiaries' assets;
- enter into transactions with affiliates;
- prepay, repurchase or redeem certain kinds of indebtedness;
- issue or sell stock of our subsidiaries; and/or
- significantly change the nature of our business.

As a result of all of these restrictions, we may be:

- limited in how we conduct our business and pursue our strategy;
- unable to raise additional debt financing to operate during general economic or business downturns; or
- unable to compete effectively or to take advantage of new business opportunities.

A breach of any of the restrictive covenants, if applicable, could result in an event of default under the terms of this indebtedness. If an event of default occurs, the lenders would have the right to accelerate the repayment of such debt and the event of default or acceleration may result in the acceleration of the repayment of any other of our debt to which a cross-default or cross-acceleration provision applies. Furthermore, the lenders of this indebtedness may require that we pledge our assets as collateral as security for our repayment obligations. If we were unable to repay any amount of this indebtedness when due and payable, the lenders could proceed against the collateral that secures this indebtedness. In the event our creditors accelerate the repayment of our borrowings, we may not have sufficient assets to repay such indebtedness, which could materially adversely affect our results of operations and financial condition.

Table of Contents

Our business is dependent on continued interest in outsourcing.

Our business and growth depend in large part on continued interest in outsourced business process services. Outsourcing means that an entity contracts with a third-party, such as us, to provide business process services rather than perform such services in-house. There can be no assurance that this interest will continue, as organizations may elect to perform such services themselves and/or the business process outsourcing industry could move to an as-a-Service model, thereby eliminating traditional business process outsourcing tasks. A significant change in this interest in outsourcing could materially adversely affect our results of operations and financial condition. Additionally, there can be no assurance that our cross-selling efforts will cause clients to purchase additional services from us or adopt a single-source outsourcing approach.

Our profitability is dependent upon our ability to obtain adequate pricing for our services and to improve our cost structure.

Our success depends on our ability to obtain adequate pricing for our services that will provide a reasonable return to our shareholders. Depending on competitive market factors, future prices we obtain for our services may decline from previous levels. If we are unable to obtain adequate pricing for our services, it could materially adversely affect our results of operations and financial condition. In addition, our contracts are increasingly requiring tighter timelines for implementation as well as more stringent service level metrics. This makes the bidding process for new contracts much more difficult and requires us to adequately consider these requirements in the pricing of our services.

In order to meet the service requirements of our customers, which often includes 24/7 service, and to optimize our employee cost base, including our back-office support, we often locate our delivery service and back-office support centers in lower-cost locations, including several developing countries. Concentrating our centers in these locations presents a number of operational risks, many of which are beyond our control, including the risks of political instability, natural disasters, safety and security risks, labor disruptions, excessive employee turnover and rising labor rates. Additionally, a change in the political environment in the United States or the adoption and enforcement of legislation and regulations curbing the use of such centers outside of the United States could materially adversely affect our results of operations and financial condition. These risks could impair our ability to effectively provide services to our customers and keep our costs aligned to our associated revenues and market requirements.

Our ability to sustain and improve profit margins is dependent on a number of factors, including our ability to continue to improve the cost efficiency of our operations through such programs as robotic process automation, to absorb the level of pricing pressures on our services through cost improvements and to successfully complete information technology initiatives. If any of these factors adversely materialize or if we are unable to achieve and maintain productivity improvements through restructuring actions or information technology initiatives, our ability to offset labor cost inflation and competitive price pressures would be impaired, each of which could materially adversely affect our results of operations and financial condition.

We may be subject to claims of infringement of third-party intellectual property rights which could adversely affect our results of operation and financial condition.

We rely heavily on the use of intellectual property. We do not own all of the software that we use to run our business; instead we license this software from a small number of primary vendors. If these vendors assert claims that we or our clients are infringing on their software or related intellectual property, we could incur substantial costs to defend these claims, which could materially adversely affect our results of operations and financial condition. In addition, if any of our vendors' infringement claims are ultimately successful, our vendors could require us to (i) cease selling or using products or services that incorporate the challenged software or technology, (ii) obtain a license or additional licenses from our vendors or (iii) redesign our services which rely on the challenged software or technology. In addition, we may be exposed to claims for monetary damages. If we are unsuccessful in defending an infringement claim and our vendors require us to initiate any of the above actions, or we are required to pay monetary damages, then such actions could materially adversely affect our results of operations and financial condition.

Table of Contents

We are subject to laws of the United States and foreign jurisdictions relating to individually identifiable information and personal health information, and failure to comply with those laws, whether or not inadvertent, could subject us to legal actions and negatively impact our operations.

We receive, process, transmit and store information relating to identifiable individuals, both in our role as a service provider and as an employer. As a result, we are subject to numerous United States (both federal and state) and foreign jurisdiction laws and regulations designed to protect both individually identifiable information as well as personal health information, including the Health Insurance Portability and Accountability Act of 1996, as amended (“HIPAA”) and the HIPAA regulations governing, among other things, the privacy, security and electronic transmission of individually identifiable health information, and the European Union Directive on Data Protection (Directive 95/46/EC). The EU General Data Protection Regulation (GDPR) replaced the Data Protection Directive 95/46/EC (with an enforcement date of May 25, 2018) and is designed to harmonize data privacy laws across Europe, to protect and empower all EU citizens data privacy, to reshape the way organizations across the region approach data privacy and will have a significant impact on how we process and handle certain data. Other United States (both federal and state) and foreign jurisdiction laws apply to our processing of individually identifiable information. These laws have been subject to frequent changes, and new legislation in this area may be enacted at any time. For example, the invalidation of the U.S.-EU Safe Harbor regime and the GDPR have required us to implement alternative mechanisms in order for some of our data flows from Europe to the United States to comply with applicable law. Changes to existing laws, the introduction of new laws in this area or failure to comply with existing laws that are applicable to us may subject us to, among other things, additional costs or changes to our business practices, liability for monetary damages, fines and/or criminal prosecution, unfavorable publicity, restrictions on our ability to obtain and process information and allegations by our customers and clients that we have not performed our contractual obligations, any of which could materially adversely affect our results of operations and financial condition.

We are subject to laws of the United States and foreign jurisdictions relating to processing certain financial transactions, including payment card transactions and debit or credit card transactions, and failure to comply with those laws, whether or not inadvertent, could subject us to legal actions and materially adversely affect our results of operations and financial condition.

We process, support and execute financial transactions, and disburse funds, on behalf of both government and commercial customers, often in partnership with financial institutions. This activity includes receiving debit and credit card information, processing payments for and due to our customers and disbursing funds on payment or debit cards to payees of our customers. As a result, we are subject to numerous United States (both federal and state) and foreign jurisdiction laws and regulations, including the Electronic Fund Transfer Act, as amended, the Currency and Foreign Transactions Reporting Act of 1970 (commonly known as the Bank Secrecy Act), as amended, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (including the so-called Durbin Amendment), as amended, the Gramm-Leach-Bliley Act (also known as the Financial Modernization Act of 1999), as amended, and the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT ACT) Act of 2001, as amended. Other United States (both federal and state) and foreign jurisdiction laws apply to our processing of certain financial transactions and related support services. These laws are subject to frequent changes, and new statutes and regulations in this area may be enacted at any time. Changes to existing laws, the introduction of new laws in this area or failure to comply with existing laws that are applicable to us may subject us to, among other things, additional costs or changes to our business practices, liability for monetary damages, fines and/or criminal prosecution, unfavorable publicity, restrictions on our ability to process and support financial transactions and allegations by our customers, partners and clients that we have not performed our contractual obligations. Any of these could materially adversely affect our results of operations and financial condition.

Table of Contents

Our data systems, information systems and network infrastructure may be subject to hacking or other cybersecurity threats and other service interruptions, which could expose us to liability, impair our reputation or temporarily render us unable to fulfill our service obligations under our contracts.

We are a leading provider of business processing services concentrated in transaction-intensive processing, analytics and automation. We act as a trusted business partner in both front office and back office platforms, providing interactions on a substantial scale with our customers and other third-parties. Our customers include global commercial clients and government clients who depend upon our operational efficiency, non-interruption of service, and accuracy and security of information. We also use third-party providers such as subcontractors, software vendors, utility providers and network providers, upon whom we rely for our business processing services, to deliver uninterrupted, secure service. As part of our business processing services we also develop system software platforms necessary to support our customers' needs, with significant ongoing investment in developing and operating customer-appropriate operating systems, data bases and system software solutions. We also receive, process, transmit and store substantial volumes of information relating to identifiable individuals, both in our role as a service provider and as an employer, and we are subject to numerous laws, rules and regulations in the United States (both federal and state) and foreign jurisdictions designed to protect both individually identifiable information as well as personal health information. We also receive, process and implement financial transactions, and disburse funds, on behalf of both commercial and government customers, which activity includes receiving debit and credit card information to process payments due to our customers as well as disbursing funds to payees of our customers. As a result of these and other business processing services, the integrity, security, accuracy and non-interruption of our systems and information technology and that of our third-party providers and our interfaces with our customers are extremely important to our business, operating results, growth, prospects and reputation.

We have implemented security systems and controls, both directly and with third-party subcontractors and service providers, with the intent of maintaining both the physical security of our facilities and the data security of our customers', clients' and suppliers' confidential information and information related to identifiable individuals (including payment card and debit and credit card information and health information) against unauthorized access through our information systems or by other electronic transmission or through the misdirection, theft or loss of physical media. These include, for example, the appropriate encryption of information. Despite such efforts, we are susceptible to breach of security systems which may result in unauthorized access to our facilities and those of our customers and/or the information we and our customers are trying to protect. Cybersecurity failure might be caused by computer hacking, malware, computer viruses, worms and other destructive software, "cyber-attacks" and other malicious activity, as well as natural disasters, power outages, terrorist attacks and similar events. Operational or business delays may also result from the disruption of network or information systems and subsequent remediation activities.

Because the techniques used to obtain unauthorized access are constantly changing and becoming increasingly more sophisticated and often are not recognized until launched against a target, we or our third-party service providers may be unable to anticipate these techniques or implement sufficient preventative measures. Hacking, malware, phishing, viruses and other "cyber-attacks" have become more prevalent, have occurred in our systems in the past, and may occur in our systems in the future. Although we have implemented and intend to continue to implement what we believe to be appropriate cyber practices and cybersecurity systems, these systems may prove to be inadequate and result in the disruption, failure, misappropriation or corruption of our network and information systems. Notwithstanding the preventative and protective measures we have in place, it may not be possible for us to fully or timely know if or when such incidents arise, or the full business impact of any cybersecurity breach.

Additionally, with advances in computer capabilities and data protection requirements to address ongoing threats, we may be required to expend significant capital and other resources to protect against potential security breaches or to alleviate problems caused by security breaches. Moreover, employee error or malfeasance, faulty password management or other irregularities may result in a defeat of our or our third-party service providers' security measures and a breach of our or our third-party service providers' information systems (whether digital, cloud-based or otherwise).

Table of Contents

If unauthorized parties gain physical access to one of our or one of our third-party service providers' facilities or electronic access to our or one of our third-party service providers' information systems or such sensitive or confidential information is misdirected, lost or stolen during transmission or transport, any theft or misuse of such information could result in, among other things, unfavorable publicity and significant damage to our brand, governmental inquiry, oversight and possible regulatory action, difficulty in marketing our services, loss of existing and potential customers, allegations by our customers that we have not performed our contractual obligations, litigation by affected parties and possible financial obligations for substantial damages related to the theft or misuse of such information, any of which could materially adversely affect our results of operations and financial condition. Moreover, a security breach could require us to devote significant management resources to address the problems created by the security breach and to expend significant additional resources to upgrade further the security measures that we employ to guard such personal information against "cyber-attacks" and to maintain various systems and data centers for our customers. Often these systems and data centers must be maintained worldwide and on a 24/7 basis. Although we endeavor to ensure that there is adequate backup and maintenance of these systems and centers, we could experience service interruptions that could result in curtailed operations and loss of existing and potential customers, which could significantly reduce our revenues and profits in addition to significantly impairing our reputation. If our information systems and our back-up systems are damaged, breached or cease to function properly, we may have to make a significant investment to repair or replace them, and we may suffer interruptions in our operations in the interim, each of which could materially adversely affect our results of operations and financial condition and diminish the value of our shares.

In addition, our and our customers' systems and networks are subject to continued threats of terrorism, which could disrupt our operations as well as disrupt the utilities and telecommunications infrastructure on which our business depends. To the extent any such disruptions were to occur, our business, operating results and financial condition could be materially adversely affected.

If we underestimate the scope of work or the costs of performance in our contracts, or we mis-perform our contracts, our results of operations and financial condition could be materially adversely affected.

In order to stay competitive in our industry, we must keep pace with changing technologies and customer preferences. Many of our contracts require us to design, develop and implement new technological and operating systems for our customers. Many of these systems involve detailed and complex computer source code which must be created and integrated into a working system that meets contract specifications. The accounting for these contracts requires judgment relative to assessing risks, estimating contract revenues and costs and making assumptions for schedule and technical issues. To varying degrees, each contract type involves some risk that we could underestimate the costs and resources necessary to fulfill the contract. In each case, our failure to accurately estimate costs or the resources and technology needed to perform our contracts or to effectively manage and control our costs during the performance of our work could result, and in some instances has resulted, in reduced profits or in losses. In addition, many of our contracts contain complicated performance obligations, including, without limitation, designing and building new integrated computer systems. These contracts carry potential financial penalties or could result in financial damages or exposures if we fail to properly perform those obligations and could result in our results of operations and financial condition being materially adversely affected.

Our continuing emphasis and shift toward technology-led digital transactions, rather than more labor intensive commoditized services, could impact our type and timing of the customer contracts that we enter into, particularly in the short-term.

We have made the strategic decision to increase our focus on technology-led digital transactions and focus less on historic labor-intensive commoditized services and customer contracts. We believe technology-led digital transactions are becoming, and will become, the type of services required by many of our customers and those in the industry. We believe that our continuing focus on digital transactions will better create long-term value and increased profitability. However, this increased emphasis on technology-led digital transactions has resulted in and will continue to result in our exiting certain services and contracts, and could adversely impact our revenues and our results of operations, particularly in the short-term.

Table of Contents

Our customers' decision-making cycles are changing and the lead time for customers to commit to contracts with us has been lengthening.

As our services industry and our service offerings change and evolve, particularly with our customers increasing their focus on digital offerings, our customers are spending increased time and resources evaluating technology and other investments needed to obtain optimal results and performance, including from their outsourcing providers including the Company. This has led to longer sales lead time cycles for contract commitments from our customers, which can adversely affect the timing of customer commitments and our revenues and results of operations.

If we are unable to collect our receivables for unbilled services, our results of operations and financial condition could be materially adversely affected.

The profitability of certain of our large contracts depends on our ability to successfully obtain payment from our clients of the amounts they owe us for work performed. Actual losses on client balances could differ from current estimates and, as a result, may require adjustment of our receivables for unbilled services. Our receivables include long-term contracts. Over the course of a long-term contract, our customers' financial condition may change such that their ability to pay their obligations, and our ability to collect our fees for services rendered, is adversely affected. Additionally, we may perform work for the federal, state and local governments, with respect to which we must file requests for equitable adjustment or claims with the proper agency to seek recovery in whole or in part, for out-of-scope work directed or caused by the government customer in support of its project, and the amounts of such recoveries may not meet our expectations or cover our costs. Timely collection of client balances also depends on our ability to complete our contractual commitments (such as, our ability to achieve specified milestones in percentage-of-completion contracts) and bill and collect our contracted revenues. If we are unable to meet our contractual requirements, we might experience delays in collection of and/or be unable to collect our client balances, and if this occurs, our results of operations and cash flows could be adversely affected. In addition, if we experience an increase in the time to bill and collect for our services, our results of operations and financial condition could be materially adversely affected.

A decline in revenues from or a loss or failure of significant clients could materially adversely affect our results of operations and financial condition.

Our results of operations and financial condition could be materially adversely affected by the loss or failure of significant clients. Some of our clients are in business sectors which have experienced significant financial difficulties or consolidation, and/or the reduction of volumes or their inability to make payments to us, as a result of, among other things, their merger or acquisition, divestiture of assets or businesses, contract expiration, nonrenewal or early termination (including termination for convenience) or business or financial failure or deterioration. Economic and political conditions could affect our clients' businesses and the markets they serve.

We have non-recurring revenue, which subjects us to a risk that our revenues and cash flows from operations may fluctuate from period to period.

Revenue generated from our non-recurring services may fluctuate due to factors both within and outside of our control. Our mix of non-recurring and recurring revenues is impacted by acquisitions as well as growth in our non-recurring lines of business, as well as our strategic decisions to exit or reduce our services in particular service areas. There is less predictability and certainty in the timing and amount of revenues generated by our non-recurring services and, accordingly, our results of operations and financial condition could be materially adversely affected by the timing and amount of revenues generated from our non-recurring services.

Table of Contents

The failure to obtain or maintain a satisfactory credit rating could adversely affect our liquidity, capital position, borrowing costs, access to capital markets and ability to post surety or performance bonds to support clients' contracts.

Any future downgrades to our credit rating could negatively impact our ability to renew contracts with our existing clients, limit our ability to compete for new clients, result in increased premiums for surety or performance bonds to support our clients' contracts and/or result in a requirement that we provide collateral to secure our surety or performance bonds. Further, certain of our commercial outsourcing contracts provide that, in the event our credit ratings are downgraded to specified levels, the client may elect to terminate its contract with us and either pay a reduced termination fee or, in some limited instances, no termination fee. Such a credit rating downgrade could adversely affect these client relationships.

There can be no assurance that we will be able to maintain our credit ratings. Any additional actual or anticipated downgrades of our credit ratings, including any announcement that our ratings are under review for a downgrade, may have a negative impact on our liquidity, capital position and access to capital markets.

A failure to attract and retain necessary technical personnel and qualified subcontractors could materially adversely affect our results of operations and financial condition.

Because we operate in intensely competitive markets, our success depends to a significant extent upon our ability to attract, retain and motivate highly skilled and qualified technical personnel and to subcontract with qualified, competent subcontractors. If we fail to attract, train and retain sufficient numbers of qualified engineers, technical staff and sales and marketing representatives or are unable to contract with qualified, competent subcontractors, our results of operations and financial condition could be materially adversely affected. Experienced and capable personnel in the services industry remain in high demand, and there is continual competition for their talents. Our ability to renegotiate certain of our legacy third-party contracts which we view as unfavorable, or to improve the service levels we expect from these contracts and third-party providers, is key to our ability to timely, efficiently and profitably deliver our services to our customers. Additionally, we may be required to increase our hiring in geographic areas outside of the United States, which could subject us to increased geopolitical and exchange rate risk. The loss of any key technical employee, the loss of a key subcontractor relationship or our inability to renegotiate or obtain required service levels from legacy and other third-party providers, could materially adversely affect our results of operations and financial condition.

Increases in the cost of telephone and data services or significant interruptions in such services could materially adversely affect our results of operations and financial condition.

Our business is significantly dependent on telephone and data service provided by various local and long distance telephone and data service providers around the world. Accordingly, any disruption of these services could materially adversely affect our results of operations and financial condition. We have taken steps to mitigate our exposure to service disruptions by investing in redundant circuits, although there is no assurance that the redundant circuits would not also suffer disruption. Any inability to obtain telephone or data services at favorable rates could materially adversely affect our results of operations and financial condition. Where possible, we have entered into long-term contracts with various providers to mitigate short-term rate increases and fluctuations. There is no obligation, however, for the vendors to renew their contracts with us, or to offer the same or lower rates in the future, and such contracts are subject to termination or modification for various reasons outside of our control. A significant increase in the cost of telephone or data services that is not recoverable through an increase in the price of our services could materially adversely affect our results of operations and financial condition. In addition, a number of our facilities are located in jurisdictions outside of the United States where the provision of utility services, including electricity and water, may not be consistently reliable, and while there are backup systems in many of our operating facilities, an extended outage of utility or network services could materially adversely affect our results of operations and financial condition.

Table of Contents

If we fail to successfully develop new service offerings, including new technology components, and protect our intellectual property rights, we may be unable to retain current customers and gain new customers and our revenues would decline.

The process of developing new service offerings, including new technology components, is inherently complex and uncertain. It requires accurate anticipation of customers' changing needs and emerging technological trends. We must make long-term investments and commit significant resources before knowing whether these investments will eventually result in service offerings that achieve customer acceptance and generate the revenues required to provide desired returns. For example, establishing internal automation processes to help us develop new service offerings will require significant up-front costs and resources, which, if not monetized effectively, could materially adversely affect our revenues. In addition, some of our service offerings rely on technologies developed by and licensed from third-parties. We may not be able to obtain or continue to obtain licenses and technologies from these third-parties at all or on reasonable terms, or such third-parties may demand cross-licenses to our intellectual property. It is also possible that our intellectual property rights could be challenged, invalidated or circumvented, allowing others to use our intellectual property to our competitive detriment. We also must ensure that all of our service offerings comply with both existing and newly enacted regulatory requirements in the countries in which they are sold. If we fail to accurately anticipate and meet our customers' needs through the development of new service offerings (including technology components) or if we fail to adequately protect our intellectual property rights or if our new service offerings are not widely accepted or if our current or future service offerings fail to meet applicable worldwide regulatory requirements, we could lose market share and customers to our competitors and that could materially adversely affect our results of operations and financial condition.

The Company's business, operating results and reputation may be negatively impacted by failures or delays in our efforts to modernize our information technology infrastructure and to consolidate to fewer data centers.

We have experienced certain disruptions in our operations and service delivery performance issues as a result of some of our information technology infrastructure that is outdated and needs to be enhanced and updated, which disruptions have adversely impacted client and delivery performance. As a result we are investing in modernizing a significant portion of our information technology infrastructure with new systems and processes and consolidating our data centers as part of our transformation initiatives. This also includes investments in our data center and networks, enhancement, modernization and consolidation of our IT infrastructure and customer-facing technologies, enhanced cybersecurity and movement to cloud-based technology. We expect that these changes will provide greater strategic and operational flexibility and efficiency and better control of our systems and processes. There is a risk, however, that our modernization efforts and data center consolidations could materially and adversely disrupt our operations and our service delivery to customers, could result in contractual penalties or damage claims from customers, could occur over a period longer than planned, and could require greater than expected investment and other internal and external resources. It may also take longer to realize the intended favorable benefits from an enhanced technology infrastructure than we expected, or that disruptions may continue to occur while we enhance this infrastructure.

The process of consolidating our data center involves inherent risks and may cause disruptions to our operations. In October 2018, we suffered a significant outage as a result of a data center migration, which resulted in unplanned system unavailability and disruption for our customers. We plan to undertake several data center migrations in the future and, in the course of these data migrations, could potentially experience significant service outages. Future service disruptions could hinder our ability to attract new customers, cause us to incur legal liability, contractual penalties or issue service credits to our customers and cause us to lose current customers, each of which could have a material adverse effect on our business, financial condition and results of operations.

Table of Contents

If we fail to meet industry data security standards, our ability to meet contractual obligations may be impaired and result in contractual damage or contract breach claims.

In some of our services lines, we are contractually subject to industry data security standards. These industry data security standards include Card Brand (Visa, Mastercard, American Express, Discover and JCB) operating rules, certification requirements and rules governing electronic funds transfers, including Payment Card Industry Data Security Standard (PCI DSS), a data security standard applicable to companies that collect, store or transmit payment card data. These standards also include the Health Information Trust Alliance (HITRUST) which applies to aspects of the healthcare industry and components of which is being used in other industries as well. While we are taking steps to achieve future compliance and/or certification for our systems, we may not be compliant now, and in the future we may not be able to maintain compliance with PCI DSS, HITRUST and other applicable industry standards. We are taking steps to achieve compliance and/or certification for our systems, but we cannot assure that these efforts will be successful in the time period required or at all. Any failure to comply fully or materially with PCI DSS, HITRUST and other applicable industry standards now or at any point in the future may provide customers the right to terminate contracts with us or to enforce provisions obligating us to reimburse them for any penalties or costs incurred by them as a result of our non-compliance, or subject us to other fines, penalties, damages or civil liability, each of which could have a material adverse effect on our business, financial condition and results of operations. In addition, failure to meet PCI DSS standards could result in the loss of our ability to accept credit card payments and the failure to meet HITRUST standards could impact our ability to service customers in the healthcare and other industries, both of which could have a material adverse impact on our business, financial condition and results of operations.

We are a holding company and, therefore, may not be able to receive dividends or other payments in needed amounts from our subsidiaries.

Our principal assets are the shares of capital stock and indebtedness of our subsidiaries. We rely on dividends, interest and other payments from these subsidiaries to meet our obligations for paying principal and interest on outstanding debt obligations, paying corporate expenses and, if determined by our Board, paying dividends to shareholders and repurchasing common shares. Certain of our subsidiaries are subject to regulatory requirements of the jurisdictions in which they operate or other restrictions that may limit the amounts that these subsidiaries can pay in dividends or other payments to us. No assurance can be given that there will not be further changes in law, regulatory actions or other circumstances that could restrict the ability of our subsidiaries to pay dividends to us. In addition, due to differences in tax rates, repatriation of funds from certain countries into the United States could have unfavorable tax ramifications for us.

Our results of operations and financial condition could be materially adversely affected by legal and regulatory matters.

We are potentially subject to various contingent liabilities that are not reflected on our balance sheet, including those arising as a result of being involved in a variety of claims, lawsuits, investigations and proceedings concerning: securities law; governmental and non-governmental entity contracting, servicing and governmental entity procurement law; intellectual property law; environmental law; employment law; the Employee Retirement Income Security Act of 1974 (ERISA); and other laws, regulations and contractual undertakings, as discussed under Note 14 – Contingencies and Litigation in our Consolidated Financial Statements. If developments in any of these matters cause a change in our determination as to an unfavorable outcome and result in the need to recognize a material accrual or materially increase an existing accrual, or if any of these matters result in an adverse judgment or are settled for significant amounts above any existing accruals, it could materially adversely affect our results of operations and financial condition in the period or periods in which such change in determination, judgment or settlement occurs. There can be no assurances as to the favorable outcome of any claim, lawsuit, investigation or proceeding. It is possible that a resolution of one or more such proceedings, through judgment, settlement or otherwise, could require us to make substantial payments to satisfy judgments, fines or penalties or settlement amounts, any of which could materially adversely affect our results of operations and financial condition. Additionally, the terms of dismissal, settlement, release or other resolution may permit certain claims to be reopened under certain conditions. For example, we entered into an agreement with the State of Texas and the Texas Health and Human Services Commission to settle all claims resulting from alleged failures by Conduent State Healthcare LLC and Texas Medicaid & Healthcare Partnership to properly perform obligations under two contracts entered into with the Texas Health and Human Services Commission in 2003 and 2010. The settlement amount is $236 million, which is payable in installments in 2019, 2020 and 2021; however, the settlement agreement does not prevent the Company from prepaying the entire amount. Pursuant to that agreement, the release of the State of Texas's claims is not effective until the Company pays the settlement amount in full. Accordingly, if the Company fails to make any of the required installment payments, the State of Texas has the right to reopen the claims and move forward with the litigation. Claims, lawsuits investigations and proceedings involving the Company could also result in reputational harm, criminal sanctions, consent decrees or orders preventing us from offering certain services, requiring a change in our business practices in costly ways or requiring development of non-infringing or otherwise altered products or technologies. In addition, it can be very costly to defend litigation and these costs could materially adversely affect our results of operations and financial condition. See Note 14 – Contingencies and Litigation to our Consolidated Financial Statements.

Our results of operations and financial condition may be materially adversely affected by conditions abroad, including local economics, political environments, fluctuating foreign currencies and shifting regulatory schemes.

A portion of our revenues is generated from operations outside the United States. In addition, we maintain significant operations outside the United States. Our results of operations and financial condition could be materially adversely affected by changes in foreign currency exchange rates, as well as by a number of other factors, including, without limitation, changes in economic conditions from country to country, changes in a country's political conditions, trade controls and protection measures, financial sanctions, licensing requirements, local tax issues, capitalization and other related legal matters. The ultimate manner in which Great Britain withdraws from the European Union, and the resulting impact on cross-border transactions and operations between Great Britain and the European Union member states, could materially and adversely affect our operations and financial condition. We generally hedge foreign currency denominated assets, liabilities and anticipated transactions primarily through the use of currency derivative contracts. The use of derivative contracts is intended to mitigate or reduce transactional level volatility in the results of foreign operations, but does not completely eliminate volatility. We do not hedge the translation effect of international revenues and expenses, which are denominated in currencies other than our U.S. parent functional currency, within our Consolidated Financial Statements. If we are unable to effectively hedge these risks, our results of operations and financial condition could be materially adversely affected.

Table of Contents

Risks related to the spin-off:

We may be unable to achieve some or all of the benefits that we expect to achieve from the spin-off.

We believe that, as an independent, publicly traded company, we will be able to, among other things, design and implement corporate strategies and policies that are targeted to our business, better focus our financial and operational resources on our specific business, create effective incentives for our management and employees that are more closely tied to our business performance, provide investors more flexibility and enable us to achieve alignment with a more natural shareholder base and implement and maintain a capital structure designed to meet our specific needs. However, as a result of separating from Xerox, we may be more susceptible to market fluctuations and other adverse events. As an independent entity, we have an arm's-length relationship with Xerox and we may not be able to obtain supplies from Xerox on terms as favorable to us as those we had as a wholly owned subsidiary of Xerox prior to the spin-off. As a smaller, independent company, Conduent has a narrower business focus and may be more vulnerable to changing market conditions as well as the risk of takeover by third parties. In addition, we may be unable to achieve some or all of the benefits that we expected to achieve as an independent company in the time we expect, if at all. Furthermore, Xerox used to guarantee our and our subsidiaries' performance under certain services contracts and real estate leases. Following the spin-off, we expect that Conduent will provide such performance guarantees, and we may be unable to retain or renew contracts or real estate leases or a failure to renew such contracts or leases on favorable terms and conditions could materially adversely affect our results of operations and financial condition. If we fail to achieve some or all of the benefits that we expected to achieve as an independent company, or do not achieve them in the time we expect, our results of operations and financial condition could be materially adversely affected.

We may be unable to make, on a timely or cost-effective basis, the changes necessary to operate as an independent, publicly traded company, and we may experience increased costs after the spin-off.

We had historically operated as part of Xerox's corporate organization, and Xerox had provided us with various corporate functions. Following the spin-off, Xerox has no obligation to provide us with assistance other than the transition services described under "Certain Relationships and Related Party Transactions -Transition Services Agreement." These services do not include every service that we have received from Xerox in the past, and Xerox is only obligated to provide these services for limited periods following completion of the spin-off. Accordingly, following the spin-off, we have needed to provide internally or obtain from unaffiliated third parties the services we had received from Xerox. These services include senior management, legal, human resources, finance and accounting, treasury, information technology, marketing and communications, internal audit and other shared services, the effective and appropriate performance of which are critical to our operations. We may be unable to replace these services on terms and conditions as favorable as those we received from Xerox. Because our business had operated as part of the wider Xerox organization, we may incur additional costs that could adversely affect our business. If we fail to obtain the quality of services necessary to operate effectively or incur greater costs in obtaining these services, our results of operations and financial condition could be materially adversely affected.

Table of Contents

We have no recent operating history as an independent, publicly traded company, and our historical and pro forma financial data are not necessarily representative of the results we would have achieved as an independent, publicly traded company and may not be a reliable indicator of our future results.

We derived certain of the historical financial data included in this Annual Report from Xerox's consolidated financial statements, and this data does not necessarily reflect the results of operations and financial condition we would have achieved as an independent, publicly traded company during the periods presented, or those that we will achieve in the future. This is primarily because of the following factors:

- Prior to the spin-off, we operated as part of Xerox's broader corporate organization and Xerox performed various corporate functions for us, including, but not limited to, senior management, legal, human resources, finance and accounting, treasury, information technology, marketing and communications, internal audit and other shared services. Our historical financial data reflect allocations of corporate expenses from Xerox for these and similar functions. These allocations may not reflect the costs we have incurred and in the future will incur for similar services as an independent, publicly traded company.
- We entered into transactions with Xerox that did not exist prior to the spin-off, such as Xerox's provision of transition services, which will cause us to incur new costs.
- Such historical financial data does not and in the future may not reflect changes that we have experienced and expect to experience in the future as a result of our separation from Xerox. As part of Xerox, we enjoyed certain benefits from Xerox's operating diversity, size, purchasing power, credit rating, borrowing leverage and available capital for investments. Many of our services contracts, particularly those for our transportation service offerings in our Public Sector business, require significant capital investments, and after the spin-off, we may not have access to the capital (from both internal and external sources) necessary to fund these services contracts. As an independent entity, we may be unable to purchase goods, services and technologies, such as insurance and health care benefits and computer software licenses, or access capital markets on terms as favorable to us as those we obtained as part of Xerox prior to the spin-off

Following the spin-off, we are now responsible for the additional costs associated with being an independent, publicly traded company, including costs related to corporate governance, investor and public relations and public reporting. For additional information about our past financial performance and the basis of presentation of our financial statements, see "Selected Historical Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our historical financial statements and the notes thereto included in this annual report on Form 10-K.

We may have been able to receive better terms from unaffiliated third parties than the terms we receive in our agreements with Xerox.

We entered into agreements with Xerox related to our separation from Xerox, including the Separation and Distribution Agreement, Transition Services Agreement, Tax Matters Agreement, Employee Matters Agreement and any other agreements, while we were still part of Xerox. Accordingly, these agreements may not reflect terms that would have resulted from arm's-length negotiations among unaffiliated third parties. The terms of these agreements relate to, among other things, allocations of assets, liabilities, rights, indemnifications and other obligations between Xerox and us. We may have received better terms from third parties. See "Certain Relationships and Related Party Transactions-Agreements with Xerox."

Table of Contents

The spin-off could result in significant tax liability to Xerox and its shareholders.

Completion of the spin-off required Xerox's receipt of a written opinion of Cravath, Swaine & Moore LLP to the effect that the Distribution should qualify for non-recognition of gain and loss under Section 355 of the Internal Revenue Code (the "Code") and the receipt and continuing effectiveness and validity of the IRS Ruling.

The opinion of counsel did not address any U.S. state or local or foreign tax consequences of the spin-off. The opinion assumed that the spin-off was completed according to the terms of the Separation and Distribution Agreement and relied on the facts as stated in the Separation and Distribution Agreement, the Tax Matters Agreement, the other ancillary agreements, the Information Statement included in our registration statement on Form 10 and a number of other documents. In addition, the opinion was based on certain representations as to factual matters from, and certain covenants by, Xerox and us. The opinion cannot be relied on if any of the assumptions, representations or covenants are incorrect, incomplete or inaccurate or are violated in any material respect.

Xerox received an IRS ruling in connection with the spin-off (the "IRS Ruling"). The IRS Ruling relies on certain facts, assumptions, representations and undertakings from Xerox and us regarding the past and future conduct of Xerox's and our businesses and other matters. If any of these facts, assumptions, representations or undertakings is incorrect or not otherwise satisfied, Xerox may not be able to rely on the IRS Ruling. In addition, the IRS Ruling is not a comprehensive ruling from the IRS regarding all aspects of the U.S. federal income tax consequences of the transactions.

Accordingly, notwithstanding the opinion of counsel and the IRS Ruling, there can be no assurance that the IRS will not assert, or that a court would not sustain, a contrary position.

If the distribution in connection with the spin-off were determined not to qualify for non-recognition of gain and loss for U.S. federal income tax purposes, U.S. holders who received our common stock could be subject to tax. In this case, each U.S. holder who received our common stock in the distribution would generally, for U.S. federal income tax purposes, be treated as having received a distribution in an amount equal to the fair market value of our common stock received, which would generally result in (i) a taxable dividend to the U.S. holder to the extent of that U.S. holder's pro rata share of Xerox's current and accumulated earnings and profits; (ii) a reduction in the U.S. holder's basis (but not below zero) in Xerox common stock to the extent the amount received exceeds the shareholder's share of Xerox's earnings and profits; and (iii) a taxable gain from the exchange of Xerox common stock to the extent the amount received exceeds the sum of the U.S. holder's share of Xerox's earnings and profits and the U.S. holder's basis in its Xerox common stock.

We could have an indemnification obligation to Xerox if the Distribution were determined not to qualify for non-recognition treatment, which could materially adversely affect our results of operations and financial condition.

If it were determined that the distribution in connection with the spin-off did not qualify for non-recognition of gain and loss under Section 355 of the Code, we could, under certain circumstances, be required to indemnify Xerox for the resulting taxes and related expenses. Any such indemnification obligation could materially adversely affect our results of operations and financial condition.

In addition, Section 355(e) of the Code generally creates a presumption that the distribution would be taxable to Xerox, but not to shareholders, if we or our shareholders were to engage in transactions that result in a 50% or greater change by vote or value in the ownership of our stock during the four-year period beginning on the date that begins two years before the date of the distribution, unless it were established that such transactions and the distribution were not part of a plan or series of related transactions giving effect to such a change in ownership. If the distribution were taxable to Xerox due to such a 50% or greater change in ownership of our stock, Xerox would recognize gain equal to the excess of the fair market value of our common stock distributed to Xerox shareholders over Xerox's tax basis in our common stock and we generally would be required to indemnify Xerox for the tax on such gain and related expenses. Any such indemnification obligation could materially adversely affect our results of operations and financial condition.

Table of Contents

We agreed to numerous restrictions to preserve the non-recognition treatment of the Distribution, which may reduce our strategic and operating flexibility.

We agreed in the Tax Matters Agreement to covenants and indemnification obligations that address compliance with Section 355 of the Code. These covenants and indemnification obligations may limit our ability to pursue strategic transactions or engage in new businesses or other transactions that may otherwise maximize the value of our business, and might discourage or delay a strategic transaction that our shareholders may consider favorable.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None

ITEM 2. PROPERTIES

We lease and own numerous facilities worldwide with larger concentrations of space in Kentucky, New Jersey, California, Mexico, Guatemala, the Philippines, Jamaica, Romania and India. Our owned and leased facilities house general offices, sales offices, service locations, call centers and distribution centers. The size of our property portfolio as of December 31, 2018 was approximately 8.2 million square feet at an annual operating cost (lease costs and expenses) of approximately $217 million and comprised 260 leased properties and 6 owned properties. We believe that our current facilities are suitable and adequate for our current businesses. Because of the interrelation of our business segments, each of the segments uses substantially all of these properties at least in part.

In addition to the 8.2 million square feet of our real estate property portfolio, we also had 1.4 million square feet of our leased and owned properties that became surplus in 2018 due to the implementation of our strategic transformation program as well as various productivity initiatives to consolidate our real estate footprint. We aggressively managed our surplus properties through early terminations and subleasing of leased properties and the sale of owned properties. As a result, approximately 1.0 million square feet of the surplus property portfolio were resolved as of December 31, 2018. Additional leased and owned properties may become surplus over the next three years as we continue the strategic transformation program. We are obligated to maintain our leased surplus properties through required contractual lease periods and plan to dispose of or sublease these properties.

ITEM 3. LEGAL PROCEEDINGS

The information set forth under Note 14 – Contingencies and Litigation in the Consolidated Financial Statements in Part II, Item 8 is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

[Table of Contents](#)

Part II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Stock Exchange Information

The common stock of Conduent Incorporated is listed on the New York Stock Exchange under the ticker symbol "CNDT." Our common stock began trading January 3, 2017.

Conduent Common Stock Prices for 2018

New York Stock Exchange composite prices*	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
High	$ 20.32	$ 21.06	$ 23.39	$ 22.66
Low	$ 15.06	$ 17.40	$ 17.79	$ 9.68

_____
** Price as of close of business.*

Common Shareholders of Record

Refer to Item 6. Selected Financial Data—Five Years in Review for common shareholders of record at year-end, which is incorporated here by reference.

Conduent Common Stock Dividends

We did not pay any dividends on our common stock in 2018. We intend to retain future earnings for use in the operation of our business and to fund future growth. We do not anticipate paying any dividends on our common stock for the foreseeable future.

Performance Graph

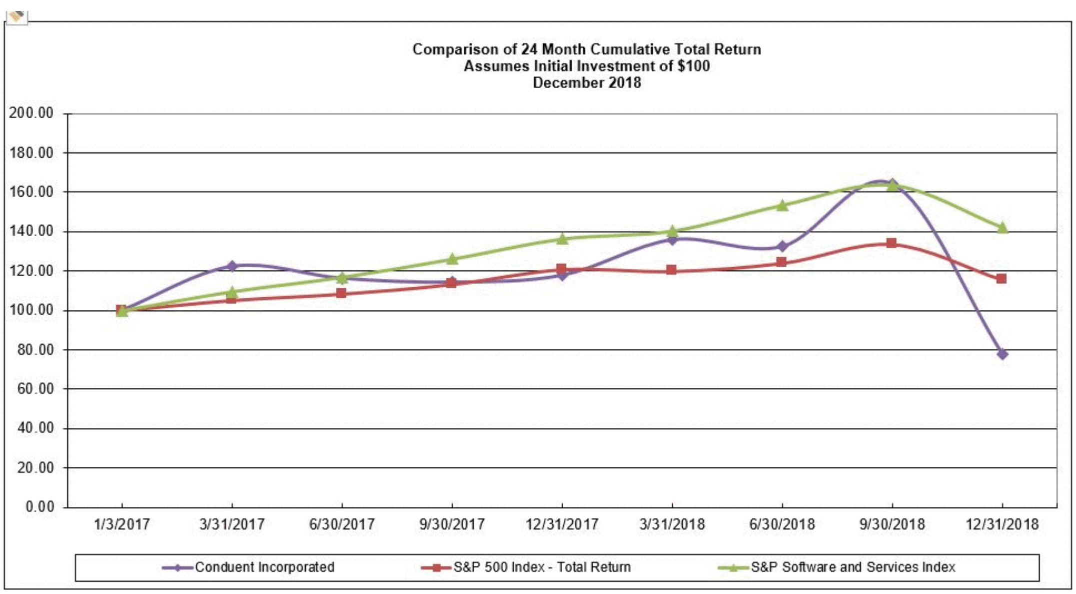


Table of Contents

Sales of Unregistered Securities During the Quarter Ended December 31, 2018

None

ITEM 6. SELECTED FINANCIAL DATA

FIVE YEARS IN REVIEW(1)

(in millions, except per-share and common shareholders of record data)

	2018	2017	2016	2015	2014
Operations					
Revenues	$ 5,393	$ 6,022	$ 6,408	$ 6,662	$ 6,938
Income (loss) income from continuing operations	(416)	177	(983)	(336)	34
Net income (loss)	(416)	181	(983)	(414)	(81)
Per-Share Data					
Income (loss) from continuing operations					
Basic	$ (2.06)	$ 0.82	$ (4.85)	$ (1.65)	$ 0.17
Diluted	(2.06)	0.81	(4.85)	(1.65)	0.17
Net income (loss) attributable to Conduent					
Basic	(2.06)	0.84	(4.85)	(2.04)	(0.40)
Diluted	(2.06)	0.83	(4.85)	(2.04)	(0.40)
Financial Position					
Working capital	$ 767	$ 1,342	$ 515	$ (867)	$ (887)
Total Assets	6,680	7,548	7,709	9,058	10,954
Consolidated Capitalization					
Current portion of long-term debt	$ 55	$ 82	$ 28	$ 24	$ 268
Long-term debt	1,512	1,979	1,913	37	43
Total Debt(2)	1,567	2,061	1,941	61	311
Series A preferred stock	142	142	142	n/a	n/a
Conduent shareholders' equity/former parent investment	3,222	3,529	3,288	5,162	5,411
Total Consolidated Capitalization	$ 4,931	$ 5,732	$ 5,371	$ 5,223	$ 5,722
Selected Data and Ratios(3)					
Common shareholders of record at year-end(3)	26,226	26,936	n/a	n/a	n/a
Book value per common share(3)	$ 15.68	$ 16.77	n/a	n/a	n/a
Year-end common stock market price(3)	$ 10.63	$ 16.16	n/a	n/a	n/a

____

(1) *On December 31, 2016, Conduent spun-off from Xerox Corporation. See Note 1 – Basis of Presentation and Summary of Significant Accounting Policies to the Consolidated Financial Statements included in Item 8 of this 2018 Form 10-K for a discussion concerning the historical financial statements.*

(2) *Includes capital lease obligations.*

(3) *Common stock of Conduent Incorporated did not begin trading on the NYSE until January 3, 2017; therefore, selected data and ratios are not available for years prior to 2017.*

Table of Contents

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management’s Discussion and Analysis (MD&A) is intended to help the reader understand the results of operations and financial condition of Conduent Incorporated. This MD&A is provided as a supplement to, and should be read in conjunction with, our Consolidated Financial Statements and the accompanying notes. This MD&A provides additional information about our operations, current developments, financial condition, cash flows and results of operations.

Throughout the MD&A, we refer to various notes to our Consolidated Financial Statements which appear in Item 8 of this 2018 Form 10-K, and the information contained in such notes is incorporated by reference into the MD&A in the places where such references are made.

Overview

With revenues of $5.4 billion, we are a leading provider of business process services with expertise in transaction-intensive processing, analytics and automation. We serve as a trusted business partner in both the front office and back office, enabling personalized, seamless interactions on a massive scale that improve end-user experience.

Headquartered in Florham Park, New Jersey, we have a team of approximately 82,000 people as of December 31, 2018, servicing customers in 26 countries. In 2018, 12% of our revenue was generated outside the U.S.

Our reportable segments correspond to how we organize and manage the business and are aligned to the industries in which our clients operate.

During 2018, in an effort to better reflect how we manage our business, we segregated our Public Sector segment into Government Services (including Health Enterprise, which was previously reported in Other segment) and Transportation segments. In addition, the Company also reclassified the operating results of our divestitures from the reportable segments to Other segment and separately reflected Shared IT/Infrastructure & Corporate Costs. All prior periods presented have been revised to reflect these changes.

- **Commercial Industries -** Our Commercial Industries segment provides business process services and customized solutions to clients in a variety of industries. Across the Commercial Industries segment, we deliver end-to-end business-to-business and business-to-customer services that enable our clients to optimize their key processes. Our multi-industry competencies include transaction processing, end-user engagement, human resource management, omni-channel communications and finance and accounting services.
- **Government Services -** Our Government Services sector provides government-centric business process services to U.S. federal, state and local and foreign governments for transportation, public assistance, program administration, transaction processing and payment services.
- **Transportation -** Our Transportation segment provides systems and support services to transportation departments and agencies globally. Offerings include electronic toll collection, public transit, parking and photo enforcement.

Other includes our divestitures and our Student Loan business, which the Company exited in the third quarter of 2018.

Table of Contents

Significant 2018 Actions

Dispositions

In 2018, we completed divestitures of: (1) our Commercial Vehicle Operations business; (2) our off-street parking business; (3) our U.S. human resource consulting and actuarial business and the human resource consulting and outsourcing business located in Canada and the United Kingdom; and (4) our local and municipal constituent government software solutions business. The aggregate proceeds for these divestitures was $703 million in cash. The businesses sold represented $304 million and $500 million of 2018 and 2017 revenue, respectively. We recorded a pre-tax gain of $78 million on these divestitures for the year ended December 31, 2018.

Significant 2017 Actions

Dispositions

In 2017, we completed divestitures of: (1) our Firehouse business and suite of emergency records management products used by fire departments across the country for their incident reporting and Emergency Management System information and records management; (2) our healthcare provider consulting services business, which advises healthcare organizations on IT application optimization; (3) the Breakaway Group business, which provides advisory project services to assist healthcare organizations optimize their health IT applications; (4) the mobile device management business of Wireless Data Services Limited; and (5) the Global Mobility business. The aggregate proceeds for these divestitures was $56 million in cash. The businesses sold represented $60 million and $82 million of 2017 and 2016 revenue, respectively. We recorded a pre-tax gain of $16 million on these divestitures for the year ended December 31, 2017.

In addition, in 2017, we sold a property located in Dallas, Texas, which was formerly the Affiliated Computer Services (ACS) headquarters, for a pre-tax gain of $24 million. This was part of our effort to consolidate our real estate footprint.

Health Enterprise Settlement

On November 28, 2017, we entered into a definitive settlement agreement with the State of New York regarding resolution of the HE platform project. Under the terms of the settlement: (1) our contract with the State of New York terminated effective December 15, 2017 and we were released from all liabilities and obligations in connection with the contract at such time; and (2) paid or incurred costs on behalf of, the State of New York in the amount of approximately $20 million. As we have previously reserved this amount, we incurred no additional charges as a result of the settlement.

Significant 2016 Actions

Separation

On December 31, 2016, Conduent Incorporated spun-off from Xerox Corporation, pursuant to the Separation and Distribution Agreement. The separation was completed by way of a pro rata distribution of Conduent Incorporated shares held by Xerox to Xerox's shareholders. As a result of the spin-off we operate as an independent, publicly traded company on the New York Stock Exchange under the ticker "CNDT".

Goodwill Impairment Charge

Our Commercial Industries reporting units operating results declined in 2016 versus our expectations, including a weak fourth quarter 2016. In performing our annual impairment test during the fourth quarter of 2016, we determined that the carrying value of the Commercial Industries reporting unit exceeded its fair value by 53%, which resulted in a goodwill impairment of $935 million. This has been presented as Goodwill impairment, a separate line item in the Consolidated Statements of Income (Loss). Refer to Note 6 – Goodwill and Intangible Assets, Net, in the Consolidated Financial Statements for additional information.

Table of Contents

Health Enterprise Charge

In February 2017, we determined that it was not probable that the New York Medicaid Management Information System (NY MMIS) project would be completed. As a result of this determination, we recorded a pre-tax charge (NY MMIS charge) of $161 million ($98 million after-tax) in the fourth quarter of 2016. The charge included $83 million for the write-off of contract receivables which were recorded as a reduction of revenue and $78 million recorded in Cost of services including $36 million for wind-down costs, $28 million related to the non-cash charge for the impairment of software and $14 million for the write-off of deferred contract set-up and transition costs and other related assets and liabilities.

Critical Accounting Policies

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires us to make estimates and assumptions in certain circumstances that affect amounts reported in the accompanying Consolidated Financial Statements and notes thereto. In preparing our Consolidated Financial Statements, we have made our best estimates and judgments of certain amounts included in the Consolidated Financial Statements giving due consideration to materiality. However, application of these accounting policies involves the exercise of judgment and use of assumptions as to future uncertainties and, as a result, actual results could differ from these estimates. Senior management has discussed the development and selection of the critical accounting policies, estimates and related disclosures included herein with the Audit Committee of the Board of Directors. We consider these as critical to understanding our Consolidated Financial Statements, as their application places the most significant demands on management's judgment, since financial reporting results rely on estimates of the effects of matters that are inherently uncertain. In instances where different estimates could have reasonably been used, we disclose the impact of these different estimates on our operations. In certain instances, the accounting rules are prescriptive; therefore, it would not have been possible to reasonably use different estimates. Changes in assumptions and estimates are reflected in the period in which they occur. The impact of such changes could be material to our results of operations and financial condition in any quarterly or annual period.

Specific risks associated with these critical accounting policies are discussed throughout the MD&A, where such policies affect our reported and expected financial results. For a detailed discussion of the application of these and other accounting policies, refer to Note 1 – Basis of Presentation and Summary of Significant Accounting Policies in the Consolidated Financial Statements.

Revenue Recognition

Application of the accounting principles in U.S. GAAP related to the measurement and recognition of revenue requires us to make judgments and estimates. Complex arrangements with nonstandard terms and conditions may require significant contract interpretation to determine the appropriate accounting. Refer to Note 1 – Basis of Presentation and Summary of Significant Accounting Policies — Revenue Recognition in the Consolidated Financial Statements for additional information regarding our revenue recognition policies.

Held for Sale

We classify assets as held for sale in the period when the following conditions are met: (i) management, having the authority to approve the action, commits to a plan to sell the asset (disposal group); (ii) the asset (disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (disposal group); (iii) an active program to locate a buyer and other actions required to complete the plan to sell the asset (disposal group) have been initiated; (iv) the sale of the asset (disposal group) is probable, and transfer of the asset (disposal group) is expected to qualify for recognition as a completed sale within one year, except if events or circumstances beyond our control extend the period of time required to sell the asset (disposal group) beyond one year; (v) the asset (disposal group) is being actively marketed for sale at a price that is reasonable in relation to its current fair value; and (vi) actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

Table of Contents

A long-lived asset (disposal group) that is classified as held for sale is initially measured at the lower of its carrying value or fair value less any costs to sell. Any loss resulting from this measurement is recognized in the period in which the held for sale criteria are met. Conversely, gains are not recognized on the sale of a long-lived asset (disposal group) until the date of sale.

The fair value of a long-lived asset (disposal group) less any costs to sell is assessed each reporting period it remains classified as held for sale and any subsequent changes are reported as an adjustment to the carrying value of the asset (disposal group), as long as the new carrying value does not exceed the carrying value of the asset at the time it was initially classified as held for sale. Upon determining that a long-lived asset (disposal group) meets the criteria to be classified as held for sale, the Company reports the assets and liabilities of the disposal group in the line items Assets held for sale and Liabilities held for sale, respectively, in the Consolidated Balance Sheets.

In 2018, management approved the disposal through sale of certain assets and businesses, which were a mix of both Commercial Industries, Government Services and Transportation. This action was taken as a result of our evaluation of these businesses as they represent businesses in markets or with services that we did not see as strategic or core. As of December 31, 2018, most of these businesses have been sold. At December 31, 2018, we reclassified $15 million to assets held for sale and $40 million to liabilities held for sale relating to a portfolio of select standalone customer care contracts that was not yet sold. See Note 3 – Assets/Liabilities Held for Sale and Divestitures for additional information.

Intangible Assets

The fair values of identifiable intangible assets are primarily estimated using an income approach. These estimates include market participant assumptions and require projected financial information, including assumptions about future revenue growth and costs necessary to facilitate the projected growth. Other key inputs include assumptions about technological obsolescence, customer attrition rates, brand recognition, the allocation of projected cash flows to identifiable intangible assets and discount rates. We regularly review intangible assets with finite lives for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Factors we consider important which could trigger an impairment review include the following:

- significant underperformance relative to historical or projected future operating results;
- significant changes in the manner of our use of the acquired assets or the strategy for our overall business; and
- significant negative industry or economic trends.

When we determine that the carrying value of intangibles and long-lived assets may not be recoverable based upon the existence of one or more of the above indicators of potential impairment, we assess whether an impairment has occurred based on whether net book value of the assets exceeds the related projected undiscounted cash flows from these assets. We consider a number of factors, including past operating results, budgets, economic projections, market trends and product development cycles in estimating future cash flows. Differing estimates and assumptions as to any of the factors described above could result in a materially different impairment charge, if any, and thus materially different results of operations.

Goodwill

Goodwill is not amortized but rather tested for impairment annually, or more frequently if an event or circumstance indicates that impairment may have been incurred. Events or circumstances that might indicate an interim evaluation is warranted include, among other things, unexpected adverse business conditions, macro and reporting unit specific economic factors, supply costs, unanticipated competitive activities and acts by governments and courts.

Application of the annual goodwill impairment test requires judgment, including the identification of reporting units, assignment of assets and liabilities to reporting units, assignment of goodwill to reporting units and the assessment of the fair value of each reporting unit. We determined that our reporting units were the same as our operating segments and, therefore, our business is comprised of three reporting units. Our annual quantitative impairment test of goodwill was performed in the fourth quarter of 2018.

Table of Contents

In our quantitative test, we estimate the fair value of each reporting unit by weighting the results from the income approach (discounted cash flow methodology) and market approach. These valuation approaches require significant judgment and consider a number of factors that include, but are not limited to, expected future cash flows, growth rates and discount rates and comparable multiples from publicly traded companies in our industry. In addition, we are required to make certain assumptions and estimates regarding the current economic environment, industry factors and the future profitability of our businesses.

When performing our discounted cash flow analysis for each reporting unit, we incorporate the use of projected financial information and discount rates that are developed using market participant-based assumptions. The cash-flow projections are based on three-year financial forecasts developed by management that include revenue and expense projections, restructuring and strategic transformation activities, capital spending trends and investment in working capital to support anticipated revenue growth or other changes in the business. The selected discount rates consider the risk and nature of the respective reporting units' cash flows, appropriate capital structure and rates of return that market participants would require to invest their capital in our reporting units.

We believe these assumptions are appropriate and reflect our forecasted long-term business model and give appropriate consideration to our historical results as well as the current economic environment and markets that we serve.

Based on our quantitative assessments, we concluded that the fair value of our reporting units (which are the Financial Services & Healthcare, Consumer & Industrial and Europe operating segments, together comprising Commercial Industries, Government Services operating segment and the Transportation operating segment) exceeded their respective carrying values by approximately $600 million (for all Commercial Industries), $285 million for Government Services and $120 million for Transportation, respectively. The most significant assumption used in the goodwill analysis relates to the long-term organic growth rate for the operating segments comprising Commercial Industries, Government Services and Transportation segments. For example, the EBITDA long term growth rates for the Commercial Industries operating segments, Government Services and Transportation segments were 3%, 2.5% and 4%, respectively. The growth rates are consistent with industry long term growth rates and contemplate that Conduent will grow, on a long term basis, at least consistent with its peers. To the extent that Conduent losses a significant contract or multiple significant contracts, such that its growth rates are negatively impacted, its goodwill could be impaired. Specifically, if Conduent’s EBITDA long term growth rates were zero for the Commercial and Government operating segments and 3% for the Transportation operating segment, the fair values of the operating segments would approximate the book values of the operating segments.

Refer to Note 6 – Goodwill and Intangible Assets, Net in the Consolidated Financial Statements for additional information regarding goodwill by reportable segment.

Income Taxes

We are subject to income taxes in the United States and numerous foreign jurisdictions. The determination of our provision for income taxes requires significant judgment, the use of estimates and the interpretation and application of complex tax laws. Our provision is based on nonrecurring events as well as recurring factors, including the taxation of foreign income. In addition, our provision will change based on discrete or other nonrecurring events such as audit settlements, tax law changes, changes in valuation allowances and other factors, that may not be predictable. In the event that there is a significant unusual or one-time item recognized in our operating results, the taxes attributable to that item would be separately calculated and recorded at the same time as an unusual or one-time item.

We record the estimated future tax effects of temporary differences between the tax bases of assets and liabilities and amounts reported in our Consolidated Balance Sheets, as well as operating loss and tax credit carryforwards. We follow very specific and detailed guidelines in each tax jurisdiction regarding the recoverability of any tax assets recorded in our Consolidated Balance Sheets and provide valuation allowances as required. We regularly review our deferred tax assets for recoverability considering historical profitability, projected future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies. Gross deferred tax assets of $210 million and $245 million had valuation allowances of $44 million and $35 million at December 31, 2018 and 2017, respectively.

Table of Contents

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (Tax Reform). The Tax Reform includes a tax on global intangible low-taxed income ("GILTI"), which imposes a U.S. tax on certain income earned by the Company's foreign subsidiaries. In January 2018, the FASB released guidance on the accounting for tax on GILTI. The guidance indicates that either accounting for deferred taxes on GILTI or treating GILTI as a period cost are both acceptable accounting elections. The Company elected to treat the tax on GILTI as a period cost when incurred and therefore, no deferred taxes for GILTI have been recognized for the year ended December 31, 2018.

We are subject to ongoing tax examinations and assessments in various jurisdictions. Accordingly, we may incur additional tax expense based upon our assessment of the more-likely-than-not outcomes of such matters. In addition, when applicable, we adjust previously recorded tax expense to reflect examination results. Our ongoing assessments of the more-likely-than-not outcomes of examinations and related tax positions require judgment and can materially increase or decrease our effective tax rate, as well as impact our operating results. Unrecognized tax benefits were $20 million, $15 million and $14 million at December 31, 2018, 2017 and 2016, respectively.

Refer to Note 13 – Income Taxes in the Consolidated Financial Statements for additional information regarding deferred income taxes and unrecognized tax benefits.

Loss Contingencies

We are currently involved in various claims and legal proceedings. At least quarterly, we review the status of each significant matter and assess its potential financial exposure considering all available information including, but not limited to, the impact of negotiations, settlements, rulings, advice of legal counsel and other updated information and events pertaining to a particular matter. If the potential loss from any claim or legal proceeding is considered probable and the amount can be reasonably estimated, we accrue a liability for the estimated loss. Significant judgment is required in both the determination of probability and the determination as to whether an exposure is reasonably estimable. Because of uncertainties related to these matters, accruals are based only on the best information available at the time. As additional information becomes available, we reassess the potential liability related to pending claims and litigation, and may revise estimates. These revisions in the estimates of the potential liabilities could have a material impact on the results of operations and financial position.

Refer to Note 14 – Contingencies and Litigation in the Consolidated Financial Statements for additional information regarding loss contingencies.

Table of Contents

Financial Information

Financial information for the three years ended December 31, 2018 was as follows:

	Year Ended December 31,			2018 vs. 2017		2017 vs. 2016	
(in millions)	2018	2017	2016	$ Change	% Change	$ Change	% Change
Revenue	$ 5,393	$ 6,022	$ 6,408	$ (629)	(10)%	$ (386)	(6)%
Operating Costs and Expenses							
Cost of Services (excluding depreciation and amortization)	4,182	4,730	5,174	$ (548)	(12)%	$ (444)	(9)%
Selling, general and administrative (excluding depreciation and amortization)	560	611	679	$ (51)	(8)%	(68)	(10)%
Research and development (excluding depreciation and amortization)	11	12	31	(1)	(8)%	(19)	(61)%
Depreciation and amortization	460	495	611	(35)	(7)%	(116)	(19)%
Restructuring and related costs	81	101	101	(20)	(20)%	—	— %
Interest expense	112	137	40	(25)	(18)%	97	243 %
(Gain) loss on divestitures and transaction costs	42	(42)	2	84	(200)%	(44)	
Litigation costs (recoveries), net	227	(11)	40	238		(51)	(128)%
(Gain) loss on extinguishment of debt	108	—	—	108	100 %	—	— %
Goodwill impairment	—	—	935	—	— %	(935)	(100)%
Separation costs	—	12	44	(12)	(100)%	(32)	(73)%
Other (income) expenses, net	5	(7)	(22)	12	(171)%	15	(68)%
Total Operating Costs and Expenses	**$ 5,788**	**$ 6,038**	**$ 7,635**	**$ (250)**		**$ (1,597)**	
Income (Loss) Before Income Taxes	$ (395)	$ (16)	$ (1,227)	$ (379)		$ 1,211	
Income tax expense (benefit)	21	(193)	(244)	214	(111)%	51	(21)%
Income (Loss) From Continuing Operations	**$ (416)**	**$ 177**	**$ (983)**	**$ (593)**		**$ 1,160**	

Revenue

Revenue for 2018 decreased, compared to the prior year period, mainly due to the impact from adopting the accounting guidance related to revenue recognition, which is also referred to herein as the "new revenue standard", divestitures completed in 2017 and 2018, strategic decisions by management as part of our portfolio rationalization, including exiting certain unprofitable contracts and contract losses. Partially offsetting these declines were increases from the ramp of new business. Excluding the impact of the new revenue standard and divestitures, the 2018 revenue decreased by 3.8% mainly due to strategic decisions by management as part of our portfolio rationalization, including exiting certain unprofitable contracts and contract losses, partially offset by the ramp of new business.

Revenue for 2017 decreased, compared to the prior year period, mainly due to the impact from strategic decisions by management as part of our portfolio rationalization, including exiting certain unprofitable contracts, the run-off of our Student Loan business and contract losses. Partially offsetting these declines were new contracts in the Government Services and the Transportation segments.

Cost of Services (excluding depreciation and amortization)

Cost of services for 2018 decreased, compared to the prior year period, mainly driven by the impact from adopting the new revenue standard, reductions in real estate, information technology and labor costs from our strategic transformation initiatives, lost business, strategic contract actions taken by management as part of portfolio management, lower volumes and divestitures completed in 2017 and 2018.

Table of Contents

Cost of services for 2017 decreased, compared to the prior year period, primarily due to cost transformation, lost business, wind-down of the NY MMIS contract, run-off of our Student Loan business, strategic contract actions taken by management as part of portfolio management and lower volumes.

Selling, General and Administrative (SG&A) (excluding depreciation and amortization)

Lower SG&A for 2018, compared to the prior year period, was reflective of the impact of our strategic transformation initiatives, primarily due to reductions in labor costs.

Lower SG&A for 2017, compared to the prior year period, was reflective of the impact of our strategic transformation initiatives driving lower wages and benefits, partially offset by the expansion and investment in our sales force.

Depreciation and Amortization

Depreciation and amortization decreased in 2018, compared to the prior year period, primarily due to the divestitures in 2018. The decrease in Depreciation and amortization for 2017, compared to the prior year period, was primarily due to the acceleration of amortization of certain trade-names in 2016. Refer to Note 6 – Goodwill and Intangible Assets, Net in the Consolidated Financial Statements for additional information regarding our intangible assets.

Restructuring and Related Costs

Restructuring and related costs for the year ended December 31, 2018, include $34 million of severance costs due to headcount reductions of approximately 3,000 employees worldwide, $40 million of lease cancellation and other costs as part of our effort to consolidate our real estate footprint as well as $7 million of costs primarily related to data center migration and professional support services associated with the implementation of the strategic transformation program.

Restructuring and related costs for the year ended December 31, 2017 include $41 million of severance costs due to headcount reductions of approximately 3,200 employees worldwide, $51 million of lease cancellation costs as part of our effort to consolidate our real estate footprint and $9 million of costs primarily related to professional support services associated with the implementation of the strategic transformation program.

Restructuring and related costs for the year ended December 31, 2016 include $54 million of severance costs due to headcount reductions of approximately 3,600 employees worldwide, $28 million of costs primarily related to professional support services associated with the implementation of the strategic transformation program and $19 million of lease cancellation costs as part of our effort to consolidate our real estate footprint.

Refer to Note 7 – Restructuring Programs and Related Costs in the Consolidated Financial Statements for additional information regarding our restructuring programs.

Interest Expense

The decrease in Interest expense for 2018, compared to the prior year period, was driven primarily by the repayment of the Senior Notes and repricing of the term loans in 2018, partially offset by the write-off of debt issuance costs for certain loans that were refinanced in June 2018, amortization of debt issuance costs associated with the repricing of the loans and interest rate increases in 2018. Refer to Note 9 – Debt in the Consolidated Financial Statements for additional information.

Increase in interest expense for 2017, compared to the prior year period, was primarily due to the issuance of debt with the capitalization of the Company during the spin-off in December 2016 and subsequent borrowing under Term Loan B in January 2017, as well as amounts outstanding at various times throughout the year and interest rate increases.

Table of Contents

(Gain) Loss on Divestitures and Transaction Costs

The loss for 2018, compared to the prior year period gain, was driven primarily by an impairment charge related to the anticipated sale of a portfolio of select standalone customer care contracts that was completed in February 2019, partially offset by net gains from divestitures and transaction costs. The gain for 2017, compared to the prior year period loss, was due to gains from the sale of property located in Dallas and from divestitures. See Note 3 – Assets/Liabilities Held for Sale and Divestitures for additional information on 2018 divestitures.

Litigation Costs (Recoveries), Net

Increase in net litigation costs for 2018, compared to the prior year period, was primarily due to increases in reserves related to the litigation settlement pursuant to the Texas Agreement ("Texas Agreement"), Student Loan Service exposures and a reserve for certain terminated contracts that are subject to litigation.

Decrease in net litigation costs for 2017, compared to the prior year period, was primarily due to income received from certain customer dispute settlements and adjustment to contingent consideration on a previous acquisition.

Refer to Note 14 – Contingencies and Litigation to the Consolidated Financial Statements for additional information.

(Gain) Loss on Extinguishment of Debt

The loss on extinguishment of debt for 2018, related to the premium paid for the substantial buyback of the 10.5% Senior Notes due 2024.

Refer to Note 9 – Debt to the Consolidated Financial Statements for additional information regarding the debt redemption.

Goodwill Impairment

Our Commercial Industries reporting unit experienced declining operating results in 2016 versus expectations. As a result, we recorded a goodwill impairment of $935 million in 2016. Refer to Note 6 – Goodwill and Intangible Assets, Net in the Consolidated Financial Statements for additional information regarding the Goodwill impairment charge.

Separation Costs

Separation costs are primarily for third-party investment banking, accounting, legal, consulting and other similar types of services related to the separation transaction as well as costs associated with the operational separation of the two companies, such as those related to human resources, brand management, real estate and information management to the extent not capitalized. Separation costs also include the costs associated with bonuses and restricted stock grants awarded to employees for retention through the separation.

Other (Income) Expenses, Net

Other (income) expenses, net primarily includes foreign currency transaction losses (gains) and other deferred compensation investment results.

Table of Contents

Income Taxes

On December 22, 2017, the Tax Cuts and Jobs Act (Tax Reform) was enacted. The effects of changes in tax rates and laws were recognized in 2017, the period in which the new legislation was enacted. The income tax effects of the Tax Reform were initially accounted for on a provisional basis pursuant to the SEC staff guidance on income taxes. Reasonable estimates for all material tax effects of the Tax Reform were provided. A provisional benefit was recorded for $210 million resulting from a reduction in the tax rate from 35% to 21%. This was partially offset by a $12 million charge from one time tax on undistributed and previously untaxed post-1986 foreign earnings and profits (Transition Tax). The Company finalized its accounting for this matter in the fourth quarter of 2018 and recognized a $2 million additional benefit year to date, included as a component of income tax expense from continuing operations. The 2018 effective tax rate was (5.3)% and was lower than the U.S. statutory rate of 21%, primarily due to pre-tax loss and tax from the impacts of business divestitures, partially offset by U.S. foreign tax credits. As a result of higher U.S. Federal taxable income caused by the divestitures, the Company is not subject to Base Erosion Anti-Abuse Tax (BEAT) in 2018.

Excluding the impact of divestitures, the State of Texas litigation reserve, the loss on extinguishment of debt, charges for amortization of intangible assets, restructuring and divestiture related costs, the normalized effective tax rate without a BEAT tax for 2018 was 25.1%.

The 2017 rate was higher than the U.S. statutory rate of 35% primarily due to the impact of the Tax Reform, which included the reduction of the U.S. statutory rate from 35% to 21% and the Transition Tax.

Excluding primarily the tax impact of the Tax Reform, the termination of the COLI, amortization of intangible assets and gains on U.S divestitures, the adjusted effective tax rate for 2017 was 33.8%.

Operations Review of Segments

Our reportable segments correspond to how we organize and manage the business and are aligned to the industries in which our clients operate.

During 2018, in an effort to better reflect how we manage our business, we segregated our Public Sector segment into Government Services (including Health Enterprise, which was previously reported in Other segment) and Transportation segments. In addition, the Company also reclassified the operating results of our divestitures from the reportable segments to Other segment and separately reflected Shared IT/Infrastructure & Corporate Costs. All prior periods presented have been revised to reflect these changes.

Table of Contents

The following are our results of financial performance by segment for the three years ended December 31, 2018:

(in millions)	Commercial Industries	Government Services	Transportation	Other		Shared IT / Infrastructure & Corporate Costs	Total
				Divestitures	Other		
Year Ended December 31, 2018							
Total Revenue	$ 2,547	$ 1,351	$ 729	$ 752	$ 14	$ —	$ 5,393
Profit (Loss)	$ 500	$ 424	$ 113	$ 98	$ (18)	$ (695)	$ 422
Adjusted EBITDA	$ 597	$ 451	$ 149	$ 105	$ (15)	$ (647)	$ 640
% of Total Revenue	47.2%	25.1%	13.5%	13.9%	0.3 %	—%	100.0%
Adjusted EBITDA Margin	23.4%	33.4%	20.4%	14.0%	(107.1)%	—%	11.9%
Year Ended December 31, 2017							
Total Revenue	$ 2,685	$ 1,433	$ 767	$ 1,062	$ 75	$ —	$ 6,022
Profit (Loss)	$ 563	$ 398	$ 114	$ 128	$ 16	$ (802)	$ 417
Adjusted EBITDA	$ 661	$ 440	$ 157	$ 141	$ 18	$ (745)	$ 672
% of Total Revenue	44.7%	23.8%	12.7%	17.6%	1.2 %	—%	100.0%
Adjusted EBITDA Margin	24.6%	30.7%	20.5%	13.3%	24.0 %	—%	11.2%
Year Ended December 31, 2016							
Total Revenue	$ 2,827	$ 1,575	$ 766	$ 1,109	$ 131	$ —	$ 6,408
Profit (Loss)	$ 520	$ 421	$ 88	$ 166	$ (149)	$ (850)	$ 196
Adjusted EBITDA	$ 623	$ 464	$ 129	$ 190	$ 9	$ (780)	$ 635
% of Total Revenue	44.1%	24.6%	12.0%	17.3%	2.0 %	—%	100.0%
Adjusted EBITDA Margin	22.0%	29.5%	16.8%	17.1%	6.9 %	—%	9.9%

Commercial Industries Segment

Revenue

Commercial Industries revenue for 2018 decreased, compared to the prior year period, primarily driven by strategic contract actions and contract losses, businesses divested in 2018 and the impact of the new revenue standard, partially offset by revenue from new contracts and price increases from existing accounts.

Commercial Industries revenue 2017 decreased, compared to the prior year period, primarily driven by strategic contract actions and contract losses, lower volumes in our customer care offerings and lost business, partially offset by revenue from new contracts and price increases with existing clients.

Segment Profit and Adjusted EBITDA

Decrease in the Commercial Industries segment profit and adjusted EBITDA margin for 2018, compared to the prior year period, was mainly driven by the overall revenue decline from strategic actions and investments in technology platforms, partially offset by reductions in real estate, information technology and labor costs from our strategic transformation initiatives and from increases in new business.

Increase in the Commercial Industries segment profit and adjusted EBITDA margin for 2017, compared to the prior year period, was primarily driven by reduced costs as a result of reductions in real estate, information technology and labor costs from our strategic transformation initiatives, as well as contract remediation and strategic contract actions, partially offset by the overall revenue decline and investments in technology platforms.

Government Services Segment

Revenue

Government Services revenue for 2018 decreased, compared to the prior year period, primarily driven by strategic contract actions and the impact of the new revenue standard, contract losses and lower volumes, partially offset by certain price increases from contract remediation and ramp of new business.

Government Services revenue for 2017 decreased, compared to the prior year period, primarily driven by strategic contract actions, contract losses and lower volumes, partially offset by certain price increases from contract remediation and ramp of new business.

Segment Profit and Adjusted EBITDA

Increase in the Government Services segment profit and adjusted EBITDA margin for 2018, compared to the prior year period, was mainly driven by reductions in real estate, information technology and labor costs from our strategic transformation initiatives and contract remediation, as well as price increases on certain accounts, partially offset by investments in technology platforms.

Decrease in the Government Services segment profit and adjusted EBITDA for 2017, compared to the prior year period, was primarily driven by strategic contract actions, contract losses in healthcare and payment services businesses, partially offset by our strategic transformation initiative.

Transportation Segment

Revenue

Transportation revenue for 2018 decreased, compared to the prior year period, primarily driven by the impact of the new revenue standard, contract losses, service level penalties and lower volumes, partially offset by certain price increases from contract remediation and ramp of new business.

Transportation revenue for 2017 was flat, compared to the prior year period, primarily driven by ramp of new business, offset by strategic decisions and contract losses.

Segment Profit and Adjusted EBITDA

Transportation segment profit and adjusted EBITDA margin for 2018, compared to the prior year period, was flat. This was mainly driven by reductions in real estate, information technology and labor costs from our strategic transformation initiatives, offset by investments in technology platforms.

Increase in the Transportation segment profit and adjusted EBITDA for 2017, compared to the prior year period, was mainly due to our strategic transformation initiative, partially offset by strategic decisions and contract losses.

Other

Revenue

Other revenue for 2018 decreased, compared to the prior year period, driven mainly by the divestitures completed in 2017 and 2018 and the run-off of our Student Loan Services business.

Other revenue for 2017 decreased, compared to the prior year period, driven mainly by the divestitures completed in 2017 and the run-off of our Student Loan Services business.

Segment Profit (Loss) and Adjusted EBITDA

Decrease in Other segment profit and adjusted EBITDA for 2018 were primarily due to divestitures completed in 2017 and 2018 and the run-off of our Student Loan Services business.

Table of Contents

Increase in Other segment profit for 2017 was primarily due to nonrecurring NY MMIS and HE charges in 2016. Decrease in Other segment adjusted EBITDA for 2017 was primarily due to divestitures completed in 2017 and the run-off of our Student Loan Services business.

Shared IT / Infrastructure & Corporate Costs

Improvements in Shared IT/Infrastructure and Corporate costs for both 2018 and 2017, compared to the prior year periods, were primarily driven by reduced costs as a result of reductions in real estate, information technology and labor costs from our strategic transformation initiatives.

Metrics

Signings

Signings are defined as estimated future revenues from contracts signed during the period, including renewals of existing contracts. Total Contract Value (TCV) is the estimated total contractual revenue related to signed contracts. The amounts in the following table reflect the impact of our adoption of the new revenue recognition standard on January 1, 2018 and also excludes divestitures. Refer to Note 1 – Basis of Presentation and Summary of Significant Accounting Policies for further discussion of the estimated impact of the adoption of this standard.

	Year Ended December 31,		2018 vs. 2017	
(in millions)	2018	2017	$ Change	% Change
New business TCV	$ 1,598	$ 2,031	$ (433)	(21)%
Renewals TCV	3,847	2,297	1,550	67 %
Total Signings	$ 5,445	$ 4,328	$ 1,117	26 %
Annual recurring revenue signings[1]	$ 365	$ 471	$ (106)	(23)%
Non-recurring revenue signings[2]	$ 234	$ 326	$ (92)	(28)%

(1) *Recurring revenue signings are for new business contracts longer than one year.*

(2) *Non-recurring revenue signings are for contracts shorter than one year.*

Signings for the 2018 increased, compared to the prior year, mainly due to increased renewal activities, partially offset by new business signings decline due to a continued focus on strategic wins with acceptable margins.

Renewal Rate

Renewal rate is defined as the annual recurring revenue (ARR) on contracts that are renewed during the period as a percentage of ARR on all contracts for which a renewal decision was made during the period, excluding any contracts that were not renewed and where a strategic action to improve the risk or profitability had been initiated.

Excluding our strategic decision not to renew certain contracts, renewal rates for 2018 and 2017 were 95% and 94%, respectively.

Capital Resources and Liquidity

As of December 31, 2018 and 2017, total cash and cash equivalents were $756 million (of which approximately $100 million was cash in foreign locations) and $658 million, respectively. Subsequent to December 31, 2018, the Company purchased the HSP business for approximately $90 million and entered into an agreement to settle the Texas litigation, $20 million of which is payable in the first quarter of 2019. Also, it is anticipated that our working capital in the first quarter of 2019 will be a net use of cash. Regarding the Texas litigation, the Settlement Agreement does not prevent the Company from prepaying the foregoing amounts and the Company is currently considering whether to do so. The Company also has a $750 million revolving line of credit for its various cash needs, of which $12 million has been utilized for letters of credit.

Table of Contents

As of December 31, 2018, there were $1.5 billion outstanding borrowings under our Credit Agreement of which $55 million was due within one year. Refer to Note 9 – Debt in the Consolidated Financial Statements for additional debt information.

Refer to the *Capital Market Activity* section below for additional information regarding our capital activity.

Cash Flow Analysis

The following summarizes our cash flows for the three years ended December 31, 2018, as reported in our Consolidated Statements of Cash Flows in the accompanying Consolidated Financial Statements:

	Year Ended December 31,			Change	
(in millions)	2018	2017	2016	2018	2017
Net cash provided by operating activities	$ 283	$ 300	$ 95	$ (17)	$ 205
Net cash provided by investing activities	460	74	16	386	58
Net cash provided by (used in) financing activities	(637)	(124)	150	(513)	(274)

Operating Activities

The decrease in cash generated from operating activities for 2018, compared to the prior year period, was primarily attributable to increased tax payments and increased deferred compensation payments, partially offset by other working capital amounts.

The increase in cash generated from operating activities for 2017, compared to the prior year period, was primarily attributable to improvements in working capital and reduced wind-down payments associated with implementations in California, Montana and New York, partially offset by higher interest payments on our outstanding debt.

Investing Activities

The increase in cash generated from investing activities for 2018, compared to the prior year period, was primarily due to the proceeds from the divestitures, partially offset by increased spending for capital expenditures related to modernizing our information technology infrastructure.

The increase in cash provided by investing activities for 2017, compared to the prior year period, was primarily related to proceeds received on the liquidation of investments related to the termination of the deferred compensation plan, proceeds from the sale of business and assets and lower net additions to land, buildings and equipment, partially offset by non-recurring proceeds from related party notes receivable in 2016.

Financing Activities

The increase in cash used from financing activities for 2018, compared to the prior year period, was related to net debt repayments, premium on debt redemption and repayments of capital leases, partially offset by payments to former parent company in 2017.

The decrease in cash used in financing activities for 2017, compared to the prior year period, was primarily related to a decrease in proceeds from long term debt and an increase in debt payments, partially offset by a reduction in payments to former parent.

Capital Market Activity

On June 28, 2018, the Company entered into Amendment No. 3 (Amendment) to the December 7, 2016 Credit Agreement and in July 2018, the Company redeemed $476 million of its $510 million 10.5% Senior Notes due 2024.

Refer to Note 9 – Debt in the Consolidated Financial Statements for additional information on both Amendment No. 3 and the partial redemption of the Senior Notes.

Table of Contents

Financial Instruments

Refer to Note 10 – Financial Instruments in the Consolidated Financial Statements for additional information.

Contractual Cash Obligations and Other Commercial Commitments and Contingencies

At December 31, 2018, we had the following contractual cash obligations and other commercial commitments and contingencies:

(in millions)	2019	2020	2021	2022	2023	Thereafter
Total debt, including capital lease obligations[1]	$ 55	$ 50	$ 84	$ 576	$ 800	$ 33
Interest on debt[2]	90	89	86	56	4	3
Minimum operating lease commitments[3]	153	113	78	53	33	76
Defined benefit pension plans	2	—	—	—	—	—
Estimated Purchase Commitments[4]	87	58	34	3	—	1
Total	$ 387	$ 310	$ 282	$ 688	$ 837	$ 113

(1) Total debt represents principal debt and capital leases. Refer to Note 9 – Debt in the Consolidated Financial Statements for additional information regarding debt.
(2) Represents interest on debt. Refer to Note 9 – Debt in the Consolidated Financial Statements for additional information.
(3) Refer to Note 5 – Land, Buildings, Equipment and Software, Net in the Consolidated Financial Statements for additional information.
(4) Other purchase commitments: We enter into other purchase commitments with vendors in the ordinary course of business. Our policy with respect to all purchase commitments is to record losses, if any, when they are probable and reasonably estimable. We currently do not have, nor do we anticipate, material loss contracts.

The table above does not include the amounts payable under the Texas Agreement. Refer to Note 14 – Contingencies and Litigation for additional information.

Other Contingencies and Commitments

As more fully discussed in Note 14 – Contingencies and Litigation in the Consolidated Financial Statements, we are involved in a variety of claims, lawsuits, investigations and proceedings concerning: securities law; governmental entity contracting, servicing and procurement law; intellectual property law; environmental law; employment law; the Employee Retirement Income Security Act (ERISA); and other laws and regulations. In addition, guarantees, indemnifications and claims may arise during the ordinary course of business from relationships with suppliers, customers and non-consolidated affiliates. Nonperformance under a contract including a guarantee, indemnification or claim could trigger an obligation of the Company.

We determine whether an estimated loss from a contingency should be accrued by assessing whether a loss is deemed probable and can be reasonably estimated. Should developments in any of these areas cause a change in our determination as to an unfavorable outcome and result in the need to recognize a material accrual, or should any of these matters result in a final adverse judgment or be settled for significant amounts, they could have a material adverse effect on our results of operations, cash flows and financial position in the period or periods in which such change in determination, judgment or settlement occurs.

Off-Balance Sheet Arrangements

As of December 31, 2018, we do not believe we have any off-balance sheet arrangements that have, or are reasonably likely to have, a material current or future effect on financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

In addition, refer to the preceding table for the Company's contractual cash obligations and other commercial commitments and Note 14 – Contingencies and Litigation in the Consolidated Financial Statements for additional information regarding contingencies, guarantees and indemnifications.

Table of Contents

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk

We are exposed to market risk from foreign currency exchange rates, which could affect operating results, financial position and cash flows. We manage our exposure to this market risk through our regular operating and financing activities and, when appropriate, through the use of derivative financial instruments. We utilized derivative financial instruments to hedge economic exposures, as well as reduce earnings and cash flow volatility resulting from shifts in market rates. We also hedge the cost to fund material non-dollar entities by buying currencies periodically in advance of the funding date. This is accounted for using derivative accounting.

Recent market events have not caused us to materially modify or change our financial risk management strategies with respect to our exposures to foreign currency risk. Refer to Note 10 – Financial Instruments in the Consolidated Financial Statements for additional discussion on our financial risk management.

Foreign Exchange Risk Management

Assuming a 10% appreciation or depreciation in foreign currency exchange rates from the quoted foreign currency exchange rates at December 31, 2018, the potential change in the fair value of foreign currency-denominated assets and liabilities in each entity would not be significant because all material currency asset and liability exposures were economically hedged as of December 31, 2018. A 10% appreciation or depreciation of the U.S. Dollar against all currencies from the quoted foreign currency exchange rates at December 31, 2018 would have an impact on our cumulative translation adjustment portion of equity of approximately $50 million. The net amount invested in foreign subsidiaries and affiliates, primarily in the U.K. and Europe, and translated into U.S. Dollars using the year-end exchange rates, was approximately $504 million at December 31, 2018.

Interest Rate Risk Management

The consolidated weighted-average interest rates related to our total debt for 2018 approximated 3.42% for Term A Loan due 2021, 5.44% for Term B Loan due 2023, 7.71% for Senior Notes due 2024 and 2.08% for capital lease obligations. As of December 31, 2018, $1,564 million of our total debt of $1,598 million carried variable interest rates. The fair values of our fixed rate financial instruments are sensitive to changes in interest rates and at December 31, 2018, a 10% increase in market interest rates would decrease the fair values of such financial instruments by approximately $1.5 million. A 10% decrease in market interest rates would increase the fair values of such financial instruments by approximately $4 million.

Table of Contents

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Conduent Incorporated

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Conduent Incorporated and its subsidiaries (the "Company") as of December 31, 2018 and 2017, and the related consolidated statements of income (loss), comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended December 31, 2018, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2018 appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for revenues from contracts with customers in 2018.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Table of Contents

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

Florham Park, New Jersey
February 28, 2019

We have served as the Company's auditor since 2016.

Table of Contents

REPORTS OF MANAGEMENT

Management's Responsibility for Financial Statements

Our management is responsible for the integrity and objectivity of all information presented in this annual report. The consolidated financial statements were prepared in conformity with accounting principles generally accepted in the United States of America and include amounts based on management's best estimates and judgments. Management believes the consolidated financial statements fairly reflect the form and substance of transactions and that the financial statements fairly represent the Company's financial position and results of operations.

The Audit Committee of the Board of Directors, which is composed solely of independent directors, meets regularly with the independent registered public accountants, PricewaterhouseCoopers LLP, the internal auditors and representatives of management to review accounting, financial reporting, internal control and audit matters, as well as the nature and extent of the audit effort. The Audit Committee is responsible for the engagement of the independent registered public accountants. The independent registered public accountants and internal auditors have free access to the Audit Committee.

/s/ ASHOK VEMURI	/s/ BRIAN WEBB-WALSH	/s/ ALLAN COHEN
Chief Executive Officer	**Chief Financial Officer**	**Chief Accounting Officer**

Table of Contents

CONDUENT INCORPORATED
CONSOLIDATED STATEMENTS OF INCOME (LOSS)

(in millions, except per-share data)	Year Ended December 31, 2018	2017	2016
Revenue	$ 5,393	$ 6,022	$ 6,408
Operating Costs and Expenses			
Cost of Services (excluding depreciation and amortization)	4,182	4,730	5,174
Selling, general and administrative (excluding depreciation and amortization)	560	611	679
Research and development (excluding depreciation and amortization)	11	12	31
Depreciation and amortization	460	495	611
Restructuring and related costs	81	101	101
Interest expense	112	137	40
(Gain) loss on divestitures and transaction costs	42	(42)	2
Litigation costs (recoveries), net	227	(11)	40
(Gain) loss on extinguishment of debt	108	—	—
Goodwill impairment	—	—	935
Separation costs	—	12	44
Other (income) expenses, net	5	(7)	(22)
Total Operating Costs and Expenses	5,788	6,038	7,635
Income (Loss) Before Income Taxes	(395)	(16)	(1,227)
Income tax expense (benefit)	21	(193)	(244)
Income (Loss) From Continuing Operations	(416)	177	(983)
Income (loss) from discontinued operations, net of tax	—	4	—
Net Income (Loss)	$ (416)	$ 181	$ (983)
Basic Earnings (Loss) per Share:			
Continuing operations	$ (2.06)	$ 0.82	$ (4.85)
Discontinued operations	—	0.02	—
Total Basic Earnings (Loss) per Share	$ (2.06)	$ 0.84	$ (4.85)
Diluted Earnings (Loss) per Share:			
Continuing operations	$ (2.06)	$ 0.81	$ (4.85)
Discontinued operations	—	0.02	—
Total Diluted Earnings (Loss) per Share	$ (2.06)	$ 0.83	$ (4.85)

The accompanying notes are an integral part of these Consolidated Financial Statements.

Table of Contents

CONDUENT INCORPORATED
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(in millions)	Year Ended December 31, 2018	2017	2016
Net Income (Loss)	$ (416)	$ 181	$ (983)
Other Comprehensive Income (Loss), Net[1]			
Currency translation adjustments, net	(31)	35	(135)
Reclassification of currency translation adjustments on divestitures	42	—	—
Reclassification of divested benefit plans and other	62	—	—
Unrecognized gains (loss), net	1	2	—
Changes in benefit plans, net	—	(5)	(20)
Other Comprehensive Income (Loss), Net	74	32	(155)
Comprehensive Income (Loss), Net	$ (342)	$ 213	$ (1,138)

(1) *All amounts are net of tax. Tax effects were immaterial. See Note 17 – Other Comprehensive Income (Loss) for information about pre-tax amounts.*

The accompanying notes are an integral part of these Consolidated Financial Statements.

Table of Contents

CONDUENT INCORPORATED
CONSOLIDATED BALANCE SHEETS

(in millions, except share data in thousands)	December 31, 2018	December 31, 2017
Assets		
Cash and cash equivalents	$ 756	$ 658
Accounts receivable, net	782	1,114
Assets held for sale	15	757
Contract assets	177	—
Other current assets	234	181
Total current assets	1,964	2,710
Land, buildings and equipment, net	328	257
Intangible assets, net	651	891
Goodwill	3,408	3,366
Other long-term assets	329	324
Total Assets	$ 6,680	$ 7,548
Liabilities and Equity		
Current portion of long-term debt	$ 55	$ 82
Accounts payable	230	118
Accrued compensation and benefits costs	193	355
Unearned income	112	151
Liabilities held for sale	40	169
Other current liabilities	567	493
Total current liabilities	1,197	1,368
Long-term debt	1,512	1,979
Deferred taxes	327	384
Other long-term liabilities	280	146
Total Liabilities	3,316	3,877
Contingencies (See Note 14)		
Series A convertible preferred stock	142	142
Common stock	2	2
Additional paid-in capital	3,878	3,850
Retained earnings (deficit)	(233)	171
Accumulated other comprehensive loss	(425)	(494)
Total Equity	3,222	3,529
Total Liabilities and Equity	$ 6,680	$ 7,548
Shares of common stock issued and outstanding	211,306	210,440
Shares of series A convertible preferred stock issued and outstanding	120	120

The accompanying notes are an integral part of these Consolidated Financial Statements.

Table of Contents

CONDUENT INCORPORATED
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Year Ended December 31, 2018	2017	2016
Cash Flows from Operating Activities:			
Net income (loss)	$ (416)	$ 181	$ (983)
Adjustments required to reconcile net income to cash flows from operating activities:			
Depreciation and amortization	460	495	611
Contract inducement amortization	3	2	2
Goodwill impairment	—	—	935
Deferred income taxes	(75)	(230)	(160)
(Gain) loss from investments	(2)	(10)	(7)
Amortization of debt financing costs	11	9	—
(Gain) loss on extinguishment of debt	108	—	—
(Gain) loss on divestitures and transaction costs	42	(42)	2
Stock-based compensation	38	40	23
Changes in operating assets and liabilities:			
(Increase) decrease in accounts receivable	133	31	(23)
(Increase) decrease in other current and long-term assets	(111)	(32)	(96)
Increase (decrease) in accounts payable and accrued compensation	(56)	(49)	(60)
Increase (decrease) in restructuring liabilities	8	34	27
Increase (decrease) in other current and long-term liabilities	161	(125)	(210)
Net change in income tax assets and liabilities	(17)	11	39
Other operating, net	(4)	(15)	(5)
Net cash provided by (used in) operating activities	283	300	95
Cash Flows from Investing Activities:			
Cost of additions to land, buildings and equipment	(179)	(96)	(149)
Proceeds from sale of land, buildings and equipment	13	33	—
Cost of additions to internal use software	(45)	(36)	(39)
Proceeds from investments	1	117	11
Proceeds from divestitures and sale of assets, net of cash	675	56	(54)
Net proceeds on notes receivable	—	—	248
Other investing, net	(5)	—	(1)
Net cash provided by (used in) investing activities	460	74	16
Cash Flows from Financing Activities:			
Proceeds on long-term debt	—	306	1,969
Debt issuance fee payments	(3)	(8)	(67)
Payments on debt	(519)	(241)	(32)
Premium on debt redemption	(95)	—	—
Net payments to former parent company	—	(161)	(1,720)
Taxes paid for settlement of stock based compensation	(10)	(5)	—
Dividends paid on preferred stock	(10)	(10)	—
Other financing	—	(5)	—
Net cash provided by (used in) financing activities	(637)	(124)	150
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(8)	1	(6)
Increase (decrease) in cash, cash equivalents and restricted cash	98	251	255
Cash, Cash Equivalents and Restricted Cash at Beginning of Period	667	416	161
Cash, Cash Equivalents and Restricted Cash at End of period[1]	$ 765	$ 667	$ 416

(1) *Includes $9 million, $9 million and $26 million of restricted cash as of December 31, 2018, 2017 and 2016, respectively, that were included in Other current assets on the Consolidated Balance Sheets.*

The accompanying notes are an integral part of these Consolidated Financial Statements.

Table of Contents

CONDUENT INCORPORATED
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(in millions)	Common Stock	Additional Paid-in Capital	Retained Earnings	AOCL[1]	Former Parent Company Investment	Conduent Shareholders' Equity
Balance at December 31, 2015	$ —	$ —	$ —	$ (181)	$ 5,343	$ 5,162
Series A preferred stock transfer	—	—	—	—	(142)	(142)
Capitalization of Company	2	3,812	—	—	(3,814)	—
Net transfers from former parent company	—	—	—	(190)	(404)	(594)
Comprehensive Income (Loss):						
Net Income (Loss)	—	—	—	—	(983)	(983)
Other comprehensive income (loss), net	—	—	—	(155)	—	(155)
Total Comprehensive Income (Loss), Net	—	—	—	(155)	(983)	(1,138)
Balance at December 31, 2016	$ 2	$ 3,812	$ —	$ (526)	$ —	$ 3,288
Cash dividends paid - preferred stock[2]	—	—	(10)	—	—	(10)
Stock option and incentive plans, net	—	38	—	—	—	38
Comprehensive Income (Loss):						
Net Income (Loss)	—	—	181	—	—	181
Other comprehensive income (loss), net	—	—	—	32	—	32
Total Comprehensive Income (Loss), Net	—	—	181	32	—	213
Balance at December 31, 2017	$ 2	$ 3,850	$ 171	$ (494)	$ —	$ 3,529
Cash dividends paid - preferred stock[2]	—	—	(10)	—	—	(10)
Cumulative impact of adopting the new revenue standard	—	—	17	—	—	17
Reclassification of amounts impacted by Tax Reform	—	—	5	(5)	—	—
Stock option and incentive plans, net	—	28	—	—	—	28
Comprehensive Income (Loss):						
Net Income (Loss)	—	—	(416)	—	—	(416)
Other comprehensive income (loss), net	—	—	—	74	—	74
Total Comprehensive Income (Loss), Net	—	—	(416)	74	—	(342)
Balance at December 31, 2018	$ 2	$ 3,878	$ (233)	$ (425)	$ —	$ 3,222

____

(1) AOCL - Accumulated other comprehensive loss.

(2) Cash dividend on preferred stock of $80.00 per share for 2018 and 2017.

The accompanying notes are an integral part of these Consolidated Financial Statements.

Table of Contents

CONDUENT INCORPORATED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 – Basis of Presentation and Summary of Significant Accounting Policies

References herein to “we,” “us,” “our,” the “Company” and “Conduent” refer to Conduent Incorporated and its consolidated subsidiaries unless the context suggests otherwise.

Description of Business

We are a global enterprise and leading provider of business process services with expertise in transaction-intensive processing, analytics and automation. We serve as a trusted business partner in both the front office and back office, enabling personalized, seamless interactions on a massive scale that improve end-user experience. We create value for our commercial and government clients by applying our expertise, technology and innovation to help them drive customer and constituent satisfaction and loyalty, increase process efficiency and respond rapidly to changing market dynamics. Our portfolio includes industry-focused service offerings in attractive growth markets such as healthcare and transportation, as well as multi-industry service offerings such as transaction processing, customer care and payment services.

Basis of Presentation

Our Consolidated Financial Statements included the historical basis of assets, liabilities, revenues and expenses of the individual businesses of the Company, including joint ventures and partnerships over which the Company has a controlling financial interest. We have prepared the Consolidated Financial Statements pursuant to the rules and regulations of the SEC. Certain reclassifications have been made to prior years' amounts to conform to the current year presentation. All intercompany transactions and balances have been eliminated.

We have also considered the impact of subsequent events on these consolidated financial statements.

Separation from Xerox Corporation

On December 31, 2016, Conduent spun-off from Xerox Corporation (Xerox), pursuant to the Separation and Distribution Agreement (Separation). The Separation was completed by way of a pro rata distribution of Conduent shares held by Xerox to Xerox’s shareholders. As a result, we operate as an independent, publicly traded company on the New York Stock Exchange, under the ticker "CNDT".

Prior to December 31, 2016, the Financial Statements of the Company were derived from the financial statements and accounting records of Xerox as if Conduent operated on a standalone basis. Historically, the Company consisted of the Business Process Outsourcing Operating segment within Xerox’s reportable Services segment and did not operate as a separate, standalone company. Accordingly, Xerox performed certain corporate overhead functions for the Company. Therefore, certain corporate costs, including compensation costs for corporate employees supporting the Company, were allocated from Xerox. It is not practicable to estimate actual costs that would have been incurred had the Company been a separate standalone company. Allocations for management costs and corporate support services provided to the Company totaled $165 million for year ended December 31, 2016. Management of the Company believes the assumptions regarding the allocated expenses reasonably reflect the utilization of services provided to or the benefit received by the Company during the period prior to the Separation. The Consolidated Financial Statements for the period prior to the Separation does not necessarily include all the expenses that would have been incurred or held by the Company had it been a separate, standalone company.

Use of Estimates

We prepared the Consolidated Financial Statements using financial information available at the time of preparation, which requires us to make estimates and assumptions that affect the amounts reported. Our most significant estimates pertain to the intangible and long-lived assets, valuation of goodwill, contingencies and litigation, income taxes and corporate allocations (for year ended December 31, 2016). Our estimates are based on management's best knowledge of current events, historical experience, and on various other assumptions that are believed to be reasonable under the circumstances. As a result, actual results may be different from these estimates.

New Accounting Standards

Table of Contents

Leases: In February 2016, the FASB updated the accounting guidance related to leases requiring lessees to recognize a right-of-use asset and a lease liability on the balance sheet for all leases with a lease term greater than 12 months. The accounting for lessors is largely unchanged. This updated guidance is effective for the Company beginning January 1, 2019. The Company adopted this updated accounting guidance beginning January 1, 2019 using the optional transition approach, which allows entities to initially apply the new leases standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption. Comparative periods will continue to be presented under existing lease guidance. This updated standard will have a significant impact on its Consolidated Balance Sheets by increasing its assets and liabilities. The Company does not expect the adoption to have a material impact on its Consolidated Statements of Income (Loss) and Consolidated Statements of Cash Flows.

Credit Losses: In June 2016, the FASB updated the accounting guidance related to measurement of credit losses on financial instruments, which requires financial assets measured at amortized cost to be presented at the net amount expected to be collected. This updated guidance is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted. We are currently evaluating the impact on the Company's Consolidated Financial Statements.

Recently Adopted Accounting Standards

Cloud Computing Arrangements: In August 2018, the Financial Accounting Standards Board (FASB) issued an accounting update which aligns the requirements for capitalizing implementation costs incurred in a hosting cloud computing arrangement that is a service contract with the existing capitalization requirements for implementation costs incurred to develop or obtain internal-use software (and hosting cloud computing arrangements that include an internal-use software license). The Company elected to early adopt this standard on July 1, 2018 on a prospective basis. The adoption of this guidance did not have a material impact on the Company’s Consolidated Financial Statements.

Reclassifying Certain Tax Effects From Accumulated Other Comprehensive Income: On December 22, 2017, the Tax Cuts and Jobs Act (Tax Reform) was enacted, lowering the U.S. corporate tax rate from 35% to 21%. The U.S. deferred tax assets and liabilities, including the balances originally recorded to Accumulated Other Comprehensive Income (AOCI), were adjusted to the new tax rate through net income from continuing operations in December 2017. In February 2018, the FASB issued guidance permitting companies, on an elective basis, to reclassify the disproportionate income tax effects of Tax Reform on items within AOCI to retained earnings. The only disproportionate income tax effects in the Company’s AOCI balance in December 2017 related to the U.S. pension plan. The plan was transferred to H.I.G. Capital as part of the U.S. human resource consulting and actuarial business divestiture completed in August 2018. In light of this, the Company adopted this accounting policy effective July 1, 2018 and has reclassified $5 million from AOCI to retained earnings as of September 30, 2018. Refer to the Consolidated Statements of Shareholders' Equity for additional information regarding this reclassification.

Cash Flows: In November 2016, the FASB issued updated accounting guidance regarding the presentation of restricted cash in the Consolidated Statements of Cash Flows. Specifically, this update requires that restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the Consolidated Statements of Cash Flows. The Company adopted this updated accounting guidance on January 1, 2018 using the retrospective method. The adoption of this guidance resulted in a reclassification of restricted cash of $9 million and $26 million for the years ended December 31, 2017 and 2016, respectively, in the Consolidated Statements of Cash Flows.

Revenue Recognition: In May 2014, the FASB updated the accounting guidance related to revenue recognition, which is also referred to herein as "the new revenue standard" to clarify the principles for recognizing revenue and replaced all existing revenue recognition guidance in U.S. GAAP with one accounting model. The core principle of the guidance is that an entity should recognize revenue when the promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. The updated guidance also requires additional qualitative and quantitative disclosures relating to the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers largely on a disaggregated basis. The Company adopted the new revenue standard as of January 1, 2018, using the modified retrospective method. The Company has applied the new revenue standard only to contracts not completed as of the date of initial application. The adoption has primarily impacted the following: (1) revenue associated with postage recognized on a net basis versus previously being recognized on a gross basis; (2) the timing of revenue recognition associated with fixed fees for certain contracts with more than one performance obligation; and (3) the timing of recognition of certain pricing discounts and credits.

The Company recorded a net increase to opening retained earnings of $17 million, a decrease to current and long-term unearned income of $9 million and $6 million, respectively, and increase to contract assets of $7 million and an increase to deferred taxes of $5 million as of January 1, 2018, due to the cumulative impact of adopting this new guidance. The comparative information has not been restated and continues to be reported under the accounting standards in effect for the periods presented.

The impact of the new revenue standard for the year ended December 31, 2018, was a decrease in Revenue of approximately $150 million, primarily as a result of recognizing postage receipts on a net basis, in the Company's Consolidated Statements of Income (Loss). The impact of the new revenue standard, as of and for the period ended December 31, 2018, on the Company's pre-tax income (loss), Consolidated Balance Sheets and Statements of Cash Flows was not material.

Summary of Accounting Policies

Revenue recognition

The Company recognizes revenue when control of the promised goods or services is transferred to its customers, in an amount that reflects the consideration that the Company expects to receive in exchange for those goods or services.

The Company's contracts with customers often include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately, versus together, may require judgment. Typically, the Company's contracts include performance obligation(s) to stand-ready on a daily or monthly basis to provide services to the customers. Under a stand-ready obligation, the evaluation of the nature of our performance obligation is focused on each time increment rather than the underlying activities. Accordingly, the promise to stand-ready is accounted for as a single-series performance obligation.

Once the Company determines the performance obligations, the Company estimates the amount of variable consideration, if any, to be included in determining the transaction price. Typical forms of variable consideration include variable pricing based on the number of transactions processed or usage-based pricing arrangements. Variable consideration is also present in the form of volume discounts, tiered and declining pricing, penalties for service level agreements, performance bonuses and credits. In circumstances where we meet certain requirements to allocate variable consideration to a distinct service within a series of related services, we allocate variable consideration to each distinct period of service within the series. If we do not meet those requirements, we include an estimate of variable consideration in the transaction price to the extent it is probable that a significant reversal of cumulative revenue recognized will not occur when the uncertainty is resolved. For contracts with multiple performance obligations, the transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. The Company generally determines standalone selling prices based on the prices charged to customers or by using expected cost plus margin.

Table of Contents

The Company typically satisfies its performance obligations over time as the services are provided. A time-elapsed output method is used to measure progress because the nature of the Company's promise is a stand-ready service and efforts are expended evenly throughout the period. In limited circumstances, such as contracts for implementation or development projects, the Company also uses a cost-to-cost based input method. The Company has determined that the above methods provide a faithful depiction of the transfer of services to the customer.

Estimates of revenue expected to be recognized in future periods exclude unexercised customer options to purchase additional services that do not represent material rights to the customer. Customer options that do not represent a material right are only accounted for when the customer exercises its option to purchase additional goods or services. The Company recognizes revenue for non-refundable upfront implementation fees on a straight-line basis over the period between the initiation of the services through the end of the contract term.

When more than one party is involved in providing services to a customer, the Company evaluates whether it is the principal, and reports revenue on a gross basis, or an agent, and reports revenue on a net basis. In this assessment, the Company considers the following: if it obtains control of the specified services before they are transferred to the customer; is primarily responsible for fulfillment and inventory risk; and has discretion in establishing price.

The Company reports revenue net of any revenue-based taxes assessed by governmental authorities that are imposed on and concurrent with specific revenue-producing transactions. The primary revenue-based taxes are sales tax and value-added tax (VAT).

The Company's payment terms vary by type of services offered. The time between invoicing and when payment is due is not significant. For certain services and customer types, the Company requires payment before services are rendered.

From time to time, the Company's contracts are modified to account for additions or changes to existing performance obligations. The Company's contract modifications related to stand-ready performance obligations are generally accounted for prospectively.

Disaggregation of Revenue

During the second quarter of 2018, the Company changed how it presents the disaggregated revenue by major service line to reflect the core businesses separate from the non-core businesses. This change had no impact on disaggregated revenue by reportable segment or the timing of revenue recognition.

Table of Contents

The following table provides information about disaggregated revenue by major service line, the timing of revenue recognition and a reconciliation of the disaggregated revenue by reportable segments. Refer to Note 2 – Segment Reporting for additional information on the Company's reportable segments.

(in millions)	Year Ended December 31, 2018
Commercial Industries:	
Omni-channel communications	$ 852
Human resource services	754
Industry services	941
Total Commercial Industries	2,547
Government Services	1,351
Transportation	729
Other:	
Divestitures	752
Education	14
Total Other	766
Total Consolidated Revenue	$ 5,393
Timing of Revenue Recognition:	
Point in time	$ 142
Over time	5,251
Total Revenue	$ 5,393

The Company's contracts with customers are broadly similar in nature throughout the Company's major service lines. The following is a description of the major service lines:

- **Omni-Channel Communications:** The Company offers a range of services that help its clients support their end-users. This includes in-bound and out-bound call support for both simple and complex transactions, technical support and patient assistance. The Company also provides multi-channel communication support (both print and digital) across a range of industries.

- **Human Resource Services:** The Company helps its clients support their employees at all stages of employment from initial on-boarding through retirement as well as health savings account (HSA) administration. The Company offers clients a range of customized advisory, technology and administrative services that improve the ability of employees to manage their benefits, professional development and retirement planning. Also, the Company assists its clients with workers' compensation claims management.

- **Industry Services:** The Company leverages technology to assist its clients with transaction processing as well as providing platform solutions. This includes offerings such as finance and accounting, transaction processing, learning, legal and payment integrity services, among others.

- **Government Services:** The Company's services include public assistance program administration such as child support, pension administration, records management, electronic benefits, eligibility and payment cards, unclaimed property, disease management and software offerings in support of federal, state and local government agencies. The Company also provides payment services, which include prepaid cards, child support disbursements and other government support programs, disbursement of electronic payments directly to end-users, collections and transfer of payments.

- **Transportation:** The Company provides systems and support services to transportation departments and agencies globally. Offerings include support for electronic toll collection, public transit, parking and photo enforcement.

- **Divestitures:** This represents divestitures that were previously reported as Commercial Industries Non-core and Public Sector Non-core.

Table of Contents

Contract Balances

The Company receives payments from customers based upon contractual billing schedules. Accounts receivable are recorded when the right to consideration becomes unconditional. Contract assets are the Company's rights to consideration for services provided when the right is conditioned on something other than passage of time (for example, meeting a milestone for the right to bill under the cost-to-cost measure of progress). Contract assets are transferred to Accounts receivable when the rights become unconditional. Unearned income includes payments received in advance of performance under the contract, which are realized when the associated revenue is recognized under the contract.

The following table provides information about the balances of the Company's contract assets, unearned income and receivables from contracts with customers:

(in millions)	December 31, 2018	January 1, 2018
Contract Assets (Unearned Income)		
Current contract assets(1)	$ 177	$ 191
Long-term contract assets(2)	7	2
Current unearned income	(112)	(128)
Long-term unearned income(3)	(32)	(46)
Net Contract Assets (Unearned Income)	$ 40	$ 19
Accounts receivable, net	$ 782	$ 908

____

(1) Prior to the adoption of the new revenue standard, these amounts were recorded in Accounts receivable, net and represented unbilled amounts.

(2) Presented in Other long-term assets in the Consolidated Balance Sheets

(3) Presented in Other long-term liabilities in the Consolidated Balance Sheets

Revenue of $134 million was recognized during the year ended December 31, 2018 related to the Company's unearned income at January 1, 2018. The Company had no asset impairment charges related to contract assets for the year ended December 31, 2018.

Transaction Price Allocated to the Remaining Performance Obligations

Estimated revenue expected to be recognized in the future related to performance obligations that are unsatisfied or partially satisfied at December 31, 2018, was approximately $2 billion. The Company expects to recognize approximately 67% of the revenues over the next two years and the remainder thereafter.

Costs to Obtain and Fulfill a Contract

The Company capitalizes commission expenses paid to internal sales personnel that are incremental to obtaining customer contracts. The net book value of these costs, which was $24 million as of December 31, 2018, are included in Other long-term assets. The judgments made in determining the amount of costs incurred include whether the commissions are incremental and directly related to a successful acquisition of a customer contract. These costs are amortized in Depreciation and amortization over the term of the contract or the estimated life of the customer relationship, if renewals are expected and the renewal commission is not commensurate with the initial commission. These costs are periodically reviewed for impairment. The Company expenses sales commissions when incurred if the amortization period of the sales commission is one year or less.

In addition, the Company may provide inducement payments to secure customer contracts. These inducement payments are capitalized and amortized to expense over the term of the customer contract. The net book value of these costs totaled $23 million as of December 31, 2018 and are included in Other long-term assets.

Table of Contents

Also, the Company capitalizes costs incurred to fulfill its contracts that (i) relate directly to the contract, (ii) are expected to generate resources that will be used to satisfy the Company's performance obligation under the contract and (iii) are expected to be recovered through revenue generated under the contract. The net book value of these costs, which comprise set-up/transition activities, was $53 million as of December 31, 2018, and are classified in Other long-term assets on the Consolidated Balance Sheets. Contract fulfillment costs are expensed to Cost of services as the Company satisfies its performance obligations by transferring the service to the customer. These costs are amortized on a systematic basis over the expected period of benefit.

The amortization of costs incurred to obtain and fulfill a contract for the year ended December 31, 2018, was approximately $50 million.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand, including money market funds and investments with original maturities of three months or less.

Receivable Sales

In 2018, 2017 and 2016, the Company sold certain accounts receivable and derecognized the corresponding receivable balance. Refer to Note 4 – Accounts Receivable, Net for more details on our receivable sales.

Assets/Liabilities Held for Sale

We classify assets as held for sale in the period when the following conditions are met: (i) management, having the authority to approve the action, commits to a plan to sell the asset (disposal group); (ii) the asset (disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (disposal group); (iii) an active program to locate a buyer and other actions required to complete the plan to sell the asset (disposal group) have been initiated; (iv) the sale of the asset (disposal group) is probable, and transfer of the asset (disposal group) is expected to qualify for recognition as a completed sale within one year, except if events or circumstances beyond our control extend the period of time required to sell the asset (disposal group) beyond one year; (v) the asset (disposal group) is being actively marketed for sale at a price that is reasonable in relation to its current fair value; and (vi) actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

A long-lived asset (disposal group) that is classified as held for sale is initially measured at the lower of its carrying value or fair value less any costs to sell. Any loss resulting from this measurement is recognized in the period in which the held for sale criteria are met. Conversely, gains are not recognized on the sale of a long-lived asset (disposal group) until the date of sale.

The fair value of a long-lived asset (disposal group) less any costs to sell is assessed each reporting period it remains classified as held for sale and any subsequent changes are reported as an adjustment to the carrying value of the asset (disposal group), as long as the new carrying value does not exceed the carrying value of the asset at the time it was initially classified as held for sale.

In both 2018 and 2017, management approved the disposal through sale of certain assets and businesses. This action was taken as a result of our strategic evaluation of these businesses. As of December 31, 2018 and 2017, these businesses qualified as assets held for sale and we reclassified $15 million and $757 million to assets held for sale for 2018 and 2017, respectively, and $40 million and $169 million to liabilities held for sale for 2018 and 2017, respectively.

Refer to Note 3 – Assets/Liabilities Held for Sale and Divestitures for further discussion.

Table of Contents

Land, Buildings and Equipment

Land, buildings and equipment are recorded at cost. Buildings and equipment are depreciated over their estimated useful lives. Leasehold improvements are depreciated over the shorter of the lease term or the estimated useful life. Significant improvements are capitalized and maintenance and repairs are expensed when incurred.

Refer to Note 5 – Land, Buildings, Equipment and Software, Net for further discussion.

Software - Internal Use and Product

Internal Use: We capitalize direct costs associated with developing, purchasing or otherwise acquiring software for internal use and amortize these costs on a straight-line basis over the expected useful life of the software, beginning when the software is implemented. Costs for upgrades and enhancements that will not result in additional functionality are expensed as incurred. Amounts incurred for Internal Use Software are included in Cash Flows from Investing.

Refer to Note 5 – Land, Buildings, Equipment and Software, Net for further information.

Goodwill

For acquired businesses, the Company records the acquired assets and assumed liabilities based on their relative fair values at the date of acquisitions (commonly referred to as the purchase price allocation). Goodwill represents the excess of the purchase price paid in excess of the fair value of net tangible and intangible assets acquired. For the Company’s business acquisitions, the purchase price is allocated to identifiable intangible assets separate from goodwill if they are from contractual or other legal rights, or if they could be separated from the acquired business and sold, transferred, licensed, rented or exchanged.

We test goodwill for impairment annually or more frequently if an event or change in circumstances indicate the asset may be impaired. Impairment testing for goodwill is done at the reporting unit level. We determined the fair value of our reporting units utilizing a combination of both an Income Approach and a Market Approach. The Income Approach utilizes a discounted cash flow analysis based upon the forecasted future business results of our reporting units. The Market Approach utilizes the guideline public company method. If the fair value of a reporting unit is less than its carrying amount, an impairment charge would be recognized for amount by which the carrying amount exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to the reporting unit.

Refer to Note 6 – Goodwill and Intangible Assets, Net for further information.

Other Intangible Assets

Other intangible assets primarily consist of assets acquired through business combinations, including installed customer base and distribution network relationships, patents and trademarks. Other intangible assets are amortized on a straight-line basis over their estimated economic lives unless impairment is identified.

Refer to Note 6 – Goodwill and Intangible Assets, Net for further information.

Impairment of Long-Lived Assets

We review the recoverability of our long-lived assets, including buildings, equipment, internal use software, product software and other intangible assets, when events or changes in circumstances occur that indicate that the carrying value of the asset may not be recoverable. The assessment of possible impairment is based on our ability to recover the carrying value of the asset from the expected future pre-tax cash flows (undiscounted and without interest charges) of the related operations. If these cash flows are less than the carrying value of such asset, an impairment loss is recognized for the difference between estimated fair value and carrying value. Our primary measure of fair value is based on forecasted cash flows.

Table of Contents

Income Taxes

We account for income taxes under the asset and liability method. Deferred tax assets and liabilities are based on differences between U.S. GAAP reporting and tax bases of assets or liabilities and based on current tax laws, regulations and rates.

The recognition of deferred tax assets requires an assessment to determine the realization of such assets. Management establishes valuation allowances on deferred tax assets when it is determined "more-likely-than-not" that some portion or all of the deferred tax assets may not be realized. Management considers positive and negative evidence in evaluating the ability of the Company to realize its deferred tax assets, including its historical results and forecasts of future ability to realize its deferred tax assets, including projected future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies.

We are subject to ongoing tax examinations and assessments in various jurisdictions. We have unrecognized tax benefits for uncertain tax positions. We follow U.S. GAAP which prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Our ongoing assessments of the more-likely-than-not outcomes of the examinations and related tax positions require judgment and can materially increase or decrease our effective tax rate, as well as impact our operating results.

On December 22, 2017, the US enacted the Tax Cuts and Jobs Act (Tax Reform). The Tax Reform includes a tax on global intangible low-taxed income ("GILTI"), which imposes a U.S. tax on certain income earned by the Company's foreign subsidiaries. In January 2018, the FASB released guidance on the accounting for tax on GILTI. The guidance indicates that either accounting for deferred taxes on GILTI or treating GILTI as a period cost are both acceptable accounting elections. The Company elected to treat the tax on GILTI as a period cost when incurred and therefore, no deferred taxes for GILTI have been recognized for the year ended December 31, 2018.

Refer to Note 13 – Income Taxes for further discussion.

Foreign Currency Translation and Re-measurement

The functional currency for most foreign operations is the local currency. Net assets are translated at current rates of exchange and income, expense and cash flow items are translated at average exchange rates for the applicable period. The translation adjustments are recorded in Accumulated other comprehensive loss.

The U.S. Dollar is used as the functional currency for certain foreign subsidiaries that conduct their business in U.S. Dollars. A combination of current and historical exchange rates is used in re-measuring the local currency transactions of these subsidiaries and the resulting exchange adjustments are recorded in Currency (gains) and losses within other expenses, net together with other foreign currency re-measurements.

Table of Contents

Note 2 – Segment Reporting

Our reportable segments correspond to how we organize and manage the business, as defined by our CEO who is also our Chief Operating Decision Maker, and are aligned to the industries in which our clients operate. Our segments involve the delivery of business process services and include service arrangements where we manage a customer's business activity or process.

During 2018, in an effort to better reflect how we manage our business, we segregated our Public Sector segment into Government Services (including Health Enterprise, which was previously reported in Other segment) and Transportation segments. In addition, the Company also reclassified the operating results of our divestitures from the reportable segments to Other segment and separately reflected Shared IT/Infrastructure & Corporate Costs. All prior periods presented have been revised to reflect these changes.

We report our financial performance based on the three reportable segments: Commercial Industries, Government Services and Transportation.

- **Commercial Industries:** Our Commercial Industries segment provides business process services and customized solutions to clients in a variety of industries. Across the Commercial Industries segment, we deliver end-to-end business-to-business and business-to-customer services that enable our clients to optimize their key processes. Our multi-industry competencies include omni-channel communications, human resource management and finance and accounting services.

- **Government Services:** Our Government Services segment provides government-centric business process services to U.S. federal, state and local and foreign governments for, public assistance, program administration, transaction processing and payment services.

- **Transportation:** Our Transportation segment provides systems and support services to transportation departments and agencies globally. Offerings include support for electronic toll collection, public transit, parking and photo enforcement.

Other includes our divestitures and our Student Loan business, which the Company exited in the third quarter of 2018.

Table of Contents

Selected financial information for our reportable segments was as follows:

(in millions)	Year Ended December 31,						
	Commercial Industries	Government Services	Transportation	Other		Shared IT / Infrastructure & Corporate Costs	Total
2018				Divestitures	Other		
Revenue	$ 2,547	$ 1,351	$ 729	$ 752	$ 14	$ —	$ 5,393
Segment profit (loss)	$ 500	$ 424	$ 113	$ 98	$ (18)	$ (695)	$ 422
Segment depreciation and amortization	$ 97	$ 30	$ 36	$ 7	$ 3	$ 48	$ 221
Adjusted EBITDA	$ 597	$ 451	$ 149	$ 105	$ (15)	$ (647)	$ 640
2017							
Revenue	$ 2,685	$ 1,433	$ 767	$ 1,062	$ 75	$ —	$ 6,022
Segment profit (loss)	$ 563	$ 398	$ 114	$ 128	$ 16	$ (802)	$ 417
Segment depreciation and amortization	$ 98	$ 41	$ 43	$ 13	$ 2	$ 57	$ 254
Adjusted EBITDA	$ 661	$ 440	$ 157	$ 141	$ 18	$ (745)	$ 672
2016							
Revenue	$ 2,827	$ 1,575	$ 766	$ 1,109	$ 131	$ —	$ 6,408
Segment profit (loss)	$ 520	$ 421	$ 88	$ 166	$ (149)	$ (850)	$ 196
Segment depreciation and amortization	$ 103	$ 43	$ 41	$ 24	$ 52	$ 70	$ 333
Adjusted EBITDA	$ 623	$ 464	$ 129	$ 190	$ 9	$ (780)	$ 635

The following is a reconciliation of segment profit (loss) profit to pre-tax (loss) income:

(in millions)	Year Ended December 31,		
Segment Profit (Loss) Reconciliation to Pre-tax Income (Loss)	2018	2017	2016
Income (Loss) Before Income Taxes	$ (395)	$ (16)	$ (1,227)
Reconciling items:			
Restructuring and related costs	81	101	101
Amortization of acquired intangible assets	242	243	280
Goodwill impairment	—	—	935
Interest expense	112	137	40
Separation costs	—	12	44
(Gain) loss on divestitures and transaction costs	42	(42)	2
Litigation costs (recoveries), net	227	(11)	40
(Gain) loss on extinguishment of debt	108	—	—
Other (income) expenses, net	5	(7)	(22)
Business transformation costs	—	—	3
Segment Pre-Tax Income (Loss)	$ 422	$ 417	$ 196
Segment depreciation and amortization	221	254	333
NY MMIS depreciation	—	—	(52)
Business transformation costs	—	—	(3)
NY MMIS charge (credit)	(2)	9	161
HE charge (credit)	(1)	(8)	—
Adjusted EBITDA	$ 640	$ 672	$ 635

Table of Contents

Geographic area data is based upon the location of the subsidiary reporting the revenue or long-lived assets and is as follows for each of the years ended December 31:

	Revenues			Long-Lived Assets (1)	
(in millions)	2018	2017	2016	2018	2017
United States	$ 4,748	$ 5,303	$ 5,686	$ 375	$ 289
Europe	497	538	547	28	42
Other areas	148	181	175	62	54
Total Revenues and Long-Lived Assets	$ 5,393	$ 6,022	$ 6,408	$ 465	$ 385

____

(1) Long-lived assets are comprised of (i) Land, buildings and equipment, net, (ii) Internal use software, net and (iii) Product software, net.

In 2016, our methodology to disclose revenue on a geographic basis changed to reflect where the work is contracted.

Note 3 – Assets/Liabilities Held for Sale and Divestitures

In September 2018, the Company entered into an agreement (subject to regulatory approval) to sell a portfolio of select standalone customer care contracts to Skyview Capital LLC. The assets and liabilities related to this portfolio, collectively referred to as the Disposal Group, have been reclassified to held for sale and measured at the lower of carrying value or fair value less cost to sell. The fair value less estimated cost to sell, as measured by the terms of the sale's agreement, was less than the carrying amount by $66 million. Accordingly, the Company recorded a $66 million impairment charge, which included a write-off of goodwill of $11 million and long-lived assets of $11 million. This impairment charge was included in the (Gain) loss on divestitures and transaction costs line in the Consolidated Statements of Income (Loss). This Disposal Group is reported in Other segment. The revenues generated from this business were $439 million and $483 million for the years ended December 31, 2018 and 2017, respectively.

Following is a summary of the major categories of assets and liabilities that have been reclassified to held for sale.

(in millions)	December 31, 2018
Accounts Receivable, net	$ 15
Total Assets held for sale	$ 15
Accounts payable	$ 1
Accrued compensation	16
Unearned revenue	8
Other	15
Total Liabilities held for sale	$ 40

In September 2018, the Company completed the sale of its local and municipal constituent government software solutions business to Avenu Insights & Analytics. The proceeds from this divestiture were $106 million in cash and the transaction generated a pre-tax gain of $0 million. The revenues generated from this business were $81 million and $113 million for the nine months ended September 30, 2018 and for the year ended December 31, 2017, respectively.

In August 2018, the Company completed the sale of its U.S. human resource consulting and actuarial business and the human resource consulting and outsourcing business located in Canada and the United Kingdom (U.K.) to H.I.G. Capital. The proceeds from this divestiture include $168 million in cash paid at closing, $20 million to be collected in installments over four years and a contingent consideration of $6 million. The transaction generated a pre-tax loss of $7 million. The revenues generated from this business were $172 million, which includes $6 million of intercompany revenue and $279 million for the nine months ended September 30, 2018 and for the year ended December 31, 2017, respectively.

In July 2018, the Company completed the sale of its off-street parking business, including the Multipark System in France and the U.K., along with its U.S. Airport Parking business to Andera Partners. The proceeds from this divestiture were $26 million in cash and the transaction generated a pre-tax gain of $8 million. The revenues generated from this business were $18 million and $42 million for the nine months ended September 30, 2018 and for the year ended December 31, 2017, respectively.

In June 2018, the Company completed the sale of its Commercial Vehicle Operations (CVO) business to Alinda Capital Partners. During the third quarter of 2018, the Company recorded a final working capital adjustment for the sale of the CVO business in the amount of $3 million, increasing the total cash proceeds received and pre-tax gain recorded to $403 million and $77 million, respectively. The revenue generated from this business was $33 million and $66 million for the six months ended June 30, 2018 and for the year ended December 31, 2017, respectively.

Note 4 – Accounts Receivable, Net

The Accounts receivable, net balance of $782 million and $1,114 million at December 31, 2018 and 2017, respectively, included allowance for doubtful accounts of $1 million and $2 million at December 31, 2018 and 2017, respectively.

The Company enters into supply chain financing programs from time to time to sell certain accounts receivable without recourse to third-party financial institutions. Sales of accounts receivable are reflected as a reduction of accounts receivable on the Consolidated Balance Sheets and the proceeds are included in cash flow from operating activities in the Consolidated Statements of Cash Flows.

Accounts receivable sales were as follows:

	Year Ended December 31,		
(in millions)	2018	2017	2016
Accounts receivable sales	$ 119	$ 94	$ 259

Note 5 - Land, Buildings, Equipment and Software, Net

Land, buildings and equipment, net were as follows:

(in millions except as noted)	Estimated Useful Lives (Years)	December 31, 2018	December 31, 2017
Land		$ 2	$ 3
Building and building equipment	25 to 50	7	17
Leasehold improvements	Varies	246	247
Office furniture and equipment	3 to 15	901	784
Other	4 to 20	2	1
Construction in progress		64	24
Subtotal		1,222	1,076
Accumulated depreciation		(894)	(819)
Land, Buildings and Equipment, Net		$ 328	$ 257

Depreciation expense and operating lease rent expense were as follows:

(in millions)	Year Ended December 31, 2018	2017	2016
Depreciation expense	$ 121	$ 125	$ 130
Operating lease rent expense	$ 208	$ 267	$ 299

We lease buildings and equipment, substantially all of which are accounted for as operating leases. Certain leases were accounted for as capital leases and the remaining net book value of those assets, included in Land, Buildings and Equipment, net were approximately $24 million and $32 million at December 31, 2018 and 2017, respectively.

Future minimum operating lease commitments that have initial or remaining non-cancelable lease terms in excess of one year at December 31, 2018 were as follows (in millions):

2019	2020	2021	2022	2023	Thereafter
$ 153	$ 113	$ 78	$ 53	$ 33	$ 76

Internal Use and Product Software

Internal use and product software are included in Other long-term assets on the Company's Consolidated Balance Sheets. Additions to Internal Use and Product Software as well as year-end balances for these assets were as follows:

(in millions) Additions to:	Year Ended December 31, 2018	2017	2016
Internal use software	$ 47	$ 36	$ 39
Product software	8	10	10

Table of Contents

(in millions)	December 31,	
Capitalized Costs, Net	2018	2017
Internal use software(1)	$ 123	$ 106
Product software(1)	18	22

____
(1) See Note 8 – Supplementary Financial Information for additional information.

Useful lives of our internal use and product software generally vary from one to seven years.

During 2016 we determined that it was probable that we would not fully complete our NY MMIS project in its current form. As a result of this decision an impairment charge of approximately $28 million was recorded in Cost of services. We also recorded an additional impairment charge in 2016 related to the 2015 HE charge of approximately $9 million in Restructuring and asset impairment.

Note 6 - Goodwill and Intangible Assets, Net

Goodwill

The following table presents the changes in the carrying amount of goodwill, by reportable segments:

(in millions)	Commercial Industries	Government Services	Transportation	Total
Balance at December 31, 2016	$ 1,504	$ 1,738	$ 647	$ 3,889
Foreign currency translation	19	—	28	47
Disposition	(19)	(14)	—	(33)
Assets held-for-sale	(105)	(414)	(18)	(537)
Balance at December 31, 2017	**$ 1,399**	**$ 1,310**	**$ 657**	**$ 3,366**
Foreign currency translation	(10)	—	(16)	(26)
Assets held-for-sale	(12)	—	—	(12)
Other(1)	14	66	—	80
Balance at December 31, 2018	**$ 1,391**	**$ 1,376**	**$ 641**	**$ 3,408**

____
(1) Represents 2018 true-up to the 2017 Assets held for sale.

Impairment Charge

There was no impairment identified for the years ended December 31, 2018 and 2017. In 2016, due to the declining trends and projections in the Commercial Industries reporting unit, we concluded that the fair value of our Commercial Industries reporting unit was less than its carrying value. Accordingly, we recorded a pre-tax goodwill impairment charge of $935 million during the fourth quarter of 2016, which is separately presented in the Consolidated Statements of Income (Loss). There was no impairment identified for the Public Sector in 2016.

Table of Contents

Intangible Assets, Net

Net intangible assets were $651 million at December 31, 2018 of which $417 million, $160 million and $74 million relate to our Commercial Industries, Government Services and Transportation segments, respectively. Intangible assets were comprised of the following:

		December 31, 2018			December 31, 2017		
(in millions except years)	Weighted Average Amortization	Gross Carrying Amount	Accumulated Amortization	Net Amount	Gross Carrying Amount	Accumulated Amortization	Net Amount
Customer relationships	11 years	$ 2,914	$ 2,264	$ 650	$ 2,907	$ 2,022	$ 885
Technology, patents and non-compete	4 years	6	5	1	11	5	6
Total Intangible Assets		$ 2,920	$ 2,269	$ 651	$ 2,918	$ 2,027	$ 891

Amortization expense related to intangible assets was $242 million, $243 million and $280 million for the years ended December 31, 2018, 2017 and 2016, respectively. Amortization expense is expected to approximate $241 million in 2019, $238 million in 2020, $134 million in 2021, $12 million in 2022 and $6 million in 2023.

Note 7 – Restructuring Programs and Related Costs

The Company engages in a series of restructuring programs related to downsizing its employee base, exiting certain activities, outsourcing certain internal functions and engaging in other actions designed to reduce its cost structure and improve productivity. The implementation of the Company's strategic transformation program and various productivity initiatives have reduced the Company's real estate footprint across all geographies and segments resulting in increased lease cancellation and other related costs. Also included in Restructuring and Related Costs are incremental, non-recurring costs related to the consolidation of our data centers. Management continues to evaluate the Company's business and in the future, there may be additional provisions for new plan initiatives and/or changes in previously recorded estimates as payments are made or actions are completed.

Costs associated with restructuring, including employee severance and lease termination costs, are generally recognized when it has been determined that a liability has been incurred, which is generally upon communication to the affected employees or exit from the leased facility. In those geographies where we have either a formal severance plan or a history of consistently providing severance benefits representing a substantive plan, we recognize employee severance costs when they are both probable and reasonably estimable.

A summary of our restructuring program activity during the two years ended December 31, 2018 is as follows:

(in millions)	Severance and Related Costs	Lease Cancellation and Other Costs	Total
Balance at December 31, 2016	$ 15	$ 6	$ 21
Restructuring provision	49	54	103
Adjustments to prior accruals	(8)	(3)	(11)
Total Net Current Period Charges	41	51	92
Payments against reserve and currency	(42)	(23)	(65)
Other	—	(4)	(4)
Balance at December 31, 2017	$ 14	$ 30	$ 44
Restructuring provision	39	39	78
Adjustments to prior accruals	(5)	5	—
Total Net Current Period Charges	34	44	78
Payments against reserve and currency	(35)	(40)	(75)
Other	—	2	2
Balance at Balance at December 31, 2018	$ 13	$ 36	$ 49

Table of Contents

We also recorded costs related to professional support services associated with the implementation of the strategic transformation program of $3 million, $9 million and $28 million during the years ended December 31, 2018, 2017 and 2016, respectively.

The following table summarizes the total amount of costs incurred in connection with these restructuring programs by reportable and non-reportable segments:

	Year Ended December 31,		
(in millions)	2018	2017	2016
Commercial Industries	$ 26	$ 15	$ 27
Government Services	1	2	3
Transportation	3	1	2
Other	6	4	17
Corporate	42	70	24
Total Net Restructuring Charges	$ 78	$ 92	$ 73

Table of Contents

Note 8 – Supplementary Financial Information

The components of Other assets and liabilities were as follows:

(in millions)	December 31, 2018	2017
Other Current Assets		
Prepaid expenses	$ 87	$ 73
Income taxes receivable	40	13
Value-added tax (VAT) receivable	22	18
Restricted cash	9	9
Other	76	68
Total Other Current Assets	$ 234	$ 181
Other Current Liabilities		
Accrued liabilities	$ 307	$ 320
Legal settlements	147	62
Software accruals	23	17
Restructure reserves	36	32
Income tax payable	3	6
Other taxes payable	15	7
Other	36	49
Total Other Current Liabilities	$ 567	$ 493
Other Long-term Assets		
Internal use software, net	$ 123	$ 106
Deferred contract costs, net[1]	100	126
Product software, net	18	22
Other	88	70
Total Other Long-term Assets	$ 329	$ 324
Other Long-term Liabilities		
Legal settlements	$ 144	$ —
Income tax liabilities	29	20
Unearned income	32	54
Restructuring reserves	13	12
Other	62	60
Total Other Long-term Liabilities	$ 280	$ 146

_____

(1) The balances at December 31, 2018 and 2017 are expected to be amortized over a weighted average remaining life of approximately 10 and 9 years, respectively.

Amortization expense for the next five years and thereafter for deferred contract costs is expected as follows:

2019	2020	2021	2022	2023	Thereafter
$ 41	$ 13	$ 8	$ 6	$ 2	$ 30

Table of Contents

Note 9 – Debt

We classify our debt based on the contractual maturity dates of the underlying debt instruments or as of the earliest put date available to the debt holders. We defer costs associated with debt issuance over the applicable term. These costs are amortized as interest expense in our Consolidated Statements of Income (Loss).

Long-term debt was as follows:

(in millions)	Weighted Average Interest Rates at December 31, 2018(1)	December 31, 2018	December 31, 2017
Term loan A due 2022	3.42%	$ 705	$ 732
Term loan B due 2023	5.44%	833	842
Senior notes due 2024	7.71%	34	510
Capital lease obligations	2.08%	26	33
Principal Debt Balance		$ 1,598	$ 2,117
Debt issuance costs and unamortized discounts		(31)	(56)
Less: current maturities		(55)	(82)
Total Long-term Debt		$ 1,512	$ 1,979

(1) Represents weighted average effective interest rate which includes the effect of discounts and premiums on issued debt.

Scheduled principal payments due on our long-term debt for the next five years and thereafter are as follows:

2019	2020	2021	2022	2023	Thereafter	Total
$ 55	$ 50	$ 84	$ 576	$ 800	$ 33	$ 1,598

Credit Facility

On December 7, 2016, we entered into a senior secured credit agreement (Credit Agreement) among the Company, its subsidiaries: Conduent Business Services, LLC (CBS), Affiliated Computer Services International B.V. and Conduent Finance, Inc. (CFI), the lenders party and JP Morgan Chase Bank, N.A., as the administrative agent. The Credit Agreement contains senior secured credit facilities (Senior Credit Facilities) consisting of:

(i) Senior Secured Term Loan A (Term Loan A) with an aggregate principal amount of $700 million;
(ii) Senior Secured Term Loan B (Term Loan B) with an aggregate principal amount of $850 million;
(iii) Senior Revolving Credit Facility (Revolving Credit Facility) with an aggregate available amount of $750 million including a sub-limit for up to $300 million million available for the issuance of letters of credit.

As of December 31, 2018, we have utilized $12 million of our revolving credit facility capacity to issue letters of credit.

The Credit Agreement permits us to incur incremental term loan borrowings and /or increase commitments under the revolving credit facility, subject to certain limitations and satisfaction of certain conditions, in an aggregate amount not to exceed (i) $300 million plus, (ii) if the senior secured net leverage ratio of Conduent Business Services (CBS) and its subsidiaries does not exceed 2.25 to 1.00 on a pro forma basis (without giving effect to any incurrence under clause (i) that is incurred substantially simultaneously with amounts incurred under clause (ii)), an unlimited amount.

All obligations under the Credit Agreement are unconditionally guaranteed by the Company, CBS, Conduent Finance, Inc. (CFI) and the existing and future direct and indirect wholly owned domestic subsidiaries of CBS (subject to certain exceptions). All obligations under the Credit Agreement, and the guarantees of those obligations, are secured, subject to certain exceptions, by substantially all of the assets of CBS and the guarantors under the Credit Agreement (other than the Company and CFI), including a first-priority pledge of all the capital stock of CBS and the subsidiaries of CBS directly held by CBS or the guarantors (other than the Company and CFI) under the

Table of Contents

Credit Agreement (which pledges, in the case of any foreign subsidiary, will be limited to 65% of the capital stock of any first-tier foreign subsidiary).

The Credit Agreement contains certain customary affirmative and negative covenants, restrictions and events of default. The Credit Agreement requires total net leverage ratio for December 31, 2018 and thereafter not to exceed 3.75 to 1.00.

Senior Notes

The Senior Notes are jointly and severally guaranteed on a senior unsecured basis by the Company and each of the existing and future domestic subsidiaries of CFI or CBS that guarantee the obligations under the Senior Credit Facilities.

Interest is payable semi-annually. At the option of the Issuers, the Senior Notes are redeemable in whole or in part, at any time prior to December 15, 2020, at a price equal to 100% of the aggregate principal amount of the Senior Notes plus accrued and unpaid interest, if any, to, but excluding, the redemption date plus a “make-whole” premium. The Issuers may also redeem the Senior Notes, in whole or in part, at any time on or after December 15, 2020, at the redemption prices specified in the Indenture, plus accrued and unpaid interest, if any, to but excluding the redemption date. Additionally, at any time prior to December 15, 2019, the Issuers may redeem up to 35% of the aggregate principal amount of the Senior Notes, subject to certain conditions, with the net cash proceeds from certain equity offerings at a price equal to 110.50% of the principal amount of the Senior Notes, plus accrued and unpaid interest, if any, to, but excluding, the redemption date.

Loans Repricing and Redemption

On June 28, 2018, the Company entered into Amendment No. 3 (Amendment) to the December 7, 2016 Credit Agreement, which (i) extended the revolving credit maturity from December 7, 2021 to December 7, 2022 and reduced the interest rate on the revolving credit by 0.5% from 2.25% over LIBOR to 1.75% over LIBOR; (ii) extended the maturity date of the Term A Loans from December 7, 2021 to December 7, 2022 and reduced the interest rate by 0.5% from 2.25% over LIBOR to 1.75% over LIBOR, and (iii) reduced the interest rate on the Term B Loans by 0.5% from 3.0% over LIBOR to 2.5% over LIBOR. These transactions resulted in a write-off of unamortized discount and issuance costs of $3 million.

In July 2018, the Company redeemed $476 million of its $510 million 10.50% Senior Notes due 2024. As part of the redemption, the Company paid a premium of $95 million and wrote off the associated unamortized discount and issuance costs of $13 million.

Interest

Interest paid on our short-term and long-term debt amounted to $100 million, $129 million, $5 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Interest expense and interest income was as follows:

	Year Ended December 31,		
(in millions)	2018	2017	2016
Interest expense	$ 112	$ 137	$ 40
Interest income	7	3	3

Table of Contents

Note 10 – Financial Instruments

We are exposed to market risk from changes in foreign currency exchange rates and interest rates, which could affect operating results, financial position and cash flows. We manage our exposure to these market risks through our regular operating and financing activities and, when appropriate, through the use of derivative financial instruments. These derivative financial instruments are utilized to hedge economic exposures, as well as to reduce earnings and cash flow volatility resulting from shifts in market rates. We enter into limited types of derivative contracts to manage foreign currency exposures that we hedge. Our primary foreign currency market exposures include the Philippine Peso, Indian Rupee and Mexican Peso. The fair market values of all our derivative contracts change with fluctuations in interest rates or currency exchange rates and are designed so that any changes in their values are offset by changes in the values of the underlying exposures. Derivative financial instruments are held solely as risk management tools and not for trading or speculative purposes. The related cash flow impacts of all of our derivative activities are reflected as cash flows from operating activities.

We do not believe there is significant risk of loss in the event of non-performance by the counterparty associated with our derivative instruments because these transactions are executed with a major financial institution. Further, our policy is to deal only with counterparties having a minimum investment grade or better credit rating. Credit risk is managed through the continuous monitoring of exposures to such counterparties.

Summary of Foreign Exchange Hedging Positions

At December 31, 2018 and 2017, we had outstanding forward exchange with gross notional values of $167 million and $160 million, respectively. At December 31, 2018, approximately 65% of these contracts mature within three months, 14% in three to six months, 17% in six to twelve months and 4% in greater than 12 months.

The following is a summary of the primary hedging positions and corresponding fair values:

	December 31, 2018		December 31, 2017	
(in millions)	Gross Notional Value	Fair Value Asset (Liability)(1)	Gross Notional Value	Fair Value Asset (Liability)(1)
Currencies Hedged (Buy/Sell)				
Philippine Peso/U.S. Dollar	$ 53	$ —	$ 62	$ —
Indian Rupee/U.S. Dollar	69	2	68	1
Mexican Peso/U.S. Dollar	8	—	9	—
All Other	37	—	21	—
Total Foreign Exchange Hedging	$ 167	$ 2	$ 160	$ 1

(1) Represents the net receivable (payable) amount included in the Consolidated Balance Sheet.

Note 11 – Fair Value of Financial Assets and Liabilities

Fair value represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. U.S. GAAP established a hierarchy framework to classify the fair value based on the observability of significant inputs to the measurement. The levels of the fair value hierarchy are as follows:

Level 1: Fair value is determined using an unadjusted quoted price in an active market for identical assets or liabilities.

Level 2: Fair value is estimated using inputs other than quoted prices included within Level 1 that are observable, either directly or indirectly.

Level 3: Fair value is estimated using unobservable inputs that are significant to the fair value of the assets or liabilities.

Table of Contents

Summary of Financial Assets and Liabilities Accounted for at Fair Value on a Recurring Basis

The following table represents assets and liabilities measured at fair value on a recurring basis. The basis for the measurement at fair value in all cases was Level 2.

(in millions)	December 31, 2018	December 31, 2017
Assets:		
Foreign exchange contract - forward	$ 3	$ 2
Total Assets	$ 3	$ 2
Liabilities:		
Foreign exchange contracts - forwards	$ 1	$ 1
Deferred compensation plan liabilities(1)	—	99
Total Liabilities	$ 1	$ 100

(1) In September 2017, the Company terminated the legacy deferred compensation plans (Plans) and the Company Owned Life Insurance (COLI), which held the Plans' investments. The Company made the payments to Plan participants in 2018.

Summary of Other Financial Assets and Liabilities

The estimated fair values of our other financial assets and liabilities were as follows:

	December 31, 2018		December 31, 2017	
(in millions)	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Assets:				
Assets held for sale	$ 15	$ 15	$ 757	$ 757
Liabilities:				
Long-term debt	$ 1,512	$ 1,463	$ 1,979	$ 2,070
Liabilities held for sale	$ 40	$ 40	$ 169	$ 169

The fair value amounts for Cash and cash equivalents, Restricted cash, Accounts receivable, net and Short-term debt approximate carrying amounts due to the short-term maturities of these instruments.

The fair value of the Assets held for sale and the Liabilities held for sale were measured based on the sale's price less estimated transactions costs (Level 3). Refer to Note 3 – Assets/Liabilities Held for Sale and Divestitures to the Consolidated Financial Statements for additional information.

The fair value of Long-term debt was estimated based on the current rates offered to the Company for debt of similar maturities (Level 2).

Note 12 – Employee Benefit Plans

Defined Benefit Plans

In 2018, all of the U.S. and the majority of the international plan assets and obligations were part of the divestiture of the U.S. human resource consulting and actuarial business and the human resource consulting and outsourcing business located in Canada and the U.K. The company's remaining benefit obligations and plan assets in 2018 were $12 million and $3 million, respectively.

As of December 31, 2017 the Company had a pension benefit obligation of $280 million ($102 million in the US and $178 million from non-US plans). The plans also had assets of approximately $222 million ($62 million in the US and $160 million from non-US plans), in which the assets were invested primarily in equity and fixed income securities (level 1 and level 2).

Table of Contents

Defined Contribution Plans

We have post-retirement savings and investment plans in several countries, including the U.S., U.K. and Canada. In many instances, employees from those defined benefit pension plans that have been amended to freeze future service accruals were transitioned to an enhanced defined contribution plan. In these plans employees are allowed to contribute a portion of their salaries and bonuses to the plans, and we match a portion of the employee contributions. We recorded charges related to our defined contribution plans of $28 million in 2018, $35 million in 2017 and $35 million in 2016.

Note 13 - Income Taxes

Prior to the Separation, Conduent's operating results were included in Xerox Corporation's various consolidated U.S. federal and state income tax returns, as well as non-U.S. tax filings. For the purposes of the Company's Consolidated Financial Statements for periods prior to the Separation, income tax expense and deferred tax balances have been recorded as if the Company filed tax returns on a standalone basis separate from Xerox. The Separate Return Method applies the accounting guidance for income taxes to the standalone financial statements as if the Company was a separate taxpayer and a standalone enterprise for fiscal 2016.

On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (Tax Reform). The Tax Reform significantly changes the U.S. corporate income tax laws by, among other things, reducing the corporate income tax rate to 21% starting in 2018 and creating a territorial tax system with a one-time mandatory tax on previous deferred foreign earnings of U.S. subsidiaries. With respect to this legislation, the Company recorded a provisional tax benefit of $198 million in the fourth quarter of 2017, which included a $210 million tax benefit due to the re-measurement of deferred tax assets and liabilities resulting from the decrease in the corporate U.S. federal income tax rate from 35% to 21% and $12 million as a one-time-charge on the transition tax for Post-1986 undistributed and not previously taxed foreign earnings and profits. The Company finalized its accounting for this legislation in the fourth quarter of 2018 and recognized a $2 million additional benefit year to date, included as a component of income tax expense from continuing operations. The true-up of the provisional benefit includes $5 million additional benefit due to re-measurement of deferred tax assets and liabilities resulting from the decrease in the U.S. corporate federal income tax rate, a $1 million reduction in the one-time charge on the transition tax and a $4 million charge due to change in recognition of deferred tax assets related to deductibility of certain expenses.

Income (loss) before income taxes (pre-tax income (loss)) was as follows:

	Year Ended December 31,		
(in millions)	2018	2017	2016
Domestic loss	$ (411)	$ (91)	$ (1,329)
Foreign income	16	75	102
Loss Before Income Taxes	$ (395)	$ (16)	$ (1,227)

Provision (benefit) for income taxes were as follows:

	Year Ended December 31,		
(in millions)	2018	2017	2016
Federal Income Taxes			
Current	$ 35	$ 4	$ (116)
Deferred	(62)	(233)	(132)
Foreign Income Taxes			
Current	41	25	31
Deferred	(6)	(3)	(3)
State Income Taxes			
Current	20	8	1
Deferred	(7)	6	(25)
Total Benefit	$ 21	$ (193)	$ (244)

Table of Contents

A reconciliation of the U.S. federal statutory income tax rate to the consolidated effective income tax rate was as follows:

	Year Ended December 31,		
	2018	2017	2016
U.S. federal statutory income tax rate	21.0 %	35.0 %	35.0 %
Nondeductible expenses(1)	(3.7)%	(104.0)%	(19.0)%
Effect of tax law changes	0.5 %	1,282.4 %	— %
Change in valuation allowance for deferred tax assets	(1.7)%	(39.5)%	0.1 %
State taxes, net of federal benefit	(2.3)%	1.2 %	1.8 %
Audit and other tax return adjustments	— %	— %	1.4 %
Tax-exempt income, credits and incentives	2.2 %	38.9 %	0.7 %
Foreign rate differential adjusted for U.S. taxation of foreign profits(2)	1.9 %	47.7 %	0.7 %
Divestitures(3)	(20.3)%	(51.9)%	— %
Unrecognized tax benefits and other	(2.9)%	(3.5)%	(0.8)%
Effective Income Tax Rate	(5.3)%	1,206.3 %	19.9 %

(1) In 2017, nondeductible expenses primarily related to officers life insurance.
(2) The “U.S. taxation of foreign profits” represents the U.S. tax, net of foreign tax credits, associated with actual and deemed repatriations of earnings from our non-U.S. subsidiaries.
(3) 2018 and 2017 divestitures include nondeductible goodwill allocated to divested businesses.

On a consolidated basis, we paid/(received) a total of $108 million, $29 million and $(123) million in income taxes to federal, foreign and state jurisdictions during the three years ended December 31, 2018, 2017 and 2016, respectively.

Total income tax expense (benefit) was allocated as follows:

	Year Ended December 31,		
(in millions)	2018	2017	2016
Pre-tax income	$ 21	$ (193)	$ (244)
Discontinued operations	—	3	—
Common shareholders' equity:			
Changes in defined benefit plans	—	—	8
Stock option and incentive plans, net	—	—	—
Total Income Tax Expense (Benefit)	$ 21	$ (190)	$ (236)

Unrecognized Tax Benefits and Audit Resolutions

We recognize tax liabilities when, despite our belief that our tax return positions are supportable, we believe that certain positions may not be fully sustained upon review by tax authorities. Each period we assess uncertain tax positions for recognition, measurement and effective settlement. Benefits from uncertain tax positions are measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon settlement. Where we have determined that our tax return filing position does not satisfy the more-likely-than-not recognition threshold, we have recorded no tax benefits.

We are also subject to ongoing tax examinations in numerous jurisdictions due to the extensive geographical scope of our operations. Our ongoing assessments of the more-likely-than-not outcomes of the examinations and related tax positions require judgment and can increase or decrease our effective tax rate, as well as impact our operating results. The specific timing of when the resolution of each tax position will be reached is uncertain. As of December 31, 2018, we do not believe that there are any positions for which it is reasonably possible that the total amount of unrecognized tax benefits will significantly increase or decrease within the next 12 months.

Table of Contents

A reconciliation of the beginning and ending amount of unrecognized tax benefits was as follows:

(in millions)	2018	2017	2016
Balance at January 1	$ 15	$ 14	$ 24
Additions related to current year	3	—	1
Additions related to prior years positions	5	—	—
Reductions related to prior years positions	—	—	(5)
Settlements with taxing authorities[1]	(1)	—	(5)
Currency	(2)	1	(1)
Balance at December 31	$ 20	$ 15	$ 14

(1) 2018 and 2016 settlement resulted in $1 million and $5 million cash paid, respectively.

We maintain offsetting benefits from other jurisdictions of $15 million, $16 million and $16 million, at December 31, 2018, 2017 and 2016, respectively. We recognized interest and penalties accrued on unrecognized tax benefits, as well as interest received from favorable settlements within income tax expense. We had $10 million, $6 million and $4 million accrued for the payment of interest and penalties associated with unrecognized tax benefits at December 31, 2018, 2017 and 2016, respectively. In the U.S., we are no longer subject to U.S. federal income tax examinations for years before 2012. With respect to our major foreign jurisdictions, the years generally remain open back to 2006.

Deferred Income Taxes

The Company is indefinitely reinvested in the undistributed earnings of its foreign subsidiaries with respect to the U.S. These foreign subsidiaries have aggregate cumulative undistributed earnings of $164 million as of December 31, 2018. For years after 2017, the Tax Reform does allow for certain earnings to be repatriated free from U.S. Federal taxes. However, the repatriation of earnings could give rise to additional tax liabilities. We have also not provided for deferred taxes on outside basis differences in our investments in our foreign subsidiaries that are unrelated to unremitted earnings. These other basis differences will also be indefinitely reinvested. A determination of the unrecognized deferred taxes related to these other components of our outside basis differences is not practicable. We have provided for deferred taxes with respect to certain unremitted earnings of foreign subsidiaries that are not indefinitely reinvested between foreign subsidiaries outside of the U.S.

Table of Contents

The tax effects of temporary differences that give rise to significant portions of the deferred taxes were as follows:

	December 31,	
(in millions)	2018	2017
Deferred Tax Assets		
Net operating losses	$ 46	$ 41
Operating reserves, accruals and deferrals	68	85
Deferred compensation	16	59
Pension	2	15
Settlement reserves	67	18
Other	11	27
Subtotal	210	245
Valuation allowance	(44)	(35)
Total	$ 166	$ 210
Deferred Tax Liabilities		
Unearned income	$ 86	$ 134
Intangibles and goodwill	341	413
Depreciation	30	5
Other	24	25
Total	$ 481	$ 577
Total Deferred Taxes, Net	$ (315)	$ (367)

The deferred tax assets for the respective periods were assessed for recoverability and, where applicable, a valuation allowance was recorded to reduce the total deferred tax asset to an amount that will, more-likely-than-not, be realized in the future. The net change in the total valuation allowance for the years ended December 31, 2018 and 2017 was an increase of $9 million and $11 million, respectively. The valuation allowance relates primarily to certain net operating loss carryforwards, tax credit carryforwards and deductible temporary differences for which we have concluded it is more-likely-than-not that these items will not be realized in the ordinary course of operations.

Although realization is not assured, we have concluded that it is more-likely-than-not that the deferred tax assets, for which a valuation allowance was determined to be unnecessary, will be realized in the ordinary course of operations based on the available positive and negative evidence, including scheduling of deferred tax liabilities and projected income from operating activities. The amount of the net deferred tax assets considered realizable, however, could be reduced in the near term if actual future income or income tax rates are lower than estimated, or if there are differences in the timing or amount of future reversals of existing taxable or deductible temporary differences.

At December 31, 2018, we had tax credit carryforwards of $9 million available to offset future income taxes which will expire between 2019 and 2038 if not utilized. We also had net operating loss carryforwards for income tax purposes of $417 million that will expire between 2019 and 2038, if not utilized; and $54 million available to offset future taxable income indefinitely.

Table of Contents

Note 14 – Contingencies and Litigation

As more fully discussed below, the Company is involved in a variety of claims, lawsuits, investigations and proceedings concerning: governmental entity contracting, servicing and procurement law; intellectual property law; employment law; commercial and contracts law; the Employee Retirement Income Security Act (ERISA); and other laws and regulations. The Company determines whether an estimated loss from a contingency should be accrued by assessing whether a loss is deemed probable and can be reasonably estimated. The Company assesses its potential liability by analyzing its litigation and regulatory matters using available information. The Company develops its view on estimated losses in consultation with outside counsel handling its defense in these matters, which involves an analysis of potential results, assuming a combination of litigation and settlement strategies. Should developments in any of these matters cause a change in the Company's determination as to an unfavorable outcome and result in the need to recognize a material accrual, or should any of these matters result in a final adverse judgment or be settled for significant amounts in excess of any accrual for such matter or matters, this could have a material adverse effect on the Company's results of operations, cash flows and financial position in the period or periods in which such change in determination, judgment or settlement occurs. The Company believes it has recorded adequate provisions for any such matters as of December 31, 2018. Litigation is inherently unpredictable, and it is not possible to predict the ultimate outcome of these matters and such outcome in any such matters could be in excess of any amounts accrued and could be material to the Company's results of operations, cash flows or financial position in any reporting period.

Additionally, guarantees, indemnifications and claims arise during the ordinary course of business from relationships with suppliers, customers and non-consolidated affiliates when the Company undertakes an obligation to guarantee the performance of others if specified triggering events occur. Nonperformance under a contract could trigger an obligation of the Company. These potential claims include actions based upon alleged exposures to products, real estate, intellectual property such as patents, environmental matters and other indemnifications. The ultimate effect on future financial results is not subject to reasonable estimation because considerable uncertainty exists as to the final outcome of these claims. However, while the ultimate liabilities resulting from such claims may be significant to results of operations in the period recognized, management does not anticipate they will have a material adverse effect on the consolidated financial position or liquidity. As of December 31, 2018, the Company had accrued its estimate of liability incurred under its indemnification arrangements and guarantees.

Table of Contents

Litigation Against the Company

State of Texas v. Xerox Corporation, Conduent Business Services, LLC (f/k/a Xerox Business Services, LLC), Conduent State Healthcare, LLC (f/k/a Xerox State Healthcare, LLC, f/k/a ACS State Healthcare, LLC) and Conduent Incorporated: On May 9, 2014, the State of Texas, via the Texas Office of Attorney General (the “State”), filed a lawsuit in the 53rd Judicial District Court of Travis County, Texas. The lawsuit alleges that Xerox Corporation, Xerox State Healthcare, LLC and ACS State Healthcare (collectively, the "Xerox Defendants") violated the Texas Medicaid Fraud Prevention Act in the administration of its contract with the Texas Department of Health and Human Services (“HHSC”). The State alleges that the Xerox Defendants made false representations of material facts regarding the processes, procedures, implementation and results regarding the prior authorization of orthodontic claims. The State seeks recovery of amounts paid for orthodontic treatment under the Texas Medicaid program for the period from approximately 2004 to 2012, three times the amount of the payments made as a result of the alleged unlawful acts, civil penalties, pre- and post-judgment interest and all costs and attorneys’ fees. The Xerox Defendants filed their Answer in June, 2014 denying all allegations. A trial date was originally scheduled for November, 2018. During the first quarter of 2018, the State notified the Xerox Defendants in the litigation discovery process that its claim is in excess of two billion dollars based primarily on the assertion of treble damages and civil penalties per illegal act for almost two hundred thousand purported illegal acts. During the second quarter of 2018, the trial date was rescheduled for May, 2019. During October of 2018, discussions with the State were undertaken to determine if a mutually acceptable settlement might be reached. Those discussions were not productive. In the wake of those discussions, we recorded an additional $72 million reserve during the third quarter of 2018, increasing our aggregate reserve for this matter as of September 30, 2018, to $110 million. During December 2018, we re-engaged with the State in discussions to settle the matter. In February 2019, those discussions culminated in a settlement agreement and release among the Xerox Defendants, the State and HHSC. Pursuant to the terms of the Texas Agreement ("Texas Agreement"), the Company will pay the State of Texas $236 million in full settlement of the claims asserted against the Xerox Defendants. This amount is payable in installments of: (1) $20 million within 10 days of execution of the settlement agreement; (2) $20 million by April 15, 2019; (3) $38 million by July 31, 2019; (4) $79 million by July 31, 2020; and (5) $79 million by July 31, 2021. The Agreement does not prevent the Company from prepaying the foregoing amounts and the Company is currently considering whether to do so. The Company does not intend to make further disclosure regarding a possible prepayment unless it actually prepays such amounts in whole or in part. As part of the settlement, all proceedings in the lawsuit are suspended and the State and the HHSC will dismiss the lawsuit with prejudice and release the Xerox Defendants from all of the State’s claims after all settlement payments are made. As a result of entering into the Texas Agreement, the Company recorded an additional reserve of $113 million in the quarter ended December 31, 2018 which is net of a $13 million discount to reflect the fair value of the liability. The Defendants’ have not made any admission of liability or wrongdoing in entering into the Texas Agreement.

Table of Contents

Dennis Nasrawi v. Buck Consultants et al.: On October 8, 2009, plaintiffs filed a lawsuit in the Superior Court of California, Stanislaus County, and on November 24, 2009, the case was removed to the U.S. Court for the Eastern District of California, Fresno Division. Plaintiffs allege actuarial negligence against Buck Consultants, LLC ("Buck"), which was a wholly-owned subsidiary of Conduent, for the use of faulty actuarial assumptions in connection with the 2007 actuarial valuation for the Stanislaus County Employees Retirement Association ("StanCERA"). Plaintiffs allege that the employer contribution rate adopted by StanCERA based on Buck's valuation was insufficient to fund the benefits promised by the County. On July 13, 2012, the Court entered its ruling that the plaintiffs lacked standing to sue in a representative capacity on behalf of all plan participants. The Court also ruled that plaintiffs had adequately pleaded their claim that Buck allegedly aided and abetted StanCERA in breaching its fiduciary duty. Plaintiffs then filed their Fifth Amended Complaint and added StanCERA to the litigation. Buck and StanCERA filed demurrers to the amended complaint. On September 13, 2012, the Court sustained both demurrers with prejudice, completely dismissing the matter and barring plaintiffs from refiling their claims. Plaintiffs appealed, and ultimately the California Court of Appeals (Sixth District) reversed the trial court's ruling and remanded the case back to the trial court as to Buck only, and only with respect to Plaintiff's claim of aiding and abetting StanCERA in breaching its fiduciary duty. This case has been stayed pending the outcome of parallel litigation the plaintiffs are pursuing against StanCERA. The parallel litigation was tried before the bench in June 2018, and on January 24, 2019, the court found in favor of StanCERA, holding that it had not breached its fiduciary duty to plaintiffs. Plaintiffs in the parallel litigation have the right to file an appeal, which we expect. Nasrawi remains stayed until the parallel litigation is finally concluded. Absent the court finding that StanCERA breached its fiduciary duty, plaintiffs' claim against Buck for aiding and abetting said breach would not appear viable. Buck will continue to aggressively defend these lawsuits. In August 2018, Conduent sold Buck Consultants, LLC; however, the Company retained this liability after the sale. The Company is not able to determine or predict the ultimate outcome of this proceeding or reasonably provide an estimate or range of estimate of the possible outcome or loss, if any.

Conduent Business Services, LLC v. Cognizant Business Services, LLC: On April 12, 2017, Conduent Business Services LLC ("Conduent") filed a lawsuit against Cognizant Business Services Corporation ("Cognizant") in the Supreme Court of New York County, New York. The lawsuit relates to the Amended and Restated Master Outsourcing Services Agreement effective as of October 24, 2012, and the service delivery contracts and work orders thereunder, between Conduent and Cognizant, as amended and supplemented (the "Contract"). The Contract contains certain minimum purchase obligations by Conduent through the date of expiration. The lawsuit alleges that Cognizant committed multiple breaches of the Contract, including Cognizant's failure to properly perform its obligations as subcontractor to Conduent under Conduent's contract with the New York Department of Health to provide a Medicaid Management Information Systems (the "NY MMIS Contract"). In the lawsuit, Conduent seeks damages in excess of one hundred fifty million dollars. During the first quarter of 2018, Conduent provided notice to Cognizant that it was terminating the Contract for cause and recorded in the same period certain charges associated with the termination. Cognizant asserted two counterclaims for breach of contract seeking recovery of damages in excess of forty-seven million dollars, which includes amounts alleged not paid to Cognizant under the contract and an alleged twenty-five million dollars of termination fee. Conduent has responded to Cognizant's counterclaims by denying the allegations. Conduent will continue to vigorously defend itself against the counterclaims but the Company is not able to determine or predict the ultimate outcome of this proceeding or reasonably provide an estimate or range of estimate of the possible outcome.

Table of Contents

Other Matters:

On January 5, 2016, the Consumer Financial Protection Bureau (the "CFPB") notified Xerox Education Services, Inc. (XES) that, in accordance with the CFPB's discretionary Notice and Opportunity to Respond and Advise (NORA) process, the CFPB's Office of Enforcement is considering recommending that the CFPB take legal action against XES, alleging that XES violated the Consumer Financial Protection Act's prohibition of unfair practices. Should the CFPB commence an action, it may seek restitution, civil monetary penalties, injunctive relief, or other corrective action. The purpose of a NORA letter is to provide a party being investigated an opportunity to present its position to the CFPB before an enforcement action is recommended or commenced. XES submitted its response to the NORA. The CFPB's NORA stems from an inquiry that commenced in 2014 when XES received and responded to a CFPB Civil Investigative Demand containing a broad request for information. During this process, XES self-disclosed to the U.S. Department of Education (the "Department") and the CFPB certain adjustments of which it had become aware that had not been timely made relating to its servicing of a small percentage of third-party student loans under outsourcing arrangements for various financial institutions. The CFPB, the U.S. Department of Education, the U.S. Department of Justice, the New York Office of the Attorney General, the New York Department of Financial Services and the Massachusetts Office of the Attorney General began similar reviews. XES has cooperated and continues to fully cooperate with all regulatory agencies. It resolved the Massachusetts Office of the Attorney General investigation in November 2016 and the investigations by both the New York agencies in January 2019. Both as a result of these inquiries, its own reviews of operations and work performed by external auditors, XES has identified certain other operational issues requiring remediation, and this remediation work has commenced. XES disclosed these additional operational projects to the Department at the end of the second quarter of 2018 and is working to complete these projects. In the third quarter of 2018, the Company exited the Student Loan Services business. The Company cannot provide assurance that the CFPB, another regulator, a financial institution on behalf of which the Company serviced third-party student loans, or another party will not ultimately commence a legal action against XES in which fines, penalties or other liabilities are sought from XES. Nor is the Company able to predict the likely outcome of these matters, should any such matter be commenced, or reasonably provide an estimate or range of estimates of any loss in excess of current reserves. The Company could in future periods incur judgments or enter into settlements to resolve these potential matters for amounts in excess of current reserves and there could be a material adverse effect on the Company's results of operations, cash flows and financial position in the period in which such change in judgment or settlement occurs.

Guarantees and Indemnifications

Indemnifications Provided as Part of Contracts and Agreements

Acquisitions/Divestitures:

We have indemnified, subject to certain deductibles and limits, the purchasers of businesses or divested assets for the occurrence of specified events under certain of our divestiture agreements. In addition, we customarily agree to hold the other party harmless against losses arising from a breach of representations and covenants, including such matters as adequate title to assets sold, intellectual property rights and certain income taxes arising prior to the date of acquisition. Where appropriate, an obligation for such indemnifications is recorded as a liability at the time of the acquisition or divestiture. Since the obligated amounts of these types of indemnifications are often not explicitly stated or are contingent on the occurrence of future events, the overall maximum amount, or range of amount of the obligation under such indemnifications cannot be reasonably estimated. Other than obligations recorded as liabilities at the time of divestiture, we have not historically made significant payments for these indemnifications. Additionally, under certain of our acquisition agreements, we have provided for additional consideration to be paid to the sellers if established financial targets are achieved within specific timeframes post-closing. We have recognized liabilities for these contingent obligations based on an estimate of the fair value of these contingencies at the time of acquisition. Contingent obligations related to indemnifications arising from our divestitures and contingent consideration provided for by our acquisitions are not expected to be material to our financial position, results of operations or cash flows.

Table of Contents

Other Agreements:

We are also party to the following types of agreements pursuant to which we may be obligated to indemnify the other party with respect to certain matters:

- Guarantees on behalf of our subsidiaries with respect to real estate leases. These lease guarantees may remain in effect subsequent to the sale of the subsidiary.
- Agreements to indemnify various service providers, trustees and bank agents from any third-party claims related to their performance on our behalf, with the exception of claims that result from the third-party's own willful misconduct or gross negligence.
- Guarantees of our performance in certain services contracts to our customers and indirectly the performance of third parties with whom we have subcontracted for their services. This includes indemnifications to customers for losses that may be sustained as a result of our performance of services at a customer's location.

In each of these circumstances, our payment is conditioned on the other party making a claim pursuant to the procedures specified in the particular contract and such procedures also typically allow us to challenge the other party's claims. In the case of lease guarantees, we may contest the liabilities asserted under the lease. Further, our obligations under these agreements and guarantees may be limited in terms of time and/or amount, and in some instances, we may have recourse against third parties for certain payments we made.

Intellectual Property Indemnifications

We do not own most of the software that we use to run our business. Instead, we license this software from a small number of primary vendors. We indemnify certain software providers against claims that may arise as a result of our use or our subsidiaries', customers' or resellers' use of their software in our services and solutions. These indemnities usually do not include limits on the claims, provided the claim is made pursuant to the procedures required in the services contract.

Indemnification of Officers and Directors

Our corporate by-laws require that, except to the extent expressly prohibited by law, we must indemnify our officers and directors against judgments, fines, penalties and amounts paid in settlement and reasonable expenses, including attorneys' fees, incurred in connection with civil or criminal action or proceedings or any appeal, as it relates to their services to our Company and our subsidiaries. Although the by-laws provide no limit on the amount of indemnification, we may have recourse against our insurance carriers for certain payments made by us. However, certain indemnification payments (such as those related to "clawback" provisions in certain compensation arrangements) may not be covered under our directors' and officers' insurance coverage. We also indemnify certain fiduciaries of our employee benefit plans for liabilities incurred in their service as fiduciary whether or not they are officers of the Company. Finally, in connection with our acquisition of businesses, we may become contractually obligated to indemnify certain former and current directors, officers and employees of those businesses in accordance with pre-acquisition by-laws or indemnification agreements or applicable state law.

Other Contingencies

Certain contracts, primarily in the Company's Public Sector segment, require the Company to provide a surety bond or a letter of credit as a guarantee of performance. As of December 31, 2018, the Company had $646 million of outstanding surety bonds used to secure its performance of contractual obligations with its clients and $344 million of outstanding letters of credit issued to secure the Company's performance of contractual obligations to its clients as well as other corporate obligations. In general, the Company would only be liable for the amount of these guarantees in the event of default in the Company's performance of its obligations under each contract. The Company believes it has sufficient capacity in the surety markets and liquidity from its cash flow and its various credit arrangements (including its Credit Facility) to allow it to respond to future requests for proposals that require such credit support.

Table of Contents

Note 15 - Preferred Stock

Series A Preferred Stock

In connection with the December 31, 2016 spin-off from Xerox Corporation, we issued 120 thousand shares of Series A convertible perpetual preferred stock with an aggregate liquidation preference of $120 million and an initial fair value of $142 million. The Series A convertible preferred stock pays quarterly cash dividends at a rate of 8% per year ($9.6 million per year). Each share of the Series A convertible preferred stock is convertible at any time, at the option of the holder, into 44.9438 shares of common stock for a total of 5,393 thousand shares (reflecting an initial conversion price of approximately $22.250 per share of common stock), subject to customary anti-dilution adjustments.

If the closing price of our common stock exceeds 137% of the initial conversion price for 20 out of 30 trading days, we have the right to cause any or all of the Series A convertible preferred stock to be converted into shares of common stock at the then applicable conversion rate. The Series A convertible preferred stock is also convertible, at the option of the holder, upon a change in control, at the applicable conversion rate plus an additional number of shares determined by reference to the price paid for our common stock upon such change in control. In addition, upon the occurrence of certain fundamental change events, including a change in control or the delisting of Conduent's common stock, the holder of Series A convertible preferred stock has the right to require us to redeem any or all of the Series A convertible preferred stock in cash at a redemption price per share equal to the liquidation preference and any accrued and unpaid dividends to, but not including, the redemption date. As a result of the contingent redemption feature, the Series A convertible preferred stock is classified as temporary equity and reflected separately from permanent equity in the Consolidated Balance Sheets.

Note 16 – Shareholders’ Equity

Preferred Stock

As of December 31, 2018, we had one class of preferred stock outstanding. See Note 15 – Preferred Stock for further information. We are authorized to issue approximately 100 million shares of cumulative preferred stock at $0.01 par value per share.

Common Stock

We have 1 billion authorized shares of common stock at $0.01 par value per share. At December 31, 2018, 15 million shares were reserved for issuance under our incentive compensation plans and 5.4 million shares were reserved for conversion of the Series A convertible preferred stock.

Stock Compensation Plans

Certain of our employees participate in a long-term incentive plan. Our long-term incentive plan authorizes the issuance of restricted stock units / shares (RSU), performance stock units / share (PSU) and non-qualified stock options to employees. All awards for these plans prior to 2017 were made in Xerox stock and therefore converted into Conduent stock effective upon the Separation. Using a formula designed to preserve the value of the award immediately prior to the Separation, all of these awards will be settled and are reflected in the Company's Consolidated Statements of Shareholders' Equity. Stock-based compensation expense includes expense based on the awards and terms previously granted to the employees.

Stock-based compensation expense was as follows:

	Year Ended December 31,		
(in millions)	2018	2017	2016
Stock-based compensation expense, pre-tax	$ 38	$ 42	$ 23
Income tax benefit recognized in earnings	7	17	9

Table of Contents

Restricted Stock Units / Shares Compensation expense is based upon the grant date market price. The compensation expense is recorded over the vesting period, which is normally three years from the date of grant, based on management's estimate of the number of shares expected to vest.

Performance Stock Units / Shares: The Company granted PSUs that vest contingent upon its achievement of certain specified financial performance criteria over a three-year period. If the three-year actual results exceed the stated targets, then the plan participants have the potential to earn additional shares of common stock, which cannot exceed 100% of the original grant.

The fair value of PSUs is based upon the market price of Conduent's common stock on the date of the grant. Compensation expense is recognized over the vesting period, which is normally three years from the date of grant, based on management's estimate of the number of shares expected to vest. If the stated targets are not met, any recognized compensation cost would be reversed.

Employee Stock Options: Stock options were issued by a former parent company and were converted to Conduent's common stock upon the Separation. These options generally expire within the next one year. Other than these options, Conduent has not issued any new stock options.

Summary of Stock-based Compensation Activity

	2018		2017		2016	
(shares in thousands)	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value	Shares	Weighted Average Grant Date Fair Value
Restricted Stock Units / Shares						
Outstanding at January 1	3,125	$ 16.29	1,961	$ 13.99	782	$ 11.70
Granted	1,246	18.82	1,988	16.75	2,602	9.61
Vested	(1,501)	17.30	(215)	19.98	(119)	9.43
Canceled	(471)	16.62	(609)	15.88	(121)	10.55
Impact of spin-off(1)	—	n/a	—	n/a	(1,183)	n/a
Outstanding at December 31	2,399	16.90	3,125	16.29	1,961	13.99
Performance Stock Units / Shares						
Outstanding at January 1	5,429	$ 16.55	4,926	$ 13.99	7,522	$ 11.57
Granted	730	18.64	3,933	16.76	1,850	9.35
Vested	(980)	17.12	(1,696)	19.67	—	—
Canceled	(622)	16.59	(1,734)	17.46	(1,478)	11.96
Impact of spin-off(1)	—	n/a	—	n/a	(2,968)	n/a
Outstanding at December 31	4,557	16.76	5,429	16.55	4,926	13.99

(1) Stock-based compensation was converted from former parent stock into Conduent common stock at spin-off.

The Company issued 96 thousand Deferred Stock Units (DSU) to non-employee members of the Board of Directors. These DSUs are fully vested and will be issued when the directors leave the Board.

The Company has 119 thousand stock options outstanding as of December 31, 2018 at a strike price of $10.15. These stock options are fully vested and exercisable.

Table of Contents

The total unrecognized compensation cost related to non-vested stock-based awards at December 31, 2018 was as follows (in millions):

Awards	Unrecognized Compensation	Remaining Weighted-Average Vesting Period (Years)
Restricted Stock Units / Shares	$ 21	0.9
Performance Stock Units / Shares	15	0.8
Total	$ 36	

The aggregate intrinsic value of outstanding RSUs and PSUs awards were as follows (in millions):

Awards	December 31, 2018
Restricted Stock Units / Shares	$ 26
Performance Stock Units / Shares	48

Information related to stock options outstanding and exercisable at December 31, 2018 was as follows

(in millions)	Options	
	Outstanding	Exercisable
Aggregate intrinsic value	$ 1	$ 1
Weighted-average remaining contractual life (years)	0.6	0.6

The total intrinsic value and actual tax benefit realized for vested and exercised stock-based awards were as follows:

(in millions)	December 31, 2018			December 31, 2017			December 31, 2016		
Awards	Total Intrinsic Value	Cash Received	Tax Benefit	Total Intrinsic Value	Cash Received	Tax Benefit	Total Intrinsic Value	Cash Received	Tax Benefit
Restricted Stock Units / Shares	$ 20	$ —	$ 4	$ 3	$ —	$ 1	$ 1	$ —	$ —
Performance Stock Units / Shares	18	—	4	25	—	10	—	—	—
Stock Options	2	2	—	3	6	1	3	9	1

Table of Contents

Note 17 – Other Comprehensive Income (Loss)

Other Comprehensive Loss is comprised of the following:

(in millions)	2018 Pre-tax	2018 Net of Tax	2017 Pre-tax	2017 Net of Tax	2016 Pre-tax	2016 Net of Tax
	Year Ended December 31,					
Currency Translation						
Currency translation adjustments, net	$ (31)	$ (31)	$ 35	$ 35	$ (135)	$ (135)
Reclassification of currency translation adjustments on divestitures	42	42	—	—	—	—
Translation adjustments gains(losses)	$ 11	$ 11	$ 35	$ 35	$ (135)	$ (135)
Unrealized Gains (Losses)						
Changes in fair value of cash flow hedges gains (losses)	$ 2	$ 1	$ 1	$ 1	$ (2)	$ (1)
Changes in cash flow hedges reclassed to earnings(1)	(1)	—	2	1	2	1
Net Unrealized Gains (Losses)	$ 1	$ 1	$ 3	$ 2	$ —	$ —
Defined Benefit Plans Gains (Losses)						
Reclassification of divested benefit plans and other	$ 65	$ 62	$ —	$ —	$ —	$ —
Net actuarial/prior service gains (losses)	—	—	(5)	(4)	(31)	(23)
Actuarial loss amortization/settlement(2)	—	—	2	2	1	1
Other gains (losses)(3)	—	—	(4)	(3)	3	2
Changes in Defined Benefit Plans Gains (Losses)	$ 65	$ 62	$ (7)	$ (5)	$ (27)	$ (20)
Other Comprehensive Income (Loss)	$ 77	$ 74	$ 31	$ 32	$ (162)	$ (155)

(1) Reclassified to Cost of sales - refer to Note 10 – Financial Instruments for additional information regarding our cash flow hedges.
(2) Reclassified to total net periodic benefit cost.
(3) Primarily represents currency impact on cumulative amount of benefit plan net actuarial losses and prior service credits in AOCL.

Accumulated Other Comprehensive Loss (AOCL)

Below are the balances and changes in AOCL(1):

(in millions)	Currency Translation Adjustments	Gains (Losses) on Cash Flow Hedges	Defined Benefit Pension Items	Total
Balance at December 31, 2017	$ (437)	$ 1	$ (58)	$ (494)
Reclassification of amounts impacted by Tax Reform	—	—	(5)	(5)
Other comprehensive income (loss) before reclassifications	(31)	1	—	(30)
Amounts reclassified from accumulated other comprehensive loss	42	—	62	104
Net current period other comprehensive income (loss)	11	1	62	74
Balance at December 31, 2018	$ (426)	$ 2	$ (1)	$ (425)

Table of Contents

(in millions)	Currency Translation Adjustments	Gains (Losses) on Cash Flow Hedges	Defined Benefit Pension Items	Total
Balance at December 31, 2016	$ (472)	$ (1)	$ (53)	$ (526)
Other comprehensive income (loss) before reclassifications	35	2	(5)	32
Amounts reclassified from accumulated other comprehensive loss	—	—	—	—
Net current period other comprehensive income (loss)	35	2	(5)	32
Balance at December 31, 2017	$ (437)	$ 1	$ (58)	$ (494)

(in millions)	Currency Translation Adjustments	Gains (Losses) on Cash Flow Hedges	Defined Benefit Pension Items	Total
Balance at December 31, 2015	$ (147)	$ (1)	$ (33)	$ (181)
Net transfers from former parent company	(190)	—	—	(190)
Other comprehensive income (loss) before reclassifications	(135)	—	(20)	(155)
Amounts reclassified from accumulated other comprehensive loss	—	—	—	—
Net current period other comprehensive income (loss)	(135)	—	(20)	(155)
Balance at December 31, 2016	$ (472)	$ (1)	$ (53)	$ (526)

____

(1) All amounts are net of tax. Tax effects were immaterial.

Table of Contents

Note 18 – Earnings per Share

We did not declare any common stock dividends in the periods presented.

The following table sets forth the computation of basic and diluted earnings per share of common stock:

(in millions, except per share data. Shares in thousands)	Year Ended December 31, 2018	2017	2016
Basic Earnings (Loss) per Share:			
Net income (loss) from continuing operations	$ (416)	$ 177	$ (983)
Accrued dividends on preferred stock	(10)	(10)	—
Adjusted Net Income (Loss) From Continuing Operations Available to Common Shareholders	(426)	167	(983)
Net income (loss) from discontinued operations	—	4	—
Adjusted Net Income (Loss) Available to Common Shareholders	$ (426)	$ 171	$ (983)
Weighted average common shares outstanding	206,056	204,007	202,875
Basic Earnings (Loss) per Share:			
Continuing operations	$ (2.06)	$ 0.82	$ (4.85)
Discontinued operations	—	0.02	—
Basic Earnings (Loss) per Share	$ (2.06)	$ 0.84	$ (4.85)
Diluted Earnings (Loss) per Share:			
Net income (loss) from continuing operations	$ (416)	$ 177	$ (983)
Accrued dividends on preferred stock	(10)	(10)	—
Adjusted Net Income (Loss) From Continuing Operations Available to Common Shareholders	(426)	167	(983)
Net income (loss) from discontinued operations	—	4	—
Adjusted Net Income (Loss) Available to Common Shareholders	$ (426)	$ 171	$ (983)
Weighted average common shares outstanding	206,056	204,007	202,875
Common shares issuable with respect to:			
Stock options	—	195	—
Restricted stock and performance units / shares	—	2,591	—
8% Convertible preferred stock	—	—	—
Adjusted Weighted Average Common Shares Outstanding	206,056	206,793	202,875
Diluted Earnings (Loss) per Share:			
Continuing operations	$ (2.06)	$ 0.81	$ (4.85)
Discontinued operations	—	0.02	—
Diluted Earnings (Loss) per Share	$ (2.06)	$ 0.83	$ (4.85)
The following securities were not included in the computation of diluted earnings per share as they were either contingently issuable shares or shares that if included would have been anti-dilutive (shares in thousands):			
Stock Options	119	—	857
Restricted stock and performance shares/units	5,242	2,568	5,719
Convertible preferred stock	5,393	5,393	5,393
Total Anti-Dilutive Securities	10,754	7,961	11,969

Note 19 – Subsequent Events

In January 2019, the Company completed the acquisition of Health Solutions Plus (HSP), a software provider of healthcare payer administration solutions for $90 million and a maximum contingent consideration payment of $7.8 million over two years.

In February 2019, the Company completed the sale of a portfolio of select standalone customer care contracts to Skyview Capital LLC for $25 million, subject to delayed transfer of certain assets in some countries pending fulfillment of legal requirements.

Table of Contents

QUARTERLY RESULTS OF OPERATIONS (Unaudited)

(in millions, except per-share data)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full Year
2018					
Revenues	$ 1,420	$ 1,387	$ 1,304	$ 1,282	$ 5,393
Costs and Expenses	1,474	1,333	1,556	1,425	5,788
(Loss) Income before Income Taxes	(54)	54	(252)	(143)	(395)
Income tax (benefit) expense	(4)	43	(15)	(3)	21
(Loss) Income from Continuing Operations	(50)	11	(237)	(140)	(416)
Income from discontinued operations, net of tax	—	—	—	—	—
Net (Loss) Income	$ (50)	$ 11	$ (237)	$ (140)	$ (416)
Basic Earnings (Loss) per Share[1]:					
Continuing operations	$ (0.26)	$ 0.05	$ (1.16)	$ (0.69)	$ (2.06)
Discontinued operations	—	—	—	—	—
Total Basic (Loss) Earnings per Share:	$ (0.26)	$ 0.05	$ (1.16)	$ (0.69)	$ (2.06)
Diluted Earnings (Loss) per Share[1]:					
Continuing operations	$ (0.26)	$ 0.04	$ (1.16)	$ (0.69)	$ (2.06)
Discontinued operations	—	—	—	—	—
Total Diluted (Loss) Earnings per Share	$ (0.26)	$ 0.04	$ (1.16)	$ (0.69)	$ (2.06)
2017					
Revenues	$ 1,553	$ 1,496	$ 1,480	$ 1,493	$ 6,022
Costs and Expenses	1,575	1,507	1,467	1,489	6,038
(Loss) Income before Income Taxes	(22)	(11)	13	4	(16)
Income tax (benefit) expense	(12)	(7)	30	(204)	(193)
(Loss) Income from Continuing Operations	(10)	(4)	(17)	208	177
Income (loss) from discontinued operations, net of tax	4	—	—	—	4
Net (Loss) Income	$ (6)	$ (4)	$ (17)	$ 208	$ 181
Basic Earnings (Loss) per Share[1]:					
Continuing operations	$ (0.06)	$ (0.03)	$ (0.09)	$ 1.00	$ 0.82
Discontinued operations	$ 0.02	$ —	$ —	$ —	$ 0.02
Total Basic (Loss) Earnings per Share:	$ (0.04)	$ (0.03)	$ (0.09)	$ 1.00	$ 0.84
Diluted Earnings (Loss) per Share[1]:					
Continuing operations	$ (0.06)	$ (0.03)	$ (0.09)	$ 0.98	$ 0.81
Discontinued operations	$ 0.02	$ —	$ —	$ —	$ 0.02
Total Diluted (Loss) Earnings per Share	$ (0.04)	$ (0.03)	$ (0.09)	$ 0.98	$ 0.83

(1) *The sum of quarterly earnings per share may differ from the full-year amounts due to rounding, or in the case of diluted earnings per share, because securities that are anti-dilutive in certain quarters may not be anti-dilutive on a full-year basis.*

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None

Table of Contents

ITEM 9A. CONTROLS AND PROCEDURES

Management's Responsibility for Financial Statements

Management is responsible for the integrity and objectivity of all information presented in this Annual Report on Form 10-K. The consolidated financial statements were prepared in conformity with accounting principles generally accepted in the United States of America and include amounts based on management's best estimates and judgments. Management believes the consolidated financial statements fairly reflect the form and substance of transactions and that the financial statements fairly represent the Company's financial position and results of operations.

The Audit Committee of the Board of Directors, which is composed solely of independent directors, meets regularly with the independent registered public accountants, PricewaterhouseCoopers LLP, the internal auditors and representatives of management to review accounting, financial reporting, internal control and audit matters, as well as the nature and extent of the audit effort. The Audit Committee is responsible for the engagement of the independent registered public accountants. The independent registered public accountants and internal auditors have access to the Audit Committee.

Disclosure Controls and Procedures

The Company's management evaluated, with the participation of our principal executive officer and principal financial officer, the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, as of December 31, 2018, the end of the period covered by this Annual Report on Form 10-K. Based on this evaluation, our principal executive officer and principal financial officer have concluded that, as of the end of the period covered by this Annual Report on Form 10-K, our disclosure controls and procedures were effective to ensure that information we are required to disclose in the reports that we file or submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms relating to Conduent Incorporated, including our consolidated subsidiaries, and was accumulated and communicated to the Company's management, including the principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Securities Exchange Act of 1934, as amended. Under the supervision and with the participation of our management, including our principal executive officer, principal financial officer and principal accounting officer, we have conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in "Internal Control - Integrated Framework" (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on the above evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2018.

The effectiveness of our internal control over financial reporting as of December 31, 2018 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears in Part II, Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

In connection with the evaluation required by paragraph (d) of Rule 13a-15 under the Exchange Act, there was no change identified in our internal control over financial reporting that occurred during the last fiscal quarter ended December 31, 2018 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Table of Contents

ITEM 9B. OTHER INFORMATION

None

Table of Contents

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information regarding directors is incorporated herein by reference to the section entitled “Proposal 1 - Election of Directors” in our definitive Proxy Statement (2019 Proxy Statement) to be filed pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended, for our 2019 Annual Meeting of Stockholders. The Proxy Statement is expected to be filed within 120 days after the end of our fiscal year ended December 31, 2018.

The information regarding compliance with Section 16(a) of the Securities and Exchange Act of 1934 is incorporated herein by reference to the section entitled “Section 16(a) Beneficial Ownership Reporting Compliance” of our 2019 Proxy Statement.

The information required by this Item regarding the Audit Committee, its members and the Audit Committee financial experts is incorporated by reference herein from the subsection entitled “Committee Functions, Membership and Meetings” in the section entitled “Proposal 1 - Election of Directors” in our 2019 Proxy Statement.

We have adopted a code of ethics applicable to our principal executive officer, principal financial officer and principal accounting officer. The Finance Code of Conduct can be found on our website at: https://www.conduent.com/corporate-governance/ethics-and-compliance/. Information concerning our Finance Code of Conduct can be found under "Corporate Governance" in our 2019 Proxy Statement and is incorporated here by reference.

Executive Officers of Conduent

The following is a list of the executive officers of Conduent, their current ages, their present positions and the year appointed to their present positions.

Each officer is elected to hold office until the meeting of the Board of Directors held on the day of the next annual meeting of shareholders, subject to the provisions of the by-laws.

Name	Age	Present Position	Year Appointed to Present Position	Conduent Officer Since
Ashok Vemuri*	50	Chief Executive Officer	2017	2017
Allan Cohen	49	Vice President & Chief Accounting Officer	2017	2017
Jeffrey Friedel	54	Executive Vice President & Chief People Officer	2017	2017
James Michael Peffer	57	Executive Vice President, General Counsel & Secretary	2017	2017
Brian J. Webb-Walsh	43	Executive Vice President & Chief Financial Officer	2017	2017

* Member of Conduent Board of Directors

Each of the officers named above has been an officer or an executive of Conduent or its subsidiaries for less than five years.

Mr. Vemuri served as Chief Executive Officer of Xerox Business Services, LLC and an Executive Vice President of Xerox Corporation since July 2016. Mr. Vemuri previously was President, Chief Executive Officer and a member of the Board of Directors of IGATE Corporation. Prior to IGATE, Mr. Vemuri spent 14 years at Infosys Limited, a multinational consulting and IT services company, in a variety of leadership and business development roles.

Prior to joining Conduent, Mr. Cohen served as Senior Vice President and Controller of NBC Universal since 2011. Mr. Cohen also previously served as Vice President, Assistant Controller at Time Warner, Professional Accounting Fellow in the Division of Corporate Finance at the SEC and Senior Manager at PriceWaterhouseCoopers.

Table of Contents

Prior to joining Conduent, Mr. Friedel served as Vice President and Head of the Office of Integrity and Compliance at Infosys Limited from January 2016 to September 2016, a global leader in technology services and consulting, where he oversaw SEC compliance, internal investigations, code of conduct, whistleblower, and anti-bribery and export regulations. Mr. Friedel has also previously served as Senior Vice President and General Counsel at IGATE Corporation from June 2014 to December 2015, an IT services and business process outsourcing company which was acquired by CapGemini. Prior to June 2014, Mr. Friedel held a variety of leadership roles at Infosys Limited.

Mr. Peffer served as Vice President, General Counsel and Secretary for Xerox Corporation from August 2016 to December 2016. Prior to this, Mr. Peffer served as Associate General Counsel of Xerox Corporation and Executive Vice President of Xerox Business Services, LLC since 2010. Prior to 2010, Mr. Peffer was Senior Vice President and Deputy General Counsel of ACS from May 2009.

Mr. Webb-Walsh served as the Chief Financial Officer of Xerox Services since January 2016. Prior to this, Mr. Webb-Walsh was Senior Vice President of Finance for the Government Healthcare Group and the Platform Development and Systems Integration Group of Xerox Services. Mr. Webb-Walsh joined Xerox Corporation in 1997 and has held a variety of leadership positions.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item included under the following captions under “Proposal 1 - Election of Directors” in our 2019 Proxy Statement is incorporated herein by reference: “Compensation Discussion and Analysis”, “Summary Compensation Table”, “Grants of Plan-Based Awards in 2018”, “Outstanding Equity Awards at 2018 Fiscal Year-End”, “Option Exercises and Stock Vested in 2018”, “Pension Benefits for the 2018 Fiscal Year”, “Nonqualified Deferred Compensation for the 2018 Fiscal Year”, “Potential Payments upon Termination or Change in Control”, “Summary of Annual Director Annual Compensation, "Compensation Committee Interlocks and Insider Participation” and “Compensation Committee”. The information included under the heading “Compensation Committee Report” in our 2019 Proxy Statement is incorporated herein by reference; however, this information shall not be deemed to be “soliciting material” or to be “filed” with the SEC or subject to Regulation 14A or 14C, or to the liabilities of Section 18 of the Exchange Act.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information required by this Item regarding security ownership of certain beneficial owners and management and securities authorized for issuance under equity compensation plans is incorporated herein by reference to the subsections entitled “Ownership of Company Securities,” and “Equity Compensation Plan Information” under “Proposal 1 - Election of Directors” in our 2019 Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS, RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Information required by this Item regarding certain relationships and related transactions is incorporated herein by reference to the subsection entitled “Certain Relationships and Related Person Transactions” under “Proposal 1 - Election of Directors” in our 2019 Proxy Statement. The information regarding director independence is incorporated herein by reference to the subsections entitled “Corporate Governance” and “Director Independence” in the section entitled “Proposal 1 - Election of Directors” in our 2019 Proxy Statement.

ITEM 14. PRINCIPAL AUDITOR FEES AND SERVICES

The information required by this Item regarding principal auditor fees and services is incorporated herein by reference to the section entitled “Proposal 2 - Ratification of Election of Independent Registered Public Accounting Firm” in our 2019 Proxy Statement.

Table of Contents

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) (1) Index to Financial Statements and Financial Statement Schedule, incorporated by reference or filed as part of this report:

- Report of Independent Registered Public Accounting Firm including Report on Financial Statement Schedule;
- Consolidated Statements of Income (Loss) for each of the years in the three-year period ended December 31, 2018;
- Consolidated Statements of Comprehensive Income (Loss) for each of the years in the three-year period ended December 31, 2018;
- Consolidated Balance Sheets as of December 31, 2018 and 2017;
- Consolidated Statements of Cash Flows for each of the years in the three-year period ended December 31, 2018;
- Consolidated Statements of Shareholders' Equity for each of the years in the three-year period ended December 31, 2018;
- Notes to the Consolidated Financial Statements;
- Schedule II - Valuation and Qualifying Accounts for the three years ended December 31, 2018; and
- All other schedules are omitted as they are not applicable, or the information required is included in the financial statements or notes thereto.

(2) Supplementary Data:

- Quarterly Results of Operations (unaudited).
- SCHEDULE II

VALUATION AND QUALIFYING ACCOUNTS

For the three years ended December 31, 2018

(in millions)	Balance at beginning of period	Additions charged to expense[1]	Amounts (credited) charged to other income statement accounts [2]	Deductions and other, net of recoveries [3][4]	Balance at end of period
Allowance for Losses:					
2018 Accounts Receivable	$ 2	$ —	$ —	$ (1)	$ 1
2017 Accounts Receivable	7	(1)	—	(4)	2
2016 Accounts Receivable	6	4	—	(3)	7
Tax Valuation Allowance:					
2018 Tax Valuation	35	9	—	—	44
2017 Tax Valuation	24	11	—	—	35
2016 Tax Valuation	38	—	—	(14)	24

(1) Account Receivables: additions charged to expense represent bad debt provisions relate to estimated losses due to credit and similar collectibility issues.
(2) Account Receivables: Other charges (credits) relate to adjustments to reserves necessary to reflect events of non-payment such as customer accommodations and contract terminations.

Table of Contents

(3) Account Receivables: Deductions and other, net of recoveries primarily relates to receivable write-offs, but also includes the impact of foreign currency translation adjustments and recoveries of previously written off receivables.

(4) Tax Valuation: Reductions to tax valuation allowance are primarily related to certain net operating loss carryforwards, tax credit carryforwards and deductible temporary differences for which we have concluded it is more-likely-than-not that these items will not be realized in the ordinary course of operations.

(3) The exhibits listed below are filed or incorporated by reference are part of this Form 10-K.

Management contracts or compensatory plans or arrangements listed that are applicable to the executive officers named in the Summary Compensation Table which appears in Registrant's 2019 Proxy Statement or to our directors are preceded by an asterisk (*).

Exhibit No.	
2.1	Separation and Distribution Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
3.1	Restated Certificate of Incorporation of Registrant as of December 23, 2016.
	Incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K dated December 23, 2016. (See SEC File Number 001-37817).
3.2	Amended and Restated By-Laws of Registrant as amended through December 31, 2016.
	Incorporated by reference to Exhibit 3.2 to Registrant's Current Report on Form 8-K dated December 23, 2016. (See SEC File Number 001-37817).
4.1(a)	Indenture, dated as of December 7, 2016, among Conduent Finance, Inc., Xerox Business Services, LLC, the Guarantors named therein and U.S. Bank National Association, as trustee.
	Incorporated by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K dated December 9, 2016. (See SEC File Number 001-37817).
4.1(b)	First Supplemental Indenture, dated as of January 9, 2018, among Conduent Finance, Inc., Xerox Business Services, LLC, the Guarantors named therein and U.S. Bank National Association, as trustee.
	Incorporated by reference to Exhibit 4.1(a) to the Registrant's Quarterly Report on Form 10-Q dated August 8, 2018. (See SEC File Number 001-37817).
4.1(c)	Second Supplemental Indenture, dated as of June 1, 2018, among Conduent Finance, Inc., Xerox Business Services, LLC, the Guarantors named therein and U.S. Bank National Association, as trustee.
	Incorporated by reference to Exhibit 4.1(b) to the Registrant's Quarterly Report on Form 10-Q dated August 8, 2018. (See SEC File Number 001-37817).
4.1(d)	Third Supplemental Indenture, dated as of June 1, 2018, among Conduent Finance, Inc., Xerox Business Services, LLC, the Guarantors named therein and U.S. Bank National Association, as trustee.
	Incorporated by reference to Exhibit 4.1(c) to the Registrant's Quarterly Report on Form 10-Q dated August 8, 2018. (See SEC File Number 001-37817).
4.1(e)	Fourth Supplemental Indenture, dated as of June 1, 2018, among Conduent Finance, Inc., Xerox Business Services, LLC, the Guarantors named therein and U.S. Bank National Association, as trustee.
	Incorporated by reference to Exhibit 4.1(d) to the Registrant's Quarterly Report on Form 10-Q dated August 8, 2018. (See SEC File Number 001-37817).
4.1(f)	Fifth Supplemental Indenture, dated as of July 12, 2018, among Conduent Finance, Inc., Xerox Business Services, LLC, the Guarantors named therein and U.S. Bank National Association, as trustee.
	Incorporated by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K dated July 12, 2018. (See SEC File Number 001-37817).
10.1(a)	Credit Agreement, dated as of December 7, 2016, among Conduent Incorporated, Xerox Business Services, LLC, Affiliated Computer Services International B.V., Conduent Finance, Inc., the Lenders from time to time party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent.
	Incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated December 9, 2016. (See SEC File Number 001-37817).

Table of Contents

10.1(b)	Amendment No. 1 to Credit Agreement, dated as of April 1, 2017, among Conduent Incorporated, Conduent Business Services, LLC (f/k/a Xerox Business Services, LLC), Affiliated Computer Services International B.V., Conduent Finance, Inc., the Lenders from time to time party thereto and JPMorgan Chase Bank, N.A. as Administrative Agent.
	Incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated April 11, 2017. (See SEC File Number 001-37817).
10.1(c)	Amendment No. 2 to Credit Agreement, dated as of October 10, 2017, among Conduent Incorporated, Conduent Business Services, LLC (f/k/a Xerox Business Services, LLC), Affiliated Computer Services International B.V., Conduent Finance, Inc., the Lenders from time to time party thereto and JPMorgan Chase Bank, N.A. as Administrative Agent.
	Incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated October 10, 2017. (See SEC File Number 001-37817).
10.1(d)	Amendment No. 3 to Credit Agreement, dated as of June 28, 2018, among Conduent Incorporated, Conduent Business Services, LLC (f/k/a Xerox Business Services, LLC), Affiliated Computer Services International B.V., Conduent Finance, Inc., the Lenders from time to time party thereto and JPMorgan Chase Bank, N.A. as Administrative Agent.
	Incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated June 28, 2018. (See SEC File Number 001-37817).
10.1(d)	First Incremental Agreement, dated as of January 3, 2017, among JPMorgan Chase Bank, N.A., as Administrative Agent and Xerox Business Services, LLC.
	Incorporated by reference to Exhibit 10.1(b) to the Registrant's Annual Report on Form 10-K dated March 10, 2017, (See SEC File Number 001-37817).
10.3(a)	Transition Services Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
10.3(b)	Tax Matters Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
10.3(c)	Employee Matters Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 10.3 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
10.3(d)	Intellectual Property Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 10.4 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
10.3(e)	Trademark License Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 10.5 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
10.4(a)	Joinder Agreement to Agreement, dated December 31, 2016, among Conduent Incorporated, Xerox Corporation, Icahn Partners Master Fund LP, Icahn Partners LP, Icahn Onshore LP, Icahn Offshore LP, Icahn Capital LP, IPH GP LLC, Icahn Enterprises Holdings L.P., Icahn Enterprises G.P. Inc., Beckton Corp., High River Limited Partnership, Hopper Investments LLC, Barberry Corp., Jonathan Christodoro and Carl C. Icahn.
	Incorporated by reference to Exhibit 10.6 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
10.4(b)	Agreement, dated January 28, 2016, among Xerox Corporation, Icahn Partners Master Fund LP, Icahn Partners LP, Icahn Onshore LP, Icahn Offshore LP, Icahn Capital LP, IPH GP LLC, Icahn Enterprises Holdings L.P., Icahn Enterprises G.P. Inc., Beckton Corp., High River Limited Partnership, Hopper Investments LLC, Barberry Corp., Jonathan Christodoro and Carl C. Icahn.
	Incorporated by reference to Exhibit 10.6 to Registrant's Amendment No. 1 to Form 10 dated August 15, 2016. (See SEC File Number 001-37817).
10.5(a)	Exchange Agreement dated October 27, 2016 by and among Darwin A. Deason, Conduent Incorporated and Xerox Corporation.

	Incorporated by reference to Exhibit 10.14 to Registrant’s Amendment No. 5 to Form 10 dated October 28, 2016. (See SEC File Number 001-37817).
10.5(b)	Shareholders Agreement dated December 18, 2018 by and between Darwin Deason and Conduent Incorporated.
	Incorporated by reference to Exhibit 10.1 to Registrant’s Current Report on Form 8-K dated December 18, 2018. (See SEC File Number 001-37817).
The management contracts or compensatory plans or arrangements listed below that are applicable to the executive officers named in the Summary Compensation Table which will appear in the Registrant’s 2019 Proxy Statement or to our directors are preceded by an asterisk (*).	
*10.6(a)(i)	Registrant’s Performance Incentive Plan dated as of December 15, 2016 (“PIP”).
	Incorporated by reference to Exhibit 4.3 to Registrant’s Registration Statement No. 333-215361 dated December 29, 2016. (See SEC File Number 001-37817).
*10.6(a)(ii)	Form of Restricted Stock Award Agreement under the PIP.
	Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated March 29, 2017. (See SEC File Number 001-37817).
*10.6(a)(iii)	Form of Performance Share Award Agreement (ELTIP) under the PIP.
	Incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K dated March 29, 2017. (See SEC File Number 001-37817).
*10.6(a)(iv)	Form of Performance Share Award Agreement (SIG) under the PIP.
	Incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K dated March 29, 2017. (See SEC File Number 001-37817).
*10.6(a)(v)	Forms of Performance Stock Unit Award Agreement 2017 under the PIP
	Incorporated by reference to Exhibit 10.6(a)(v) to the Registrant's Annual Report on Form 10-K dated March 1, 2018. (See SEC File Number 001-37817).
*10.6(a)(vi)	Forms of Restricted Stock Unit Award Agreement 2017 under the PIP.
	Incorporated by reference to Exhibit 10.6(a)(vi) to the Registrant's Annual Report on Form 10-K dated March 1, 2018. (See SEC File Number 001-37817)
*10.6(a)(vii)	Form of Restricted Stock Unit Award Agreement 2018 under the PIP Severance Plan, dated as of October 1, 2017.
	Incorporated by reference to Exhibit 10.6(a)(vii) to the Registrant's Quarterly Report on Form 10-Q dated May 9, 2018. (See SEC File Number 001-37817).
*10.6(a)(viii)	Form of Performance Stock Unit Award Agreement 2018 under the PIP Severance Plan, dated as of October 1, 2017.
	Incorporated by reference to Exhibit 10.6(a)(viii) to the Registrant's Quarterly Report on Form 10-Q dated May 9, 2018. (See SEC File Number 001-37817).
*10.6(a)(ix)	Form of Restricted Stock Unit Award Agreement 2019 under the PIP Severance Plan.
*10.6(a)(x)	Form of Performance Stock Unit Award Agreement 2019 under the PIP Severance Plan.
*10.6(b)(i)	Registrant’s Equity Compensation Plan for Non-Employee Directors dated as of December 15, 2016 (“ECPNED”).
	Incorporated by reference to Exhibit 4.4 to Registrant’s Registration Statement No. 333-215361 dated December 29, 2016. (See SEC File Number 001-37817).
*10.6(b)(ii)	Form of Agreement under the ECPNED.
	Incorporated by reference to Exhibit 10.6(b)(ii) to the Registrant's Annual Report on From 10-K dated March 10, 2017. (See SEC File Number 001-37817).
*10.6.(c)	Registrant's Executive Change in Control Severance Plan dated as of April 25, 2017.
	Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated August 28, 2017. (See SEC File Number 001-37817).
*10.6(d)	Letter Agreement dated June 10, 2016 between Xerox Corporation and Ashok Vemuri regarding compensation arrangements.
	Incorporated by reference to Exhibit 99.2 to Xerox Corporation’s Current Report on Form 8-K dated June 14, 2016. (See SEC File Number 001-04471).
*10.6(e)	Letter Agreement dated July 22, 2016 between Xerox Corporation and J. Michael Peffer regarding compensation arrangements.

Table of Contents

	Incorporated by reference to Exhibit 10.12 to Registrant's Amendment No. 4 to Form 10 dated October 21, 2016. (See SEC File Number 001-37817).
*10.6(f)	Letter Agreement dated September 6, 2016 between Xerox Corporation and Brian Webb-Walsh regarding compensation arrangements.
	Incorporated by reference to Exhibit 10.13 to Registrant's Amendment No. 4 to Form 10 dated October 21, 2016. (See SEC File Number 001-37817).
*10.6(g)	Letter Agreement dated September 28, 2017 between Conduent Incorporated and Allan Cohen regarding compensation arrangements.
	Incorporated by reference to Exhibit 10.6(g) to the Registrant's Annual Report on Form 10-K dated March 1, 2018. (See SEC File Number 001-37817).
10.7(a)	Settlement Agreement and Release between the State of Texas, the Texas Health and Human Services Commission, Xerox Corporation, Conduent Incorporated, Conduent Business Services, LLC and Conduent State Healthcare, LLC dated February 18, 2019.
	Incorporated by reference to the Registrant's Current Report on Form 8-K dated February 19, 2019. (See SEC File Number 001-37817).
21.1	List of subsidiaries of Registrant.
23	Consent of PricewaterhouseCoopers LLP.
31(a)	Certification of CEO pursuant to Rule 13a-14(a) or Rule 15d-14(a).
31(b)	Certification of CFO pursuant to Rule 13a-14(a) or Rule 15d-14(a).
32	Certification of CEO and CFO pursuant to 18 U.S.C. §1350 as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase.
101.DEF	XBRL Taxonomy Extension Definition Linkbase.
101.INS	XBRL Instance Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase.
101.SCH	XBRL Taxonomy Extension Schema Linkbase.

Table of Contents

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CONDUENT INCORPORATED

/s/ ASHOK VEMURI

Ashok Vemuri
Chief Executive Officer

February 28, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

February 28, 2019

Signature	Title
Principal Executive Officer:	
/S/ ASHOK VEMURI	Chief Executive Officer and Director
Ashok Vemuri	
Principal Financial Officer:	
/S/ BRIAN WEBB-WALSH	Executive Vice President and Chief Financial Officer
Brian Webb-Walsh	
Principal Accounting Officer:	
/S/ ALLAN COHEN	Vice President and Chief Accounting Officer
Allan Cohen	
/S/ NICHOLAS GRAZIANO	Director
Nicholas Graziano	
/S/ JOIE A. GREGOR	Director
Joie A. Gregor	
/s/ SCOTT LETIER	Director
Scott Letier	
/S/ COURTNEY MATHER	Director
Courtney Mather	
/S/ MICHAEL NEVIN	Director
Michael Nevin	
/S/ MICHAEL A. NUTTER	Director
Michael A. Nutter	
/s/ WILLIAM G. PARRETT	Director and Chairman of the Board
William G. Parrett	
/S/ VIRGINIA M. WILSON	Director
Virginia M. Wilson	

EXHIBIT 10.6(a)(ix)

RESTRICTED STOCK UNIT AWARD AGREEMENT PURSUANT TO
CONDUENT INCORPORATED PERFORMANCE INCENTIVE PLAN

AGREEMENT, by Conduent Incorporated, a New York corporation (the "Company"), dated as of the date that appears in the award summary that provides the number of Restricted Stock Units and vesting provisions of the award (the "Award Summary"), in favor of the individual whose name appears on the Award Summary (the "Employee"), who is an employee of the Company, one of the Company's subsidiaries or one of its affiliates (the Company, or such subsidiary or affiliate, the "Employer").

In accordance with the provisions of the Conduent Performance Incentive Plan (the "Plan"), the Compensation Committee of the Board of Directors of the Company (the "Committee") or the Chief Executive Officer of the Company (the "CEO") has authorized the execution and delivery of this Agreement.

Terms used herein that are defined in the Plan or in this Agreement shall have the meanings assigned to them in the Plan or this Agreement, respectively.

The Award Summary contains the details of the awards covered by this Agreement and is incorporated herein in its entirety.

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration the Company agrees as follows:

AWARDS

1 . Award of Restricted Stock Units. Subject to all terms and conditions of the Plan and this Agreement, the Company has awarded to the Employee on the date indicated on the Award Summary the number of Restricted Stock Units (individually, a "RSU") as shown on the Award Summary. Notwithstanding anything herein to the contrary, only active employees and those employees on Short Term Disability Leave, Social Service Leave, Family Medical Leave or Paid Uniform Services Leave (pursuant to the Company's Human Resources Policies or similar policies of the Company's subsidiaries or affiliates) on the effective date of the award as shown on the Award Summary shall be eligible to receive the award.

TERMS OF THE RESTRICTED STOCK UNITS

2 . Entitlement to Shares. As soon as practicable on or after each applicable Vesting Date (as defined below) (or such earlier date provided in Section 9), the Company shall deliver to the Employee, in such manner as the Company shall determine, a number of shares of Common Stock equal to the number of vested RSUs (subject to reduction for withholding of the Employee's taxes in relation to the award as described in Section 11) within 60 days following each applicable Vesting Date (or, if earlier, a distribution event set forth in Section 9 that satisfies the requirements of Section 409A(a)(2) of the Code).

No fractional shares shall be issued as a result of such tax withholding. Instead, the Company shall apply the equivalent of any fractional share amount to amounts withheld for taxes. Notwithstanding the foregoing, the Company shall be entitled to delay delivery of such shares of Common Stock (or cash payment in lieu thereof, as applicable) until it shall have received from the Employee a duly executed Form W-8 or W-9, as applicable, and any other information or completed forms the Company may reasonably require.

3. Vesting. Except as otherwise determined by the Committee in its sole discretion (subject to Section 23 of the Plan) or as otherwise provided in this Section 3 or Section 9, the vesting of RSUs covered hereby shall be subject to the Employee's continued employment with the Company or a subsidiary or affiliate through the applicable Vesting Date. The Employee shall be eligible to vest in one-third of the shares of Common Stock covered by this Agreement as set forth in the Award Summary on each of December 31, 2019, December 31, 2020 and December 31, 2021 (each, a "Vesting Date").

Upon the occurrence of an event constituting a Change in Control, notwithstanding anything to the contrary in Section 22(b) of the Plan, the RSUs outstanding on the date of such Change in Control, and any dividend equivalents with respect thereto, shall remain outstanding and thereafter the vesting of such RSUs, and any dividend equivalents with respect thereto, shall be subject to Employee's continued employment with the Company or a subsidiary or an affiliate through each applicable Vesting Date as provided in this Section 3, at which time such RSUs shall vest and shall be paid in cash in accordance with Section 22(f) of the Plan at the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee; provided that the RSUs, and any dividend equivalents with respect thereto, shall vest and shall be paid to the extent provided in Section 9 in the event of the Employee's termination of employment following such Change in Control and prior to a Vesting Date. Upon payment pursuant to the terms of the Plan, such awards shall be cancelled.

4. Dividend Equivalents. The Employee shall become entitled to receive from the Company on each applicable Vesting Date (or such earlier date provided in Section 9) a cash payment equaling the same amount(s) that the holder of record of a number of shares of Common Stock equal to the number of vested RSUs (if any) would have been entitled to receive as dividends on such Common Stock during the period commencing on the effective date hereof and ending on each applicable Vesting Date (or such earlier date provided in Section 9) as provided under Section 3. Payments under this Section shall be net of any required withholding taxes.

OTHER TERMS

5. Ownership Guidelines. Guidelines pertaining to the Employee's required ownership of Common Stock (the "Stock Ownership Guidelines") shall be determined by the Committee or its authorized delegate, as applicable, in its sole discretion from time to time as communicated to the Employee in writing.

6. Holding Requirements. In the event of non-compliance with the Stock Ownership Guidelines under Section 5 hereof, following a five-year noncompliance period as described in the Stock Ownership Guidelines, the Employee must retain fifty percent (50%) of the net shares of Common Stock acquired in connection with the vesting of RSUs (net of withholding tax and any applicable fees) until the threshold set forth in the Stock Ownership Guidelines is satisfied. Such shares shall be held in the Employee's Morgan Stanley account or in another account acceptable to the Company. In addition, shares used to maintain the Employee's ownership level pursuant to this award should be held with Morgan Stanley or in another account acceptable to the Company.

7. Voting Rights/Dividends. Except as otherwise provided herein, the Employee shall have no rights as a shareholder with respect to the RSUs until the date of issuance of a stock certificate to him for such RSUs and no adjustment shall be made for dividends or other rights for which the record date is prior to the date the RSUs become vested.

8. Non-Assignability. Unless otherwise provided by the Committee in its discretion, RSUs may not be sold, assigned, alienated, transferred, pledged, attached or otherwise encumbered except as provided in Section 11 of the Plan. Any purported sale, assignment, alienation, transfer, pledge, attachment or other encumbrance of a RSU in violation of the provisions of this Section 8 and Section 11 of the Plan shall be void.

9. Effect of Termination of Employment or Death.

(a) Effect on RSUs. In the event the Employee

(i) voluntarily ceases to be an employee of the Employer for any reason other than Termination For Good Reason following a Change in Control, the RSUs that have not vested in accordance with Section 3 shall be canceled and forfeited on the date of such voluntary termination of employment;

(ii) involuntarily ceases to be an employee of the Employer on or after the nine-month anniversary of the grant date of the RSUs and prior to a Change in Control for any reason other than due to death, Disability or a termination for Cause, the number of RSUs scheduled to vest on the Vesting Date immediately following such termination, and any dividend equivalents with respect thereto, shall be prorated based on a fraction, the numerator of which is the number of full months elapsed since the most recent Vesting Date immediately preceding such date of termination (or since January 1, 2018, in the case of a termination of employment prior to the first Vesting Date) and the denominator of which is 12, and any remaining RSUs shall be forfeited. Such prorated number of RSUs, and any dividend equivalents with respect thereto, shall immediately vest and shall be settled in accordance with Section 2 within 60 days following the Vesting Date immediately following such termination; provided that such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity in a form acceptable to the Company) and such release becoming effective and irrevocable within the 60-day period following such termination;

(iii) involuntarily ceases to be an employee of the Employer following a Change in Control for any reason other than due to death, Disability or termination for Cause, then the RSUs covered by this Agreement, and any dividend equivalents with respect thereto, shall immediately vest (without proration based on the portion of the vesting period elapsed prior to such termination) and shall be paid in cash in accordance with Section 22(f) of the Plan within 60 days following the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee. Such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity, in a form acceptable to the Company) and such release becoming effective and irrevocable within the 60-day period following such termination;

(iv) involuntarily ceases to be an employee of the Employer by reason of death or Disability, (1) the RSUs covered by this Agreement, and any dividend equivalents with respect thereto, shall immediately vest if such termination of employment occurs prior to a Change in Control and shall be settled within 60 days following the Vesting Date immediately following such termination] in accordance with Section 2, and (2) if such termination of employment occurs following a Change in Control, then the number of RSUs covered by this Agreement, and any dividend equivalents with respect thereto, shall immediately vest and shall be paid in cash in accordance with Section 22(f) of the Plan at the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee, in either case without proration based on the portion of the vesting period elapsed prior to such termination;

(v) involuntarily ceases to be an employee of the Employer (A) due to termination for Cause or (B) prior to the nine-month anniversary of the grant date of the RSUs and prior to a Change in Control for any reason other than due to death or Disability, the RSUs shall be cancelled and forfeited on the date of such termination of employment; and

(vi) voluntarily ceases to be an employee due to a Termination for Good Reason following a Change in Control, the number of RSUs covered by this Agreement, and any dividend equivalents with respect thereto, shall immediately vest (without proration based on the portion of the vesting period elapsed prior to such termination) and shall be paid in cash in accordance with Section 22(f) of the Plan within 60 days following the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee. Such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity, in a form acceptable to the Company) and such release becoming effective and irrevocable within the 60-day period following such termination.

(b) Definitions. “Cause” means (i) a violation of any of the rules, policies, procedures or guidelines of the Employer, including but not limited to the Company’s Business Ethics Policy and the Proprietary Information and Conflict of Interest Agreement (ii) any conduct which qualifies for “immediate discharge” under the Employer’s Human Resource Policies as in effect from time to time (iii) rendering services to a firm which engages, or engaging directly or indirectly, in any business that is competitive with the Employer, or represents a conflict of interest with the interests of the Employer; (iv) conviction of, or entering a guilty plea with respect to, a crime whether or not connected with the Employer; or (v) any other conduct determined to be injurious, detrimental or prejudicial to any interest of the Employer.

"Termination For Good Reason" has the meaning set forth in Section 22(a)(vi) of the Plan.

"Disability" shall include cessation of active employment due to commencement of long-term disability under the Employer's long-term disability plan or under a disability policy of any subsidiary or Affiliate, as applicable; provided that a Disability shall not be deemed to have occurred for such purposes unless the circumstances would also result in a "disability" within the meaning of Section 409A of the Code.

(c) Divestiture. Notwithstanding the above, the termination of Employee's employment with Employer in connection with the Employer's sale (whether by sale of assets or a subsidiary, or both) of a line of business within which the Employee was employed immediately prior to such sale as determined by the Committee in its sole discretion, that does not constitute a Change in Control, shall be treated as an involuntary termination of employment for purposes of this Agreement and the RSUs shall vest and be paid as provided in Section 9(a)(ii) above, whether or not such termination occurs after the nine-month anniversary of the grant date of the RSUs; provided, however, that, in the event the Employee is offered a comparable position (as determined by the Committee in accordance with the Company's severance policy) with the acquirer of such line of business and does not accept such offer, the RSUs shall be cancelled and forfeited on the date of termination of employment.

10. General Restrictions. If at any time the Committee or its authorized delegate, as applicable, shall determine, in its discretion, that the listing, registration or qualification of any shares of Common Stock subject to this Agreement upon any securities exchange or under any state or Federal law, or the consent or approval of any government regulatory body, is necessary or desirable as a condition of, or in connection with, the awarding of the RSUs or the issue or purchase of shares of Common Stock hereunder, the certificates for shares of Common Stock may not be issued in respect of RSUs in whole or in part unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Committee or its authorized delegate, as applicable, and any delay caused thereby shall in no way affect the date of termination of the RSUs.

11. Responsibility for Taxes. The Employee acknowledges that the ultimate responsibility for the Employee's Federal, state and municipal individual income taxes, the Employee's portion of social security and other payroll taxes, and any other taxes related to the Employee's participation in the Plan and legally applicable to the Employee, is and remains his or her responsibility and may exceed the amount actually withheld by the Company or the Employer. In the event that there is withholding tax liability in connection with the vesting or settlement of RSUs, the Employee may satisfy, in whole or in part, any withholding tax liability: (a) by cash payment of an amount equal to such withholding liability; or (b) by having the Company withhold from the number of RSUs in which the Employee would be entitled to vest a number of shares of Common Stock having a fair value equal to such withholding tax liability in accordance with the Company's share withholding procedures.

12. Nature of Award. In accepting the award, the Employee acknowledges that:

(a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time in a manner consistent with Section 13 of the Plan regarding Plan amendment and termination and, in addition, the RSUs are subject to modification and adjustment under Section 6 of the Plan.

(a) the award of the RSUs is voluntary and occasional and does not create any contractual or other right to receive future grants of RSUs, or benefits in lieu of RSUs, even if RSUs have been granted repeatedly in the past;
(b) all decisions with respect to future RSU awards, if any, will be at the sole discretion of the Committee or its authorized delegate, as applicable;
(c) The Employee's participation in the Plan shall not create a right to further employment with the Employer and shall not interfere with the ability of the Employer to terminate Employee's employment relationship at any time; further, the RSU award and Employee's participation in the Plan will not be interpreted to form an employment contract or relationship with the Employer;
(d) The Employee is voluntarily participating in the Plan;
(e) the RSUs and the shares of Common Stock subject to the RSUs are an extraordinary item that does not constitute compensation of any kind for services of any kind rendered to the Employer, and which is outside the scope of the Employee's employment contract, if any;
(f) the RSUs and the shares of Common Stock subject to the RSUs are not intended to replace any pension rights or compensation;

EXHIBIT 10.6(a)(ix)

(g) the RSUs and the shares of Common Stock subject to the RSUs are not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end of service payments, bonuses, long-service awards, pension or retirement or welfare benefits or similar payments and in no event should be considered as compensation for, or relating in any way to, past services for the Employer;

(h) the future value of the underlying shares of Common Stock is unknown and cannot be predicted with certainty;

(i) in consideration of the award of the RSUs, no claim or entitlement to compensation or damages shall arise from forfeiture of the RSUs, including, but not limited to, forfeiture resulting from termination of the Employee's employment with the Employer (for any reason whatsoever and whether or not in breach of local labor laws) and the Employee irrevocably releases the Company and the Employer from any such claim that may arise; if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, the Employee shall be deemed irrevocably to have waived the Employee's entitlement to pursue such claim; and

(j) subject to the provisions in the Plan regarding Change in Control, RSUs and the benefits under the Plan, if any, will not auto-matically transfer to another company in the case of a merger, take-over or transfer of liability.

13. No Advice Regarding Award. Neither the Company nor the Employer is providing any tax, legal or financial advice, nor is the Company or Employer making any recommendations regarding the Employee's participation in the Plan, or his or her acquisition or sale of the underlying shares of Common Stock. The Employee is hereby advised to consult with his or her own personal tax, legal and financial advisors regarding his or her partici-pation in the Plan before taking any action related to the Plan.

14. Amendment of This Agreement. With the consent of the Em-ployee, the Committee or its authorized delegate, as applicable, may amend this Agree-ment in a manner not inconsistent with the Plan.

15. Subsidiary. As used herein the term "subsidiary" shall mean any present or future corporation which would be a "subsidiary corpora-tion" of the Com-pany as the term is defined in Section 425 of the Internal Revenue Code (the "Code") of 1986 on the date of award.

16. Affiliate. As used herein the term "affiliate" shall mean any entity in which the Company has a significant equity interest, as deter-mined by the Committee.

17. Recoupments.

(a) If an employee or former employee of the Employer is reasonably deemed by the Committee or its authorized delegate, as applicable, to have engaged in detrimental activity against the Employer, any awards granted to such employee or former employee shall be cancelled and be of no further force or effect and any payment or delivery of an award from six months prior to such detrimental activity may be rescinded. In the event of any such rescission, the Employee shall pay to the Company the amount of any gain realized or payment received as a result of the rescinded exercise, payment or delivery, in such manner and on such terms and conditions as may be required by the Committee or its authorized delegate, as applicable. Detrimental activity may include:

(i) violating terms of a non-compete agreement with the Employer, if any;

(ii) disclosing confidential or proprietary business information of the Employer to any person or entity including but not limited to a competitor, vendor or customer without appropriate authorization from the Employer;

(iii) violating any rules, policies, procedures or guidelines of the Employer;

(iv) directly or indirectly soliciting any employee of the Employer to terminate employment with the Employer;

(v) directly or indirectly soliciting or accepting business from any customer or potential customer or encouraging any customer, potential customer or supplier of the Employer, to reduce the level of business it does with the Employer; or

(vi) engaging in any other conduct or act that is determined to be injurious, detrimental or prejudicial to any interest of the Employer.

EXHIBIT 10.6(a)(ix)

(b) If an accounting restatement by the Company is required in order to correct any material noncompliance with financial reporting requirements under relevant securities laws, the Company will have the authority to recover from executive officers or former executive officers, whether or not still employed by the Employer, any excess incentive-based compensation (in excess of what would have been paid under the accounting restatement), including entitlement to shares, provided under this Agreement to executive officers of the Employer, that was based on such erroneous data and paid during the three-year period preceding the date on which the Company is required to prepare the accounting restatement. Notwithstanding anything herein to the contrary, the Company may implement any policy or take any action with respect to the recovery of excess incentive-based compensation, including entitlement to shares of Common Stock that the Company determines to be necessary or advisable in order to comply with the requirements of the Dodd-Frank Wall Street Financial Reform and Consumer Protection Act.

18. Cancellation and Rescission of Award. Without limiting the foregoing Section regarding non-engagement in detrimental activity against the Employer, the Company may cancel any award provided hereunder if the Employee is not in compliance with all of the following conditions:

(a) The Employee shall not render services for any organization or engage directly or indirectly in any business which would cause the Employee to breach any of the post-employment prohibitions contained in any agreement between the Employer and the Employee.

(b) The Employee shall not, without prior written authorization from the Employer, disclose to anyone outside the Employer, or use in other than the Employer's business, any confidential information or material, as specified in any agreement between the Employer and the Employee which contains post-employment prohibitions, relating to the business of the Employer acquired by the Employee either during or after employment with the Employer.

Notwithstanding the above, this Agreement does not in any manner restrict the Employee from reporting possible violations of federal, state or local laws or regulations to any governmental agency or entity, and shall not, and not be interpreted to, impair the participant from exercising any legally protected whistleblower rights (including under Rule 21F under the Exchange Act). Similarly, the Employer does not in any manner restrict the Employee from participating in any proceeding or investigation by a federal, state or local government agency or entity responsible for enforcing such laws. The Employee is not required to notify the Employer that he or she has made such report or disclosure, or of his or her participation in an agency investigation or proceeding.

(c) The Employee, pursuant to any agreement between the Employer and the Employee which contains post-employment prohibitions, shall disclose promptly and assign to the Employer all right, title and interest in any invention or idea, patentable or not, made or conceived by the Employee during employment with the Employer, relating in any manner to the actual or anticipated busi-ness, research or development work of the Employer, and shall do anything reasonably necessary to enable the Employer to secure a patent where appropriate in the United States and in foreign countries.

(d) Failure to comply with the provision of subparagraphs (a), (b) or (c) of this Section 18 prior to, or during the six months after, any payment or delivery shall cause such payment or delivery to be rescinded. The Company shall notify the Employee in writing of any such rescission within two years after such payment or delivery. Within ten days after receiving such a notice from the Company, the Employee shall pay to the Company the amount of any payment received as a result of the rescinded payment or delivery pursuant to an award. Such payment to the Company by the Employee shall be made either in cash or by returning to the Company the number of shares of Common Stock that the Employee received in connection with the rescinded payment or delivery.

19. Notices. Notices hereunder shall be in writing and if to the Company shall be mailed to the Company at 100 Campus Dr. Suite 200 Florham Park, NJ 07932 USA, addressed to the attention of Stock Plan Administrator, and if to the Employee shall be delivered personally or mailed to the Employee at his address as the same appears on the records of the Company.

20. Language. If the Employee has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

EXHIBIT 10.6(a)(ix)

21. Electronic Delivery and Acceptance. The Company will deliver any documents related to current or future participation in the Plan by electronic means. The Employee hereby consents to receive such documents by electronic delivery, and agrees to participate in the Plan and be bound by the terms and conditions of this Agreement, through an on-line or electronic system established and maintained by the Company or a third party designated by the Company. Electronic acceptance by the Employee is required and the award will be cancelled for any employee who fails to comply with the Company's acceptance requirement within six months of the effective date of the award.

22. Interpretation of This Agreement. The Committee or its authorized delegate, as applicable, shall have the authority to interpret the Plan and this Agreement and to take whatever administrative actions, including correction of administrative errors in the awards subject to this Agreement and in this Agreement, as the Committee or its authorized delegate, as applicable, in its sole good faith judgment shall determine to be advisable. All decisions, interpretations and administrative actions made by the Committee or its authorized delegate, as applicable, hereunder or under the Plan shall be binding and conclusive on the Company and the Employee. In the event there is inconsistency between the provisions of this Agreement and of the Plan, the provisions of the Plan shall govern.

23. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties hereto and the successors and assigns of the Company and to the extent provided in Section 11 of the Plan to the personal representatives, legatees and heirs of the Employee.

24. Governing Law and Venue. The validity, construction and effect of the Agreement and any actions taken under or relating to this Agreement shall be determined in accordance with the laws of the state of New York and applicable Federal law.

This grant is made and/or administered in the United States. For purposes of litigating any dispute that arises under this grant or the Agreement the parties hereby submit to and consent to the jurisdiction of the state of New York, agree that such litigation shall be conducted in the state or federal courts located in New York.

25. Section 409A. It is intended that the provisions of this Agreement comply with, or are exempt from, Section 409A, and all provisions of this Agreement shall be construed and interpreted in a manner consistent with the requirements for avoiding taxes or penalties under Section 409A.

Neither the Employee nor any of the Employee's creditors or beneficiaries shall have the right to subject any deferred compensation (within the meaning of Section 409A) payable under this Agreement to any anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, attachment or garnishment. Except as permitted under Section 409A, any deferred compensation (within the meaning of Section 409A) payable to the Employee or for the Employee's benefit under this Agreement may not be reduced by, or offset against, any amount owing by the Employee to the Company or any of its Affiliates. In the event that any 60-day period described in Section 9 of this Agreement straddles two calendar years, then any RSUs, and any dividends with respect thereto, that are settled within such 60-day period in accordance with this Agreement shall be settled in the second calendar year.

If, at the time of the Employee's separation from service (within the meaning of Section 409A), (a) the Employee shall be a specified employee (within the meaning of Section 409A and using the identification methodology selected by the Company from time to time) and (b) the Company shall make a good faith determination that an amount payable hereunder constitutes deferred compensation (within the meaning of Section 409A) the payment of which is required to be delayed pursuant to the six-month delay rule set forth in Section 409A in order to avoid taxes or penalties under Section 409A, then the Company shall not pay such amount on the otherwise scheduled payment date but shall instead pay it, without interest, on the first business day after such six-month period.

Notwithstanding any provision of this Agreement to the contrary, in light of the uncertainty with respect to the proper application of Section 409A, the Company reserves the right to make amendments to this Agreement as the Company deems necessary or desirable to avoid the imposition of taxes or penalties under Section 409A. In any case, the Employee shall be solely responsible and liable for the satisfaction of all taxes and penalties that may be imposed on the Employee or for the Employee's account in connection with this Agreement (including any taxes and penalties under Section 409A), and neither the Company nor any of its Affiliates shall have any obligation to indemnify or otherwise hold the Employee harmless from any or all of such taxes or penalties.

26. Separability. In case any provision in the Agreement, or in any other instrument referred to herein, shall become invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions in the Agreement, or in any other instrument referred to herein, shall not in any way be affected or impaired thereby.

EXHIBIT 10.6(a)(ix)

27. Integration of Terms. Except as otherwise provided in this Agreement, this Agreement contains the entire agreement between the parties relating to the subject matter hereof and supersedes any and all oral statements and prior writings with respect thereto.

28. Appendix for Non-U.S. Countries. Notwithstanding any provisions in this Agreement, the RSU award shall be subject to any special terms and conditions set forth in any appendix to this Agreement for the Employee's country (the "Appendix"). Moreover, if the Employee relocates to one of the countries included in the Appendix, the special terms and conditions for such country will apply to the Employee, to the extent the Company determines that the application of such terms and conditions is necessary or advisable in order to comply with local law or facilitate the administration of the Plan. The Appendix constitutes part of this Agreement.

29. Imposition of Other Requirements. The Committee or its authorized delegate, as applicable, reserves the right to impose other requirements on the Employee's participation in the Plan, on the RSUs and on any shares of Common Stock acquired under the Plan, to the extent the Committee or its authorized delegate, as applicable, determines it is nec-essary or advisable in order to comply with local law or facilitate the administration of the Plan, and to require the Employee to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

IN WITNESS WHEREOF, the Company has executed this Agreement as of the day and year set forth on the Award Summary.

CONDUENT INCORPORATED

B

Signature

EXHIBIT 10.6(a)(x)

PERFORMANCE STOCK UNIT AWARD AGREEMENT PURSUANT TO CONDUENT INCORPORATED PERFORMANCE INCENTIVE PLAN

AGREEMENT, by Conduent Incorporated, a New York corporation (the "Company"), dated as of the date that appears in the award summary that provides the number of Performance Stock Units and vesting provisions of the award (the "Award Summary"), in favor of the individual whose name appears on the Award Summary (the "Employee"), who is an employee of the Company, one of the Company's subsidiaries or one of its affiliates (the Company, or such subsidiary or affiliate, the "Employer").

In accordance with the provisions of the Conduent Performance Incentive Plan (the "Plan"), the Compensation Committee of the Board of Directors of the Company (the "Committee") or the Chief Executive Officer of the Company (the "CEO") has authorized the execution and delivery of this Agreement.

Terms used herein that are defined in the Plan or in this Agreement shall have the meanings assigned to them in the Plan or this Agreement, respectively.

The Award Summary contains the details of the awards covered by this Agreement and is incorporated herein in its entirety.

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration, the Company agrees as follows:

AWARDS

1. Award of Performance Stock Units. Subject to all terms and conditions of the Plan and this Agreement, the Company has awarded to the Employee on the date indicated on the Award Summary Performance Stock Units (individually, a "PS") as shown on the Award Summary, representing the target number of shares of Common Stock covered by this Agreement (the "Target PSs"). Notwithstanding anything herein to the contrary, only active employees and those employees on Short Term Disability Leave, Social Service Leave, Family Medical Leave or Paid Uniform Services Leave (pursuant to the Company's Human Resources Policies or similar policies of the Company's subsidiaries or affiliates) on the effective date of the award as shown on the Award Summary shall be eligible to receive the award.

TERMS OF THE PERFORMANCE STOCK UNITS

2. Entitlement to Shares. As soon as practicable on or after the Vesting Date (as defined below) (or such earlier date provided in Section 9) in connection with the PSs, the Company shall deliver to the Employee, in such manner as the Company shall determine, a number of shares of Common Stock equal to the number of vested PSs (subject to reduction for withholding of the Employee's taxes in relation to the award as described in Section 11) within 60 days following the Vesting Date (or, if earlier, a distribution event set forth in Section 9 that satisfies the requirements of Section 409A(a)(2) of the Code).

No fractional shares shall be issued pursuant to this Agreement. Instead, the Company shall apply the equivalent of any fractional share amount to amounts withheld for taxes. Notwithstanding the foregoing, the Company shall be entitled to delay delivery of such shares of Common Stock (or cash payment in lieu thereof, as applicable) until it shall have received from the Employee a duly executed Form W-8 or W-9, as applicable, and any other information or completed forms the Company may reasonably require.

3. Vesting. Except as otherwise determined by the Committee in its sole discretion (subject to Section 23 of the Plan) or as otherwise provided in this Section 3 or Section 9, the vesting of the PSs covered hereby shall be subject to (i) the achievement of the performance goals as set forth in the Award Summary (the "Performance Goals") as determined by the Committee and (ii) the Employee's continued employment with the Company or a subsidiary or affiliate through December 31, 2021 (the "Vesting Date"). In the event the achievement of the Performance Goals is "below threshold" level, then all of the PSs will be forfeited; in the event that achievement of the Performance Goals is between "threshold" and "target" level, then no less than 50% and no more than 100% of the Target PSs will vest; and in the event achievement of the Performance Goals is between "target" and "maximum" level, then no less than 100% and no more than 200% of the Target PSs will vest, in each case as set forth in the Award Summary and subject to the Employee's continued employment through the Vesting Date as described in clause (ii) of the immediately preceding sentence.

Upon the occurrence of an event constituting a Change in Control prior to the Vesting Date, notwithstanding anything to the contrary in Section 22(b) of the Plan, the Performance Goals shall be deemed achieved at target level, but thereafter the PSs, and any dividend equivalents with respect thereto, shall remain outstanding and thereafter the vesting of such PSs, and any dividend equivalents with respect thereto, shall be subject to the Employee's continued employment with the Company or a subsidiary or an affiliate through the Vesting Date, at which time such PSs shall be paid in cash in accordance with Section 22(f) of the Plan at the earliest time set forth in Section 22(c) of the Plan that will not trigger tax or penalty under Section 409A of the Code, as determined by the Committee; provided that such PSs, and any dividend equivalents with respect thereto, shall vest and shall be paid to the extent provided in Section 9 in the event of the Employee's termination of employment following such Change in Control and prior to the Vesting Date or in the event such Change in Control occurs following a termination of the Employee's employment. Upon payment pursuant to the terms of the Plan, such awards shall be cancelled.

4. Dividend Equivalents. The Employee shall become entitled to receive from the Company on the Vesting Date (or such earlier date provided in Section 9) a cash payment equaling the same amount(s) that the holder of record of a number of shares of Common Stock equal to the number of vested PSs (if any) would have been entitled to receive as dividends on such Common Stock during the period commencing on the effective date hereof and ending on the Vesting Date (or such earlier date provided in Section 9) as provided under Section 3. Payments under this Section shall be net of any required withholding taxes.

OTHER TERMS

5 . Ownership Guidelines. Guidelines pertaining to the Employee's required ownership of Common Stock (the "Stock Ownership Guidelines") shall be determined by the Committee or its authorized delegate, as applicable, in its sole discretion from time to time as communicated to the Employee in writing.

6 . Holding Requirements. In the event of non-compliance with the Stock Ownership Guidelines under Section 5 hereof, following a five-year noncompliance period as described in the Stock Ownership Guidelines, the Employee must retain fifty percent (50%) of the net shares of Common Stock acquired in connection with the vesting of PSs (net of withholding tax and any applicable fees) until the threshold set forth in the Stock Ownership Guidelines is satisfied. Such shares shall be held in the Employee's Morgan Stanley account or in another account acceptable to the Company. In addition, shares used to maintain the Employee's ownership level pursuant to this award should be held with Morgan Stanley or in another account acceptable to the Company.

7. Voting Rights/ Dividends. Except as otherwise provided herein, the Employee shall have no rights as a shareholder with respect to the PSs until the date of issuance of a stock certificate to him for such PSs and no adjustment shall be made for dividends or other rights for which the record date is prior to the date the PSs become vested.

8. Non-Assignability. Unless otherwise provided by the Committee in its discretion, PSs may not be sold, assigned, alienated, transferred, pledged, attached or otherwise encumbered except as provided in Section 11 of the Plan. Any purported sale, assignment, alienation, transfer, pledge, attachment or other encumbrance of a PS in violation of the provisions of this Section 8 and Section 11 of the Plan shall be void.

9. Effect of Termination of Employment or Death.

(a) Effect on PSs. In the event the Employee

(i) voluntarily ceases to be an employee of the Employer for any reason other than Termination For Good Reason following a Change in Control, the PSs that have not vested in accordance with Section 3 shall be canceled and forfeited on the date of such voluntary termination of employment;

(ii) involuntarily ceases to be an employee of the Employer on or after the nine-month anniversary of the grant date of PSs and prior to a Change in Control for any reason other than due to death, Disability or a termination for Cause, the number of PSs covered by this Agreement, and any dividend equivalents with respect thereto, shall be prorated based on a fraction, the numerator of which is the number of full months elapsed during the three-year performance period prior to such termination of employment and the denominator of which is 36, and any remaining PSs shall be forfeited. The vesting of such prorated number of PSs, and any dividend equivalents with respect thereto, shall remain subject to the achievement of the Performance Goals in accordance with Section 3 and shall be settled within 60 days following the Vesting Date in accordance with Section 2. Such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity, in a form acceptable to the Company) and such release becoming effective and irrevocable within the 60-day period following such termination;

(iii) involuntarily ceases to be an employee of the Employer following a Change in Control for any reason other than due to death, Disability or termination for Cause, then the PSs (the Performance Goals for which shall have been deemed achieved at target level, pursuant to Section 3), and any dividend equivalents with respect thereto, shall immediately vest (without proration based on the portion of the three-year performance period elapsed prior to such termination) and shall be paid in cash in accordance with Section 22(f) of the Plan within 60 days following the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee. Such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity, in a form acceptable to the Company) and such release becoming effective and irrevocable within the 60-day period following such termination;

(iv) involuntarily ceases to be an employee of the Employer by reason of death or Disability, (1) the vesting of the PSs shall remain subject to the achievement of the Performance Goals in accordance with Section 3, if such termination of employment occurs prior to a Change in Control and shall be settled on the Vesting Date in accordance with Section 2, and (2) if such termination of employment occurs following a Change in Control, then the PSs (the Performance Goals for which shall have been deemed achieved at target level, pursuant to Section 3), and any dividend equivalents with respect thereto, shall immediately vest and shall be paid in cash in accordance with Section 22(f) of the Plan at the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee, in either case without proration based on the portion of the three-year performance period elapsed prior to such termination;

(v) involuntarily ceases to be an employee of the Employer (A) due to termination for Cause or (B) prior to the nine-month anniversary of the grant date of the PSs and prior to a Change in Control for any reason other than due to death or Disability, the PSs shall be cancelled and forfeited on the date of such termination of employment; and

(vi) voluntarily ceases to be an employee due to a Termination for Good Reason following a Change in Control, the PSs (the Performance Goals for which shall have been deemed achieved at target level, pursuant to Section 3), and any dividend equivalents with respect thereto, shall immediately vest and shall be paid in cash in accordance with Section 22(f) of the Plan within 60 days following the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee, without proration based on the portion of the three-year performance period elapsed prior to such termination. Such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity, in a form acceptable to the Company) and such release becoming effective and irrevocable within the 60-day period following such termination.

(b) Definitions. “Cause” means (i) a violation of any of the rules, policies, procedures or guidelines of the Employer, including but not limited to the Company’s Business Ethics Policy and the Proprietary Information and Conflict of Interest Agreement (ii) any conduct which qualifies for “immediate discharge” under the Employer’s Human Resource Policies as in effect from time to time (iii) rendering services to a firm which engages, or engaging directly or indirectly, in any business that is competitive with the Employer, or represents a conflict of interest with the interests of the Employer; (iv) conviction of, or entering a guilty plea with respect to, a crime whether or not connected with the Employer; or (v) any other conduct determined to be injurious, detrimental or prejudicial to any interest of the Employer.

"Termination For Good Reason" has the meaning set forth in Section 22(a)(vi) of the Plan.

"Disability" shall include cessation of active employment due to commencement of long-term disability under the Employer's long-term disability plan or under a disability policy of any subsidiary or Affiliate, as applicable; provided that a Disability shall not be deemed to have occurred for such purposes unless the circumstances would also result in a "disability" within the meaning of Section 409A of the Code.

(c) Divestiture. Notwithstanding the above, the termination of Employee's employment with Employer in connection with the Employer's sale (whether by sale of assets or a subsidiary, or both) of a line of business within which the Employee was employed immediately prior to such sale as determined by the Committee in its sole discretion, that does not constitute a Change in Control, shall be treated as an involuntary termination of employment for purposes of this Agreement and the PSs shall vest and be paid as provided in Section 9(a)(ii) above, whether or not such termination occurs after the nine-month anniversary of the grant date of the PSs; provided, however, that, in the event the Employee is offered a comparable position (as determined by the Committee in accordance with the Company's severance policy) with the acquirer of such line of business and does not accept such offer, the PSs shall be cancelled and forfeited on the date of termination of employment.

10. General Restrictions. If at any time the Committee or its authorized delegate, as applicable, shall determine, in its discretion, that the listing, registration or qualification of any shares of Common Stock subject to this Agreement upon any securities exchange or under any state or Federal law, or the consent or approval of any government regulatory body, is necessary or desirable as a condition of, or in connection with, the awarding of the PSs or the issue or purchase of shares of Common Stock hereunder, the certificates for shares of Common Stock may not be issued in respect of PSs in whole or in part unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Committee or its authorized delegate, as applicable, and any delay caused thereby shall in no way affect the date of termination of the PSs.

11. Responsibility for Taxes. The Employee acknowledges that the ultimate responsibility for the Employee's Federal, state and municipal individual income taxes, the Employee's portion of social security and other payroll taxes, and any other taxes related to the Employee's participation in the Plan and legally applicable to the Employee, is and remains his or her responsibility and may exceed the amount actually withheld by the Company or the Employer. In the event that there is withholding tax liability in connection with the vesting or settlement of the PSs, the Employee may satisfy, in whole or in part, any withholding tax liability: (a) by cash payment of an amount equal to such withholding liability; or (b) by having the Company withhold from the number of PSs in which the Employee would be entitled to vest a number of shares of Common Stock having a fair value equal to such withholding tax liability in accordance with the Company's share withholding procedures.

12. Nature of Award. In accepting the award, the Employee acknowledges that:

(a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time in a manner consistent with Section 13 of the Plan regarding Plan amendment and termination and, in addition, the PSs are subject to modification and adjustment under Section 6 of the Plan.

(a) the award of the PSs is voluntary and occasional and does not create any contractual or other right to receive future grants of PSs, or benefits in lieu of PSs, even if PSs have been granted repeatedly in the past;
(b) all decisions with respect to future PS awards, if any, will be at the sole discretion of the Committee or its authorized delegate, as applicable;
(c) The Employee's participation in the Plan shall not create a right to further employment with the Employer and shall not interfere with the ability of the Employer to terminate Employee's employment relationship at any time; further, the PS award and Employee's participation in the Plan will not be interpreted to form an employment contract or relationship with the Employer;
(d) The Employee is voluntarily participating in the Plan;
(e) the PSs and the shares of Common Stock subject to the PSs are an extraordinary item that does not constitute compensa-tion of any kind for services of any kind rendered to the Employer, and which is outside the scope of the Employee's employment contract, if any;
(f) the PSs and the shares of Common Stock subject to the PSs are not intended to replace any pension rights or compensation;

EXHIBIT 10.6(a)(x)

(g) the PSs and the shares of Common Stock subject to the PSs are not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end of service payments, bonuses, long-service awards, pension or retirement or welfare benefits or similar payments and in no event should be considered as compensation for, or relating in any way to, past services for the Employer;

(h) the future value of the underlying shares of Common Stock is unknown and cannot be predicted with certainty;

(i) in consideration of the award of the PSs, no claim or entitlement to compensation or damages shall arise from forfeiture of the PSs, including, but not limited to, forfeiture resulting from termination of the Employee's employment with the Employer (for any reason whatsoever and whether or not in breach of local labor laws) and the Employee irrevocably releases the Company and the Employer from any such claim that may arise; if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, the Employee shall be deemed irrevocably to have waived the Employee's entitlement to pursue such claim; and

(j) subject to the provisions in the Plan regarding Change in Control, PSs and the benefits under the Plan, if any, will not auto-matically transfer to another company in the case of a merger, take-over or transfer of liability.

13. No Advice Regarding Award. Neither the Company nor the Employer is providing any tax, legal or financial advice, nor is the Company or Employer making any recommendations regarding the Employee's participation in the Plan, or his or her acquisition or sale of the underlying shares of Common Stock. The Employee is hereby advised to consult with his or her own personal tax, legal and financial advisors regarding his or her partici-pation in the Plan before taking any action related to the Plan.

14. Amendment of This Agreement. With the consent of the Em-ployee, the Committee or its authorized delegate, as applicable, may amend this Agree-ment in a manner not inconsistent with the Plan.

15. Subsidiary. As used herein the term "subsidiary" shall mean any present or future corporation which would be a "subsidiary corpora-tion" of the Com-pany as the term is defined in Section 425 of the Internal Revenue Code (the "Code") of 1986 on the date of award.

16. Affiliate. As used herein the term "affiliate" shall mean any entity in which the Company has a significant equity interest, as deter-mined by the Committee.

17. Recoupments.

(a) If an employee or former employee of the Employer is reasonably deemed by the Committee or its authorized delegate, as applicable, to have engaged in detrimental activity against the Employer, any awards granted to such employee or former employee shall be cancelled and be of no further force or effect and any payment or delivery of an award from six months prior to such detrimental activity may be rescinded. In the event of any such rescission, the Employee shall pay to the Company the amount of any gain realized or payment received as a result of the rescinded exercise, payment or delivery, in such manner and on such terms and conditions as may be required by the Committee or its authorized delegate, as applicable. Detrimental activity may include:

(i) violating terms of a non-compete agreement with the Employer, if any;

(ii) disclosing confidential or proprietary business information of the Employer to any person or entity including but not limited to a competitor, vendor or customer without appropriate authorization from the Employer;

(iii) violating any rules, policies, procedures or guidelines of the Employer;

(iv) directly or indirectly soliciting any employee of the Employer to terminate employment with the Employer;

(v) directly or indirectly soliciting or accepting business from any customer or potential customer or encouraging any customer, potential customer or supplier of the Employer, to reduce the level of business it does with the Employer; or

(vi) engaging in any other conduct or act that is determined to be injurious, detrimental or prejudicial to any interest of the Employer.

(b) If an accounting restatement by the Company is required in order to correct any material noncompliance with financial reporting requirements under relevant securities laws, the Company will have the authority to recover from executive officers or former executive officers, whether or not still employed by the Employer, any excess incentive-based compensation (in excess of what would have been paid under the accounting restatement), including entitlement to shares, provided under this Agreement to executive officers of the Employer, that was based on such erroneous data and paid during the three-year period preceding the date on which the Company is required to prepare the accounting restatement. Notwithstanding anything herein to the contrary, the Company may implement any policy or take any action with respect to the recovery of excess incentive-based compensation, including entitlement to shares of Common Stock that the Company determines to be necessary or advisable in order to comply with the requirements of the Dodd-Frank Wall Street Financial Reform and Consumer Protection Act.

18. Cancellation and Rescission of Award. Without limiting the foregoing Section regarding non-engagement in detrimental activity against the Employer, the Company may cancel any award provided hereunder if the Employee is not in compliance with all of the following conditions:

(a) The Employee shall not render services for any organization or engage directly or indirectly in any business which would cause the Employee to breach any of the post-employment prohibitions contained in any agreement between the Employer and the Employee.

(b) The Employee shall not, without prior written authorization from the Employer, disclose to anyone outside the Employer, or use in other than the Employer's business, any confidential information or material, as specified in any agreement between the Employer and the Employee which contains post-employment prohibitions, relating to the business of the Employer acquired by the Employee either during or after employment with the Employer.

Notwithstanding the above, this Agreement does not in any manner restrict the Employee from reporting possible violations of federal, state or local laws or regulations to any governmental agency or entity, and shall not, and not be interpreted to, impair the participant from exercising any legally protected whistleblower rights (including under Rule 21F under the Exchange Act). Similarly, the Employer does not in any manner restrict the Employee from participating in any proceeding or investigation by a federal, state or local government agency or entity responsible for enforcing such laws. The Employee is not required to notify the Employer that he or she has made such report or disclosure, or of his or her participation in an agency investigation or proceeding.

(c) The Employee, pursuant to any agreement between the Employer and the Employee which contains post-employment prohibitions, shall disclose promptly and assign to the Employer all right, title and interest in any invention or idea, patentable or not, made or conceived by the Employee during employment with the Employer, relating in any manner to the actual or anticipated busi-ness, research or development work of the Employer, and shall do anything reasonably necessary to enable the Employer to secure a patent where appropriate in the United States and in foreign countries.

(d) Failure to comply with the provision of subparagraphs (a), (b) or (c) of this Section 18 prior to, or during the six months after, any payment or delivery shall cause such payment or delivery to be rescinded. The Company shall notify the Employee in writing of any such rescission within two years after such payment or delivery. Within ten days after receiving such a notice from the Company, the Employee shall pay to the Company the amount of any payment received as a result of the rescinded payment or delivery pursuant to an award. Such payment to the Company by the Employee shall be made either in cash or by returning to the Company the number of shares of Common Stock that the Employee received in connection with the rescinded payment or delivery.

19. Notices. Notices hereunder shall be in writing and if to the Company shall be mailed to the Company at 100 Campus Dr. Suite 200 Florham Park, NJ 07932 USA, addressed to the attention of Stock Plan Administrator, and if to the Employee shall be delivered personally or mailed to the Employee at his address as the same appears on the records of the Company.

20. Language. If the Employee has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

EXHIBIT 10.6(a)(x)

21. Electronic Delivery and Acceptance. The Company will deliver any documents related to current or future participation in the Plan by electronic means. The Employee hereby consents to receive such documents by electronic delivery, and agrees to participate in the Plan and be bound by the terms and conditions of this Agreement, through an on-line or electronic system established and maintained by the Company or a third party designated by the Company. Electronic acceptance by the Employee is required and the award will be cancelled for any employee who fails to comply with the Company's acceptance requirement within six months of the effective date of the award.

22. Interpretation of This Agreement. The Committee or its authorized delegate, as applicable, shall have the authority to interpret the Plan and this Agreement and to take whatever administrative actions, including correction of administrative errors in the awards subject to this Agreement and in this Agreement, as the Committee or its authorized delegate, as applicable, in its sole good faith judgment shall determine to be advisable. All decisions, interpretations and administrative actions made by the Committee or its authorized delegate, as applicable, hereunder or under the Plan shall be binding and conclusive on the Company and the Employee. In the event there is inconsistency between the provisions of this Agreement and of the Plan, the provisions of the Plan shall govern.

23. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties hereto and the successors and assigns of the Company and to the extent provided in Section 11 of the Plan to the personal representatives, legatees and heirs of the Employee.

24. Governing Law and Venue. The validity, construction and effect of the Agreement and any actions taken under or relating to this Agreement shall be determined in accordance with the laws of the state of New York and applicable Federal law.

This grant is made and/or administered in the United States. For purposes of litigating any dispute that arises under this grant or the Agreement the parties hereby submit to and consent to the jurisdiction of the state of New York, agree that such litigation shall be conducted in the state or federal courts located in New York.

25. Section 409A. It is intended that the provisions of this Agreement comply with, or are exempt from, Section 409A, and all provisions of this Agreement shall be construed and interpreted in a manner consistent with the requirements for avoiding taxes or penalties under Section 409A.

Neither the Employee nor any of the Employee's creditors or beneficiaries shall have the right to subject any deferred compensation (within the meaning of Section 409A) payable under this Agreement to any anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, attachment or garnishment. Except as permitted under Section 409A, any deferred compensation (within the meaning of Section 409A) payable to the Employee or for the Employee's benefit under this Agreement may not be reduced by, or offset against, any amount owing by the Employee to the Company or any of its Affiliates. In the event that any 60-day period described in Section 9 of this Agreement straddles two calendar years, then any PSs, and any dividends with respect thereto, that are settled within such 60-day period in accordance with this Agreement shall be settled in the second calendar year

If, at the time of the Employee's separation from service (within the meaning of Section 409A), (a) the Employee shall be a specified employee (within the meaning of Section 409A and using the identification methodology selected by the Company from time to time) and (b) the Company shall make a good faith determination that an amount payable hereunder constitutes deferred compensation (within the meaning of Section 409A) the payment of which is required to be delayed pursuant to the six-month delay rule set forth in Section 409A in order to avoid taxes or penalties under Section 409A, then the Company shall not pay such amount on the otherwise scheduled payment date but shall instead pay it, without interest, on the first business day after such six-month period.

Notwithstanding any provision of this Agreement to the contrary, in light of the uncertainty with respect to the proper application of Section 409A, the Company reserves the right to make amendments to this Agreement as the Company deems necessary or desirable to avoid the imposition of taxes or penalties under Section 409A. In any case, the Employee shall be solely responsible and liable for the satisfaction of all taxes and penalties that may be imposed on the Employee or for the Employee's account in connection with this Agreement (including any taxes and penalties under Section 409A), and neither the Company nor any of its Affiliates shall have any obligation to indemnify or otherwise hold the Employee harmless from any or all of such taxes or penalties.

26. Separability. In case any provision in the Agreement, or in any other instrument referred to herein, shall become invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions in the Agreement, or in any other instrument referred to herein, shall not in any way be affected or impaired thereby.

27. Integration of Terms. Except as otherwise provided in this Agreement, this Agreement contains the entire agreement between the parties relating to the subject matter hereof and supersedes any and all oral statements and prior writings with respect thereto.

28. Appendix for Non-U.S. Countries. Notwithstanding any provisions in this Agreement, the PS award shall be subject to any special terms and conditions set forth in any appendix to this Agreement for the Employee's country (the "Appendix"). Moreover, if the Employee relocates to one of the countries included in the Appendix, the special terms and conditions for such country will apply to the Employee, to the extent the Company determines that the application of such terms and conditions is necessary or advisable in order to comply with local law or facilitate the administration of the Plan. The Appendix constitutes part of this Agreement.

29. Imposition of Other Requirements. The Committee or its authorized delegate, as applicable, reserves the right to impose other requirements on the Employee's participation in the Plan, on the PSs and on any shares of Common Stock acquired under the Plan, to the extent the Committee or its authorized delegate, as applicable, determines it is nec-essary or advisable in order to comply with local law or facilitate the administration of the Plan, and to require the Employee to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

IN WITNESS WHEREOF, the Company has executed this Agreement as of the day and year set forth on the Award Summary.

CONDUENT INCORPORATED

B

Signature

EXHIBIT 21.1

SUBSIDIARIES OF CONDUENT INCORORATED

The following companies are subsidiaries of Conduent Incorporated as of December 31, 2018. Unless otherwise noted, a subsidiary is a company in which Conduent Incorporated or a subsidiary of Conduent Incorporated holds 50% or more of the voting stock. The names of other subsidiaries have been omitted as they would not, if considered in the aggregate as a single subsidiary, constitute a significant subsidiary:

Name of Subsidiary	Jurisdiction of Incorporation or Organization
Conduent Care Management, Inc.	Arizona
Conduent Healthy Communities Corporation	California
Conduent Asset Management Group, LLC	Delaware
Conduent BPO Services, Inc.	Delaware
Conduent Workers Compensation Holdings, Inc.	Delaware
Conduent Defense, LLC	Delaware
Conduent EDI Solutions, Inc.	Delaware
Conduent Education Loan Services LLC	Delaware
Conduent Global, Inc.	Delaware
Conduent Health Administration, Inc.	Delaware
Conduent Human Resources Services, LLC	Delaware
Conduent Lending, Inc.	Delaware
Conduent Middle East, Inc.	Delaware
Conduent TradeOne Marketing, Inc.	Delaware
Conduent Securities LLC	Delaware
Conduent Care Solutions, LLC	Delaware
Conduent Card Service LLC	Delaware
Conduent Finance, Inc.	Delaware
Conduent Education Industry Services, LLC	Delaware
Conduent Payment Integrity Solutions, Inc	Delaware
Conduent Public Health Solutions, Inc.	Delaware
Conduent ParkIndy, LLC	Delaware
Conduent Health Assessments, LLC	Delaware
The National Abandoned Property Processing Corporation	Delaware
Conduent Business Services, LLC	Delaware
Conduent Education Services, LLC	Delaware
Conduent Education Solutions, LLC	Delaware
Conduent European Funding LLC	Delaware
Conduent Export LLC	Delaware
Conduent Federal Solutions, LLC	Delaware
Conduent Helpline LLC	Delaware
Conduent Helpline Holdings, LLC	Delaware
Conduent Mortgage Services, Inc.	Delaware
Conduent Public Health Solutions, Inc.	Delaware
Conduent Credit Balance Solutions, LLC.	Delaware
Conduent Workers Compensation, LLC	Delaware
Conduent State Healthcare, LLC	Delaware
Integrated Call Center Solutions LLC	Delaware
United Call Center Solutions LLC	Delaware

EXHIBIT 21.1

Conduent Healthcare Knowledge Solutions LLC	Florida
Conduent Transport Solutions, Inc.	Georgia
Conduent Wireless Data Services (Operations) Inc.	Idaho
Conduent Human Services, LLC	Indiana
Conduent Healthcare Information Services, Inc.	Indiana
Conduent Image Solutions, Inc.	Louisiana
Conduent Bill Review Corporation	Nevada
Conduent Commercial Solutions, LLC	Nevada
Conduent Patient Access Solutions, LLC	New Jersey
Conduent Compliance & Risk Consulting Corporation	New York
Conduent State & Local Solutions, Inc.	New York
Conduent Performance Improvement Solutions, Inc.	Oregon
Conduent Customer Care Solutions, Inc.	Oregon
Conduent HR Services, LLC	Pennsylvania
Conduent Healthcare Data Management, Inc.	Tennessee
Conduent Securities Services, Inc.	Texas
ACS Welfare Benefit Trust	Texas
Conduent Legal & Compliance Solutions, LLC	Texas
Mercury Fund II, Ltd.	Texas
Conduent Business Process Optimization Services, Inc.	Texas
Conduent WDS Global—Texas, Inc.	Texas
Conduent Heritage, LLC	Virginia
Conduent Learning Services, Inc.	Washington
Conduent Wireless Data Services North America Inc.	Washington
Conduent Care and Quality Solutions, Inc.	Wisconsin
Eagle Connect Sh.p.k.	Albania
Voice Star Sh.p.k.	Albania
Market Line S.A.	Argentina
Consilience Software Australasia Pty Ltd	Australia
Conduent Business Services (Australasia) PTY. LTD.	Australia
Wireless Data Services PTY Limited	Australia
Affiliated Computer Services Austria GmbH	Austria
Affiliated Computer Services International (Barbados) Limited	Barbados
Conduent (Belgium)	Belgium
ACS Transportation Services Participacoes Ltda	Brazil
Conduent Servicos de Terceirizacao de Processos de Negocios Ltda.	Brazil
Conduent Consultoria e Servicos de Recursos Humanos Ltda	Brazil
Conduent do Brasil Servicos de Call Center Ltda.	Brazil
Conduent Business Services Canada, Inc./Services D'affaires Conduent Canada Inc.	Canada
Conduent Solutions Chile SA	Chile

EXHIBIT 21.1

ACS Road Technology Services (Beijing) Co. Ltd.	China
Affiliated Computer Services (Tianjin) Co., Ltd.	China
Customer Helpline Colombia S.A.S.	Colombia
ML Colombia S.A.	Colombia
Conduent Czech Republic s.r.o.	Czech Republic
Customer Helpline (Czech Republic), s.r.o.	Czech Republic
Conduent Solutions Dominican Republic, S.A.S.	Dominican Republic
Affiliated Computer Services (Fiji) Limited	Fiji
Conduent Business Process (France) Solutions (France) SAS	France
Conduent Business Solutions (France) SAS	France
Affiliated Computer Services of Germany GmbH	Germany
ACS Holdings (Germany) GmbH	Germany
Invoco Holding GmbH	Germany
Invoco Business Solutions GmbH	Germany
Invoco Communication Center GmbH	Germany
Invoco Customer Service GmbH	Germany
Invoco Helpline Communication GmbH	Germany
Invoco Helpline GmbH	Germany
Invoco Marketing & Vetrieb GmbH	Germany
Invoco Media Sales GmbH	Germany
Invoco Multimeida GmbH	Germany
Invoco Sales GmbH	Germany
Invoco Service Center GmbH	Germany
Invoco Services & Sales GmbH	Germany
Invoco Technical Service GmbH	Germany
ACS-BPS (Ghana) Limited	Ghana
Conduent Business Services de Guatemala, Sociedad Anonima	Guatemala
Customer Helpline (Guatemala), Sociedad Anonima	Guatemala
ACS China Solutions Hong Kong Limited	Hong Kong
Conduent Business Solutions (Hong Kong) Limited	Hong Kong
Bereichem Helpline India Private Limited	India
Conduent Business Services India LLP	India
Conduent Ireland Limited	Ireland
Conduent Business Services Italy S.r.l.	Italy
Nuova Karel Soluzioni S.r.l. unipersonale	Italy
Conduent Business Solutions Italia, S.p.A.	Italy
Conduent Solutions (Jamaica) Limited	Jamaica
Conduent Jamaica Limited	Jamaica
United Call Solutions (Jamaica) Limited	Jamaica
Sia Rigas Karte	Latvia
Affiliated Computer Services Holdings (Luxembourg) S.A.R.L.	Luxembourg
Conduent Business Services Malaysia Sdn. Bhd.	Malaysia
ACS Malta Limited	Malta

EXHIBIT 21.1

Conduent de Mexico, S.A. de C.V.	Mexico
Conduent Helpline Mexico, S. de R.L. de C.V.	Mexico
Conduent Solutions de Mexico, S. de R.L. de C.V.	Mexico
Affiliated Computer Services International B.V.	Netherlands
Continuum Global Solutions Holdings B.V.	Netherlands
Customer Helpline (Netherland) B.V.	Netherlands
Customer Helpline Holdings (Netherlands) B.V.	Netherlands
Wilhaave Groep BV	Netherlands
Unamic Holding BV	Netherlands
Unamic/HCN BV	Netherlands
Conduent Business Services (Netherlands) B.V.	Netherlands
Market Line Peru S.A.C.	Peru
ACS Solutions Peru S.A.	Peru
Conduent Business Services Philippines, Inc.	Philippines
Conduent Solutions Philippines, Inc.	Philippines
Integrated Call Center Solutions (Philippines), Inc.	Philippines
ACS Solutions Poland Sp. Z.o.o.	Poland
Affiliated Computer Services of Poland Sp. z.o.o.	Poland
ACS Puerto Rico, LLC	Puerto Rico
Conduent Business Solutions of Puerto Rico, Inc.	Puerto Rico
Conduent Business Services Romania S.r.l.	Romania
Continuum Global Solutions Limited	Scotland
Conduent Europe Finance Limited Partnership	Scotland
Wireless Data Services (Asia Pacific) PTE Ltd.	Singapore
Conduent (PTY) LTD	South Africa
Affiliated Computer Services of Spain, S.L., Sociedad Unipersonal	Spain
Xerox Business Solutions Spain, S.L.	Spain
Conduent Holdings (St. Lucia) Ltd.	St. Lucia
Affiliated Computer Services GmbH	Switzerland
Conduent Business Solutions AG	Switzerland
Comtinuum Global Musteri Hizmetleri Limited Sirketi	Turkey
Unamic HCN Musteri Hizmetleri Limited Sirketi	Turkey
Conduent Business Process Solutions Limited	United Kingdom
Conduent Parking Enforcement Solutions Limited	United Kingdom
Wireless Data Services Limited	United Kingdom

EXHIBIT 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-215361) of Conduent Incorporated of our report dated February 28, 2019, relating to the financial statements, financial statement schedule, and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/S/ PRICEWATERHOUSECOOPERS LLP

PricewaterhouseCoopers LLP
Florham Park, New Jersey
February 28, 2019

EXHIBIT 31(a)

CEO CERTIFICATIONS

I, Ashok Vemuri, certify that:

1. I have reviewed this Annual Report on Form 10-K of Conduent Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 28, 2019

/S/ ASHOK VEMURI

Ashok Vemuri
Principal Executive Officer

EXHIBIT 31(b)

CFO CERTIFICATIONS

I, Brian Webb-Walsh, certify that:

1. I have reviewed this Annual Report on Form 10-K of Conduent Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

February 28, 2019

/S/ BRIAN WEBB-WALSH

Brian Webb-Walsh
Principal Financial Officer

EXHIBIT 32

**CERTIFICATION OF CEO AND CFO PURSUANT TO 18 U.S.C. § 1350,
AS ADOPTED PURSUANT TO § 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Form 10-K of Conduent Incorporated, a New York corporation (the "Company"), for the year ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Ashok Vemuri, Chief Executive Officer of the Company, and Brian Webb-Walsh, Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, to the best of his/her knowledge, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/S/ ASHOK VEMURI

Ashok Vemuri
Chief Executive Officer
February 28, 2019

/S/ BRIAN WEBB-WALSH

Brian Webb-Walsh
Chief Financial Officer
February 28, 2019

This certification accompanies this Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of § 18 of the Securities Exchange Act of 1934, as amended.

A signed original of this written statement required by § 906 has been provided to Conduent Incorporated and will be retained by Conduent Incorporated and furnished to the Securities and Exchange Commission or its staff upon request.

FORM 10-K

CONDUENT Inc - CNDT

Filed: March 01, 2018 (period: December 31, 2017)

Annual report with a comprehensive overview of the company

Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended: December 31, 2017

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from: _____ to: _____

Commission File Number 001-37817

CONDUENT INCORPORATED

(Exact Name of Registrant as specified in its charter)

New York	**81-2983623**
(State of incorporation)	(IRS Employer Identification No.)
100 Campus Drive, Suite 200 **Florham Park, New Jersey 07932**	**(844) 663-2638**
(Address of principal executive offices)	**(Registrants telephone number, including area code)**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $0.01 par value	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Table of Contents

Indicate by a check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐ Emerging Growth ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o

Indicate by a check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common stock of the registrant held by non-affiliates as of June 30, 2017 was $3,323,804,990.

Indicate the number of shares outstanding of each of the Registrant's classes of common stock, as of the latest practicable date:

Class	Outstanding at January 31, 2018
Common Stock, $0.01 par value	210,469,177

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the following document are incorporated herein by reference:

Document	Part of Form 10-K in which Incorporated
Conduent Incorporated Notice of 2018 Annual Meeting of Shareholders and Proxy Statement (to be filed no later than 120 days after the close of the fiscal year covered by this report on Form 10-K)	III

Table of Contents

FORWARD-LOOKING STATEMENTS

From time to time, we and our representatives may provide information, whether orally or in writing, including certain statements in this Annual Report on Form 10-K, which are deemed to be "forward-looking" within the meaning of the Private Securities Litigation Reform Act of 1995 (the "Litigation Reform Act"). These forward-looking statements and other information are based on our beliefs as well as assumptions made by us using information currently available.

The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “will,” “should” and similar expressions, as they relate to us, are intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are subject to certain risks, uncertainties and assumptions. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those expressed or implied herein as anticipated, believed, estimated, expected or intended or using other similar expressions.

In accordance with the provisions of the Litigation Reform Act, we are making investors aware that such forward-looking statements, because they relate to future events, are by their very nature subject to many important factors and uncertainties that could cause actual results to differ materially from those contemplated by the forward-looking statements contained in this Annual Report on Form 10-K, any exhibits to this Form 10-K and other public statements we make.

Such factors include, but are not limited to: termination rights contained in our government contracts; our ability to renew commercial and government contracts awarded through competitive bidding processes; our ability to recover capital and other investments in connection with our contracts; our ability to attract and retain necessary technical personnel and qualified subcontractors; our ability to deliver on our contractual obligations properly and on time; competitive pressures; our significant indebtedness; changes in interest in outsourced business process services; our ability to obtain adequate pricing for our services and to improve our cost structure; claims of infringement of third-party intellectual property rights; the failure to comply with laws relating to individually identifiable information, and personal health information and laws relating to processing certain financial transactions, including payment card transactions and debit or credit card transactions; breaches of our security systems and service interruptions; our ability to estimate the scope of work or the costs of performance in our contracts; our ability to collect our receivables for unbilled services; a decline in revenues from or a loss or failure of significant clients; fluctuations in our non-recurring revenue; our failure to maintain a satisfactory credit rating; our ability to attract and retain key employees; increases in the cost of telephone and data services or significant interruptions in such services; our failure to develop new service offerings; our ability to receive dividends or other payments from our subsidiaries; changes in tax and other laws and regulations; changes in government regulation and economic, strategic, political and social conditions; changes in U.S. GAAP or other applicable accounting policies; and other factors that are set forth in the “Risk Factors” section, the “Legal Proceedings” section, the “Management's Discussion and Analysis of Financial Condition and Results of Operations” section and other sections of this Annual Report on Form 10-K, as well as in our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. We do not intend to update these forward-looking statements, except as required by law.

Table of Contents

CONDUENT INCORPORATED
FORM 10-K
December 31, 2017

TABLE OF CONTENTS

Table of Contents

PART I

ITEM 1. BUSINESS

In this Annual Report on Form 10-K, unless the content otherwise dictates, "Conduent", the "Company", "we" or "our" mean Conduent Inc. and its consolidated subsidiaries.

Our Business

Conduent is a leading provider of business process services with expertise in transaction-intensive processing, analytics and automation. We serve as a trusted business partner in both the front office and back office, enabling personalized, seamless interactions on a massive scale that improve end-user experiences.

On December 31, 2016, Conduent Incorporated (formerly known as the BPO business) spun-off from Xerox Corporation, pursuant to the Separation and Distribution Agreement between the Company and Xerox Corporation (Separation). As a result of the spin-off, we now operate as an independent, publicly traded company on the New York Stock Exchange, under the ticker "CNDT".

We create value for our Commercial and Public Sector clients by applying our expertise, technology and innovation to help them drive customer and constituent satisfaction and loyalty, increase process efficiency and respond rapidly to changing market dynamics.

Our portfolio includes industry-focused service offerings in attractive growth markets such as Healthcare and Transportation, as well as multi-industry service offerings such as Transaction Processing, Human Resources Solutions and Payment Services.

Our strategy is to drive portfolio focus, operational discipline, sales and delivery excellence and innovation, complemented by tightly aligned investments. As a result, we aim to deliver profitable growth and margin expansion and to deploy a disciplined capital allocation strategy.

With approximately 90,000 employees globally as of December 31, 2017, we provide differentiated services to clients spanning small, medium and large businesses and to governments around the world.

Our Transformation

We have a portfolio of businesses that we are optimizing and effectively targeting attractive growth areas in a rapidly evolving business process services industry. We have taken significant actions to improve our profitability and drive growth with a more focused portfolio of services.

Key initiatives include:

- ***Realigned Delivery.*** During 2017 we reorganized the business to better align to our vertical go-to-market strategy and to our global delivery capabilities. We believe this operating structure will allow us to better integrate and tailor business solutions for our customers.
- ***Divested Non-Core Assets.*** We divested five businesses in 2017 for aggregate proceeds of $56 million in cash. These sales enabled us to increase our focus on areas where we have a competitive advantage.
- ***Increased Use of Automation.*** We have developed and deployed a set of advanced software-based automation tools as part of our service delivery operations. These tools reduce the amount of repetitive, manual labor required to deliver many of our services and improve service quality through lower error rates and faster processing times.
- ***Real Estate, Infrastructure and Selling, General and Administrative (SG&A).*** We have significantly reduced the number of leased and owned properties from 462 to 339, reduced our information technology infrastructure costs by streamlining our operations and reduced our SG&A costs from $686 million in 2016 to $615 million in 2017.

Table of Contents

We continue to execute on our strategic transformation program to deliver cost savings through infrastructure optimization, labor productivity and automation initiatives, restructuring of unprofitable contracts and other efficiencies. This transformation program has and will enable us to better capitalize on our differentiated service offerings, industry expertise and global delivery excellence and position us for long-term shareholder value creation.

Our Market Opportunity

We estimate our addressable market size in the global business process service industry at approximately $243 billion in 2017, according to third party industry reports, and we are a leader across several segments of this large, diverse and growing market. Providing business process services is complex and multi-faceted with services that span many industries.

Ongoing competitive pressures and increasing demand for further productivity gains have motivated businesses to outsource elements of their day-to-day operations to accelerate performance and innovation. As a result, our clients have become more focused on their core businesses and the range of outsourced activities has expanded greatly. Increasing globalization has also required many companies to optimize cost structures to retain competitiveness and business process services have become a key component of this strategy.

The ongoing shift to next-generation software and automation technologies is driving greater demand for, and expectation of, efficiency and personalization by the constituents and customers of the businesses and governments we serve. Addressing these business and operational challenges is necessary for business process
services companies to capitalize on these trends. In addition, business process services have the potential to meaningfully enhance productivity for businesses and governments and satisfaction for their constituents and customers.

Segments

Our reportable segments correspond to how management organizes and manages the business and are aligned to the industries in which our clients operate, which are Commercial Industries and Public Sector.

- Our *Commercial Industries* segment provides business process services and customized solutions to clients in a variety of industries.
- Our *Public Sector* segment provides government-centric business process services and subject matter experts to U.S. federal, state and local and foreign governments.

Other represents our Government Health Enterprise (HE) Medicaid Platform for all current state clients and our Education business, including our Student Loan business, as well as inter-segment eliminations.

We present segment financial information in Note 2 – Segment Reporting to our Consolidated Financial Statements included in Part II, Item 8 of this Form 10-K, which is incorporated herein by reference. The discussion below highlights our segment revenues for the year ended December 31, 2017.

Commercial Industries

Our Commercial Industries segment is our largest segment, with $3.5 billion in revenues in 2017, representing 59% of total revenues. Across the Commercial Industries segment, we deliver end-to-end business-to-business and business-to-customer services that enable our clients to optimize their key processes. Our multi-industry competencies include Customer Care, Human Resource Management, Worker's Compensation process management, Finance and Accounting, Workforce Learning Services and Legal Business Services. These services are complemented by innovative industry-specific services such as payment integrity solutions to clients in the Healthcare payer space, care and quality analytics, workflow solutions and software adoption services to Healthcare provider clients, personalized product information for clients in the Automotive industry, digitized source-to-pay solutions for clients in the Manufacturing industry, revenue generation and clinical services for clients in the Pharmaceutical and Life Sciences industries, customer experience and marketing services for clients in the Retail industry, and mortgage and consumer loan processing for clients in the Financial Services industry.

Table of Contents

Public Sector

Our Public Sector segment generated revenues of $2.2 billion in 2017, representing 36% of the total revenues. This segment provides government-centric business process services to U.S. federal, state and local and foreign governments for transportation, public assistance program administration, transaction processing and payment services. In order to provide targeted support to our government clients, our Public Sector segment is organized into several primary businesses:

- ***Transportation:*** We provide revenue-generating transportation services to government clients in 27 countries. Our services include support for electronic toll collection, public transit, parking, photo enforcement and commercial vehicle operations. Across these offerings, we manage key processes on behalf of our clients including fee collection, compliance and violation management, notifications, statements and reporting. These innovative services significantly improve individual travel experiences, optimize how vehicles and goods move efficiently within cities, digitize integrated modes of transportation and help our government clients to better serve their constituents.

- ***Federal, State and Local Government:*** We support our government clients with services targeting key civilian agencies within federal, state and local governments, as well as government administrative offices. Our depth of agency-specific expertise combined with our scale allows us to deliver and manage programs at all levels of government. Our broad set of public sector services includes public assistance program administration such as child support, pension administration, records management, electronic benefits, eligibility and payment cards, unclaimed property, disease management and software offerings in support of federal, state and local government agencies.

- ***Payments:*** With more than $87 billion disbursed annually, we are a leader in government payment disbursements for federally sponsored programs like Supplemental Nutritional Assistance Program (SNAP, a.k.a Food Stamps) and Women, Infant and Children (WIC) as well as government initiated cash disbursements such as child support, unemployment and federal social security. We provide our payment card services which include branded prepaid debit card (Visa and Mastercard), Electronic Benefit Transfer (EBT for SNAP and WIC) and Electronic Child Care to 36 states and the US Treasury with a diversified portfolio consisting of 147 different payment programs nationwide.

- ***Government Healthcare:*** We provide medical management and fiscal agent care management services to Medicaid programs and federally-funded U.S. government healthcare programs in 24 states, Puerto Rico and the District of Columbia. Our services include a range of innovative solutions such as Medicaid management fiscal agent, pharmacy benefits management and clinical program management. These services help states optimize their costs by streamlining access to care and improve patient health outcomes through population health management and help families in need by improving beneficiary support.

Other

Other includes our Government HE Medicaid Platform business, where we are limiting our focus to maintaining systems for our current clients, our Education Business inclusive of our Student Loan business, which is in runoff; and inter-segment eliminations. In 2017, Other accounted for $311 million of revenues, representing 5% of total revenues.

Our Service Offerings

Our portfolio of business process services includes a combination of industry-specific and multi-industry services. We have subject matter experts who are responsible for implementing each of these services, delivering service excellence to clients, ensuring best practices to improve cost competitiveness, innovating our next generation offerings and supporting worldwide sales.

Table of Contents

Industry-Specific Services

Commercial Industry-Specific Services
Examples of the services we offer include personalized product information for automotive clients, digitized source to pay solutions for manufacturing clients, care integration and coordination, member health risk assessments and payment integrity (such as recovering claims from the appropriate payers) for healthcare clients, mortgage and consumer loan processing for financial institution clients and customized workforce learning solutions for aerospace clients.

Public Sector-Specific Services

Transportation Services: The transportation services we offer include support for electronic toll collection, public transit, parking, photo enforcement and commercial vehicle operations. Across these offerings, we manage key processes on behalf of our clients including fee collection, compliance and violation management, notifications, statements and reporting.

Other Public Sector Services: Our broad set of public sector services includes public assistance program administration, pension administration, records management, disease management and software offerings in support of federal, state and local government agencies. It also includes fiscal agent administrative services and providing management information systems in support of Medicaid programs or pharmacy benefits management for Government Healthcare clients.

Multi-Industry Services

Transaction Processing Services
We help our clients to improve communications with their customers and constituents, whether it is on paper, on-line or through other communication channels. By supporting our clients' customer communication processes, we help our clients deliver a better experience to their customers and operate with improved efficiency and greater effectiveness.

We offer a broad array of flexible transaction processing services that include data entry, scanning, image processing, enrollment processing, claims processing, high volume offsite print and mail services and file indexing. Our multi-channel communication capabilities (including secure print, email, text and web) enable the delivery of personalized and targeted communications that are designed to elicit the desired response from customers or other end-users (*e.g.*, on-time bill payment and increased marketing response rates). Our service offerings utilize both proprietary and commercially available third-party technologies, combined with our expertise to ensure continued quality and innovation for our clients.

Payment Services
Prepaid Cards: We are an extensive provider of VISA and MasterCard prepaid debit cards, as well as other electronic payment cards in support of U.S. government benefit programs including Social Security, the Supplemental Nutrition Assistance Program (formerly known as food stamps), the Special Supplemental Nutrition Program for Women, Infants and Children and other specialized Electronic Benefits Transfer programs. Our secure payment services reduce fraud and eliminate paper checks by disbursing electronic payments directly to end users, even those without bank accounts. Our proprietary processing platform, significant operational expertise, advanced fraud analytics and adoption of Europay, MasterCard and Visa chip-enabled technology put us in the forefront of the Prepaid Card industry.

Health Savings Accounts (HSA): We provide clients with a simplified approach to help their employees manage their health care costs and accumulate wealth with tax-advantaged accounts. We consolidate administration of all health spending accounts onto one common platform, including Health Savings Accounts, Health Reimbursement Arrangements, Flexible Spending Accounts and Health Incentive Accounts. By consolidating and integrating the management of health spending accounts, we help our clients improve benefit enrollment and account opening, consolidate customer service, simplify communications and streamline account funding and management. As of December 31, 2017, we had approximately 1 million active HSA accounts and $2.3 billion of assets under management within our HSA offering.

Table of Contents

Child Support Payments: We are an industry leader of U.S. State Government Disbursement Units for child support payments. We collect payments from non-custodial parents via check, credit card and transfers from employee payroll systems and disburse payments to the beneficiaries.

Customer Care Services
We offer customer care services that help our clients provide their own customers with a superior experience. Our service offerings range from answering simple billing questions to providing complex technical and customer support. We also offer both inbound and outbound sales and cross-selling programs through our contact center operations. We provide these services through multiple channels, including phone, SMS, chat, interactive voice response, social networks and email. We augment our customer care agents' efficiency and effectiveness with advanced technologies that help them resolve customer needs quickly and with consistent high quality.

Human Resources Services
We help our clients to support their employees at all stages of employment from initial on-boarding through retirement. We offer clients customized advisory, technology and administrative services that help them more
effectively involve employees in their health insurance, retirement plan and compensation programs. We design
and administer employee benefit programs that attract, reward and retain workforce talent through engaging technologies and decision support tools. Our service offerings include; cloud-based HR outsourcing; payroll and benefits administration; health savings and tax efficient account administration; and administration of, and consultation regarding, our proprietary private health care exchange, which allows employees to select from a set of predefined providers and also provides market-leading health and benefit decision support tools and ongoing health and wellness management.

Finance and Accounting Services
We serve clients by managing their critical finance, accounting and procurement processes. Our services include general accounting and reporting, billing and accounts receivable and purchasing, accounts payable and expense management services. We also offer wholesale and retail lockbox services and process auto and mortgage loans in the United States. With a global, dedicated team, we manage the core, end-to-end process areas of finance, accounting and procurement for some of the world's most recognized brands.

Legal Business Services
We have been providing client support to law firms and corporate legal departments for over 20 years. We work across the litigation lifecycle, with particular focus on the legal discovery and review process. Our offerings include litigation support services, compliance and risk review and managed services support.

Workforce Learning Services
We are a provider of end-to-end learning services, designed to accelerate the productivity and development of our clients' employees and extended work forces. Our global presence, superior innovation and expertise allow us to deliver performance-based learning services tailored to our clients' unique strategic business goals. Our offerings include learning strategy and assessment, instructor management and learning administration.

Applied Automation and Analytics Solutions
Many of our service offerings described above incorporate our applied automation and analytics solutions to increase their value and effectiveness to clients across all industries. We deploy these solutions to personalize millions of interactions, optimize service delivery and simplify complex processes. For example, our customer care services harness the power of applied analytics and automation to help our customer service agents work more efficiently across different communication channels. Our applied automation solutions track and learn the most efficient means to address common customer service needs as they occur in real time so that we can solve the same problem faster the next time around. The combination of applied automation and analytics allows us to identify new service demand patterns and opportunities quickly so that we can proactively address them on behalf of our clients.

Table of Contents

Our Competitive Strengths

We possess a number of competitive strengths that distinguish us from our competitors, including:

Leadership in attractive growth markets. We are a leader in business process services. Our clients continue to outsource key business processes to accelerate performance and innovation. Additionally, clients are moving beyond services for back-office functions in order to drive customer satisfaction and loyalty, as well as productivity and efficiency. The increase in globalization and cost competition continues to accelerate, forcing companies to seek ways to stay ahead of the competition. These factors, along with clients and their customers demanding more personalized, seamless and secure solutions, are collectively driving the ongoing shift to next-generation software and automation technologies.

- ***Healthcare.*** U.S. healthcare spending is estimated to have represented greater than 17.9% of GDP in 2016 and is continuing to grow. As one of the most regulated industries, healthcare providers must balance increased utilization with heightened complexity and new financial pressures such as government budget challenges to significantly reduce reimbursements, reimbursement penalties for hospital readmissions and a shift from fee-for-service to “value-based” population health management. We are widely recognized by industry analysts as a leader in healthcare payer operations, serving all 20 of the top 20 U.S. managed healthcare plans and providing administrative and care management solutions to Medicaid programs and federally funded U.S. government healthcare programs in 24 states, Puerto Rico and the District of Columbia.

- ***Transportation.*** Traffic congestion continues to increase as urbanization and changing demographics take hold globally. As a result, optimized transportation systems are becoming critical to increase efficiency while maintaining strict safety requirements. Electronic toll collection, public transit and parking all represent key growth drivers as governments at all levels increasingly focus on transportation infrastructure. We maintain approximately 54% market share position in electronic toll collection in the United States based on toll revenues collected through our systems in 2017. We are also one of the largest U.S.-based commercial vehicle operations service providers in the United States with approximately 51% market share based on 2017 revenues, and we are an award-winning innovator in parking management.

- ***Transaction Processing.*** We provide high volume print and mail services, enrollment processing and personalized and targeted marketing and communications, to large corporations and we believe we are a leading provider in this market.

- ***Prepaid Cards***: We are the leading provider of prepaid payment card services in support of the U.S. government prepaid card services market.

Global delivery expertise. Our scale and global delivery network enables us to deliver our proprietary technology, differentiated service offerings and service capabilities expertly to clients around the world. We have operations in India, Philippines, Jamaica, Guatemala, Mexico, Romania, Dominican Republic and several locations within the United States, giving our customers the option for "onshore" or "offshore" outsourced business process services. This global delivery model enables us to leverage lower-cost production locations, consistent methodologies and processes, time zone advantages and business continuity plans. As of December 31, 2017, our employee location mix was approximately 48% in North America, 20% in Latin America / Caribbean, 22% in Asia Pacific and 10% in Europe / Middle East / Africa.

Differentiated suite of multi-industry service offerings at scale. We manage transaction-intensive processes and work directly with end-users to meet their needs often in real-time. We are unique in our ability to offer our clients these business process services on a large scale and with high quality. Additionally, we are able to leverage our multi-industry services to bring the same scale and quality to our portfolio of industry-specific service offerings, such as healthcare claims management, employee benefits management and public transit fare collection.

Table of Contents

Innovation and development. We innovate by developing and acquiring new technologies and capabilities that improve business processes. We are constantly creating the next generation of simple, automated and touchless business processes to drive lower costs, higher quality and increased end-user satisfaction. Analytics allow us to transform big data into useful information that helps identify operational improvements and constituent insights. Additionally, we leverage robotic process automation and predictive analytics and combine this with our deep subject matter expertise to create intelligent services that improve security, increase speed and improve accuracy, quality and regulatory compliance, and uncover insights that support better decision making and outcomes for our clients.

Stable recurring revenue model supported by a loyal, diverse client base. We have a broad and diverse base of clients in 31 countries across geographies and industries, including Fortune 1000 companies, small and midsize businesses and governmental entities. Our close client relationships and successful client execution support our stable recurring revenue model and high renewal rates. Excluding our strategic decision not to renew certain contracts, the renewal rate for the year ended December 31, 2017 was 94% and above our target range of 85%-90%. Including all contracts, renewal rate would have been approximately 87%.

Our Strategies

Our strategy is to drive leadership in attractive markets by leveraging and building on our competitive strengths. We intend to execute our strategy through increased business portfolio focus and operating discipline, enhanced sales and delivery capabilities and tightly aligned investments. Our strategy is designed to deliver value by delivering profitable growth, expanding operating margins and deploying a disciplined capital allocation strategy.

Specific elements of our strategy include the following:

Expand within attractive industries. The industries in which we operate have attractive revenue growth rates, generally in the mid-single digits. We intend to sharpen our focus and expand our business in industries with strong growth and profitability characteristics. We will employ a disciplined approach to portfolio management to complement our competitive strengths and build depth and breadth in our core businesses. Within the Healthcare industry, we intend to leverage our data analytics, differentiated service offerings and industry know-how to continue to service payer, provider and core government healthcare clients. Within the Transportation industry, we will leverage our global, end-to-end platforms to continue to deliver seamless travel experiences while providing back-end Transaction Processing and Call Center services for government clients globally.

Optimize and strengthen our services capabilities. We plan to optimize our services capabilities and strengthen several core areas, including Transaction Processing, Finance and Accounting and Prepaid Card services by building out our services offerings and continuing to improve our competitive strengths. We have begun to divest non-core assets, refocused our business towards higher margin growing segments and consolidated delivery operations to enable greater productivity. Within Transaction Processing, we intend to continue to build industry-specific service offerings and advance inbound and outbound processing capabilities. Within Customer Experience, we intend to capitalize on our global scale, cost efficiencies and our ability to provide seamless communications between our clients and their end-users through traditional (e.g., voice) and digital (e.g., web, mobile and Internet of Things) channels. In Prepaid Cards, we plan to continue to leverage our scalable platform to help our clients simplify their payment disbursement processes.

Continue to advance next-generation platforms and capabilities. We intend to maintain our focus on innovation to create next-generation solutions aligned with our clients' future needs and our growth strategies. We plan to advance our current platforms, further automate and personalize business processes and enhance data analytics capabilities to deliver value-added services for our clients.

Engage, develop and support our people. We intend to increasingly develop our employees by investing in training, processes and systems to equip them with modern tools that enable them to perform their jobs more
efficiently. Furthermore, we plan to strengthen our sales teams throughout improved and optimized coverage and effective talent management.

Table of Contents

Competition

Although we encounter competition in all areas of our portfolio, we lead across many areas of our principal businesses. We compete on the basis of technology, performance, price, quality, reliability and customer service and support. In the current political environment in the U.S. and other territories, we also consider our "onshore" delivery capacity to be a competitive advantage. We participate in a highly competitive and rapidly evolving market, driven by changes in industry standards and demands of customers to become more efficient. Our competitors range from large international companies to relatively small firms. Our competitors include:

- Large multinational service providers such as CGI Group, Accenture, Aon Hewitt, Cognizant, Hewlett-Packard Enterprise, IBM, Teletech and Teleperformance;
- Traditional Business Process Outsourcing companies such as Genpact, ELX Services, Exela Technologies and WNS Global Services;
- Payroll processing and human capital management providers such as ADP and Paychex;
- Healthcare-focused IT and service solutions providers such as Cerner and Maximus;
- U.S. Federal focused government services such as CACI International and DXC Technology;
- Transportation multi-nationals such as Roper/Transcore, Cubic and Kaptsh; and
- Smaller niche business processing service providers and in-house departments that perform functions that could be outsourced to us.

Sales and Marketing

We market our business process services to both potential and existing clients through our worldwide sales force and our business development team. Additionally, we have dedicated “solution architects” who work with clients to better understand their situation and develop a custom-tailored solution to meet their unique needs.

Our sales and marketing strategy is to go to market by industry to deliver key industry-specific and multi-industry service offerings to our clients. We focus on developing new prospects through market research and analysis, renewing expiring contracts and leveraging existing client relationships to offer additional services. We leverage our broad, multi-industry service offerings to package solutions through enterprise selling, while maintaining a disciplined approach to pricing and contracting. Our sales efforts typically involve extended selling cycles and our expertise in specific industries is critical to winning new business.

Our Geographies

We provide services globally and we have a diversified geographic delivery network, including a significant presence within the U.S. In 2017, approximately 12% of our revenues were generated by clients outside the United States. In 2017, our revenues by geography were as follows: $5,303 million in the United States (88% of total revenues), $538 million in Europe (9% of total revenues) and $181 million from the rest of the world (3% of total revenues). We present geographical information in Note 2 – Segment Reporting to our Consolidated Financial Statements included in Part II, Item 8 of this Form 10-K, which is incorporated herein by reference.

Innovation and Research and Development

Our innovation and research and development (R&D) capabilities are critical to our client value proposition and competitive positioning. Our investments in innovation align with our growth strategies and are driven by a view of future needs and required competencies developed in close partnership with our clients and R&D partners. We are investing in attractive markets, such as healthcare and transportation, and building on proven platforms to create services that distinguish us from our competitors.

Our innovation and R&D are focused on three key areas: automation, personalization and analytics.

Table of Contents

Automation—Create simple, automated and touchless business processes to drive lower cost, higher quality and increased agility. Businesses require agility to quickly respond to market changes and new customer requirements. To enable greater business process agility, our R&D goals are to simplify, automate and enable business processes via flexible platforms that run on robust and scalable infrastructures. Automation of business processes benefits from our strong image, video and robotic processing, as well as our machine learning capabilities. Application of these methods to business processes enables technology to perform tasks that today are performed manually. Examples include providing automation solutions in transportation by aggregating and automatically applying business rules to simplify toll payments, using our state-of-the-art video and image analytics to reduce the need for manual review of license plates in tolling and toll adjustment scenarios, analyzing data on eligibility claims and checking for correctness on applications. The scope of automation is applied across our portfolio of services and is a key element of our ongoing strategy of modern, efficient services.

Personalization—Augment humans by providing secure, real-time and context-aware personalized products and services. Whether business correspondence, personal communication, manufactured items or information service, personalization increases the value to the recipient. Our R&D investments lead to technologies that improve the efficiency, economics and relevance of business services, such as customer care and health and welfare services. In our current customer care service offerings, the human touch is seamlessly added as our software automatically takes telephony data and merges it with customer records pulled from multiple sources to seamlessly create targeted scripts and flows. This allows the agent to have the caller's data at their fingertips and provide a more personal experience to the customer—whether on the phone or online. In toll systems, our systems automatically pull up a customer's name, verify their information and prompt them for unpaid tolls. In transit systems, our mobile app aggregates and calculates the time, cost, carbon footprint and health benefits from walking, biking, driving, parking and taking public transit. For health and welfare, our systems provide state of the art personalized delivery to ensure the best utilization of funds for the neediest populations.

Analytics—Transform big data into useful information to support better decision making. Competitive advantage can be achieved by better utilizing available and real-time information. Today, information resides in an ever increasing universe of servers, repositories and formats. The vast majority of information is unstructured, including text, images, voice and videos. We seek to better manage large data systems in order to extract business insights to provide our clients with actionable recommendations and new services. Tailoring these methods to various industry applications leads to new customer value propositions. In hospitals, we mine usage and clinical indicators to improve patient experiences. We also help our healthcare clients identify waste and fraud by identifying networks of providers and patients with suspicious behavior, such as sudden and dramatic increases in a provider's level of business or unusual or illogical patient treatment sequences. In transportation, we enable transport and parking operators to better understand and predict commuter needs, including adherence to schedules, passenger loading levels, car park utilization rates and the impact of varying factors such as weather and schedule variations. In our card payment services business, we perform geo location analytics to predict potential fraud behaviors to assure monies are being distributed to the intended recipients.

Intellectual Property

Our general policy is to seek patent protection for those inventions likely to be incorporated into our products and services or where obtaining such proprietary rights will improve our competitive position. We own approximately 1,024 patents and pending applications. Our patent portfolio evolves as new patents are awarded to us and as older patents expire. These patents expire at various dates, generally 20 years from their original filing dates. While we believe that our portfolio of patents and applications has value, in general no single patent is essential to our business or any individual segment. In addition, any of our proprietary rights could be challenged, invalidated or circumvented, or may not provide significant competitive advantages.

Our business relies on software provided to an approximately equal extent, by both internal development and external sourcing to deliver our services in our businesses. With respect to internally developed software, we claim copyright on all such software, registering works which may be accessible to third parties. In addition, we rely on maintaining source code confidentiality to assure our market competitiveness. With respect to externally sourced software, we rely on contracts assuring our continued access for our business usage.

In the United States, we own 132 trademarks, which are either registered or applied for, reflecting the many businesses we participate in. These trademarks may have a perpetual life, subject to renewal every 10 years and may be subject to cancellation or invalidation based on certain use requirements and third-party challenges, or on other grounds. We vigorously enforce and protect our trademarks.

Table of Contents

People and Culture

We draw on the business and technical expertise of our talented and diverse global workforce to provide our clients with high-quality services. Our business leaders bring a strong diversity of experience in our industry and a track record of successful performance and execution.

Conduent established its own diversity and inclusion program post-separation, which is overseen by Conduent's human resources department. Conduent promotes understanding and inclusion through a comprehensive set of diversity initiatives and strategies, including addressing under-representation by identifying shortfalls and developing action plans to close those gaps and through work-life programs that assist employees in certain aspects of their personal lives. Additionally, Conduent informs and educates all employees on diversity programs, policies and achievements. As an independent company, we intend to continue our commitment to diversity and inclusion and implement similar policies and programs.

In the United States, Conduent complies with Equal Employment Opportunity guidelines and all applicable federal, state and local laws that govern the hiring and treatment of its employees.

As of December 31, 2017, we had approximately 90,000 employees globally, with 48% located in the United States and the remainder located primarily in India, Philippines, Jamaica, Guatemala and Mexico.

Training and Talent Development
We believe our people are our most important asset, which is why we invest in employee growth and development programs. We are focused on building a workplace where our people can do their best work and have access to the tools and resources they need to perform their jobs more effectively. We are building a culture of learning and have shifted from delivering training to incorporating learning into day-to-day work.

We have a strong performance management system in place that requires all employees to engage with their managers on goal-setting and performance feedback, enabling personal and professional development. There is a strong emphasis on mentorship and coaching, both formal and informal, to help employees get to the next level in their careers. We enable this by developing management capability for our front line leaders to ensure they are able to coach and mentor their teams and engage in constructive and continuous two-way dialogue.

Corporate Ethics
Our commitment to business ethics represents more than a declaration to do the right thing. It has become an integral part of the way we do business. We operate according to our ethics and compliance program, which is designed to meet general governance and specific industry and regulatory requirements with a focus on values, culture and performance with integrity. Conduent has a business ethics program, which is overseen by the business ethics office, and a code of business conduct (Code), which serves as the foundation of our business ethics program. The Code makes clear Conduent’s expectations for ethical leadership, performance with integrity and compliance with company policies and the law. In addition, the Code embodies and reinforces Conduent’s commitment to integrity and helps employees resolve ethics and compliance concerns consistent with operating principles and legal and policy controls. In addition, as Conduent employees, our employees are required to complete business ethics training annually and we periodically solicit their input to gauge the state of Conduent’s ethical culture and help identify areas for improvement.

Our directors must act in accordance with our Code of Business Conduct and Ethics for Members of the Board; our principal executive officer, principal financial officer and principal accounting officer, among others, must act in accordance with our Finance Code of Conduct; and all of our executives and employees must act in accordance with our Code of Business Conduct. Each of these codes of conduct can be accessed through our website at www.conduent.com/corporate-governance. They are also available to any shareholder who requests them in writing addressed to Conduent Incorporated, 100 Campus Drive Suite 200, Florham Park, NJ 07932, Attention: Corporate Secretary. We will disclose any future amendments to, or waivers from, provisions of our Code of Business Conduct and Ethics for members of the Board and, our Code of Business Conduct and our Finance Code of Conduct for our officers on our website as promptly as practicable, and consistent with the requirements of applicable SEC and NYSE rules.

Table of Contents

Seasonality

Our revenues can be affected by various factors such as our clients' demand pattern for our services. These factors have historically resulted in higher revenues and profits in the fourth quarter.

Other

Conduent Incorporated is a New York corporation, organized in 2016. Our principal executive offices are located at 100 Campus Drive, Florham Park, New Jersey 07932. Our telephone number is (844) 663-2638.

In the Investor Information section of our Internet website, you will find our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to these reports. We make these documents available as soon as we can after we have filed them with, or furnished them to the U.S. Securities and Exchange Commission (SEC).

Our Internet address is www.conduent.com.

ITEM 1A. RISK FACTORS

Our government contracts are subject to termination rights, audits and investigations, which, if exercised, could negatively impact our reputation and reduce our ability to compete for new contracts.

A significant portion of our revenues is derived from contracts with U.S. federal, state and local governments and their agencies, and some of our revenues are derived from contracts with foreign governments and their agencies. Government entities typically finance projects through appropriated funds. While these projects are often planned and executed as multi-year projects, government entities usually reserve the right to change the scope of or terminate these projects for lack of approved funding and/or at their convenience. Changes in government or political developments, including budget deficits, shortfalls or uncertainties, government spending reductions (e.g., Congressional sequestration of funds under the Budget Control Act of 2011) or other debt or funding constraints, such as those recently experienced in the United States and Europe, could result in lower governmental sales and in our projects being reduced in price or scope or terminated altogether, which also could limit our recovery of incurred costs, reimbursable expenses and profits on work completed prior to the termination. Additionally, if the government discovers improper or illegal activities or contractual non-compliance (including improper billing), we may be subject to various civil and criminal penalties and administrative sanctions, which may include termination of contracts, forfeiture of profits, suspension of payments, fines and suspensions or debarment from doing business with the government. Any resulting penalties or sanctions could materially adversely affect our results of operations and financial condition. Moreover, government contracts are generally subject to audits and investigations by government agencies. If the government finds that we inappropriately charged any costs to a contract, the costs are not reimbursable or, if already reimbursed, the cost must be refunded to the government. Further, the negative publicity that could arise from any such penalties, sanctions or findings in such audits or investigations could have an adverse effect on our reputation in the industry and reduce our ability to compete for new contracts and could materially adversely affect our results of operations and financial condition.

We derive significant revenue and profit from commercial and government contracts awarded through competitive bidding processes, including renewals, which can impose substantial costs on us, and we will not achieve revenue and profit objectives if we fail to accurately and effectively bid on such projects.

Many of these contracts are extremely complex and require the investment of significant resources in order to prepare accurate bids and proposals. Competitive bidding imposes substantial costs and presents a number of risks, including: (i) the substantial cost and managerial time and effort that we spend to prepare bids and proposals for contracts that may or may not be awarded to us; (ii) the need to estimate accurately the resources and costs that will be required to implement and service any contracts we are awarded, sometimes in advance of the final determination of their full scope and design; (iii) the expense and delay that may arise if our competitors protest or challenge awards made to us pursuant to competitive bidding and the risk that such protests or challenges could result in the requirement to resubmit bids and in the termination, reduction or modification of the awarded contracts; and (iv) the opportunity cost of not bidding on and winning other contracts we might otherwise pursue. If our competitors protest or challenge an award made to us on a government contract, the costs to defend such an award may be significant and could involve subsequent litigation that could take years to resolve.

Table of Contents

Our ability to recover capital and other investments in connection with our contracts is subject to risk.

In order to attract and retain large outsourcing contracts, we sometimes make significant capital and other investments to enable us to perform our services under those contracts, such as purchases of information technology equipment, facility costs, labor resources and costs incurred to develop and implement software. The net book value of certain assets recorded, including a portion of our intangible assets, could be impaired, and our results of operations and financial condition could be materially adversely affected in the event of the early termination of all or a part of such a contract or a reduction in volumes and services thereunder for reasons such as a customer's or client's merger or acquisition, divestiture of assets or businesses, business failure or deterioration or a customer's or client's exercise of contract termination rights.

We rely to a significant extent on third-party providers, such as subcontractors, a relatively small number of primary software vendors, utility providers and network providers; if they cannot deliver or perform as expected or if our relationships with them are terminated or otherwise change, our results of operations and financial condition could be materially adversely affected.

Our ability to service our customers and clients and deliver and implement solutions depends to a large extent on third-party providers such as subcontractors, a relatively small number of primary software vendors, software application developers, utility providers and network providers meeting their obligations to us and our expectations in a timely, quality manner. Our results of operations and financial condition could be materially adversely affected and we might incur significant additional liabilities if any of our third-party providers do not meet these obligations or our or our clients' expectations or if they terminate or refuse to renew their relationships with us or were to offer their products to us with less advantageous prices and other terms than we previously had.

Failure to deliver on our contractual obligations properly and on time could materially adversely affect our results of operations and financial condition.

Our business model depends in large part on our ability to retain existing and attract new work from our base of existing clients, as well as on relationships we develop with our clients so that we can understand our clients' needs and deliver solutions and services that are tailored to meet those needs. In order for our business to grow, we must successfully manage the provision of services under our contracts. If a client is not satisfied with the quality of work performed by us or a subcontractor, or with the type of services or solutions delivered, then we could incur additional costs to address the situation, the profitability of that work might be impaired and the client's dissatisfaction with our services could damage our ability to obtain additional work from that client or obtain new work from other potential clients. In particular, many of our contracts with non-government clients may be terminated by the client, without cause, upon specified advance notice, so clients who are not satisfied might seek to terminate existing contracts prior to their scheduled expiration date, which may result in our inability to fully recover our up-front investments. In addition, clients could direct future business to our competitors. We could also trigger contractual credits to clients or a contractual default. Failure to properly transition new clients to our systems, properly budget transition costs or accurately estimate contract operational costs could result in delays in our contract performance, trigger service level penalties, impair fixed or intangible assets or result in contract profit margins that do not meet our expectations or our historical profit margins.

In addition, we incur significant expenditures for the development and construction of system software platforms needed to support our clients' needs. Our failure to fully understand client requirements or implement the appropriate operating systems or databases or solutions which enable the use of other supporting software may delay the project and result in cost overruns or potential impairment of the related software platforms, which could materially adversely affect our results of operations and financial condition.

We face significant competition and our failure to compete successfully could materially adversely affect our results of operations and financial condition.

To remain competitive, we must develop services and applications; periodically enhance our existing offerings; remain cost efficient; and attract and retain key personnel and management. If we are unable to compete successfully, we could lose market share and important customers to our competitors and that could materially adversely affect our results of operations and financial condition.

Table of Contents

Our significant indebtedness could materially adversely affect our results of operations and financial condition.

We have and will continue to have a significant amount of debt and other obligations. Our substantial debt and other obligations could have important consequences. For example, it could (i) increase our vulnerability to general adverse economic and industry conditions; (ii) limit our ability to obtain additional financing for future working capital, capital expenditures, acquisitions and other general corporate requirements; (iii) require us to dedicate a substantial portion of our cash flows from operations to service debt and other obligations thereby reducing the availability of our cash flows from operations for other purposes; (iv) limit our flexibility in planning for, or reacting to, changes in our businesses and the industries in which we operate; (v) place us at a competitive disadvantage compared to our competitors that have less debt; and (vi) become due and payable upon a change in control. If new debt is added to our current debt levels, these related risks could increase.

Our ability to make payments on and to refinance our indebtedness, including the debt incurred in connection with our spin-off, as well as any future debt that we may incur, will depend on our ability to generate cash in the future from operations, financings or asset sales. Our ability to generate cash is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control.

The terms of our indebtedness may restrict our current and future operations, particularly our ability to incur debt that we may need to fund initiatives in response to changes in our business, the industries in which we operate, the economy and governmental regulations.

The terms of our indebtedness include a number of restrictive covenants that impose significant operating and financial restrictions on us and our subsidiaries and limit our ability to engage in actions that may be in our long-term best interests. These may restrict our and our subsidiaries' ability to take some or all of the following actions:

- incur or guarantee additional indebtedness or sell disqualified or preferred stock;
- pay dividends on, make distributions in respect of, repurchase or redeem, capital stock;
- make investments or acquisitions;
- sell, transfer or otherwise dispose of certain assets, including accounts receivable;
- create liens;
- enter into sale/leaseback transactions;
- enter into agreements restricting the ability to pay dividends or make other intercompany transfers;
- consolidate, merge, sell or otherwise dispose of all or substantially all of our or our subsidiaries' assets;
- enter into transactions with affiliates;
- prepay, repurchase or redeem certain kinds of indebtedness;
- issue or sell stock of our subsidiaries; and/or
- significantly change the nature of our business.

As a result of all of these restrictions, we may be:

- limited in how we conduct our business and pursue our strategy; unable to raise additional debt financing to operate during general economic or business downturns; or
- unable to compete effectively or to take advantage of new business opportunities.

A breach of any of these covenants, if applicable, could result in an event of default under the terms of this indebtedness. If an event of default occurs, the lenders would have the right to accelerate the repayment of such debt and the event of default or acceleration may result in the acceleration of the repayment of any other of our debt to which a cross-default or cross-acceleration provision applies. Furthermore, the lenders of this indebtedness may require that we pledge our assets as collateral as security for our repayment obligations. If we were unable to repay any amount of this indebtedness when due and payable, the lenders could proceed against the collateral that secures this indebtedness. In the event our creditors accelerate the repayment of our borrowings, we may not have sufficient assets to repay such indebtedness, which could materially adversely affect our results of operations and financial condition.

Table of Contents

Our business is dependent on continued interest in outsourcing.

Our business and growth depend in large part on continued interest in outsourced business process services. Outsourcing means that an entity contracts with a third party, such as us, to provide business process services rather than perform such services in-house. There can be no assurance that this interest will continue, as organizations may elect to perform such services themselves and/or the business process outsourcing industry could move to an as-a-Service model, thereby eliminating traditional business process outsourcing tasks. A significant change in this interest in outsourcing could materially adversely affect our results of operations and financial condition. Additionally, there can be no assurance that our cross-selling efforts will cause clients to purchase additional services from us or adopt a single-source outsourcing approach.

Our profitability is dependent upon our ability to obtain adequate pricing for our services and to improve our cost structure.

Our success depends on our ability to obtain adequate pricing for our services that will provide a reasonable return to our shareholders. Depending on competitive market factors, future prices we obtain for our services may decline from previous levels. If we are unable to obtain adequate pricing for our services, it could materially adversely affect our results of operations and financial condition. In addition, our contracts are increasingly requiring tighter timelines for implementation as well as more stringent service level metrics. This makes the bidding process for new contracts much more difficult and requires us to adequately consider these requirements in the pricing of our services.

In order to meet the service requirements of our customers, which often includes 24/7 service, and to optimize our employee cost base, including our back-office support, we often locate our delivery service and back-office support centers in lower-cost locations, including several developing countries. Concentrating our centers in these locations presents a number of operational risks, many of which are beyond our control, including the risks of political instability, natural disasters, safety and security risks, labor disruptions, excessive employee turnover and rising labor rates. Additionally, a change in the political environment in the United States or the adoption and enforcement of legislation and regulations curbing the use of such centers outside of the United States could materially adversely affect our results of operations and financial condition. These risks could impair our ability to effectively provide services to our customers and keep our costs aligned to our associated revenues and market requirements.

Our ability to sustain and improve profit margins is dependent on a number of factors, including our ability to continue to improve the cost efficiency of our operations through such programs as robotic process automation, to absorb the level of pricing pressures on our services through cost improvements and to successfully complete information technology initiatives. If any of these factors adversely materialize or if we are unable to achieve and maintain productivity improvements through restructuring actions or information technology initiatives, our ability to offset labor cost inflation and competitive price pressures would be impaired, each of which could materially adversely affect our results of operations and financial condition.

We may be subject to claims of infringement of third-party intellectual property rights which could adversely affect our results of operation and financial condition.

We rely heavily on the use of intellectual property. We do not own a significant portion of the software that we use to run our business; instead we license this software from a small number of primary vendors. If these vendors assert claims that we or our clients are infringing on their software or related intellectual property, we could incur substantial costs to defend these claims, which could materially adversely affect our results of operations and financial condition. In addition, if any of our vendors' infringement claims are ultimately successful, our vendors could require us to (i) cease selling or using products or services that incorporate the challenged software or technology, (ii) obtain a license or additional licenses from our vendors or (iii) redesign our services which rely on the challenged software or technology. In addition, we may be exposed to claims for monetary damages. If we are unsuccessful in defending an infringement claim and our vendors require us to initiate any of the above actions, or we are required to pay monetary damages, then such actions could materially adversely affect our results of operations and financial condition.

Table of Contents

We are subject to laws of the United States and foreign jurisdictions relating to individually identifiable information and personal health information, and failure to comply with those laws, whether or not inadvertent, could subject us to legal actions and negatively impact our operations.

We receive, process, transmit and store information relating to identifiable individuals, both in our role as a service provider and as an employer. As a result, we are subject to numerous United States (both federal and state) and foreign jurisdiction laws and regulations designed to protect both individually identifiable information as well as personal health information, including the Health Insurance Portability and Accountability Act of 1996, as amended ("HIPAA") and the HIPAA regulations governing, among other things, the privacy, security and electronic transmission of individually identifiable health information, and the European Union Directive on Data Protection (Directive 95/46/EC). The EU General Data Protection Regulation (GDPR) replaces the Data Protection Directive 95/46/EC (with an enforcement date of May 25, 2018) and is designed to harmonize data privacy laws across Europe, to protect and empower all EU citizens data privacy, to reshape the way organizations across the region approach data privacy and will have a significant impact on how we process and handle certain data. Other United States (both federal and state) and foreign jurisdiction laws apply to our processing of individually identifiable information and these laws have been subject to frequent changes, and new legislation in this area may be enacted at any time. For example, the invalidation of the U.S.-EU Safe Harbor regime and the emerging GDPR will require us to implement alternative mechanisms in order for some of our data flows from Europe to the United States to comply with applicable law. Changes to existing laws, introduction of new laws in this area or failure to comply with existing laws that are applicable to us may subject us to, among other things, additional costs or changes to our business practices, liability for monetary damages, fines and/or criminal prosecution, unfavorable publicity, restrictions on our ability to obtain and process information and allegations by our customers and clients that we have not performed our contractual obligations, any of which could materially adversely affect our results of operations and financial condition.

We are subject to laws of the United States and foreign jurisdictions relating to processing certain financial transactions, including payment card transactions and debit or credit card transactions, and failure to comply with those laws, whether or not inadvertent, could subject us to legal actions and materially adversely affect our results of operations and financial condition.

We process, support and execute financial transactions, and disburse funds, on behalf of both government and commercial customers, often in partnership with financial institutions. This activity includes receiving debit and credit card information, processing payments for and due to our customers and disbursing funds on payment or debit cards to payees of our customers. As a result, we are subject to numerous United States (both federal and state) and foreign jurisdiction laws and regulations, including the Electronic Fund Transfer Act, as amended, the Currency and Foreign Transactions Reporting Act of 1970 (commonly known as the Bank Secrecy Act), as amended, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (including the so-called Durbin Amendment), as amended, the Gramm-Leach-Bliley Act (also known as the Financial Modernization Act of 1999), as amended, and the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT ACT) Act of 2001, as amended. Other United States (both federal and state) and foreign jurisdiction laws apply to our processing of certain financial transactions and related support services. These laws are subject to frequent changes, and new statutes and regulations in this area may be enacted at any time. Changes to existing laws, introduction of new laws in this area or failure to comply with existing laws that are applicable to us may subject us to, among other things, additional costs or changes to our business practices, liability for monetary damages, fines and/or criminal prosecution, unfavorable publicity, restrictions on our ability to process and support financial transactions and allegations by our customers, partners and clients that we have not performed our contractual obligations. Any of these could materially adversely affect our results of operations and financial condition.

Table of Contents

Our data systems, information systems and network infrastructure may be subject to hacking or other cyber security threats and other service interruptions, which could expose us to liability, impair our reputation or temporarily render us unable to fulfill our service obligations under our contracts.

We are a leading provider of business processing services concentrated in transaction-intensive processing, analytics and automation. We act as a trusted business partner in both front office and back office platforms, providing interactions on a substantial scale with our customers and other third parties. Our customers include global commercial clients and government clients who depend upon our operational efficiency, non-interruption of service, and accuracy and security of information. We also use third party providers such as subcontractors, software vendors, utility providers and network providers, upon whom we rely for our business processing services, to deliver uninterrupted, secure service. As part of our business processing services we also develop system software platforms necessary to support our customers' needs, with significant ongoing investment in developing and operating customer-appropriate operating systems, data bases and system software solutions. We also receive, process, transmit and store substantial volumes of information relating to identifiable individuals, both in our role as a service provider and as an employer, and we are subject to numerous laws, rules and regulations in the United States (both federal and state) and foreign jurisdictions designed to protect both individually identifiable information as well as personal health information. We also receive, process and implement financial transactions, and disburse funds, on behalf of both commercial and government customers, which activity includes receiving debit and credit card information to process payments due to our customers as well as disbursing funds to payees of our customers. As a result of these and other business processing services, the integrity, security, accuracy and non-interruption of our systems and information technology and that of our third-party providers and our interfaces with our customers are extremely important to our business, operating results, growth, prospects and reputation.

We have implemented security systems and controls, both directly and with third-party subcontractors and service providers, with the intent of maintaining both the physical security of our facilities and the data security of our customers', clients' and suppliers' confidential information and information related to identifiable individuals (including payment card and debit and credit card information and health information) against unauthorized access through our information systems or by other electronic transmission or through the misdirection, theft or loss of physical media. These include, for example, the appropriate encryption of information. Despite such efforts, we are subject to breach of security systems which may result in unauthorized access to our facilities and those of our customers and/or the information we and our customers are trying to protect. Cyber security failure might be caused by computer hacking, malware, computer viruses, worms and other destructive software, "cyber-attacks" and other malicious activity, as well as natural disasters, power outages, terrorist attacks and similar events. Operational or business delays may also result from the disruption of network or information systems and subsequent remediation activities.

Because the techniques used to obtain unauthorized access are constantly changing and becoming increasingly more sophisticated and often are not recognized until launched against a target, we or our third-party service providers may be unable to anticipate these techniques or implement sufficient preventative measures. Hacking, malware, phishing, viruses and other "cyber-attacks" have become more prevalent, have occurred in our systems in the past, and may occur in our systems in the future. Although we have implemented and intend to continue to implement what we believe to be appropriate cyber practices and cyber security systems, these systems may prove to be inadequate and result in the disruption, failure, misappropriation or corruption of our network and information systems.

Additionally, with advances in computer capabilities and data protection requirements to address ongoing threats, we may be required to expend significant capital and other resources to protect against potential security breaches or to alleviate problems caused by security breaches. Moreover, employee error or malfeasance, faulty password management or other irregularities may result in a defeat of our or our third-party service providers' security measures and a breach of our or our third-party service providers' information systems (whether digital, cloud-based or otherwise).

Table of Contents

If unauthorized parties gain physical access to one of our or one of our third-party service providers' facilities or electronic access to our or one of our third-party service providers' information systems or such sensitive or confidential information is misdirected, lost or stolen during transmission or transport, any theft or misuse of such information could result in, among other things, unfavorable publicity and significant damage to our brand, governmental inquiry, oversight and possible regulatory action, difficulty in marketing our services, loss of existing and potential customers, allegations by our customers that we have not performed our contractual obligations, litigation by affected parties and possible financial obligations for substantial damages related to the theft or misuse of such information, any of which could materially adversely affect our results of operations and financial condition. Moreover, a security breach could require us to devote significant management resources to address the problems created by the security breach and to expend significant additional resources to upgrade further the security measures that we employ to guard such personal information against "cyber attacks" and to maintain various systems and data centers for our customers. Often these systems and data centers must be maintained worldwide and on a 24/7 basis. Although we endeavor to ensure that there is adequate backup and maintenance of these systems and centers, we could experience service interruptions that could result in curtailed operations and loss of existing and potential customers, which could significantly reduce our revenues and profits in addition to significantly impairing our reputation. If our information systems and our back-up systems are damaged, breached or cease to function properly, we may have to make a significant investment to repair or replace them, and we may suffer interruptions in our operations in the interim, each of which could materially adversely affect our results of operations and financial condition and diminish the value of our shares.

In addition, our and our customers' systems and networks are subject to continued threats of terrorism, which could disrupt our operations as well as disrupt the utilities and telecommunications infrastructure on which our business depends. To the extent any such disruptions were to occur, our business, operating results and financial condition could be materially adversely affected.

If we underestimate the scope of work or the costs of performance in our contracts, or we mis-perform our contracts, our results of operations and financial condition could be materially adversely affected.

In order to stay competitive in our industry, we must also keep pace with changing technologies and customer preferences. Many of our contracts require us to design, develop and implement new technological and operating systems for our customers. Many of these systems involve detailed and complex computer source code which must be created and integrated into a working system that meets contract specifications. The accounting for these contracts requires judgment relative to assessing risks, estimating contract revenues and costs and making assumptions for schedule and technical issues. To varying degrees, each contract type involves some risk that we could underestimate the costs and resources necessary to fulfill the contract. In each case, our failure to accurately estimate costs or the resources and technology needed to perform our contracts or to effectively manage and control our costs during the performance of our work could result, and in some instances has resulted, in reduced profits or in losses. In addition, in many of our contracts, we have complicated performance obligations, including, without limitation, designing and building new integrated computer systems or doing actuarial work for pension, medical and other plans with beneficiaries that can rely on future projection of obligations to determine appropriate levels of funding. These contracts carry potential financial penalties or could result in financial damages or exposures if we fail to properly perform those obligations and could result in our results of operations and financial condition being materially adversely affected.

Table of Contents

If we are unable to collect our receivables for unbilled services, our results of operations and financial condition could be materially adversely affected.

The profitability of certain of our large contracts depends on our ability to successfully obtain payment from our clients of the amounts they owe us for work performed. Actual losses on client balances could differ from current estimates and, as a result, may require adjustment of our receivables for unbilled services. Our receivables include long-term contracts and over the course of a long-term contract, our customers' financial condition may change such that their ability to pay their obligations, and our ability to collect our fees for services rendered, is adversely affected. Additionally, we may perform work for the federal, state and local governments, with respect to which we must file requests for equitable adjustment or claims with the proper agency to seek recovery in whole or in part, for out-of-scope work directed or caused by the government customer in support of its project, and the amounts of such recoveries may not meet our expectations or cover our costs. Timely collection of client balances also depends on our ability to complete our contractual commitments (for example, achieve specified milestones in percentage-of-completion contracts) and bill and collect our contracted revenues. If we are unable to meet our contractual requirements, we might experience delays in collection of and/or be unable to collect our client balances, and if this occurs, our results of operations and cash flows could be adversely affected. In addition, if we experience an increase in the time to bill and collect for our services, our results of operations and financial condition could be materially adversely affected.

A decline in revenues from or a loss or failure of significant clients could materially adversely affect our results of operations and financial condition.

Our results of operations and financial condition could be materially adversely affected by the loss or failure of significant clients. Some of our clients are in business sectors which have experienced significant financial difficulties or consolidation, and/or the reduction of volumes or their inability to make payments to us, as a result of, among other things, their merger or acquisition, divestiture of assets or businesses, contract expiration, nonrenewal or early termination (including termination for convenience) or business or financial failure or deterioration. Economic and political conditions could affect our clients' businesses and the markets they serve.

We have non-recurring revenue, which subjects us to a risk that our revenues and cash flows from operations may fluctuate from period to period.

Revenue generated from our non-recurring services may fluctuate due to factors both within and outside of our control. Our mix of non-recurring and recurring revenues is impacted by acquisitions as well as growth in our non-recurring lines of business. There is less predictability and certainty in the timing and amount of revenues generated by our non-recurring services and, accordingly, our results of operations and financial condition could be materially adversely affected by the timing and amount of revenues generated from our non-recurring services.

The failure to obtain or maintain a satisfactory credit rating could adversely affect our liquidity, capital position, borrowing costs, access to capital markets and ability to post surety or performance bonds to support clients' contracts.

Any future downgrades to our credit rating could negatively impact our ability to renew contracts with our existing clients, limit our ability to compete for new clients, result in increased premiums for surety or performance bonds to support our clients' contracts and/or result in a requirement that we provide collateral to secure our surety or performance bonds. Further, certain of our commercial outsourcing contracts provide that, in the event our credit ratings are downgraded to specified levels, the client may elect to terminate its contract with us and either pay a reduced termination fee or, in some limited instances, no termination fee. Such a credit rating downgrade could adversely affect these client relationships.

There can be no assurance that we will be able to maintain our credit ratings. Any additional actual or anticipated downgrades of our credit ratings, including any announcement that our ratings are under review for a downgrade, may have a negative impact on our liquidity, capital position and access to capital markets.

Table of Contents

A failure to attract and retain necessary technical personnel and qualified subcontractors could materially adversely affect our results of operations and financial condition.

Because we operate in intensely competitive markets, our success depends to a significant extent upon our ability to attract, retain and motivate highly skilled and qualified technical personnel and to subcontract with qualified, competent subcontractors. If we fail to attract, train and retain sufficient numbers of qualified engineers, technical staff and sales and marketing representatives or are unable to contract with qualified, competent subcontractors, our results of operations and financial condition could be materially adversely affected. Experienced and capable personnel in the services industry remain in high demand, and there is continual competition for their talents. Additionally, we may be required to increase our hiring in geographic areas outside of the United States, which could subject us to increased geopolitical and exchange rate risk. The loss of any key technical employee or the loss of a key subcontractor relationship could materially adversely affect our results of operations and financial condition.

Increases in the cost of telephone and data services or significant interruptions in such services could materially adversely affect our results of operations and financial condition.

Our business is significantly dependent on telephone and data service provided by various local and long distance telephone and data service providers around the world. Accordingly, any disruption of these services could materially adversely affect our results of operations and financial condition. We have taken steps to mitigate our exposure to service disruptions by investing in redundant circuits, although there is no assurance that the redundant circuits would not also suffer disruption. Any inability to obtain telephone or data services at favorable rates could materially adversely affect our results of operations and financial condition. Where possible, we have entered into long-term contracts with various providers to mitigate short-term rate increases and fluctuations. There is no obligation, however, for the vendors to renew their contracts with us, or to offer the same or lower rates in the future, and such contracts are subject to termination or modification for various reasons outside of our control. A significant increase in the cost of telephone or data services that is not recoverable through an increase in the price of our services could materially adversely affect our results of operations and financial condition. In addition, a number of our facilities are located in jurisdictions outside of the United States where the provision of utility services, including electricity and water, may not be consistently reliable, and while there are backup systems in many of our operating facilities, an extended outage of utility or network services could materially adversely affect our results of operations and financial condition.

We are a holding company and, therefore, may not be able to receive dividends or other payments in needed amounts from our subsidiaries.

Our principal assets are the shares of capital stock and indebtedness of our subsidiaries. We rely on dividends, interest and other payments from these subsidiaries to meet our obligations for paying principal and interest on outstanding debt obligations, paying corporate expenses and, if determined by our Board, paying dividends to shareholders and repurchasing common shares. Certain of our subsidiaries are subject to regulatory requirements of the jurisdictions in which they operate or other restrictions that may limit the amounts that these subsidiaries can pay in dividends or other payments to us. No assurance can be given that there will not be further changes in law, regulatory actions or other circumstances that could restrict the ability of our subsidiaries to pay dividends to us. In addition, due to differences in tax rates, repatriation of funds from certain countries into the United States could have unfavorable tax ramifications for us.

Table of Contents

Our results of operations and financial condition could be materially adversely affected by legal and regulatory matters.

We are potentially subject to various contingent liabilities that are not reflected on our balance sheet, including those arising as a result of being involved in a variety of claims, lawsuits, investigations and proceedings concerning: securities law; governmental and non-governmental entity contracting, servicing and governmental entity procurement law; intellectual property law; environmental law; employment law; the Employee Retirement Income Security Act of 1974 (ERISA); and other laws, regulations and contractual undertakings, as discussed under Note 13 – Contingencies and Litigation in our Consolidated Financial Statements. Should developments in any of these matters cause a change in our determination as to an unfavorable outcome and result in the need to recognize a material accrual or materially increase an existing accrual, or should any of these matters result in an adverse judgment or be settled for significant amounts above any existing accruals, it could materially adversely affect our results of operations and financial condition in the period or periods in which such change in determination, judgment or settlement occurs. There can be no assurances as to the favorable outcome of any claim, lawsuit, investigation or proceeding. It is possible that a resolution of one or more such proceedings could require us to make substantial payments to satisfy judgments, fines or penalties or to settle claims or proceedings, any of which could materially adversely affect our results of operations and financial condition. These proceedings could also result in reputational harm, criminal sanctions, consent decrees or orders preventing us from offering certain services, requiring a change in our business practices in costly ways or requiring development of non-infringing or otherwise altered products or technologies. In addition, it can be very costly to defend litigation and these costs could materially adversely affect our results of operations and financial condition. See Note 13 – Contingencies and Litigation to our Consolidated Financial Statements.

Our results of operations and financial condition may be materially adversely affected by conditions abroad, including local economics, political environments, fluctuating foreign currencies and shifting regulatory schemes.

A portion of our revenues is generated from operations outside the United States. In addition, we maintain significant operations outside the United States. Our results of operations and financial condition could be materially adversely affected by changes in foreign currency exchange rates, as well as by a number of other factors, including, without limitation, changes in economic conditions from country to country, changes in a country's political conditions, trade controls and protection measures, financial sanctions, licensing requirements, local tax issues, capitalization and other related legal matters. We generally hedge foreign currency denominated assets, liabilities and anticipated transactions primarily through the use of currency derivative contracts. The use of derivative contracts is intended to mitigate or reduce transactional level volatility in the results of foreign operations, but does not completely eliminate volatility. We do not hedge the translation effect of international revenues and expenses, which are denominated in currencies other than our U.S. parent functional currency, within our Consolidated Financial Statements. If we are unable to effectively hedge these risks, our results of operations and financial condition could be materially adversely affected.

Table of Contents

If we fail to successfully develop new service offerings, including new technology components, and protect our intellectual property rights, we may be unable to retain current customers and gain new customers and our revenues would decline.

The process of developing new service offerings, including new technology components, is inherently complex and uncertain. It requires accurate anticipation of customers' changing needs and emerging technological trends. We must make long-term investments and commit significant resources before knowing whether these investments will eventually result in service offerings that achieve customer acceptance and generate the revenues required to provide desired returns. For example, establishing internal automation processes to help us develop new service offerings will require significant up-front costs and resources, which, if not monetized effectively, could materially adversely affect our revenues. In addition, some of our service offerings rely on technologies developed by and licensed from third parties. We may not be able to obtain or continue to obtain licenses and technologies from these third parties at all or on reasonable terms, or such third parties may demand cross-licenses to our intellectual property. It is also possible that our intellectual property rights could be challenged, invalidated or circumvented, allowing others to use our intellectual property to our competitive detriment. We also must ensure that all of our service offerings comply with both existing and newly enacted regulatory requirements in the countries in which they are sold. If we fail to accurately anticipate and meet our customers' needs through the development of new service offerings (including technology components) or if we fail to adequately protect our intellectual property rights or if our new service offerings are not widely accepted or if our current or future service offerings fail to meet applicable worldwide regulatory requirements, we could lose market share and customers to our competitors and that could materially adversely affect our results of operations and financial condition.

Risks related to the spin-off:

We may be unable to achieve some or all of the benefits that we expect to achieve from the spin-off.

We believe that, as an independent, publicly traded company, we will be able to, among other things, design and implement corporate strategies and policies that are targeted to our business, better focus our financial and operational resources on our specific business, create effective incentives for our management and employees that are more closely tied to our business performance, provide investors more flexibility and enable us to achieve alignment with a more natural shareholder base and implement and maintain a capital structure designed to meet our specific needs. However, as a result of separating from Xerox, we may be more susceptible to market fluctuations and other adverse events. As an independent entity, we have an arm's-length relationship with Xerox and we may not be able to obtain supplies from Xerox on terms as favorable to us as those we had as a wholly owned subsidiary of Xerox prior to the spin-off. As a smaller, independent company, Conduent has a narrower business focus and may be more vulnerable to changing market conditions as well as the risk of takeover by third parties. In addition, we may be unable to achieve some or all of the benefits that we expected to achieve as an independent company in the time we expect, if at all. Furthermore, Xerox used to guarantee our and our subsidiaries' performance under certain services contracts and real estate leases. Following the spin-off, we expect that Conduent will provide such performance guarantees, and we may be unable to retain or renew contracts or real estate leases or a failure to renew such contracts or leases on favorable terms and conditions could materially adversely affect our results of operations and financial condition. If we fail to achieve some or all of the benefits that we expected to achieve as an independent company, or do not achieve them in the time we expect, our results of operations and financial condition could be materially adversely affected.

Table of Contents

We may be unable to make, on a timely or cost-effective basis, the changes necessary to operate as an independent, publicly traded company, and we may experience increased costs after the spin-off.

We had historically operated as part of Xerox's corporate organization, and Xerox had provided us with various corporate functions. Following the spin-off, Xerox has no obligation to provide us with assistance other than the transition services described under "Certain Relationships and Related Party Transactions —Transition Services Agreement." These services do not include every service that we have received from Xerox in the past, and Xerox is only obligated to provide these services for limited periods following completion of the spin-off. Accordingly, following the spin-off, we have needed to provide internally or obtain from unaffiliated third parties the services we had received from Xerox. These services include senior management, legal, human resources, finance and accounting, treasury, information technology, marketing and communications, internal audit and other shared services, the effective and appropriate performance of which are critical to our operations. We may be unable to replace these services on terms and conditions as favorable as those we received from Xerox. Because our business had operated as part of the wider Xerox organization, we may incur additional costs that could adversely affect our business. If we fail to obtain the quality of services necessary to operate effectively or incur greater costs in obtaining these services, our results of operations and financial condition could be materially adversely affected.

We have no recent operating history as an independent, publicly traded company, and our historical and pro forma financial data are not necessarily representative of the results we would have achieved as an independent, publicly traded company and may not be a reliable indicator of our future results.

We derived certain of the historical financial data included in this Annual Report from Xerox's consolidated financial statements, and this data does not necessarily reflect the results of operations and financial condition we would have achieved as an independent, publicly traded company during the periods presented, or those that we will achieve in the future. This is primarily because of the following factors:

- Prior to the spin-off, we operated as part of Xerox's broader corporate organization and Xerox performed various corporate functions for us, including, but not limited to, senior management, legal, human resources, finance and accounting, treasury, information technology, marketing and communications, internal audit and other shared services. Our historical financial data reflect allocations of corporate expenses from Xerox for these and similar functions. These allocations may not reflect the costs we have incurred and in the future will incur for similar services as an independent, publicly traded company.
- We entered into transactions with Xerox that did not exist prior to the spin-off, such as Xerox's provision of transition services, which will cause us to incur new costs.
- Such historical financial data does not and in the future may not reflect changes that we have experienced and expect to experience in the future as a result of our separation from Xerox. As part of Xerox, we enjoyed certain benefits from Xerox's operating diversity, size, purchasing power, credit rating, borrowing leverage and available capital for investments. Many of our services contracts, particularly those for our transportation service offerings in our Public Sector business, require significant capital investments, and after the spin-off, we may not have access to the capital (from both internal and external sources) necessary to fund these services contracts. As an independent entity, we may be unable to purchase goods, services and technologies, such as insurance and health care benefits and computer software licenses, or access capital markets on terms as favorable to us as those we obtained as part of Xerox prior to the spin-off.

Following the spin-off, we are now responsible for the additional costs associated with being an independent, publicly traded company, including costs related to corporate governance, investor and public relations and public reporting. For additional information about our past financial performance and the basis of presentation of our financial statements, see "Selected Historical Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our historical financial statements and the notes thereto included in this annual report on Form 10-K.

Table of Contents

We may have been able to receive better terms from unaffiliated third parties than the terms we receive in our agreements with Xerox.

We entered into agreements with Xerox related to our separation from Xerox, including the Separation and Distribution Agreement, Transition Services Agreement, Tax Matters Agreement, Employee Matters Agreement and any other agreements, while we were still part of Xerox. Accordingly, these agreements may not reflect terms that would have resulted from arm's-length negotiations among unaffiliated third parties. The terms of these agreements relate to, among other things, allocations of assets, liabilities, rights, indemnifications and other obligations between Xerox and us. We may have received better terms from third parties. See "Certain Relationships and Related Party Transactions—Agreements with Xerox."

The spin-off could result in significant tax liability to Xerox and its shareholders.

Completion of the spin-off required Xerox's receipt of a written opinion of Cravath, Swaine & Moore LLP to the effect that the Distribution should qualify for non-recognition of gain and loss under Section 355 of the Internal Revenue Code (the "Code") and the receipt and continuing effectiveness and validity of the IRS Ruling.

The opinion of counsel did not address any U.S. state or local or foreign tax consequences of the spin-off. The opinion assumed that the spin-off was completed according to the terms of the Separation and Distribution Agreement and relied on the facts as stated in the Separation and Distribution Agreement, the Tax Matters Agreement, the other ancillary agreements, the Information Statement included in our registration statement on Form 10 and a number of other documents. In addition, the opinion was based on certain representations as to factual matters from, and certain covenants by, Xerox and us. The opinion cannot be relied on if any of the assumptions, representations or covenants are incorrect, incomplete or inaccurate or are violated in any material respect.

Xerox received an IRS ruling in connection with the spin-off (the "IRS Ruling"). The IRS Ruling relies on certain facts, assumptions, representations and undertakings from Xerox and us regarding the past and future conduct of Xerox's and our businesses and other matters. If any of these facts, assumptions, representations or undertakings is incorrect or not otherwise satisfied, Xerox may not be able to rely on the IRS Ruling. In addition, the IRS Ruling is not a comprehensive ruling from the IRS regarding all aspects of the U.S. federal income tax consequences of the transactions.

Accordingly, notwithstanding the opinion of counsel and the IRS Ruling, there can be no assurance that the IRS will not assert, or that a court would not sustain, a contrary position.

If the distribution in connection with the spin-off were determined not to qualify for non-recognition of gain and loss for U.S. federal income tax purposes, U.S. holders who received our common stock could be subject to tax. In this case, each U.S. holder who received our common stock in the distribution would generally, for U.S. federal income tax purposes, be treated as having received a distribution in an amount equal to the fair market value of our common stock received, which would generally result in (i) a taxable dividend to the U.S. holder to the extent of that U.S. holder's pro rata share of Xerox's current and accumulated earnings and profits; (ii) a reduction in the U.S. holder's basis (but not below zero) in Xerox common stock to the extent the amount received exceeds the shareholder's share of Xerox's earnings and profits; and (iii) a taxable gain from the exchange of Xerox common stock to the extent the amount received exceeds the sum of the U.S. holder's share of Xerox's earnings and profits and the U.S. holder's basis in its Xerox common stock.

We could have an indemnification obligation to Xerox if the Distribution were determined not to qualify for non-recognition treatment, which could materially adversely affect our results of operations and financial condition.

If it were determined that the distribution in connection with the spin-off did not qualify for non-recognition of gain and loss under Section 355 of the Code, we could, under certain circumstances, be required to indemnify Xerox for the resulting taxes and related expenses. Any such indemnification obligation could materially adversely affect our results of operations and financial condition.

Table of Contents

In addition, Section 355(e) of the Code generally creates a presumption that the distribution would be taxable to Xerox, but not to shareholders, if we or our shareholders were to engage in transactions that result in a 50% or greater change by vote or value in the ownership of our stock during the four-year period beginning on the date that begins two years before the date of the distribution, unless it were established that such transactions and the distribution were not part of a plan or series of related transactions giving effect to such a change in ownership. If the distribution were taxable to Xerox due to such a 50% or greater change in ownership of our stock, Xerox would recognize gain equal to the excess of the fair market value of our common stock distributed to Xerox shareholders over Xerox's tax basis in our common stock and we generally would be required to indemnify Xerox for the tax on such gain and related expenses. Any such indemnification obligation could materially adversely affect our results of operations and financial condition.

We agreed to numerous restrictions to preserve the non-recognition treatment of the Distribution, which may reduce our strategic and operating flexibility.

We agreed in the Tax Matters Agreement to covenants and indemnification obligations that address compliance with Section 355 of the Code. These covenants and indemnification obligations may limit our ability to pursue strategic transactions or engage in new businesses or other transactions that may otherwise maximize the value of our business, and might discourage or delay a strategic transaction that our shareholders may consider favorable.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None

ITEM 2. PROPERTIES

We lease and own numerous facilities worldwide with larger concentrations of space in Kentucky, New Jersey, California, Mexico, Guatemala, the Philippines, Jamaica, Romania and India. Our owned and leased facilities house general offices, sales offices, service locations, call centers and distribution centers. The size of our property portfolio as of December 31, 2017 was approximately 9.7 million square feet at an annual operating cost (lease costs and expenses) of approximately $247 million and comprised 330 leased properties and 9 owned properties. We believe that our current facilities are suitable and adequate for our current businesses. Because of the interrelation of our business segments, each of the segments uses substantially all of these properties at least in part.

In addition to the 9.7 million square feet of our real estate property portfolio, we also had 2.7 million square feet of our leased and owned properties that became surplus in 2017 due to the implementation of our strategic transformation program as well as various productivity initiatives to consolidate our real estate footprint. We aggressively managed our surplus properties through early terminations and subleasing of leased properties and the sale of owned properties. As a result, approximately 1.7 million square feet of the surplus property portfolio were resolved as of December 31, 2017. Additional leased and owned properties may become surplus over the next three years as we continue the strategic transformation program. We are obligated to maintain our leased surplus properties through required contractual lease periods and plan to dispose of or sublease these properties.

ITEM 3. LEGAL PROCEEDINGS

The information set forth under Note 13 – Contingencies and Litigation in the Consolidated Financial Statements in Part II, Item 8, which is incorporated here by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

Table of Contents

Part II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Stock Exchange Information

The common stock of Conduent Incorporated is listed on the New York Stock Exchange under the ticker symbol "CNDT." Our common stock began trading January 3, 2017.

Conduent Common Stock Prices for 2017

New York Stock Exchange composite prices*	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
High	$ 17.44	$ 18.15	$ 17.20	$ 16.39
Low	$ 13.10	$ 15.50	$ 15.38	$ 14.95

_____

** Price as of close of business.*

Common Shareholders of Record

Refer to Item 6. Selected Financial Data—Five Years in Review for common shareholders of record at year-end, which is incorporated here by reference.

Conduent Common Stock Dividends

We did not pay any dividends on our common stock in 2017. We intend to retain future earnings for use in the operation of our business and to fund future growth. We do not anticipate paying any dividends on our common stock for the foreseeable future.

Performance Graph

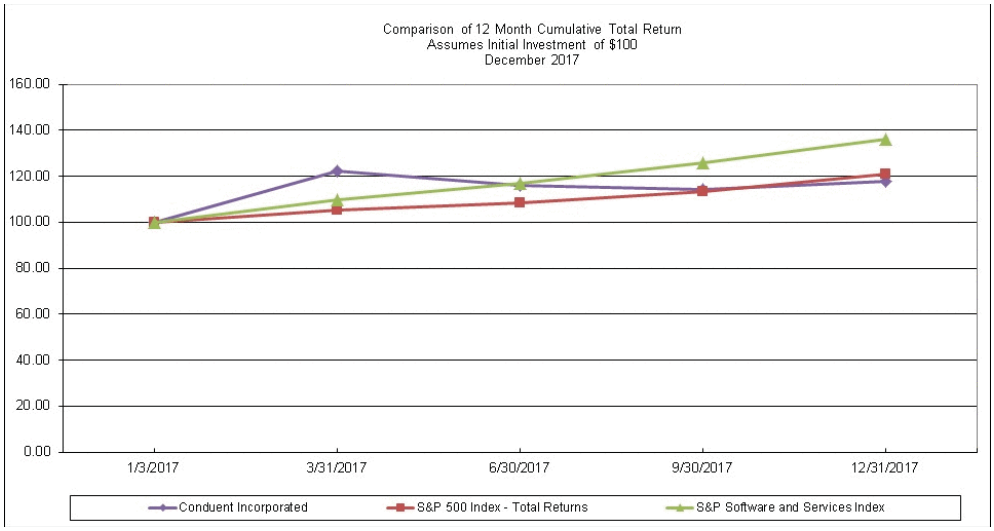


Table of Contents

Sales of Unregistered Securities During the Quarter Ended December 31, 2017

None

ITEM 6. SELECTED FINANCIAL DATA

FIVE YEARS IN REVIEW[1]

(in millions, except per-share data)

	2017	2016	2015	2014	2013
Operations					
Revenues	$ 6,022	$ 6,408	$ 6,662	$ 6,938	$ 6,879
Income (loss) income from continuing operations	177	(983)	(336)	34	135
Net income (loss)	181	(983)	(414)	(81)	182
Per-Share Data					
Income (loss) from continuing operations					
Basic	$ 0.82	$ (4.85)	$ (1.65)	$ 0.17	$ 0.67
Diluted	0.81	(4.85)	(1.65)	0.17	0.67
Net income (loss) attributable to Conduent					
Basic	0.84	(4.85)	(2.04)	(0.40)	0.90
Diluted	0.83	(4.85)	(2.04)	(0.40)	0.90
Financial Position					
Working capital	$ 1,342	$ 515	$ (867)	$ (887)	$ (1,450)
Total Assets	7,548	7,709	9,058	10,954	11,205
Consolidated Capitalization					
Short-term debt and current portion of long-term debt	$ 82	$ 28	$ 24	$ 268	$ 42
Long-term debt	1,979	1,913	37	43	310
Total Debt[2]	2,061	1,941	61	311	352
Series A preferred stock	142	142	n/a	n/a	n/a
Conduent shareholders' equity/former parent investment	3,529	3,288	5,162	5,411	5,579
Total Consolidated Capitalization	$ 5,732	$ 5,371	$ 5,223	$ 5,722	$ 5,931
Selected Data and Ratios[3]					
Common shareholders of record at year-end[3]	26,936	n/a	n/a	n/a	n/a
Book value per common share[3]	$ 16.77	n/a	n/a	n/a	n/a
Year-end common stock market price[3]	$ 16.16	n/a	n/a	n/a	n/a

---

(1) On December 31, 2016, Conduent spun-off from Xerox Corporation. See Note 1 – Basis of Presentation and Summary of Significant Accounting Policies to the Consolidated Financial Statements included in Item 8 of this 2017 Form 10-K for a discussion concerning the historical financial statements.

(2) Includes capital lease obligations.

(3) Common stock of Conduent Incorporated did not begin trading on the NYSE until January 3, 2017; therefore, selected data and ratios are not available for years prior to 2017.

Table of Contents

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management's Discussion and Analysis (MD&A) is intended to help the reader understand the results of operations and financial condition of Conduent Incorporated. This MD&A is provided as a supplement to, and should be read in conjunction with, our Consolidated Financial Statements and the accompanying notes. This MD&A provides additional information about our operations, current developments, financial condition, cash flows and results of operations.

Throughout the MD&A, we refer to various notes to our Consolidated Financial Statements which appear in Item 8 of this 2017 Form 10-K, and the information contained in such notes is incorporated by reference into the MD&A in the places where such references are made.

Overview

With revenues of $6.0 billion, we are a leading provider of business process services with expertise in transaction-intensive processing, analytics and automation. We serve as a trusted business partner in both the front office and back office, enabling personalized, seamless interactions on a massive scale that improve end-user experience.

Headquartered in Florham Park, New Jersey, we, have a team of approximately 90,000 people as of December 31, 2017, who serves customers in 31 countries. In 2017, 12% of our revenue was generated outside the U.S.

Our reportable segments correspond to how we organize and manage the business and are aligned to the industries in which our clients operate.

Beginning in 2017, in an effort to better reflect how we manage our business, we changed our reporting segments to align the Healthcare business based upon customer focus between Commercial Industries and Public Sector.

- **Commercial Industries -** Our Commercial Industries segment provides business process services and customized solutions to clients in a variety of industries. Across the Commercial Industries segment, we deliver end-to-end business-to-business and business-to-customer services that enable our clients to optimize their key processes. Our multi-industry competencies include transaction processing, customer experience, human resource management, omni-channel communications and finance and accounting services.
- **Public Sector -** Our Public Sector segment provides government-centric business process services to U.S. federal, state and local and foreign governments for transportation, public assistance, program administration, transaction processing and payment services.

Other includes our Government HE Medicaid Platform business, where we are limiting our focus to maintaining systems for our current clients; our Education Business inclusive of our Student Loan business, which is in runoff; and inter-segment eliminations.

Significant 2017 Actions

Dispositions

In 2017, we completed divestitures of: (1) our Firehouse business and suite of emergency records management products used by fire departments across the country for their incident reporting and Emergency Management System information and records management; (2) our healthcare provider consulting services business, which advises healthcare organizations on IT application optimization; (3) the Breakaway Group business, which provides advisory project services to assist healthcare organizations optimize their health IT applications; (4) the mobile device management business of Wireless Data Services Limited; and (5) the Global Mobility business. The aggregate proceeds for these divestitures was $56 million in cash. The businesses sold represent $60 million and $82 million of 2017 and 2016 revenue, respectively. We recorded a pre-tax gain of $16 million on these divestitures for the year ended December 31, 2017.

Table of Contents

In addition, in 2017, we sold a property located in Dallas, Texas, which was formerly the Affiliated Computer Services (ACS) headquarters, for a pre-tax gain of $24 million. This was part of our effort to consolidate our real estate footprint.

Health Enterprise Settlement

On November 28, 2017, we entered into a definitive settlement agreement with the State of New York regarding resolution of the HE platform project. Under the terms of the settlement: (1) our contract with the State of New York terminated effective December 15, 2017 and we were released from all liabilities and obligations in connection with the contract at such time; and (2) we will pay, or incur costs on behalf of, the State of New York in the amount of approximately $20 million. As we have previously reserved this amount, we will incur no additional charges as a result of the settlement.

Significant 2016 Actions

Separation

On December 31, 2016, Conduent Incorporated spun-off from Xerox Corporation, pursuant to the Separation and Distribution Agreement. The separation was completed by way of a pro rata distribution of Conduent Incorporated shares held by Xerox to Xerox's shareholders. As a result of the spin-off we operate as an independent, publicly traded company on the New York Stock Exchange under the ticker "CNDT".

Goodwill Impairment Charge

Our Commercial Industries reporting units operating results declined in 2016 versus our expectations, including a weak fourth quarter 2016. In performing our annual impairment test during the fourth quarter of 2016, we determined that the carrying value of the Commercial Industries reporting unit exceeded its fair value by 53%, which resulted in a goodwill impairment of $935 million. This has been presented as Goodwill impairment, a separate line item in the Consolidated Statements of Income (Loss). Refer to Note 6 – Goodwill and Intangible Assets, Net, in the Consolidated Financial Statements for additional information.

Health Enterprise Charge

In February 2017, we determined that it was not probable that the New York Medicaid Management Information System (NY MMIS) project would be completed. As a result of this determination, we recorded a pre-tax charge (NY MMIS charge) of $161 million ($98 million after-tax) in the fourth quarter of 2016. The charge included $83 million for the write-off of contract receivables which were recorded as a reduction of revenue and $78 million recorded in Cost of services including $36 million for wind-down costs, $28 million related to the non-cash charge for the impairment of software and $14 million for the write-off of deferred contract set-up and transition costs and other related assets and liabilities.

Significant 2015 Actions

Health Enterprise Charge

In 2015, we determined that we would not fully complete the HE platform implementation projects in California and Montana. However, we would continue to process Medicaid claims using existing legacy systems in those states, thus providing uninterrupted service for the states' healthcare providers and constituents.

As a result of this determination, we recorded a pre-tax HE charge of $389 million ($237 million after-tax). The charge included $116 million for the write-off of contract receivables (primarily non-current), $34 million related to the non-cash impairment of the HE software and deferred contract set-up transition costs and $23 million for other related assets and liabilities. The remainder of the charge was primarily related to settlement costs including payments to subcontractors resulting in cash outflows in future periods. Of the $389 million charge, $116 million was recorded as a reduction to revenue and the remaining $273 million recorded to Cost of services.

This development resulted from the Government Healthcare strategy change announced in July 2015, regarding our decision to focus our future HE implementations on current Medicaid customers and to discontinue investment in and sales of our Integrated Eligibility System. This resulted in a pre-tax non-cash software platform impairment charge of $146 million ($89 million after-tax).

Table of Contents

Critical Accounting Policies

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires us to make estimates and assumptions in certain circumstances that affect amounts reported in the accompanying Consolidated Financial Statements and notes thereto. In preparing our Consolidated Financial Statements, we have made our best estimates and judgments of certain amounts included in the Consolidated Financial Statements giving due consideration to materiality. However, application of these accounting policies involves the exercise of judgment and use of assumptions as to future uncertainties and, as a result, actual results could differ from these estimates. Senior management has discussed the development and selection of the critical accounting policies, estimates and related disclosures included herein with the Audit Committee of the Board of Directors. We consider these as critical to understanding our Consolidated Financial Statements, as their application places the most significant demands on management's judgment, since financial reporting results rely on estimates of the effects of matters that are inherently uncertain. In instances where different estimates could have reasonably been used, we disclose the impact of these different estimates on our operations. In certain instances, the accounting rules are prescriptive; therefore, it would not have been possible to reasonably use different estimates. Changes in assumptions and estimates are reflected in the period in which they occur. The impact of such changes could be material to our results of operations and financial condition in any quarterly or annual period.

Specific risks associated with these critical accounting policies are discussed throughout the MD&A, where such policies affect our reported and expected financial results. For a detailed discussion of the application of these and other accounting policies, refer to Note 1 – Basis of Presentation and Summary of Significant Accounting Policies in the Consolidated Financial Statements.

Revenue Recognition

Application of the various accounting principles in U.S. GAAP related to the measurement and recognition of revenue requires us to make judgments and estimates. Complex arrangements with nonstandard terms and conditions may require significant contract interpretation to determine the appropriate accounting. Refer to Note 1 – Basis of Presentation and Summary of Significant Accounting Policies — Revenue Recognition in the Consolidated Financial Statements for additional information regarding our revenue recognition policies.

A significant portion of our revenue is recognized based on objective criteria that do not require significant estimates or uncertainties. For example, transaction volumes, time and material and cost reimbursable arrangements are based on specific, objective criteria under the contracts. Accordingly, revenues recognized under these contracts do not require the use of significant estimates that are susceptible to change. Revenue recognized using the percentage-of completion (POC) accounting method does require the use of estimates and judgment as discussed below.

We recognize revenues when we have persuasive evidence of an arrangement, the services have been provided, the transaction price is fixed or determinable and collectability is reasonably assured. During 2017, approximately 80% of our revenue was recognized based on transaction volumes, approximately 13% was recognized on a fixed fee basis (wherein our revenue is earned as we fulfill our performance obligations under the arrangement), approximately 1% was related to cost reimbursable contracts, approximately 2% recognized using POC accounting and the remaining 4% was related to time and material contracts. Our revenue mix is subject to change due to the impact of changing customer requirements, acquisitions, divestitures, new business and lost business.

Percentage-of-Completion: The POC method requires the use of estimates and judgment. Although not significant to total revenue, the POC methodology is normally applied to certain of our larger and longer term outsourcing contracts involving system development and implementation, primarily in government healthcare and certain government transportation contracts. In addition, we had unbilled receivables totaling $187 million and $279 million at December 31, 2017 and 2016, respectively, representing revenues recognized but not yet billable under the terms of our POC contracts.

Table of Contents

The POC accounting methodology involves recognizing probable and reasonably estimable revenue using the percentage of services completed based on a current cumulative cost incurred to estimated total cost basis and a reasonably consistent profit margin over the period. Due to the long-term nature of these arrangements, developing the estimates of cost often requires significant judgment. Factors that must be considered in estimating the progress of work completed and ultimate cost of the projects include, but are not limited to, the availability of labor and labor productivity, the nature and complexity of the work to be performed and the impact of delayed performance. If changes occur in delivery, productivity or other factors used in developing the estimates of costs or revenues, we revise our cost and revenue estimates, which may result in increases or decreases in revenues. Such revisions are reflected in income in the period in which the facts that give rise to that revision become known. We perform ongoing profitability analysis of our POC services contracts in order to determine whether the latest estimates require updating. Key factors reviewed by the Company to estimate the future costs to complete each contract are future labor costs, future product costs, expected productivity efficiencies, achievement of contracted milestones and performance goals, as well as potential penalties for milestone and system implementation delays.

If at any time our estimates indicate the POC contract will be unprofitable, the entire estimated loss for the remainder of the contract is recorded immediately in cost of services. This results in the contract being recorded at a zero profit margin going forward with recognition of an equal amount of revenues and costs over the remaining contract term. A zero profit margin may also be applied when it is impractical to estimate specific amounts or ranges of contract revenues and costs; however, we can at least determine that we will not incur a loss on a particular contract.

Capitalization of Outsourcing Contract Costs

In connection with our services arrangements, we incur and capitalize costs to originate these long-term contracts and to perform the migration, transition and setup activities necessary to enable us to perform under the terms of the arrangement. Certain initial direct costs of an arrangement are capitalized and amortized over the contractual service period of the arrangement to cost of services. From time to time, we also provide inducements to customers in various forms, including contractual credits, which are capitalized and amortized as a reduction of revenue over the term of the contract. We regularly review costs to determine appropriateness for deferral in accordance with the relevant accounting guidance. Key estimates and assumptions that we must make include projecting future cash flows in order to assess the recoverability of deferred costs. To assess recoverability, undiscounted estimated cash flows of the contract are projected over its remaining life and compared to the carrying amount of contract related assets, including the unamortized deferred cost balance. Key factors that are considered in estimating the undiscounted cash flows include projected labor costs and productivity efficiencies. A significant change in an estimate or assumption on one or more contracts could have a material effect on our results of operations.

Capitalization of Software Development Costs

We capitalize certain costs incurred to develop commercial software products to be sold, leased or otherwise marketed after establishing technological feasibility, and we capitalize costs to develop or purchase internal-use software. Significant estimates and assumptions include: determining the appropriate period over which to amortize the capitalized costs based on estimated useful lives, estimating the marketability of the commercial software products and related future revenues and assessing the unamortized cost balances for impairment. For commercial software products, determining the appropriate amortization period is based on estimates of future revenues from sales of the products. We consider various factors to project marketability and future revenues, including an assessment of alternative solutions or products, current and historical demand for the product, and anticipated changes in technology that may make the product obsolete. For internal-use software, the appropriate amortization period is based on estimates of our ability to utilize the software on an ongoing basis. To assess the recoverability of capitalized software costs, we consider estimates of future revenue, costs and cash flows. Such estimates require assumptions about future cash inflows and outflows, and are primarily based on the historical experience and expectations regarding future revenues. A significant change in an estimate related to one or more software products could result in a material change to our results of operations.

Refer to Note 5 – Land, Buildings, Equipment and Software, Net in the Consolidated Financial Statements for additional information regarding capitalized software costs.

Table of Contents

Held for Sale

We classify assets as held for sale in the period when the following conditions are met: (i) management, having the authority to approve the action, commits to a plan to sell the asset (disposal group); (ii) the asset (disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (disposal group); (iii) an active program to locate a buyer and other actions required to complete the plan to sell the asset (disposal group) have been initiated; (iv) the sale of the asset (disposal group) is probable, and transfer of the asset (disposal group) is expected to qualify for recognition as a completed sale within one year, except if events or circumstances beyond our control extend the period of time required to sell the asset (disposal group) beyond one year; (v) the asset (disposal group) is being actively marketed for sale at a price that is reasonable in relation to its current fair value; and (vi) actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

A long-lived asset (disposal group) that is classified as held for sale is initially measured at the lower of its carrying value or fair value less any costs to sell. Any loss resulting from this measurement is recognized in the period in which the held for sale criteria are met. Conversely, gains are not recognized on the sale of a long-lived asset (disposal group) until the date of sale.

The fair value of a long-lived asset (disposal group) less any costs to sell is assessed each reporting period it remains classified as held for sale and any subsequent changes are reported as an adjustment to the carrying value of the asset (disposal group), as long as the new carrying value does not exceed the carrying value of the asset at the time it was initially classified as held for sale. Upon determining that a long-lived asset (disposal group) meets the criteria to be classified as held for sale, the Company reports the assets and liabilities of the disposal group in the line items Assets held for sale and Liabilities held for sale, respectively, in the Consolidated Balance Sheets.

In the fourth quarter of 2017, management approved the disposal through sale of certain assets and businesses, which is a mix of both Commercial Industries and Public Sectors. This action was taken as a result of our evaluation of these businesses as they represent businesses in markets or with services that we did not see as strategic or core. As of December 31, 2017, these businesses qualified as assets held for sale. During the year ended December 31, 2017, we reclassified $757 million to assets held for sale and $169 million to liabilities held for sale, as we have an active program to locate buyers for these businesses and we expect these businesses to be sold within one year.

Intangible Assets

The fair values of identifiable intangible assets are primarily estimated using an income approach. These estimates include market participant assumptions and require projected financial information, including assumptions about future revenue growth and costs necessary to facilitate the projected growth. Other key inputs include assumptions about technological obsolescence, customer attrition rates, brand recognition, the allocation of projected cash flows to identifiable intangible assets and discount rates. We regularly review intangible assets with finite lives for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Factors we consider important which could trigger an impairment review include the following:

- significant underperformance relative to historical or projected future operating results;
- significant changes in the manner of our use of the acquired assets or the strategy for our overall business; and
- significant negative industry or economic trends.

When we determine that the carrying value of intangibles and long-lived assets may not be recoverable based upon the existence of one or more of the above indicators of potential impairment, we assess whether an impairment has occurred based on whether net book value of the assets exceeds the related projected undiscounted cash flows from these assets. We consider a number of factors, including past operating results, budgets, economic projections, market trends and product development cycles in estimating future cash flows. Differing estimates and assumptions as to any of the factors described above could result in a materially different impairment charge, if any, and thus materially different results of operations.

Goodwill

Goodwill is not amortized but rather tested for impairment annually, or more frequently, if an event or circumstance indicates that impairment may have been incurred. Events or circumstances that might indicate an interim evaluation is warranted include, among other things, unexpected adverse business conditions, macro and reporting unit specific economic factors, supply costs, unanticipated competitive activities and acts by governments and courts.

Table of Contents

Application of the annual goodwill impairment test requires judgment, including the identification of reporting units, assignment of assets and liabilities to reporting units, assignment of goodwill to reporting units and the assessment of the fair value of each reporting unit. We determined that our reporting units were the same as our operating segments and, therefore, our business is comprised of two reporting units. Our annual quantitative impairment test of goodwill was performed in the fourth quarter of 2017.

In our quantitative test, we estimate the fair value of each reporting unit by weighting the results from the income approach (discounted cash flow methodology) and market approach. These valuation approaches require significant judgment and consider a number of factors that include, but are not limited to, expected future cash flows, growth rates and discount rates and comparable multiples from publicly traded companies in our industry. In addition, we are required to make certain assumptions and estimates regarding the current economic environment, industry factors and the future profitability of our businesses.

When performing our discounted cash flow analysis for each reporting unit, we incorporate the use of projected financial information and discount rates that are developed using market participant-based assumptions. The cash-flow projections are based on three-year financial forecasts developed by management that include revenue and expense projections, restructuring and strategic transformation activities, capital spending trends and investment in working capital to support anticipated revenue growth or other changes in the business. The selected discount rates consider the risk and nature of the respective reporting units' cash flows, appropriate capital structure and rates of return that market participants would require to invest their capital in our reporting units.

We believe these assumptions are appropriate and reflect our forecasted long-term business model and give appropriate consideration to our historical results as well as the current economic environment and markets that we serve.

Based on our quantitative assessments, we concluded that the fair value of our Commercial Industries and Public Sector reporting units exceeded their respective carrying values by 72% and 13%, respectively, at December 31, 2017. The most significant assumptions used in the goodwill analysis relate to a 3% long-term organic growth rate for both the Commercial Industries and Public Sector segments as well as a 9.25% and a 8.75% discount rate for the Commercial Industries and Public Sector segments, respectively. The fair values of the Commercial Industries and Public Sector segments are sensitive to changes in the long-term growth rates and the discount rates. A decrease of 50 basis points to the long-term growth rate or an increase to the discount rate of 50 basis points would result in an approximate reduction of fair value of $200 million and $250 million, respectively, in the Public Sector segment.

Refer to Note 6 – Goodwill and Intangible Assets, Net in the Consolidated Financial Statements for additional information regarding goodwill by reportable segment.

Restructuring and Asset Impairments

We have engaged in restructuring actions, which require management to estimate the timing and amount of severance and other employee separation costs for workforce reduction, the fair value of assets made redundant or obsolete and the lease cancellation and other exit costs. We accrue for severance and other employee separation costs under these actions when it is probable that benefits will be paid and the amount is reasonably estimable. The rates used in determining severance accruals are based on existing plans, historical experiences and negotiated settlements.

For additional information regarding our restructuring actions, refer to the "Restructuring and Related Costs" section in the MD&A and Note 7 – Restructuring Programs and Asset Impairment Charges in the Consolidated Financial Statements.

Income Taxes

We are subject to income taxes in the United States and numerous foreign jurisdictions. The determination of our provision for income taxes requires significant judgment, the use of estimates and the interpretation and application of complex tax laws. Our provision is based on nonrecurring events as well as recurring factors, including the taxation of foreign income. In addition, our provision will change based on discrete or other nonrecurring events such as audit settlements, tax law changes, changes in valuation allowances and other factors, that may not be predictable. In the event that there is a significant unusual or one-time item recognized in our operating results, the taxes attributable to that item would be separately calculated and recorded at the same time as an unusual or one-time item.

Table of Contents

We record the estimated future tax effects of temporary differences between the tax bases of assets and liabilities and amounts reported in our Consolidated Balance Sheets, as well as operating loss and tax credit carryforwards. We follow very specific and detailed guidelines in each tax jurisdiction regarding the recoverability of any tax assets recorded in our Consolidated Balance Sheets and provide valuation allowances as required. We regularly review our deferred tax assets for recoverability considering historical profitability, projected future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies. Gross deferred tax assets of $250 million and $360 million had valuation allowances of $35 million and $24 million at December 31, 2017 and 2016, respectively. As a result of the 2017 tax law changes in the United States, we recorded provisional amounts for a one-time non-cash $210 million income tax benefit related to adjusting our deferred tax liabilities from a 35% Federal tax rate to a 21% Federal tax rate and the transition tax expense of $12 million.

We are subject to ongoing tax examinations and assessments in various jurisdictions. Accordingly, we may incur additional tax expense based upon our assessment of the more-likely-than-not outcomes of such matters. In addition, when applicable, we adjust previously recorded tax expense to reflect examination results. Our ongoing assessments of the more-likely-than-not outcomes of examinations and related tax positions require judgment and can materially increase or decrease our effective tax rate, as well as impact our operating results. Unrecognized tax benefits were $15 million, $14 million and $24 million at December 31, 2017, 2016 and 2015, respectively.

Refer to Note 12 – Income Taxes in the Consolidated Financial Statements for additional information regarding deferred income taxes and unrecognized tax benefits.

Loss Contingencies

We are currently involved in various claims and legal proceedings. At least quarterly, we review the status of each significant matter and assess its potential financial exposure considering all available information including, but not limited to, the impact of negotiations, settlements, rulings, advice of legal counsel and other updated information and events pertaining to a particular matter. If the potential loss from any claim or legal proceeding is considered probable and the amount can be reasonably estimated, we accrue a liability for the estimated loss. Significant judgment is required in both the determination of probability and the determination as to whether an exposure is reasonably estimable. Because of uncertainties related to these matters, accruals are based only on the best information available at the time. As additional information becomes available, we reassess the potential liability related to pending claims and litigation, and may revise estimates. These revisions in the estimates of the potential liabilities could have a material impact on the results of operations and financial position.

Refer to Note 13 – Contingencies and Litigation in the Consolidated Financial Statements for additional information regarding loss contingencies.

Table of Contents

Financial Information

Financial information for the three years ended December 31, 2017 was as follows:

	Year Ended December 31,			2017 vs. 2016		2016 vs. 2015	
(in millions)	2017	2016	2015	$ Change	% Change	$ Change	% Change
Total Revenues	$ 6,022	$ 6,408	$ 6,662	$ (386)	(6)%	$ (254)	(4)%
Total Cost of services	4,977	5,498	5,977	(521)	(9)%	(479)	(8)%
Gross Margin	**$ 1,045**	**$ 910**	**$ 685**	**$ 135**	**15 %**	**$ 225**	**33 %**
Operating Costs and Expenses							
Research and development	$ 13	$ 31	$ 52	$ (18)	(58)%	$ (21)	(40)%
Selling, general and administrative	615	686	699	(71)	(10)%	(13)	(2)%
Restructuring and related costs	101	101	159	—	— %	(58)	(36)%
Amortization of intangible assets	243	280	250	(37)	(13)%	30	12 %
Goodwill impairment	—	935	—	(935)	(100)%	935	100 %
Separation costs	12	44	—	(32)	(73)%	44	100 %
Interest expense	137	14	8	123	879 %	6	75 %
Related party interest	—	26	61	(26)	(100)%	(35)	(57)%
(Gain) loss on sale of asset and businesses	(42)	2	—	(44)	(2,200)%	2	100 %
Other (income) expenses, net	(18)	18	30	(36)	(200)%	(12)	(40)%
Total Operating Costs and Expenses	**$ 1,061**	**$ 2,137**	**$ 1,259**	**$ (1,076)**	**(50)%**	**$ 878**	**70 %**
Loss Before Income Taxes	$ (16)	$ (1,227)	$ (574)	$ 1,211	(99)%	$ (653)	114 %
Income tax benefit	(193)	(244)	(238)	51	(21)%	(6)	3 %
Income (Loss) From Continuing Operations	**$ 177**	**$ (983)**	**$ (336)**	**$ 1,160**	**(118)%**	**$ (647)**	**193 %**

Revenue

Total revenues for 2017 decreased mainly due to the impact from strategic decisions by management as part of our portfolio rationalization, including exiting certain unprofitable contracts, the run-off of our Student Loan business and contract losses. Partially offsetting these declines was an increase from the ramping of new business.

Total revenues for 2016 decreased compared to the prior year as a result of the NY MMIS charge of $83 million, lower volumes, delayed ramping of new business and contract exits, primarily in customer care contracts within our Commercial Industries segment, the run off of our Student Loan business and overall price declines that were consistent with prior-period trends. Partially offsetting these declines were new contracts in the Public Sector.

Cost of Services

Cost of services for 2017 decreased compared to the prior year period primarily due to cost transformation, lost business, wind-down of the NY MMIS contract, run-off of our Student Loan business, strategic contract actions taken by management as part of portfolio management and lower volumes.

Cost of services for 2016 decreased compared to the prior year period primarily due to lost business, the NY MMIS contract, run-off of our Student Loan business and lower volumes.

Gross Margin

Increase in gross margin in 2017 compared to the prior year period was driven primarily by the impact of cost and productivity improvements, including benefits from our strategic transformation program, exiting or remediating certain underperforming contracts and lower costs associated with our Student Loan business. This was partially offset by the run-off of our Student Loan business, contract losses and lower volumes with existing clients.

Increase in gross margin in 2016 compared to the prior year period reflected cost benefits from our strategic transformation initiatives offset by lost business and margin pressures in our customer service offerings and price declines.

Table of Contents

Selling, General and Administrative (SG&A)

Lower SG&A compared to the prior years reflected the impact of our strategic transformation initiatives driving lower wages and benefits, partially offset by the expansion and investment in our sales force.

Restructuring and Related Costs

Restructuring and related costs for the year ended December 31, 2017 include $46 million of lease cancellation costs as part of our effort to consolidate our real estate footprint, $41 million of severance costs due to headcount reductions of approximately 3,200 employees worldwide, $9 million of costs primarily related to professional support services associated with the implementation of the strategic transformation program and $5 million of asset impairments charges.

Restructuring and related costs for the year ended December 31, 2016 include $54 million of severance costs due to headcount reductions of approximately 3,600 employees worldwide, $28 million of costs primarily related to professional support services associated with the implementation of the strategic transformation program, $12 million of asset impairment charges and $7 million of lease cancellation costs.

Refer to Note 7 – Restructuring Programs and Asset Impairment Charges in the Consolidated Financial Statements for additional information regarding our restructuring programs.

Amortization of Intangible Assets

Amortization of intangible asset decreased in 2017 from the prior year primarily due to the acceleration of amortization of certain trade-names in 2016.

Amortization of intangible assets was higher in 2016 as compared to 2015, primarily due to the acceleration of amortization of certain trade-names associated with prior acquisitions.

Refer to Note 6 – Goodwill and Intangible Assets, Net in the Consolidated Financial Statements for additional information regarding our intangible assets.

Goodwill Impairment

Our Commercial Industries reporting unit experienced declining operating results in 2016 versus expectations. As a result, we recorded a goodwill impairment of $935 million. Refer to Note 6 – Goodwill and Intangible Assets, Net in the Consolidated Financial Statements for additional information regarding the Goodwill impairment charge.

Separation Costs

Separation costs are primarily for third-party investment banking, accounting, legal, consulting and other similar types of services related to the separation transaction as well as costs associated with the operational separation of the two companies, such as those related to human resources, brand management, real estate and information management to the extent not capitalized. Separation costs also include the costs associated with bonuses and restricted stock grants awarded to employees for retention through the separation.

Interest Expense

Interest expense represents interest on long-term debt and the amortization of debt issuance costs. Interest expense for the year ended December 31, 2017 increased compared to the prior year, primarily due to the issuance of debt with the capitalization of the Company during the spin-off in December 2016 and subsequent borrowing under Term Loan B in January 2017, as well as amounts outstanding at various times throughout the year under the Company's credit facility.

In 2017, the Company successfully repriced its Term Loan B in April and October (Amendments No.1 and No. 2, respectively), which overall resulted in lowering the total interest rate on this loan by 250 basis points to LIBOR plus 3.0%.

Refer to Note 8 – Debt in the Consolidated Financial Statements for additional information.

Table of Contents

Related Party Interest

In January 2017, in connection with the spin-off from Xerox Corporation, we paid Xerox $161 million for the final settlement per the Separation and Distribution Agreement.

Related-party interest expense for the year ended December 31, 2016 was lower than the prior year primarily due to the payment of certain related party notes payable in 2015, as a result of the proceeds received from the sale of the ITO business.

Refer to Note 18 – Related Party Transactions and Former Parent Company Investment in the Consolidated Financial Statements for additional information.

(Gain) Loss on Sale of Asset

As disclosed under Item 7. MD&A— Divestiture, we completed five divestitures in 2017 with aggregate proceeds of $56 million. We recorded a pre-tax gain of $16 million on these divestitures. In addition, in 2017 we sold a property located in Dallas, TX, which was formerly the ACS headquarters, for a pre-tax gain of $24 million.

Other (Income) Expense, Net

Other (income) expense, net primarily includes foreign currency transaction losses (gains), litigation and other contingent matters and deferred compensation investment results.

Income Taxes

On December 22, 2017, the Tax Cuts and Jobs Act (Tax Reform) was enacted. The effects of changes in tax rates and laws are recognized in the period in which the new legislation is enacted. In the case of US federal income taxes, the enactment date is the date the bill becomes law. The income tax effects of the Tax Reform have been initially accounted for on a provisional basis pursuant to the SEC staff guidance on income taxes. Reasonable estimates for all material tax effects of the Tax Reform have been provided and adjustments to provisional amounts will be made in subsequent reporting periods as information becomes available to complete provisional computations.

The 2017 effective tax rate was 1,206.3% as compared with 19.9% for the prior year. The 2017 rate was higher than the U.S. statutory tax rate of 35% primarily due to the impact of the Tax Reform, which included the reduction of the U.S. statutory rate from 35% to 21% and a one-time tax on undistributed and previously untaxed post-1986 foreign earnings and profits. Excluding primarily the tax impact of the Tax Reform, the termination of the COLI, amortization of intangible assets and gains on U.S divestitures, the adjusted effective tax rate for 2017 was 33.8%. The Tax Reform is the most significant change to U.S. federal income tax legislation in over 30 years and, as a result, has a disproportionate effect on our 2017 effective tax rate. See Note 12 – Income Taxes for further information regarding the impact of the Tax Reform on our Consolidated Financial Statements.

Deferred tax assets and liabilities are measured and recorded using the enacted tax rates for the periods during which the related temporary differences are expected to reverse or deferred tax attributes are expected to be realized. As a result of the change in future federal statutory tax rate due to the passing of the Tax Reform, the deferred tax assets and liabilities should no longer be valued at a federal statutory rate of 35%, but rather at the rate in which the benefit of the deferred tax liabilities will be realized by the Company. As such, the U.S. federal statutory rate used to value the Company's deferred tax assets and liabilities was 21%, which resulted in a $210 million tax benefit.

The 2016 effective tax rate was lower than the U.S. statutory tax rate due primarily to the impact of the non-deductible Goodwill impairment charge. Excluding primarily the goodwill impairment, NY MMIS, amortization of intangible assets, and restructuring costs, the 2016 normalized effective rate was 29.0%.

Table of Contents

Operations Review of Segments

Our reportable segments correspond to how we organize and manage the business and are aligned to the industries in which our clients operate. Beginning in 2017, in an effort to better reflect how we organize and manage our business, we changed our reporting segments to align the Healthcare business based on customer focus between Commercial Industries and Public Sector. All prior years have been adjusted to reflect the new reporting segments.

The following are our results of financial performance by segment for the three years ended December 31, 2017:

(in millions)	Commercial Industries	Public Sector	Other	Total
Year Ended December 31, 2017				
Total Revenue	$ 3,548	$ 2,163	$ 311	$ 6,022
Profit (Loss)	$ 182	$ 245	$ (10)	$ 417
EBITDA[1]	$ 344	$ 330	$ (3)	$ 671
Adjusted EBITDA(1)	$ 344	$ 330	$ (2)	$ 672
% of Total Revenue	58.9%	35.9%	5.2 %	100.0%
EBITDA Margin[1]	9.7%	15.3%	(1.0)%	11.1%
Adjusted EBITDA Margin[1]	9.7%	15.3%	(0.6)%	11.2%
Year Ended December 31, 2016				
Total Revenue	$ 3,805	$ 2,308	$ 295	$ 6,408
Adjusted Revenue[1]	$ 3,805	$ 2,308	$ 378	$ 6,491
Profit (Loss)	$ 151	$ 293	$ (248)	$ 196
EBITDA[1]	$ 313	$ 395	$ (182)	$ 526
Adjusted EBITDA[1]	$ 313	$ 395	$ (73)	$ 635
% of Total Revenue	59.4%	36.0%	4.6 %	100.0%
EBITDA Margin[1]	8.2%	17.1%	(61.7)%	8.2%
Adjusted EBITDA Margin[1]	8.2%	17.1%	(19.3)%	9.8%
Year Ended December 31, 2015				
Total Revenue	$ 4,059	$ 2,331	$ 272	$ 6,662
Adjusted Revenue[1]	$ 4,059	$ 2,331	$ 388	$ 6,778
Profit (Loss)	$ 148	$ 298	$ (509)	$ (63)
EBITDA[1]	$ 308	$ 416	$ (440)	$ 284
Adjusted EBITDA[1]	$ 308	$ 416	$ (85)	$ 639
% of Total Revenue	60.9%	35.0%	4.1 %	100.0%
EBITDA Margin[1]	7.6%	17.8%	(161.8)%	4.3%
Adjusted EBITDA Margin[1]	7.6%	17.8%	(21.9)%	9.4%

(1) Refer to the reconciliations table in the "Non-GAAP Financial Measures" section.

Commercial Industries Segment

Revenue

Commercial Industries revenue 2017 as compared to prior year decreased, primarily driven by strategic contract actions, lower volumes in our customer care offerings and lost business, partially offset by revenue from new contracts and price increases with existing clients. Commercial Industries revenue for 2016 decreased from the prior year, mainly driven by lost business, lower volumes in our customer care offerings and reduced level of project work as a result of fewer large cases in our litigation services offering, negative impacts from currency and strategic contract exits. Partially offsetting the decline were new contract signings, primarily in our high-tech business area.

Table of Contents

Segment Profit

Increase in the Commercial Industries segment profit for 2017 as compared to the prior year, was primarily driven by reduced costs as a result of our strategic transformation initiatives, including contract remediation and strategic contract actions, partially offset by the overall revenue decline. The Commercial Industries segment profit for 2016 as compared to the prior year was largely flat, primarily due to overall benefits from costs and productivity initiatives, partially offset by margin pressure in our customer care services offering and reduced project work in our litigation services offering.

Public Sector Segment

Revenue

Public Sector revenue for 2017 as compared to prior year decreased, primarily driven by strategic decisions and contract losses in State & Local, Government Healthcare and Payment Services. Public Sector revenue for 2016 decreased as compared to the prior year, primarily due to lower volumes and lost business in State Government Services, partially offset by new business.

Segment Profit

Decrease in the Public Sector segment profit for 2017 as compared to the prior year was mainly due to strategic decisions, contract losses in Government Healthcare, as well as losses in our Payment Services business, partially mitigated by our strategic transformation initiative. Decrease in the Public Sector segment profit for 2016 as compared to prior year was primarily due to the impact of lost business in State Government Services, partially offset by costs and productivity initiatives and improved performance in our transportation offering.

Other

Revenue

Other revenue for 2017 improved compared to 2016, primarily due to improved pricing and performance from two large Health Enterprise clients, partially offset by the exit from the NY MMIS contract and the strategic run-off of the Student Loan business. Other revenue for 2016 increased compared to 2015 as a result of the non-recurring $116 million HE charge in 2015, partially offset by the $83 million write-off of NY MMIS in 2016, the continued run-off of the Student Loan business, partially offset by our prior-year decision to not complete the HE implementations in California and Montana.

Segment Loss

Other loss for 2017 improved, primarily due to improved profitability in the student loan business, improved pricing from a contract extension with a large Health Enterprise client and general operational efficiencies in the HE business. Other loss for 2016 improved as a result of the non-recurring $389 million HE charge in 2015, partially offset by the $161 million write-off of the NY MMIS, partially offset by improvements in HE platform implementation expenses resulting from the decision to not fully complete the HE platform implementation in California and Montana.

Metrics

Signings

Signings are defined as estimated future revenues from contracts signed during the period, including renewals of existing contracts. Total Contract Value (TCV) is the estimated total contractual revenue related to signed contracts. The amounts in the following table do not reflect the impact of our adoption of the new revenue recognition standard on January 1, 2018. Refer to Note 1 – Basis of Presentation and Summary of Significant Accounting Policies for further discussion of the estimated impact of the adoption of this standard.

Table of Contents

(in millions)	Year Ended December 31, 2017	2016	2015	2017 vs. 2016 $ Change	% Change	2016 vs. 2015 $ Change	% Change
New business TCV	$ 2,260	$ 2,527	$ 4,345	$ (267)	(11)%	$ (1,818)	(42)%
Renewals TCV	2,692	4,325	3,637	(1,633)	(38)%	688	19 %
Total Signings	$ 4,952	$ 6,852	$ 7,982	$ (1,900)	(28)%	$ (1,130)	(14)%
Annual recurring revenue signings	$ 533	$ 589	$ 883	$ (56)	(10)%	$ (294)	(33)%
Non-recurring revenue signings	$ 383	$ 438	$ 451	$ (55)	(13)%	$ (13)	(3)%

Signings for 2017 decreased compared to the prior year mainly due to strategic decisions by management to streamline our portfolio which impacted both new business and renewal volume. Partially offsetting these declines were new business wins in targeted offerings and expansion with certain existing clients.

Signings for 2016 decreased compared to the prior year, primarily reflecting lower contribution from new business, due in part to our decision not to pursue opportunities with lower margins and the prior year large NY MMIS new business signing.

Renewal Rate

Renewal rate is defined as the annual recurring revenue (ARR) on contracts that are renewed during the period as a percentage of ARR on all contracts for which a renewal decision was made during the period, excluding any contracts that were not renewed and where a strategic action to improve the risk or profitability had been initiated.

Excluding our strategic decision not to renew certain contracts, renewal rate for 2017 was 94% and above our target range of 85%-90%. Including all contracts, renewals would have been 87%.

Capital Resources and Liquidity

As of December 31, 2017 and 2016, total cash and cash equivalents were $658 million and $390 million, respectively. As of December 31, 2017, there were $1,574 million outstanding borrowings under our credit facility and we utilized $12 million of our revolving credit facility capacity to issue letters of credit. In addition, we will make payments in 2018 of $99 million to participants of the terminated deferred compensation plans.

Refer to the *Capital Market Activity* section below for additional information regarding our capital activity.

Cash Flow Analysis

The following summarizes our cash flows for the three years ended December 31, 2017, as reported in our Consolidated Statements of Cash Flows in the accompanying Consolidated Financial Statements:

(in millions)	Year Ended December 31, 2017	2016	2015	Change 2017	2016
Net cash provided by operating activities	$ 302	$ 108	$ 493	$ 194	$ (385)
Net cash provided by investing activities	74	16	522	58	(506)
Net cash provided by (used in) financing activities	(109)	132	(1,023)	(241)	1,155

Operating Activities

The increase in cash generated from operating activities for the year ended December 31, 2017 was primarily attributable to improvements in working capital and reduced wind-down payments associated with implementations in California, Montana and New York, partially offset by a higher interest payments on our outstanding debt.

The decrease in cash generated from operating activities for the year ended December 31, 2016 was primarily attributable to reduced factoring, HE settlement payments and working capital partially offset by lower net income tax payments due to income tax refunds.

Table of Contents

Investing Activities

The increase in cash provided by investing activities for the year ended December 31, 2017 compared to the year ended December 31, 2016 was primarily related to $117 million in proceeds received on the liquidation of investments related to the termination of the deferred compensation plan, $56 million of proceeds from the sale of business and assets as compared to payments of $54 million in 2016, $86 million of lower net additions to land, buildings and equipment, partially offset by non-recurring proceeds of $248 million on related party notes receivable in 2016.

The decrease in cash provided by investing activities for the year ended December 31, 2016 compared to the year ended December 31, 2015 was primarily related to $54 million of payments for the sale of business and assets as compared to proceeds of $742 million in 2015, partially offset by proceeds of $248 million from related party notes receivable in 2016.

Financing Activities

The change to cash used in financing activities for the year ended December 31, 2017 compared to cash provided by for the year ended December 31, 2016 was primarily related to a decrease of $1.7 billion in proceeds from long term debt and an increase in debt payments of $209 million, partially offset by a reduction in payments to former parent of $1.6 billion.

The change to cash provided by financing activities for the year ended December 31, 2016 compared to cash used for the year ended December 31, 2015 was primarily related to an increase of $1.9 billion in proceeds from long term debt and a reduction in payments on debt of $261 million, partially offset by an increase in payments to former parent of $957 million.

Capital Market Activity

In April 2017, we entered into Amendment No. 1 to the Credit Agreement, which reduced the interest rate on our Term Loan B by 1.5% from 5.5% over LIBOR to 4.0% over LIBOR. Subsequently in October 2017, we entered into Amendment No. 2, which reduced the interest rate on our Term Loan B by 1.0% from 4.0% over LIBOR to 3.0% over LIBOR.

In January 2017, we borrowed an additional $100 million on Term Loan B with proceeds used for general corporate purposes.

Refer to Note 8 – Debt in the Consolidated Financial Statements for additional information.

Financial Instruments

Refer to Note 9 – Financial Instruments in the Consolidated Financial Statements for additional information.

Contractual Cash Obligations and Other Commercial Commitments and Contingencies

At December 31, 2017, we had the following contractual cash obligations and other commercial commitments and contingencies:

(in millions)	2018	2019	2020	2021	2022	Thereafter
Total debt, including capital lease obligations[1]	$ 82	$ 72	$ 85	$ 560	$ 9	$ 1,309
Interest on debt[2]	115	113	110	107	91	156
Minimum operating lease commitments[3]	163	119	80	53	31	52
Defined benefit pension plans	8	—	—	—	—	—
Estimated Purchase Commitments[4]	116	100	68	38	21	—
Total	$ 484	$ 404	$ 343	$ 758	$ 152	$ 1,517

(1) Total debt represents principal debt and capital leases. Refer to Note 8 – Debt in the Consolidated Financial Statements for additional information regarding debt.
(2) Represents interest on debt. Refer to Note 8 – Debt in the Consolidated Financial Statements for additional information.
(3) Refer to Note 5 – Land, Buildings, Equipment and Software, Net in the Consolidated Financial Statements for additional information.

Table of Contents

(4) Other purchase commitments: We enter into other purchase commitments with vendors in the ordinary course of business. Our policy with respect to all purchase commitments is to record losses, if any, when they are probable and reasonably estimable. We currently do not have, nor do we anticipate, material loss contracts.

Pension Benefit Plans

We sponsor defined benefit pension plans that require periodic cash contributions. Our 2017 cash contributions for these plans were $8 million. In 2018, based on current actuarial calculations, we expect to make contributions of approximately $8 million to our worldwide defined benefit pension plans.

Contributions to our defined benefit pension plans in subsequent years will depend on a number of factors, including the investment performance of plan assets and discount rates as well as potential legislative and plan changes. At December 31, 2017, the unfunded and underfunded balances of our U.S. and non-U.S. defined benefit pension plans were $40 million and $19 million, respectively.

Refer to Note 11 – Employee Benefit Plans in the Consolidated Financial Statements for additional information regarding contributions to our defined benefit pension and post-retirement plans.

Other Contingencies and Commitments

As more fully discussed in Note 13 – Contingencies and Litigation in the Consolidated Financial Statements, we are involved in a variety of claims, lawsuits, investigations and proceedings concerning: securities law; governmental entity contracting, servicing and procurement law; intellectual property law; environmental law; employment law; the Employee Retirement Income Security Act (ERISA); and other laws and regulations. In addition, guarantees, indemnifications and claims may arise during the ordinary course of business from relationships with suppliers, customers and non-consolidated affiliates. Nonperformance under a contract including a guarantee, indemnification or claim could trigger an obligation of the Company.

We determine whether an estimated loss from a contingency should be accrued by assessing whether a loss is deemed probable and can be reasonably estimated. Should developments in any of these areas cause a change in our determination as to an unfavorable outcome and result in the need to recognize a material accrual, or should any of these matters result in a final adverse judgment or be settled for significant amounts, they could have a material adverse effect on our results of operations, cash flows and financial position in the period or periods in which such change in determination, judgment or settlement occurs.

Off-Balance Sheet Arrangements

As of December 31, 2017, we do not believe we have any off-balance sheet arrangements that have, or are reasonably likely to have, a material current or future effect on financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

In addition, refer to the preceding table for the Company's contractual cash obligations and other commercial commitments and Note 13 – Contingencies and Litigation in the Consolidated Financial Statements for additional information regarding contingencies, guarantees, indemnifications and warranty liabilities.

Non-GAAP Financial Measures

We have reported our financial results in accordance with U.S. generally accepted accounting principles (GAAP). In addition, we have discussed our results using the non-GAAP measures described below.

Table of Contents

We believe these non-GAAP measures allow investors to better understand the trends in our business and to better understand and compare our results. Accordingly, we believe it is necessary to adjust several reported amounts, determined in accordance with GAAP, to exclude the effects of certain items as well as their related tax effects. Management believes that these non-GAAP financial measures provide an additional means of analyzing the current periods' results against the corresponding prior periods' results. However, these non-GAAP financial measures should be viewed in addition to, and not as a substitute for, the Company's reported results prepared in accordance with U.S. GAAP. Our non-GAAP financial measures are not meant to be considered in isolation or as a substitute for comparable U.S. GAAP measures and should be read only in conjunction with our Consolidated Financial Statements prepared in accordance with U.S. GAAP. Our management regularly uses our supplemental non-GAAP financial measures internally to understand, manage and evaluate our business and make operating decisions and providing such non-GAAP financial measures to investors allows for a further level of transparency as the factors management uses in planning for and forecasting future periods. Compensation of our executives is based in part on the performance of our business based on these non-GAAP measures.

A reconciliation of the non-GAAP financial measures to the most directly comparable financial measures calculated and presented in accordance with U.S. GAAP are provided in the tables below.

These reconciliations also include the income tax effects of our non-GAAP performance measures in total, to the extent applicable. The income tax effects are calculated under the same accounting principles as applied to our reported pre-tax performance measures under ASC 740, which employs an annual effective tax rate method. The income tax effect for our non-GAAP performance measures is effectively the difference in income taxes for reported and adjusted pre-tax income calculated under the annual effective tax rate method. The tax effect of the non-GAAP adjustments was calculated based upon evaluation of the statutory tax treatment and the applicable statutory tax rate in the jurisdictions in which such charges were incurred.

Adjusted Revenue, Adjusted Operating Income and Adjusted Operating Margin*

We make adjustments to Revenue and Pre-tax income (Loss) for the following items for the purpose of calculating Adjusted Revenue, Adjusted Operating Income and Adjusted Operating Margin.

- Goodwill Impairment. Represents Goodwill Impairment charge of $935 million.
- Amortization of intangible assets. The amortization of intangible assets is driven by acquisition activity, which can vary in size, nature and timing as compared to other companies within our industry and from period to period.
- NY MMIS. Revenue and costs associated with the Company not fully completing the State of New York Health Enterprise Platform project.
- Restructuring and related costs. Restructuring and related costs include restructuring and asset impairment charges as well as costs associated with our strategic transformation program.
- HE charge. Revenue and costs associated with not fully completing the Health Enterprise Medical Platform projects in California and Montana.
- Separation costs. Separation costs are expenses incurred in connection with separation from Xerox Corporation into a separate, independent, publicly traded company. These costs primarily relate to third-party investment banking, accounting, legal, consulting and other similar types of services related to the separation transaction as well as costs associated with the operational separation of the two companies.
- Interest expense. Interest expense includes interest on long-term debt and amortization of debt issuance costs.
- Related party interest. Related party interest relates interest on related party Notes payable from Xerox prior to the Separation.
- Other (income) expenses, net. Other (income) expenses, net includes currency (gains) losses, net, litigation matters and all other (income) expenses, net.
- (Gain) loss on sale of asset and businesses.

** Applies to both consolidated and segment disclosures.*

We provide our investors with adjusted operating income and adjusted operating margin information, as supplemental information, because we believe it offers added insight, by itself and for comparability between periods, by adjusting for certain non-cash items as well as certain other identified items which we do not believe are indicative of our ongoing business and may also provide added insight on trends in our ongoing business.

Table of Contents

Adjusted Net Income (Loss), Adjusted Earnings per Share and Adjusted Effective Tax Rate

We made adjustments to Income (Loss) before Income Taxes for the following items for the purpose of calculating Adjusted Net Income (Loss), Adjusted Earnings per Share and Adjusted Effective Tax Rate:

- Goodwill Impairment.
- Amortization of intangible assets.
- NY MMIS.
- Restructuring and related costs.
- HE charge.
- Separation costs.
- (Gain) loss on sale of asset and businesses.
- Other (income) expenses, net.

The Company provides adjusted net income and adjusted EPS financial measures to assist our investors in evaluating our ongoing operating performance for the current reporting period and, where provided, over different reporting periods, by adjusting for certain items which may be recurring or non-recurring and which in our view do not necessarily reflect ongoing performance. We also internally use these measures to assess our operating performance, both absolutely and in comparison to other companies, and in evaluating or making selected compensation decisions.

Management believes that adjusted effective tax rate, provided as supplemental information, facilitates a comparison by investors of our actual effective tax rate with an adjusted effective tax rate which reflects the impact of the items which are excluded in providing adjusted net income, and may provide added insight into our underlying business results and how effective tax rates impact our ongoing business.

Segment and Consolidated Adjusted EBITDA and EBITDA Margin

We use Adjusted EBITDA and Adjusted EBITDA Margin as additional way of assessing certain aspects of our operations that, when viewed with the GAAP results and the accompanying reconciliations to corresponding GAAP financial measures, provide a more complete understanding of our on-going business. Adjusted EBITDA represents income (loss) before interest, income taxes, depreciation and amortization adjusted for the following items:

- Goodwill Impairment.
- Restructuring and related costs.
- Separation costs.
- Other (income) expenses, net.
- NY MMIS.
- NY MMIS depreciation
- HE charge.
- HE charge depreciation.
- (Gain) loss on sale of asset and businesses.
- Business transformation costs (Segment only).

Adjusted EBITDA and Adjusted EBITDA Margin are not intended to represent cash flows from operations, operating income (loss) or net income (loss) as defined by U.S. GAAP as indicators of operating performances. Management cautions that amounts presented in accordance with Conduent's definition of Adjusted EBITDA may not be comparable to similar measures disclosed by other companies because not all companies calculate Adjusted EBITDA in the same manner.

Key Financial Ratios

We make adjustments to Gross margin and SG&A as a percentage on Revenue:

- NY MMIS.
- HE charge.

Table of Contents

The Company provides adjusted gross margin and adjusted SG&A as a percentage of revenue to assist our investors in evaluating our ongoing operating performance for the current reporting period and, where provided, over different reporting periods, by adjusting for certain items which may be recurring or non-recurring and which in our view do not necessarily reflect ongoing performance. We also internally use these measures to assess our operating performance, both absolutely and in comparison to other companies, and in evaluating or making selected compensation decisions.

Non-GAAP Reconciliations

Net Income (Loss) and EPS Reconciliation:

	Year Ended December 31, 2017		Year Ended December 31, 2016		Year Ended December 31, 2015	
(in millions; except per share amounts)	Net Income (Loss)	EPS	Net Income (Loss)	EPS	Net Income (Loss)	EPS
GAAP as Reported from Continuing Operations	$ 177	$ 0.81	$ (983)	$ (4.85)	$ (336)	$ (1.65)
Adjustments:						
Goodwill impairment	—		935		—	
Amortization of intangible assets	243		280		250	
NY MMIS	9		161		—	
Restructuring and related costs	101		101		159	
HE charge	(8)		—		389	
Separation costs	12		44		—	
(Gain) loss on sale of asset and businesses	(42)		2		—	
Other (income) expenses, net	(18)		18		30	
Less: Income tax adjustments(1)	(288)		(335)		(318)	
Adjusted Net Income (Loss) and EPS	$ 186	$ 0.85	$ 223	$ 1.06	$ 174	$ 0.83
(GAAP Shares in thousand)						
Weighted average common shares outstanding		204,007		202,875		202,875
Stock options		195		—		—
Restricted stock and performance shares		2,491		—		—
Adjusted Weighted Average Shares Outstanding(2)		206,693		202,875		202,875
(Non-GAAP Shares in thousand)						
Weighted average common shares outstanding		204,007		202,875		202,875
Stock options		195		374		374
Restricted stock and performance shares		2,491		2,132		2,132
8% Convertible preferred stock		—		5,393		5,393
Adjusted Weighted Average Shares Outstanding(2)		206,693		210,774		210,774

(1) Reflects the income tax (expense) benefit of the adjustments. Refer to Effective Tax Rate reconciliation below for details.
(2) Average shares for the 2017 calculation of adjusted EPS excludes 5 million shares associated with our Series A convertible preferred stock and includes the impact of the preferred stock dividend of $10 million for the year ended December 31, 2017. Average shares for the 2016 and 2015 calculation of adjusted EPS includes 5 million shares associated with our Series A convertible preferred stock and excludes the impact of the preferred stock quarterly dividend. Shares associated with our stock compensation plan are included in the calculation of adjusted EPS for all years presented.

Effective Tax Reconciliation:

	Year Ended December 31, 2017			Year Ended December 31, 2016			Year Ended December 31, 2015		
(in millions)	Pre-Tax Income (loss)	Income Tax (Benefit)Expense	Effective Tax Rate	Pre-Tax Income (loss)	Income Tax (Benefit)Expense	Effective Tax Rate	Pre-Tax Income (loss)	Income Tax (Benefit)Expense	Effective Tax Rate
GAAP as Reported from Continuing Operations	$ (16)	$ (193)	1,206.3%	$ (1,227)	$ (244)	19.9%	$ (574)	$ (238)	41.5%
Non-GAAP adjustments									
Benefit from tax law changes	—	198		—	—		—	—	
Termination of COLI plan	—	(19)		—	—		—	—	
Other non-GAAP adjustments	297	109		1,541	335		828	318	
Total non-GAAP adjustments(1)	297	288		1,541	335		828	318	
Adjusted(2)	$ 281	$ 95	33.8%	$ 314	$ 91	29.0%	$ 254	$ 80	31.5%

(1) *Refer to Net Income (Loss) reconciliation for details of non-GAAP adjustments.*
(2) *The tax impact of Adjusted Pre-tax income (Loss) from continuing operations is calculated under the same accounting principles applied to the 'As Reported' pre-tax income (loss), which employs an annual effective tax rate method to the results.*

Table of Contents

Revenue and Operating Income / Margin Reconciliations:

(in millions)	Year Ended December 31, 2017			Year Ended December 31, 2016			Year Ended December 31, 2015		
	Pre-Tax Income (Loss)	Revenue	Margin	Pre-Tax Income (Loss)	Revenue	Margin	Pre-Tax Income (Loss)	Revenue	Margin
GAAP as Reported from Continuing Operations	$ (16)	$ 6,022	(0.3)%	$ (1,227)	$ 6,408	(19.1)%	$ (574)	$ 6,662	(8.6)%
Adjustments:									
Goodwill impairment	—			935			—		
Amortization of intangible assets	243			280			250		
NY MMIS	9	—		161	83		—	—	
Restructuring and related costs	101			101			159		
HE charge	(8)	—		—	—		389	116	
Separation costs	12			44			—		
Interest expense	137			14			8		
Related party interest	—			26			61		
(Gain) loss on sale of asset and businesses	(42)			2			—		
Other (income) expenses, net	(18)			18			30		
Adjusted Revenue / Operating Income / Margin	$ 418	$ 6,022	6.9 %	$ 354	$ 6,491	5.5 %	$ 323	$ 6,778	4.8 %

(in millions)	Three Months Ended March 31, 2017			Three Months Ended June 30, 2017		
	Pre-Tax Income (Loss)	Revenue	Margin	Pre-Tax Income (Loss)	Revenue	Margin
GAAP as Reported from Continuing Operations	$ (22)	$ 1,553	(1.4)%	$ (11)	$ 1,496	(0.7)%
Adjustments:						
Amortization of intangible assets	61			61		
NY MMIS	8			1		
Restructuring and related costs	18			36		
HE charge	(5)			—		
Separation costs	5			1		
Interest expense	36			34		
(Gain) loss on sale of asset and businesses	—			(25)		
Other (income) expenses, net	(12)			(9)		
Adjusted Operating Income / Margin	$ 89	$ 1,553	5.7 %	$ 88	$ 1,496	5.9 %

(in millions)	Three Months Ended September 30, 2017			Three Months Ended December 31, 2017		
	Pre-Tax Income (Loss)	Revenue	Margin	Pre-Tax Income (Loss)	Revenue	Margin
GAAP as Reported from Continuing Operations	$ 13	$ 1,480	0.9%	$ 4	$ 1,493	0.3%
Adjustments:						
Amortization of intangible assets	60			61		
NY MMIS	1			(1)		
Restructuring and related costs	22			25		
HE charge	(3)			—		
Separation costs	2			4		
Interest expense	35			32		
(Gain) loss on sale of asset and businesses	(16)			(1)		
Other (income) expenses, net	(3)			6		
Adjusted Operating Income / Margin	$ 111	$ 1,480	7.5%	$ 130	$ 1,493	8.7%

Table of Contents

Segment and Consolidated Revenue / Profit / Adjusted EBITDA / Adjusted EBITDA Margin Reconciliations:

(in millions)	Years Ended December 31		
Commercial Industries	2017	2016	2015
Segment revenue	$ 3,548	$ 3,805	$ 4,059
Segment profit	$ 182	$ 151	$ 148
Depreciation & amortization	162	162	160
Adjusted Segment EBITDA	$ 344	$ 313	$ 308
Adjusted EBITDA Margin	*9.7 %*	*8.2 %*	*7.6 %*
Public Sector			
Segment revenue	$ 2,163	$ 2,308	$ 2,331
Segment profit	$ 245	$ 293	$ 298
Depreciation & amortization	85	102	118
Adjusted Segment EBITDA	$ 330	$ 395	$ 416
Adjusted EBITDA Margin	15.3 %	17.1 %	17.8 %
Other Segment			
Segment revenue	$ 311	$ 295	$ 272
NY MMIS charge	—	83	—
HE charge	—	—	116
Adjusted Segment Revenue	$ 311	$ 378	$ 388
Segment (loss)	$ (10)	$ (248)	$ (509)
Business transformation costs	—	(3)	(3)
Depreciation & amortization	7	69	72
Segment EBITDA	(3)	(182)	(440)
Segment EBITDA Margin	(1.0)%	(61.7)%	(161.8)%
NY MMIS charge	9	161	—
HE charge	(8)	—	389
NY MMIS depreciation	—	(52)	—
HE depreciation	—	—	(34)
Adjusted Segment EBITDA	$ (2)	$ (73)	$ (85)
Adjusted EBITDA Margin	(0.6)%	(19.3)%	*(21.9)%*

Table of Contents

Segment and Consolidated Revenue / Profit / Adjusted EBITDA / Adjusted EBITDA Margin Reconciliations (Cont.):

(in millions)	Years Ended December 31		
	2017	2016	2015
Consolidated			
Reconciliation to Adjusted Revenue			
Revenue	$ 6,022	$ 6,408	$ 6,662
NY MMIS adjustment	—	83	—
HE charge	—	—	116
Adjusted Revenue	$ 6,022	$ 6,491	$ 6,778
Reconciliation to Adjusted EBITDA			
Net Income (Loss) from Continuing Operations	$ 177	$ (983)	$ (336)
Goodwill impairment	—	935	—
Restructuring and related costs	101	101	159
Separation costs	12	44	—
Interest Expense	137	14	8
Related Party Interest	—	26	61
Income tax benefits	(193)	(244)	(238)
(Gain) Loss on sale of assets and business	(42)	2	—
Other (income) expenses, net	(18)	18	30
Depreciation	125	128	126
Amortization	372	485	474
EBITDA	$ 671	$ 526	$ 284
EBITDA Margin	*11.1%*	*8.2%*	*4.3%*
EBITDA	$ 671	$ 526	$ 284
Adjustments:			
NY MMIS	9	161	—
NY MMIS depreciation	—	(52)	—
HE charge	(8)	—	389
HE charge depreciation	—	—	(34)
Adjusted EBITDA	$ 672	$ 635	$ 639
Adjusted EBITDA Margin	11.2%	9.8%	9.4%

Key Financial Ratios Reconciliation:

	Year Ended December 31, 2017		Year Ended December 31, 2016		Year Ended December 31, 2015	
(in millions)	Gross Margin	SG&A as % of Revenue	Gross Margin	SG&A as % of Revenue	Gross Margin	SG&A as % of Revenue
GAAP As Reported	17.4 %	10.2%	14.2%	10.7 %	10.3%	10.5 %
Adjustments:						
NY MMIS charge	0.1	—	2.3	(0.1)	—	—
HE charge	(0.1)	—	—		5.5	(0.2)
Adjusted	17.4 %	10.2%	16.5%	10.6 %	15.8%	10.3 %

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk

We are exposed to market risk from foreign currency exchange rates, which could affect operating results, financial position and cash flows. We manage our exposure to this market risk through our regular operating and financing activities and, when appropriate, through the use of derivative financial instruments. We utilized derivative financial instruments to hedge economic exposures, as well as reduce earnings and cash flow volatility resulting from shifts in market rates. We also hedge the cost to fund material non-dollar entities by buying currencies periodically in advance of the funding date. This is accounted for using derivative accounting.

Table of Contents

Recent market events have not caused us to materially modify or change our financial risk management strategies with respect to our exposures to foreign currency risk. Refer to Note 9 – Financial Instruments in the Consolidated Financial Statements for additional discussion on our financial risk management.

Foreign Exchange Risk Management

Assuming a 10% appreciation or depreciation in foreign currency exchange rates from the quoted foreign currency exchange rates at December 31, 2017, the potential change in the fair value of foreign currency-denominated assets and liabilities in each entity would not be significant because all material currency asset and liability exposures were economically hedged as of December 31, 2017. A 10% appreciation or depreciation of the U.S. Dollar against all currencies from the quoted foreign currency exchange rates at December 31, 2017 would have an impact on our cumulative translation adjustment portion of equity of approximately $54 million. The net amount invested in foreign subsidiaries and affiliates, primarily in the U.K. and Europe, and translated into U.S. Dollars using the year-end exchange rates, was approximately $542 million at December 31, 2017.

Interest Rate Risk Management

The consolidated weighted-average interest rates related to our total debt for 2017 approximated 3.11% for Term A Loan due 2021, 6.79% for Term B Loan due 2023, 10.91% for Senior Notes due 2024 and 4.39% for capital lease obligations. As of December 31, 2017, $1,607 million of our total debt of $2,117 million carried variable interest rates. The fair values of our fixed rate financial instruments are sensitive to changes in interest rates and at December 31, 2017, a 10% increase in market interest rates would decrease the fair values of such financial instruments by approximately $19 million. A 10% decrease in market interest rates would increase the fair values of such financial instruments by approximately $52 million.

Table of Contents

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Conduent Incorporated

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Conduent Incorporated and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of income (loss), comprehensive income (loss), shareholders' equity and cash flows for each of the three years in the period ended December 31, 2017, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2017 appearing under Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016**,** and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Table of Contents

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

Florham Park, New Jersey
March 1, 2018

We have served as the Company's auditor since 2016.

Table of Contents

REPORTS OF MANAGEMENT

Management's Responsibility for Financial Statements

Our management is responsible for the integrity and objectivity of all information presented in this annual report. The consolidated financial statements were prepared in conformity with accounting principles generally accepted in the United States of America and include amounts based on management's best estimates and judgments. Management believes the consolidated financial statements fairly reflect the form and substance of transactions and that the financial statements fairly represent the Company's financial position and results of operations.

The Audit Committee of the Board of Directors, which is composed solely of independent directors, meets regularly with the independent registered public accountants, PricewaterhouseCoopers LLP, the internal auditors and representatives of management to review accounting, financial reporting, internal control and audit matters, as well as the nature and extent of the audit effort. The Audit Committee is responsible for the engagement of the independent registered public accountants. The independent registered public accountants and internal auditors have free access to the Audit Committee.

/s/ ASHOK VEMURI	/s/ BRIAN WEBB-WALSH	/s/ ALLAN COHEN
Chief Executive Officer	**Chief Financial Officer**	**Chief Accounting Officer**

Table of Contents

CONDUENT INCORPORATED
CONSOLIDATED STATEMENTS OF INCOME (LOSS)

(in millions, except per-share data)	Year Ended December 31, 2017	2016	2015
Revenue			
Revenue	$ 5,980	$ 6,358	$ 6,609
Former parent company revenue	42	50	53
Total Revenues	6,022	6,408	6,662
Cost of Services			
Cost of services	4,945	5,462	5,937
Former parent company cost of services	32	36	40
Gross Margin	1,045	910	685
Operating Costs and Expenses			
Research and development	13	31	52
Selling, general and administrative	615	686	699
Restructuring and related costs	101	101	159
Amortization of intangible assets	243	280	250
Goodwill impairment	—	935	—
Separation costs	12	44	—
Interest expense	137	14	8
Related party interest	—	26	61
(Gain) loss on sale of asset and businesses	(42)	2	—
Other (income) expenses, net	(18)	18	30
Total Operating Costs and Expenses	1,061	2,137	1,259
Loss Before Income Taxes	(16)	(1,227)	(574)
Income tax benefit	(193)	(244)	(238)
Income (Loss) From Continuing Operations	177	(983)	(336)
Income (loss) from discontinued operations, net of tax	4	—	(78)
Net Income (Loss)	$ 181	$ (983)	$ (414)
Basic Earnings (Loss) per Share:			
Continuing operations	$ 0.82	$ (4.85)	$ (1.65)
Discontinued operations	0.02	—	(0.39)
Total Basic Earnings (Loss) per Share	$ 0.84	$ (4.85)	$ (2.04)
Diluted Earnings (Loss) per Share:			
Continuing operations	$ 0.81	$ (4.85)	$ (1.65)
Discontinued operations	0.02	—	(0.39)
Total Diluted Earnings (Loss) per Share	$ 0.83	$ (4.85)	$ (2.04)

The accompanying notes are an integral part of these Consolidated Financial Statements.

Table of Contents

CONDUENT INCORPORATED
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(in millions)	Year Ended December 31, 2017	2016	2015
Net Income (Loss)	$ 181	$ (983)	$ (414)
Other Comprehensive Income (Loss), Net[1]			
Translation adjustments, net	35	(135)	(60)
Unrecognized gains, net	2	—	1
Changes in benefit plans, net	(5)	(20)	7
Other Comprehensive Income (Loss), Net	32	(155)	(52)
Comprehensive Income (Loss), Net	$ 213	$ (1,138)	$ (466)

(1) Refer to Note 16 – Other Comprehensive Income (Loss) for gross components of Other Comprehensive Income (Loss), reclassification adjustments out of Accumulated other comprehensive loss and related tax effects.

The accompanying notes are an integral part of these Consolidated Financial Statements.

Table of Contents

CONDUENT INCORPORATED
CONSOLIDATED BALANCE SHEETS

(in millions, except share data in thousands)	December 31, 2017	2016
Assets		
Cash and cash equivalents	$ 658	$ 390
Accounts receivable, net	1,104	1,286
Net receivable from former parent company	11	—
Assets held for sale	757	—
Other current assets	180	241
Total current assets	2,710	1,917
Land, buildings and equipment, net	257	283
Intangible assets, net	891	1,144
Goodwill	3,366	3,889
Long-term receivable from former parent company	11	—
Other long-term assets	313	476
Total Assets	$ 7,548	$ 7,709
Liabilities and Equity		
Short-term debt and current portion of long-term debt	$ 82	$ 28
Accounts payable	138	164
Accrued compensation and benefits costs	335	269
Unearned income	151	206
Net payable to former parent company	—	124
Liabilities held for sale	169	—
Other current liabilities	493	611
Total current liabilities	1,368	1,402
Long-term debt	1,979	1,913
Pension and other benefit liabilities	4	172
Deferred taxes	384	619
Other long-term liabilities	142	173
Total Liabilities	3,877	4,279
Contingencies (See Note 13)		
Series A convertible preferred stock	142	142
Common stock	2	2
Additional paid-in capital	3,850	3,812
Retained earnings	171	—
Accumulated other comprehensive loss	(494)	(526)
Total Equity	3,529	3,288
Total Liabilities and Equity	$ 7,548	$ 7,709
Shares of common stock issued and outstanding	210,440	202,875
Shares of series A convertible preferred stock issued and outstanding	120	120

The accompanying notes are an integral part of these Consolidated Financial Statements.

Table of Contents

CONDUENT INCORPORATED
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Year Ended December 31, 2017	2016	2015
Cash Flows from Operating Activities:			
Net income (loss)	$ 181	$ (983)	$ (414)
Adjustments required to reconcile net income to cash flows from operating activities:			
Depreciation and amortization	497	613	600
Goodwill impairment	—	935	—
Deferred tax benefit	(230)	(160)	(115)
(Gain) loss from investments	(10)	(7)	—
Amortization of debt financing costs	9	—	—
Net (gain) loss on sales of businesses and assets	(49)	2	100
Stock-based compensation	40	23	19
Changes in operating assets and liabilities:			
(Increase) decrease in accounts receivable	31	(23)	243
(Increase) decrease in other current and long-term assets	(30)	(83)	(86)
Increase (decrease) in accounts payable and accrued compensation	(49)	(60)	22
Increase (decrease) in restructuring liabilities	34	27	140
Increase (decrease) in other current and long-term liabilities	(125)	(210)	228
Net change in income tax assets and liabilities	11	39	(236)
Other operating, net	(8)	(5)	(8)
Net cash provided by operating activities	302	108	493
Cash Flows from Investing Activities:			
Cost of additions to land, buildings and equipment	(96)	(149)	(159)
Proceeds from sales of land, buildings and equipment	33	—	1
Cost of additions to internal use software	(36)	(39)	(27)
Proceeds (payments) from sale (purchase) of businesses	56	(54)	742
Proceeds from investments	117	11	—
Net proceeds (payments) on former parent company notes receivable	—	248	(37)
Other investing, net	—	(1)	2
Net cash provided by investing activities	74	16	522
Cash Flows from Financing Activities:			
Proceeds on long term debt	306	1,969	28
Debt issuance fee payments	(8)	(67)	—
Payments on debt	(241)	(32)	(293)
Net payments to former parent company	(161)	(1,720)	(763)
Issuance of common stock related to employee stock plans	(5)	—	—
Dividends paid on preferred stock	(10)	—	—
Restricted cash - former parent company	15	(18)	—
Other financing	(5)	—	5
Net cash (used in) provided by financing activities	(109)	132	(1,023)
Effect of exchange rate changes on cash and cash equivalents	1	(6)	(11)
Increase (decrease) in cash and cash equivalents	268	250	(19)
Cash and cash equivalents at beginning of Year	390	140	159
Cash and Cash Equivalents at End of Year	$ 658	$ 390	$ 140

The accompanying notes are an integral part of these Consolidated Financial Statements.

Table of Contents

CONDUENT INCORPORATED
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(in millions)	Common Stock	Additional Paid-in Capital	Retained Earnings	AOCL[1]	Former Parent Company Investment	Conduent Shareholders' Equity
Balance at December 31, 2014	$ —	$ —	$ —	$ (129)	$ 5,540	$ 5,411
Comprehensive loss, net	—	—	—	(52)	(414)	(466)
Net transfers to former parent	—	—	—	—	217	217
Balance at December 31, 2015	$ —	$ —	$ —	$ (181)	$ 5,343	$ 5,162
Comprehensive loss, net	—	—	—	(155)	(983)	(1,138)
Series A Preferred stock transfer	—	—	—	—	(142)	(142)
Capitalization of Company	2	3,812	—	—	(3,814)	—
Net transfers from former parent	—	—	—	(190)	(404)	(594)
Balance at December 31, 2016	$ 2	$ 3,812	$ —	$ (526)	$ —	$ 3,288
Comprehensive income, net	—	—	181	32	—	213
Cash dividends declared-preferred[2]	—	—	(10)	—	—	(10)
Stock option and incentive plans, net	—	38	—	—	—	38
Balance at December 31, 2017	$ 2	$ 3,850	$ 171	$ (494)	$ —	$ 3,529

(1) AOCL - Accumulated other comprehensive loss.
(2) Cash dividend on preferred stock of $20.00 per share for each quarter of 2017.

The accompanying notes are an integral part of these Consolidated Financial Statements.

Table of Contents

CONDUENT INCORPORATED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 – Basis of Presentation and Summary of Significant Accounting Policies

References herein to “we,” “us,” “our,” the “Company” and “Conduent” refer to Conduent Incorporated and its consolidated subsidiaries unless the context suggests otherwise.

Description of Business

We are a global enterprise and leading provider of business process services with expertise in transaction-intensive processing, analytics and automation. We serve as a trusted business partner in both the front office and back office, enabling personalized, seamless interactions on a massive scale that improve end user experience. We create value for our commercial and government clients by applying our expertise, technology and innovation to help them drive customer and constituent satisfaction and loyalty, increase process efficiency and respond rapidly to changing market dynamics. Our portfolio includes industry-focused service offerings in attractive growth markets such as healthcare and transportation, as well as multi-industry service offerings such as transaction processing, customer care and payment services.

Basis of Presentation

Our Consolidated Financial Statements included the historical basis of assets, liabilities, revenues and expenses of the individual businesses of the Company, including joint ventures and partnerships over which the Company has a controlling financial interest. We have prepared the Consolidated Financial Statements pursuant to the rules and regulations of the SEC. Certain reclassifications have been made to prior years to conform to the current year presentation. All intercompany transactions and balances have been eliminated.

We have also considered the impact of subsequent events on these consolidated financial statements.

Separation from Xerox Corporation

On December 31, 2016, Conduent spun-off from Xerox Corporation (Xerox), pursuant to the Separation and Distribution Agreement (Separation). The Separation was completed by way of a pro rata distribution of Conduent shares held by Xerox to Xerox’s shareholders. As a result, we operate as an independent, publicly traded company on the New York Stock Exchange, under the ticker "CNDT".

Prior to December 31, 2016, the Financial Statements of the Company were derived from the financial statements and accounting records of Xerox as if the Conduent operated on a standalone basis. Historically, the Company consisted of the Business Process Outsourcing Operating segment within Xerox’s reportable Services segment and did not operate as a separate, standalone company. Accordingly, Xerox performed certain corporate overhead functions for the Company. Therefore, certain corporate costs, including compensation costs for corporate employees supporting the Company, were allocated from Xerox. It is not practicable to estimate actual costs that would have been incurred had the Company been a separate standalone company during the periods presented. Allocations for management costs and corporate support services provided to the Company totaled $165 million and $170 million for years ended December 31, 2016 and December 31, 2015, respectively. Management of the Company believes the assumptions regarding the allocated expenses reasonably reflect the utilization of services provided to or the benefit received by the Company during the periods prior to the Separation. The Consolidated Financial Statements for the periods prior to the Separation do not necessarily include all the expenses that would have been incurred or held by the Company had it been a separate, standalone company.

Table of Contents

Use of Estimates

We prepared the Consolidated Financial Statements using financial information available at the time of preparation, which requires us to make estimates and assumptions that affect the amounts reported. Our most significant estimates pertain to the recognition of revenue for contracts based on the percentage of completion method of accounting, intangible and long-lived assets, valuation of goodwill, contingencies and litigation, income taxes and corporate allocations (for years ended December 31, 2016 and 2015). Our estimates are based on management's best knowledge of current events, historical experience, and on various other assumptions that are believed to be reasonable under the circumstances. As a result, actual results may be different from these estimates.

New Accounting Standards

Revenue Recognition: In May 2014, the Financial Accounting Standards Board (FASB) updated the accounting guidance related to revenue recognition to clarify the principles for recognizing revenue and replaced all existing revenue recognition guidance in U.S. GAAP with one accounting model. The core principle of the guidance is that an entity should recognize revenue when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. The updated guidance also requires additional qualitative and quantitative disclosures relating to the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers largely on a disaggregated basis. We have evaluated the adoption impact of the updated accounting guidance on our consolidated financial statements and continue to evaluate the impact on disclosures and internal controls. The new guidance will impact: (1) revenue associated with postage, which will be recognized on a net basis versus the current gross treatment; (2) the timing of revenue recognition associated with fixed fees for certain contracts with more than one performance obligation; and (3) the timing of recognition of certain pricing discounts. We adopted this updated accounting guidance beginning January 1, 2018 using the modified retrospective method under which we will recognize a cumulative-effect adjustment of approximately $20 million at the date of adoption (the expected impact to 2018 revenues is approximately $15 million), which excludes changes to our revenue associated with the reimbursement of postage. In addition, we recognized approximately $150 million of postage revenue in 2017 that will be recognized on a net basis (for all future periods) in Cost of services.

Leases: In February 2016, the FASB updated the accounting guidance related to leases requiring lessees to recognize a right-of-use asset and a lease liability on the balance sheet for all leases except short term leases (lease term of 12 months or less). The accounting for lessors is largely unchanged. This updated guidance is effective for us beginning January 1, 2019. This guidance must be adopted using a modified retrospective approach through a cumulative-effect adjustment for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. While we are currently evaluating the impact of the updated accounting guidance on our consolidated financial statements; we do expect a material impact to the Company's Consolidated Balance Sheets.

Cash Flows: In November 2016 the FASB issued updated accounting guidance regarding the presentation of restricted cash in the statement of cash flows. Specifically, this update requires that restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. At December 31, 2017 and 2016, we had $9 million and $22 million of restricted cash, respectively, reported in other current assets. This update is effective for us beginning January 1, 2018.

Business Combinations: In January 2017, the FASB issued clarifying accounting guidance related to the definition of a business to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. This update is effective for us beginning January 1, 2018, with early adoption permitted. The amendment in this update will be applied prospectively. There will be no material impact from the adoption of this clarifying accounting guidance on our consolidated financial statements.

Table of Contents

Recently Adopted Accounting Standards

Goodwill: In January 2017, the FASB issued updated accounting guidance for simplifying the goodwill impairment test. Under the new guidance, an entity does not have to calculate the implied fair value of goodwill at the impairment testing date of its assets and liabilities as if those assets and liabilities had been acquired in a business combination. Instead the goodwill impairment test will compare the fair value of a reporting unit with its carrying amount and recognize as an impairment charge any amount by which the carrying amount exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to the reporting unit. We have elected to early adopt this new guidance for our goodwill impairment tests performed after January 1, 2017. Adoption did not have any effect on our financial condition, results of operations or cash flows.

Summary of Accounting Policies

Revenue Recognition

We primarily generate revenue through services. Revenue is recognized when it is realized or realizable and earned. We consider revenue realized or realizable and earned when we have persuasive evidence of an arrangement, delivery has occurred, the transaction price is fixed or determinable and collectibility is reasonably assured. Delivery does not occur until services have been provided to the customer, risk of loss has transferred to the customer, and either customer acceptance has been obtained, customer acceptance provisions have lapsed or the company has objective evidence that the criteria specified in the customer acceptance provisions have been satisfied. The transaction price is not considered to be fixed or determinable until all contingencies related to the sale have been resolved.

Outsourcing Services: Revenues associated with outsourcing services are generally recognized as services are rendered, which is generally on the basis of the number of accounts or transactions processed. In service arrangements where final acceptance of a system or solution by the customer is required, revenue is deferred until all acceptance criteria have been met. Revenues on cost reimbursable contracts are recognized by applying an estimated factor to costs as incurred, determined by the contract provisions and prior experience. Revenues on unit-price contracts are recognized at the contractual selling prices as work is completed and accepted by the customer. Revenues on time and material contracts are recognized at the contractual rates as the labor hours and direct expenses are incurred.

Revenues on certain fixed price contracts where we provide system development and implementation services are recognized over the contract term based on the percentage of development and implementation services that are provided during the period compared with the total estimated development and implementation services to be provided over the entire contract using the percentage-of-completion accounting methodology. These services require that we perform significant, extensive and complex design, development, modification or implementation of our customers' systems. Performance will often extend over long periods, and our right to receive future payment depends on our future performance in accordance with the agreement.

The percentage-of-completion methodology involves recognizing probable and reasonably estimable revenue using the percentage of services completed, on a current cumulative cost to an estimated total cost basis, using a reasonably consistent profit margin over the period.

Revenues earned in excess of related billings are accrued, whereas billings in excess of revenues earned are deferred until the related services are provided. We recognize revenues for non-refundable, upfront implementation fees on a straight-line basis over the period between the initiation of the services through the end of the contract term.

In connection with our services arrangements, we incur and capitalize costs to originate these long-term contracts and to perform the migration, transition and setup activities necessary to enable us to perform under the terms of the arrangement. Certain initial direct costs of an arrangement are capitalized and amortized over the contractual service period of the arrangement to cost of services. From time to time, we also provide inducements to customers in various forms, including contractual credits, which are capitalized and amortized as a reduction of revenue over the term of the contract.

Spending associated with customer-related deferred set-up/transition and inducement costs were as follows:

	Year Ended December 31,		
(in millions)	2017	2016	2015
Set-up/transition and inducement expenditures	$ 55	$ 63	$ 65

Table of Contents

The capitalized amount of customer contract costs were as follows:

	Year Ended December 31,	
(in millions)	2017	2016
Capitalized customer contract costs [1]	126	137

(1) The balance at December 31, 2017 and 2016 are expected to be amortized over a weighted average period of approximately nine and eight years, respectively.

Amortization expense for the next five years and thereafter is expected to be as follows (in millions):

2018	2019	2020	2021	2022	Thereafter
$ 54	$ 22	$ 13	$ 9	$ 6	$ 22

Long-lived assets used in the fulfillment of the arrangements are capitalized and depreciated over the shorter of their useful life or the term of the contract if an asset is contract specific.

Multiple Element Arrangements: As described above, we enter into the following revenue arrangements that may consist of multiple deliverables including contracts for multiple types of outsourcing services, as well as professional and value-added services. For instance, we may contract for an implementation or development project and also provide services to operate the system which we implement or develop over a period of time; or we may contract to scan, manage and store customer documents.

In substantially all of our multiple element arrangements, we are able to separate the deliverables since we normally will meet both of the following criteria:

- The delivered item(s) has value to the customer on a stand-alone basis; and
- If the arrangement includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially in our control.

Consideration in a multiple-element arrangement is allocated at the inception of the arrangement to all deliverables on the basis of the relative selling price. When applying the relative selling price method, the selling price for each deliverable is primarily determined based on vendor-specific objective evidence (VSOE), third-party evidence (TPE), or our best estimate of the selling price. The above noted revenue policies are then applied to each separated deliverable, as applicable.

Revenue Reporting: Revenue from sales of third-party vendor products or services is recorded net of costs when the Company is acting as an agent between the customer and the vendor or supplier, or gross when the Company is a principal to the transaction. Postage is generally recognized on a gross basis. Several factors are considered to determine whether the company is an agent or principal, most notably whether the Company is the primary obligor to the customer, or has inventory risk. Consideration is also given to whether the Company adds meaningful value to the vendor's product or service, was involved in the selection of the vendor's product or service, has latitude in establishing the sales price or has credit risk.

Revenue-based Taxes: We report revenue net of any revenue-based taxes assessed by governmental authorities that are imposed on and concurrent with specific revenue-producing transactions. The primary revenue-based taxes are sales tax and value-added tax (VAT).

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand, including money market funds and investments with original maturities of three months or less.

Receivable Sales

We had transferred certain portions of our receivable portfolios in 2016 and 2015 and accounted for those transfers as sales based on meeting the criteria for derecognition. Losses on the sale of receivables depend, in part, on both (a) the cash proceeds and (b) the net non-cash proceeds received or paid. When we have sold receivables, we normally received beneficial interests in the transferred receivables from the purchasers as part of the proceeds. Refer to Note 4 – Accounts Receivable, Net for more details on our receivable sales.

Table of Contents

Assets/Liabilities Held for Sale

We classify assets as held for sale in the period when the following conditions are met: (i) management, having the authority to approve the action, commits to a plan to sell the asset (disposal group); (ii) the asset (disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (disposal group); (iii) an active program to locate a buyer and other actions required to complete the plan to sell the asset (disposal group) have been initiated; (iv) the sale of the asset (disposal group) is probable, and transfer of the asset (disposal group) is expected to qualify for recognition as a completed sale within one year, except if events or circumstances beyond our control extend the period of time required to sell the asset (disposal group) beyond one year; (v) the asset (disposal group) is being actively marketed for sale at a price that is reasonable in relation to its current fair value; and (vi) actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

A long-lived asset (disposal group) that is classified as held for sale is initially measured at the lower of its carrying value or fair value less any costs to sell. Any loss resulting from this measurement is recognized in the period in which the held for sale criteria are met. Conversely, gains are not recognized on the sale of a long-lived asset (disposal group) until the date of sale.

The fair value of a long-lived asset (disposal group) less any costs to sell is assessed each reporting period it remains classified as held for sale and any subsequent changes are reported as an adjustment to the carrying value of the asset (disposal group), as long as the new carrying value does not exceed the carrying value of the asset at the time it was initially classified as held for sale.

In the fourth quarter of 2017, Management approved for disposal through sale of certain assets and businesses. This action was taken as a result of our strategic evaluation of these businesses. As of December 31, 2017, these businesses qualified as assets held for sale. During the year ended December 31, 2017, we reclassified $757 million to assets held for sale and $169 million to liabilities held for sale, as we have an active program to locate buyers for these businesses and we expect these businesses to be sold within one year.

Refer to Note 3 – Assets/Liabilities Held for Sale for further discussion.

Land, Buildings and Equipment

Land, buildings and equipment are recorded at cost. Buildings and equipment are depreciated over their estimated useful lives. Leasehold improvements are depreciated over the shorter of the lease term or the estimated useful life. Significant improvements are capitalized and maintenance and repairs are expensed when incurred.

Refer to Note 5 – Land, Buildings, Equipment and Software, Net for further discussion.

Software - Internal Use and Product

Internal Use: We capitalize direct costs associated with developing, purchasing or otherwise acquiring software for internal use and amortize these costs on a straight-line basis over the expected useful life of the software, beginning when the software is implemented (Internal Use Software). Costs incurred for upgrades and enhancements that will not result in additional functionality are expensed as incurred. Amounts expended for Internal Use Software are included in Cash Flows from Investing.

Product: We also capitalize certain costs related to the development of software solutions to be sold to our customers upon reaching technological feasibility (Product Software). These costs are amortized on a straight-line basis over the estimated economic life of the software. Amounts expended for Product Software are included in Cash Flows from Operations. We perform periodic reviews to ensure that unamortized Product Software costs remain recoverable from estimated future operating profits (net realizable value or NRV). Costs to support or service licensed software are charged to Costs of outsourcing as incurred.

Refer to Note 5 – Land, Buildings, Equipment and Software, Net for further information.

Goodwill

For acquired businesses, the Company records the acquired assets and assumed liabilities based on their relative fair values at the date of acquisitions (commonly referred to as the purchase price allocation). Goodwill represents the excess of the purchase price paid in excess of the fair value of net tangible and intangible assets acquired. For the Company's business acquisitions, the purchase price is allocated to identifiable intangible assets separate from goodwill if they are from contractual or other legal rights, or if they could be separated from the acquired business and sold, transferred, licensed, rented or exchanged.

Table of Contents

We test goodwill for impairment annually or more frequent if an event or change in circumstances indicate the asset may be impaired. Impairment testing for goodwill is done at the reporting unit level. We determined the fair value of our reporting units utilizing a combination of both an Income Approach and a Market Approach. The Income Approach utilizes a discounted cash flow analysis based upon the forecasted future business results of our reporting units. The Market Approach utilizes the guideline public company method. If the fair value of a reporting unit is less than its carrying amount, an impairment charge would be recognized for amount by which the carrying amount exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to the reporting unit.

Refer to Note 6 – Goodwill and Intangible Assets, Net for further information.

Other Intangible Assets

Other intangible assets primarily consist of assets acquired through business combinations, including installed customer base and distribution network relationships, patents and trademarks. Other intangible assets are amortized on a straight-line basis over their estimated economic lives unless impairment is identified.

Refer to Note 6 – Goodwill and Intangible Assets, Net for further information.

Impairment of Long-Lived Assets

We review the recoverability of our long-lived assets, including buildings, equipment, internal use software, product software and other intangible assets, when events or changes in circumstances occur that indicate that the carrying value of the asset may not be recoverable. The assessment of possible impairment is based on our ability to recover the carrying value of the asset from the expected future pre-tax cash flows (undiscounted and without interest charges) of the related operations. If these cash flows are less than the carrying value of such asset, an impairment loss is recognized for the difference between estimated fair value and carrying value. Our primary measure of fair value is based on forecasted cash flows.

Pension Obligations

We sponsor various forms of defined benefit pension plans in several countries covering employees who meet eligibility requirements.

Several statistical and other factors that attempt to anticipate future events are used in calculating the expense, liability and asset values related to our pension plans. These factors include assumptions we make about the discount rate, expected return on plan assets, the rate of future compensation increases and mortality rates.

The discount rate is used to present value our future anticipated benefit obligations. The discount rate reflects the current rate at which benefit liabilities could be effectively settled considering the timing of expected payments for plan participants. In estimating our discount rate, we consider rates of return on high-quality fixed-income investments adjusted to eliminate the effects of call provisions, as well as the expected timing of pension and other benefit payments.

The expected rate of return on plan assets is the long-term rate of return we expect to earn on plan assets. When estimating the expected rate of return, in addition to assessing recent performance, we consider the historical returns earned on plan assets, the rates of return expected in the future, and our investment strategy and asset mix with respect to the plans' funds. The expected rate of return on plan assets is reviewed annually and revised, as necessary, to reflect changes in financial markets and our investment strategy.

Each year, the difference between the actual return on plan assets and the expected return on plan assets, as well as increases or decreases in the benefit obligation as a result of changes in the discount rate and other actuarial assumptions, are added to or subtracted from any cumulative actuarial gain or loss from prior years. This amount is the net actuarial gain or loss recognized in Accumulated other comprehensive loss. We amortize net actuarial gains and losses as a component of net pension cost for a year if, as of the beginning of the year, that net gain or loss (excluding asset gains or losses that have not been recognized in market-related value) exceeds 10% of the greater of the projected benefit obligation or the market-related value of plan assets (the "corridor" method). This determination is made on a plan-by-plan basis. If amortization is required for a particular plan, we amortize the applicable net gain or loss in excess of the 10% threshold on a straight-line basis in net periodic pension cost over the remaining service period of the employees participating in that pension plan. In plans where substantially all participants are inactive, the amortization period for the excess is the average remaining life expectancy of the plan participants.

All changes are ultimately recognized as components of net periodic benefit cost, except to the extent they may be offset by subsequent changes. At any point, changes that have been identified and quantified but not recognized as components of net periodic benefit cost, are recognized in Accumulated other comprehensive loss, net of tax.

Table of Contents

Refer to Note 11 – Employee Benefit Plans for further information regarding our Pension Benefit Obligations.

Income Taxes

We account for income taxes under the asset and liability method. Deferred tax assets and liabilities are based on differences between U.S. GAAP reporting and tax bases of assets or liabilities and based on current tax laws, regulations and rates.

The recognition of deferred tax assets requires an assessment to determine the realization of such assets. Management establishes valuation allowances on deferred tax assets when it is determined "more-likely-than-not" that some portion or all of the deferred tax assets may not be realized. Management considers positive and negative evidence in evaluating the ability of the Company to realize its deferred tax assets, including its historical results and forecasts of future ability to realize its deferred tax assets, including projected future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies.

We are subject to ongoing tax examinations and assessments in various jurisdictions. We have unrecognized tax benefits for uncertain tax positions. We follow U.S. GAAP which prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Our ongoing assessments of the more-likely-than-not outcomes of the examinations and related tax positions require judgment and can materially increase or decrease our effective tax rate, as well as impact our operating results.

Refer to Note 12 – Income Taxes for further discussion.

Foreign Currency Translation and Re-measurement

The functional currency for most foreign operations is the local currency. Net assets are translated at current rates of exchange and income, expense and cash flow items are translated at average exchange rates for the applicable period. The translation adjustments are recorded in Accumulated other comprehensive loss.

The U.S. Dollar is used as the functional currency for certain foreign subsidiaries that conduct their business in U.S. Dollars. A combination of current and historical exchange rates is used in re-measuring the local currency transactions of these subsidiaries and the resulting exchange adjustments are recorded in Currency (gains) and losses within other expenses, net together with other foreign currency re-measurements.

Note 2 – Segment Reporting

Our reportable segments correspond to how we organize and manage the business, as defined by our CEO who is also our Chief Operating Decision Maker, and are aligned to the industries in which our clients operate. Our segments involve the delivery of business process services and include service arrangements where we manage a customer's business activity or process. We report our financial performance based on the two reportable segments: Commercial Industries and Public Sector.

- **Commercial Industries:** Our Commercial Industries segment provides business process services and customized solutions to clients in a variety of industries (other than healthcare). Across the Commercial Industries segment, we deliver end-to-end business-to-business and business-to-customer services that enable our clients to optimize their key processes. Our multi-industry competencies include customer care, human resource management and finance and accounting services. These services are complemented by innovative industry-specific services such as personalized product information for the automotive industry; digitized source-to-pay solutions for clients in the manufacturing industry; customer experience and marketing services for clients in the retail industry; mortgage and consumer loan processing for clients in the financial services industry; and customized workforce learning solutions for clients in the aerospace industry.
- **Public Sector:** Our Public Sector segment provides government-centric business process services to U.S. federal, state and local and foreign governments for transportation, public assistance, program administration, transaction processing and payment services.

Other includes our Government Health Enterprise Medicaid Platform business, where we are limiting our focus to maintaining systems for our current clients; our Education Business inclusive of our Student Loan business, which is in runoff; and inter-segment eliminations.

Table of Contents

Selected financial information for our reportable segments was as follows:

(in millions)	Year Ended December 31, Commercial Industries	Public Sector	Other	Total
2017				
Revenue	$ 3,486	$ 2,160	$ 334	$ 5,980
Former parent company revenue	42	—	—	42
Inter-segment revenue	20	3	(23)	—
Total Segment Revenue	$ 3,548	$ 2,163	$ 311	$ 6,022
Depreciation and amortization	$ 162	$ 85	$ 7	$ 254
Segment profit (loss)	182	245	(10)	417
2016				
Revenue	$ 3,729	$ 2,300	$ 329	$ 6,358
Former parent company revenue	50	1	(1)	50
Inter-segment revenue	26	7	(33)	—
Total Segment Revenue	$ 3,805	$ 2,308	$ 295	$ 6,408
Depreciation and amortization	$ 162	$ 102	$ 69	$ 333
Segment profit (loss)	151	293	(248)	196
2015				
Revenue	$ 3,970	$ 2,324	$ 315	$ 6,609
Former parent company revenue	54	—	(1)	53
Inter-segment revenue	35	7	(42)	—
Total Segment Revenue	$ 4,059	$ 2,331	$ 272	$ 6,662
Depreciation and amortization	$ 160	$ 118	$ 72	$ 350
Segment profit (loss)	148	298	(509)	(63)

The following is a reconciliation of segment profit (loss) profit to pre-tax (loss) income:

(in millions)	Year Ended December 31, 2017	2016	2015
Segment Profit (Loss) Reconciliation to Pre-tax Loss			
Pre-tax Loss	$ (16)	$ (1,227)	$ (574)
Reconciling items:			
Goodwill impairment	—	935	—
Amortization of intangible assets	243	280	250
Restructuring and related costs	101	101	159
Interest expense	137	14	8
Related party interest	—	26	61
Separation costs	12	44	—
(Gain) Loss on sale of asset and businesses	(42)	2	—
Business transformation costs	—	3	3
Other (income) expenses, net	(18)	18	30
Total Segment Profit (Loss)	$ 417	$ 196	$ (63)

Table of Contents

Geographic area data is based upon the location of the subsidiary reporting the revenue or long-lived assets and is as follows for each of the years ended December 31:

	Revenues			Long-Lived Assets [1]	
(in millions)	2017	2016	2015	2017	2016
United States	$ 5,303	$ 5,686	$ 5,849	$ 289	$ 325
Europe	538	547	616	42	47
Other areas	181	175	197	54	64
Total Revenues and Long-Lived Assets	$ 6,022	$ 6,408	$ 6,662	$ 385	$ 436

(1) Long-lived assets are comprised of (i) Land, buildings and equipment, net, (ii) Internal use software, net and (iii) Product software, net.

In 2016, our methodology to disclose revenue on a geographic basis changed to reflect where the work is contracted. All prior years have been adjusted to reflect this change in methodology.

Note 3 – Assets/Liabilities Held for Sale

As of December 31, 2017, there were certain businesses that qualified as assets/liabilities held for sale due to plans for disposal through sale. These assets/liabilities held for sale include a mix of both Commercial Industries and Public Sector that represent businesses in markets or with services that we did not see as strategic or core. The following is a summary of the major categories of assets and liabilities that have been reclassified to held for sale.

(in millions)	Year Ended December 31, 2017
Accounts Receivable, net	$ 160
Other current assets	41
Land, building and equipment, net	6
Product Software, net	3
Intangible assets, net	7
Goodwill	537
Other long-term assets	3
Total Assets held for sale	$ 757
Accounts payable	$ 9
Accrued compensation	20
Unearned revenue	30
Other current liabilities	53
Pension and other benefit obligations	50
Other long-term liabilities	7
Total Liabilities held for sale	$ 169

Information Technology Outsourcing (ITO)

In 2015 we completed the sale of our ITO business to Atos, which represented a discontinued operation.

In February 2016, we reached an agreement with Atos on the final adjustments to the closing balance of net assets sold as well as the settlement of certain indemnifications and recorded an additional pre-tax loss on the disposal in 2015 of $24 million ($14 million after-tax). The additional loss was recorded in 2015 as the financial statements had not yet been issued when the agreement was reached with Atos. We made a payment in 2016 to Atos of approximately $52 million, representing a $28 million adjustment to the final sales price as a result of this agreement and a payment of $24 million due from closing. The payment is reflected in Investing cash flows as an adjustment of the sales proceeds.

Table of Contents

Summarized financial information for our Discontinued Operations is as follows:

(in millions)	Year Ended December 31, 2015
Revenues	$ 619
Income (loss) from operations	$ 104
Loss on disposal	(101)
Net income (loss) before income taxes	$ 3
Income tax expense	(81)
Loss from discontinued operations, net of tax	$ (78)

The following is a summary of selected financial information of the ITO business:

(in millions)	Year Ended December 31, 2015
Expenses:	
Operating lease rent expense	$ 130
Defined contribution plans	4
Interest expense	2
Expenditures:	
Cost of additions to land, buildings and equipment	$ 41
Cost of additions to internal use software	1
Customer-related deferred set-up/transition and inducement costs	10

Note 4 – Accounts Receivable, Net

Accounts receivable, net was as follows:

	December 31,	
(in millions)	2017	2016
Amounts billed or billable	$ 919	$ 1,014
Unbilled amounts	187	279
Allowance for doubtful accounts	(2)	(7)
Accounts Receivable, Net	$ 1,104	$ 1,286

Unbilled amounts include amounts associated with percentage-of-completion accounting and other earned revenues not currently billable due to contractual provisions. Amounts to be invoiced in subsequent months for current services provided are included in amounts billable, and at December 31, 2017 and 2016 were approximately $364 million and $429 million, respectively.

Accounts Receivable Sales Arrangements

Prior to 2017, we sold accounts receivables with payment due dates of less than 60 days.

Under most of the agreements, we continue to service the sold accounts receivable. When applicable, a servicing liability is recorded for the estimated fair value of the servicing. The amounts associated with the servicing liability were not material.

Accounts receivable sales were as follows:

	Year Ended December 31,		
(in millions)	2017	2016	2015
Accounts receivable sales	$ —	$ 250	$ 325
Estimated increase (decrease) to operating cash flows[1]	—	(136)	58

(1) *Represents the difference between current and prior year fourth quarter receivable sales adjusted for the effects of: (i) deferred proceeds, (ii) collections prior to the end of the year and (iii) currency.*

Table of Contents

Note 5 - Land, Buildings, Equipment and Software, Net

Land, buildings and equipment, net were as follows:

(in millions except as noted)	Estimated Useful Lives (Years)	December 31, 2017	December 31, 2016
Land		$ 3	$ 10
Building and building equipment	25 to 50	17	20
Leasehold improvements	Varies	247	236
Office furniture and equipment	3 to 15	784	719
Other	4 to 20	1	1
Construction in progress		24	54
Subtotal		1,076	1,040
Accumulated depreciation		(819)	(757)
Land, Buildings and Equipment, Net		$ 257	$ 283

Depreciation expense and operating lease rent expense were as follows:

(in millions)	Year Ended December 31, 2017	2016	2015
Depreciation expense	$ 125	$ 130	$ 126
Operating lease rent expense	$ 375	$ 378	$ 389

We lease buildings and equipment, substantially all of which are accounted for as operating leases. Certain leases were accounted for as capital leases and the remaining net book value of those assets, included in Land, Buildings and Equipment, net were approximately $32 million and $42 million at December 31, 2017 and 2016, respectively.

Future minimum operating lease commitments that have initial or remaining non-cancelable lease terms in excess of one year at December 31, 2017 were as follows (in millions):

2018	2019	2020	2021	2022	Thereafter
$ 163	$ 119	$ 80	$ 53	$ 31	$ 52

Internal Use and Product Software

Additions to Internal Use and Product Software as well as year-end balances for these assets were as follows:

(in millions) Additions to:	Year Ended December 31, 2017	2016	2015
Internal use software	$ 36	$ 39	$ 27
Product software	10	10	19

(in millions) Capitalized Costs, Net	December 31, 2017	2016
Internal use software	$ 106	$ 115
Product software	22	38

Useful lives of our internal use and product software generally vary from one to seven years.

Table of Contents

Included within product software at December 31, 2017 and 2016 were $2 million and $3 million, respectively, of capitalized costs associated with software system platforms developed for use in certain of our government services businesses.

During 2016 we determined that it was probable that we would not fully complete our NY MMIS project in its current form. As a result of this decision an impairment charge of approximately $28 million was recorded in Cost of services. We also recorded an additional impairment charge in 2016 related to the 2015 HE charge of approximately $9 million in Restructuring and asset impairment. In 2015 we decided to discontinue certain future implementations of these software system platforms, and recorded an impairment charge of $160 million ($14 million in Cost of services and $146 million in Restructuring and asset impairments).

Note 6 - Goodwill and Intangible Assets, Net

Goodwill

The following table presents the changes in the carrying amount of goodwill, by reportable segment:

(in millions)	Commercial Industries	Public Sector	Total
Balance at December 31, 2015	$ 2,467	$ 2,405	$ 4,872
Foreign currency translation	(24)	(20)	(44)
Acquisitions	(2)	—	(2)
Disposition	(2)	—	(2)
Impairment	(935)	—	(935)
Balance at December 31, 2016	$ 1,504	$ 2,385	$ 3,889
Foreign currency translation	19	28	47
Dispositions	(19)	(14)	(33)
Assets held for sale	(105)	(432)	(537)
Balance at December 31, 2017	**$ 1,399**	**$ 1,967**	**$ 3,366**

Impairment Charge

There was no impairment identified for the years ended December 31, 2017 and 2015. In 2016, due to the declining trends and projections in the Commercial Industries reporting unit, we concluded that the fair value of our Commercial Industries reporting unit was less than its carrying value. Accordingly, we recorded a pre-tax goodwill impairment charge of $935 million during the fourth quarter of 2016, which is separately presented in the Consolidated Statements of Income (Loss). There was no impairment identified for the Public Sector in 2016.

Based on our quantitative assessments, we concluded that the fair value of our Commercial Industries and Public Sector reporting units exceeded their respective carrying values by 72% and 13%, respectively, at December 31, 2017. The most significant assumptions used in the goodwill analysis relate to a 3% long-term organic growth rate for both the Commercial Industries and Public Sector segments as well as a 9.25% and a 8.75% discount rate for the Commercial Industries and Public Sector segments, respectively.

Intangible Assets, Net

Net intangible assets were $891 million at December 31, 2017 of which $492 million and $399 million relate to our Commercial Industries and Public Sector segments, respectively. Intangible assets were comprised of the following:

		December 31, 2017			December 31, 2016		
(in millions except years)	Weighted Average Amortization	Gross Carrying Amount	Accumulated Amortization	Net Amount	Gross Carrying Amount	Accumulated Amortization	Net Amount
Customer relationships	12 years	$ 2,907	$ 2,022	$ 885	$ 2,924	$ 1,788	$ 1,136
Technology, patents and non-compete	4 years	11	5	6	11	3	8
Total Intangible Assets		$ 2,918	$ 2,027	$ 891	$ 2,935	$ 1,791	$ 1,144

Table of Contents

Amortization expense related to intangible assets was $243 million, $280 million and $250 million for the years ended December 31, 2017, 2016 and 2015, respectively. Amortization expense is expected to approximate $241 million in 2018, $241 million in 2019, $238 million in 2020, $134 million in 2021 and $12 million in 2022.

Note 7 – Restructuring Programs and Asset Impairment Charges

We engage in a series of restructuring programs related to downsizing our employee base, exiting certain activities, outsourcing certain internal functions and engaging in other actions designed to reduce our cost structure and improve productivity. Prior to 2017, these initiatives primarily consist of severance actions that impacted all major geographies and segments. In 2017, the implementation of our strategic transformation program as well as various productivity initiatives reduced our real estate footprint across all geographies and segments resulting in increased lease cancellation and other related costs. Management continues to evaluate our business, therefore, in future years, there may be additional provisions for new plan initiatives as well as changes in previously recorded estimates as payments are made or actions are completed. Asset impairment charges were also incurred in connection with these restructuring actions for those assets sold, abandoned or made obsolete as a result of these programs.

Costs associated with restructuring, including employee severance and lease termination costs are generally recognized when it has been determined that a liability has been incurred, which is generally upon communication to the affected employees or exit from the leased facility. In those geographies where we have either a formal severance plan or a history of consistently providing severance benefits representing a substantive plan, we recognize employee severance costs when they are both probable and reasonably estimable.

A summary of our restructuring program activity during the two years ended December 31, 2017 is as follows:

(in millions)	Severance and Related Costs	Lease Cancellation and Other Costs	Asset Impairments	Total
Balance at December 31, 2015	4	—	—	4
Restructuring provision	67	7	12	86
Reversals of prior accruals	(13)	—	—	(13)
Total Net Current Period Charges	54	7	12	73
Charges against reserve and currency	(43)	(2)	(11)	(56)
Balance at December 31, 2016	15	5	1	21
Restructuring provision	49	49	5	103
Reversals of prior accruals	(8)	(3)	—	(11)
Total Net Current Period Charges	41	46	5	92
Charges against reserve and currency	(42)	(17)	(6)	(65)
Liabilities held for sale	—	(4)	—	(4)
Balance at December 31, 2017	$ 14	$ 30	$ —	$ 44

We also recorded costs related to professional support services associated with the implementation of the strategic transformation program of $9 million and $28 million during the years ended December 31, 2017 and 2016, respectively.

The following table summarizes the total amount of costs incurred in connection with these restructuring programs by segment:

	Year Ended December 31,		
(in millions)	2017	2016	2015
Commercial Industries	$ 60	$ 57	$ 11
Public Sector	28	12	2
Other[1]	4	4	146
Total Net Restructuring Charges	$ 92	$ 73	$ 159

(1) Refer to Note 5 – Land, Buildings, Equipment and Software, Net for additional information regarding the asset impairment in 2016 and 2015.

Table of Contents

Note 8 – Debt

We classify our debt based on the contractual maturity dates of the underlying debt instruments or as of the earliest put date available to the debt holders. We defer costs associated with debt issuance over the applicable term. These costs are amortized as interest expense in our Consolidated Statements of Income (Loss).

Long-term debt was as follows:

(in millions)	Weighted Average Interest Rates at December 31, 2017[1]	December 31, 2017	December 31, 2016
Term loan A due 2021	3.11%	$ 732	$ 694
Term loan B due 2023	6.79%	842	750
Senior notes due 2024	10.91%	510	510
Capital lease obligations	4.39%	33	43
Principal Debt Balance		$ 2,117	$ 1,997
Debt issuance costs and unamortized discounts		(56)	(56)
Less: current maturities		(82)	(28)
Total Long-term Debt		$ 1,979	$ 1,913

(1) Represents weighted average effective interest rate which includes the effect of discounts and premiums on issued debt.

Scheduled principal payments due on our long-term debt for the next five years and thereafter are as follows:

2018(1)	2019	2020	2021	2022	Thereafter	Total
$ 82	$ 72	$ 85	$ 560	$ 9	$ 1,309	$ 2,117

(1) Quarterly long-term debt maturities for 2018 are $21 million, $21 million, $21 million and $19 million for the first, second, third and fourth quarters, respectively.

Credit Facility

On December 7, 2016, we entered into a senior secured credit agreement (Credit Agreement) among the Company, its subsidiaries: Conduent Business Services, LLC (CBS), Affiliated Computer Services International B.V. and Conduent Finance, Inc. (CFI), the lenders party and JP Morgan Chase Bank, N.A., as the administrative agent. The Credit Agreement contains senior secured credit facilities (Senior Credit Facilities) consisting of:

(i) Senior Secured Term Loan A (Term Loan A) due 2021 with an aggregate principal amount of $700 million;
(ii) Senior Secured Term Loan B (Term Loan B) due 2023 with an aggregate principal amount of $850 million;
(iii) Senior Revolving Credit Facility (Revolving Credit Facility) due 2021 with an aggregate available amount of $750 million including a sub-limit for up to $300 million available for the issuance of letters of credit.

Borrowings under the Term Loan A Facility and the Revolving Credit Facility bears interest at a rate equal to either the sum of a base rate plus a margin ranging from 1.00% and 1.50% or the sum of a Eurocurrency rate plus an applicable rate ranging from 2.00% to 2.50%, with either such margin varying according to the total net leverage ratio of CBS. Borrowing under Term Loan B Facility bears interest at a rate equal to the sum of a base rate plus 2.0%, or the sum of a Eurocurrency rate plus 3.0%. CBS is required to pay a quarterly commitment fee under the Revolving Credit Facility at a rate ranging from 0.35% to 0.40% per annum, with such rate varying according to the total net leverage ratio of CBS and the actual daily unused portion of the commitments during the applicable quarter. CBS is also required to pay a fee equal to the adjusted LIBOR on the aggregate face amount of outstanding letters of credit under the Revolving Credit Facility.

The Credit Agreement permits us to incur incremental term loan borrowings and /or increase commitments under the Revolving Credit Facility, subject to certain limitations and satisfaction of certain conditions, in an aggregate amount not to exceed (i) $200 million plus, (ii) if the senior secured net leverage ratio of CBS and its subsidiaries does not exceed 2.25 to 1.00 on a pro forma basis (without giving effect to any incurrence under clause (i) that is incurred substantially simultaneously with amounts incurred under clause (ii)), an unlimited amount.

Table of Contents

All obligations under the Senior Credit Facilities are unconditionally guaranteed by the Company, CBS, CFI and the existing and future direct and indirect wholly owned domestic subsidiaries of CBS (subject to certain exceptions). All obligations under the Senior Credit Facilities, and the guarantees of those obligations, are secured, subject to certain exceptions, by substantially all of the assets of CBS and the guarantors under the Senior Credit Facilities (other than the Company and CFI), including a first-priority pledge of all the capital stock of CBS and the subsidiaries of CBS directly held by CBS or the guarantors (other than the Company and CFI) under the Senior Credit Facilities (which pledge, in the case of any foreign subsidiary, will be limited to 65% of the capital stock of any first-tier foreign subsidiary).

The Credit Facility contains certain customary affirmative and negative covenants, restrictions and events of default. CBS is required to maintain a total net leverage ratio not to exceed 4.25 to 1.00 (a quarterly test) for each quarter through September 30, 2018 and 3.75 to 1.00 for each quarter thereafter.

The net proceeds of the borrowings under the Term Loan A of $700 million (approximately $278 million borrowed in Euros) and Term Loan B of $850 million, were used to purchase our international subsidiaries from Xerox Corporation, to pay a distribution to Xerox Corporation and for working capital and other general corporate purposes. At December 31, 2017 we had $1,574 million in outstanding borrowings under our Credit Agreement and had utilized $12 million of our Revolving Credit Facility capacity to issue letters of credit. Discounts and debt issuance costs of $47 million were deferred.

Senior Notes

On December 7, 2016, CBS and CFI, each a wholly owned subsidiary of the Company, issued $510 million Senior Unsecured Notes due 2024 bearing interest at 10.5% (the "Senior Notes"). Interest is payable semi-annually, beginning on June 15, 2017. Discounts and debt issuance costs of $17 million were deferred.

At the option of the Issuers, the Senior Notes are redeemable in whole or in part, at any time prior to December 15, 2020, at a price equal to 100% of the aggregate principal amount of the Senior Notes plus accrued and unpaid interest, if any, to, but excluding, the redemption date plus a “make-whole” premium. The Issuers may also redeem the Senior Notes, in whole or in part, at any time on or after December 15, 2020, at the redemption prices specified in the Indenture, plus accrued and unpaid interest, if any, to but excluding the redemption date. Additionally, at any time prior to December 15, 2019, the Issuers may redeem up to 35% of the aggregate principal amount of the Senior Notes with the net cash proceeds from certain equity offerings at a price equal to 110.50% of the principal amount of the Senior Notes, plus accrued and unpaid interest, if any, to, but excluding, the redemption date.

The Senior Notes are jointly and severally guaranteed on a senior unsecured basis by the Company and each of the existing and future domestic subsidiaries of CFI or CBS that guarantee the obligations under the Senior Credit Facilities.

Proceeds from the issuance were used to fund a portion of the transfer of cash to Xerox Corporation in connection with the spin-off.

Interest

Interest paid on our short-term and long-term debt amounted to $129 million, $5 million and $9 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Interest expense and interest income was as follows:

	Year Ended December 31,		
(in millions)	2017	2016	2015
Interest expense	$ 137	$ 14	$ 8
Interest income	3	3	3

Table of Contents

Note 9 – Financial Instruments

We are exposed to market risk from changes in foreign currency exchange rates and interest rates, which could affect operating results, financial position and cash flows. We manage our exposure to these market risks through our regular operating and financing activities and, when appropriate, through the use of derivative financial instruments. These derivative financial instruments are utilized to hedge economic exposures, as well as to reduce earnings and cash flow volatility resulting from shifts in market rates. We enter into limited types of derivative contracts to manage foreign currency exposures that we hedge. Our primary foreign currency market exposures include the Philippine Peso, Indian Rupee and Mexican Peso. The fair market values of all our derivative contracts change with fluctuations in interest rates or currency exchange rates and are designed so that any changes in their values are offset by changes in the values of the underlying exposures. Derivative financial instruments are held solely as risk management tools and not for trading or speculative purposes. The related cash flow impacts of all of our derivative activities are reflected as cash flows from operating activities.

We do not believe there is significant risk of loss in the event of non-performance by the counterparty associated with our derivative instruments because these transactions are executed with a major financial institution. Further, our policy is to deal only with counterparties having a minimum investment grade or better credit rating. Credit risk is managed through the continuous monitoring of exposures to such counterparties.

Summary of Foreign Exchange Hedging Positions

At December 31, 2017, we had outstanding forward exchange with gross notional values of $160 million, which is typical of the amounts that are normally outstanding at any point during the year. The impact of our hedging program is not material to our balance sheet or income statement.

Approximately 68% of these contracts mature within three months, 12% in three to six months, 15% in six to twelve months and 5% in greater than 12 months.

The following is a summary of the primary hedging positions and corresponding fair values as of December 31, 2017:

(in millions)	Gross Notional Value	Fair Value Asset (Liability)[1]
Currencies Hedged (Buy/Sell)		
Philippine Peso/U.S. Dollar	$ 62	$ —
Indian Rupee/U.S. Dollar	68	1
Mexican Peso/U.S. Dollar	9	—
All Other	21	—
Total Foreign Exchange Hedging	$ 160	$ 1

(1) Represents the net receivable (payable) amount included in the Consolidated Balance Sheet at December 31, 2017.

Note 10 – Fair Value of Financial Assets and Liabilities

Fair value represents the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. US. GAAP establishes a framework for measuring that includes a hierarchy used to classify the inputs used in measuring fair value. The levels of the fair value hierarchy are as follows:

Level 1: Fair value is determined using an unadjusted quoted price in an active market for identical assets or liabilities. As at December 31, 2017 and 2016, the Company did not have any asset or liability that was measured using Level 1 inputs.

Level 2: Fair value is estimated using inputs other than quoted prices included within Level 1 that are observable, either directly or indirectly. All the Company's assets and liabilities that were measured at fair value on a recurring basis as at December 31, 2017 and 2016, were valued using Level 2 inputs.

Level 3: Fair value is estimated using unobservable inputs that are significant to the fair value of the assets. As at December 31, 2017 and 2016, the Company did not have any asset or liability that was measured using Level 3 inputs.

Table of Contents

The following table represents assets and liabilities fair value measured on a recurring basis. The basis for the measurement at fair value in all cases is Level 2 – Significant Other Observable Inputs.

	As of December 31,	
(in millions)	2017	2016
Assets:		
Foreign exchange contracts - forwards	$ 2	$ 1
Deferred compensation investments in cash surrender life insurance[1]	—	99
Deferred compensation investments in mutual funds[1]	—	10
Total	$ 2	$ 110
Liabilities:		
Foreign exchange contracts - forwards	$ 1	$ 3
Deferred compensation plan liabilities[1]	99	113
Total	$ 100	$ 116

(1) In September 2017, the Company terminated the legacy deferred compensation plans (Plans) and the Company Owned Life Insurance (COLI), which held the Plans' investments. The Company will make payments to Plan participants of approximately $100 million in the fourth quarter 2018.

Fair value for our deferred compensation plan investments in company-owned life insurance is reflected at cash surrender value. Fair value for our deferred compensation plan investments in mutual funds is based on quoted market prices for actively traded investments similar to those held by the plan. Fair value for deferred compensation plan liabilities is based on the fair value of investments corresponding to employees' investment selections, based on quoted prices for similar assets in actively traded markets.

Summary of Other Financial Assets and Liabilities Fair Value Measured on a Nonrecurring Basis

The estimated fair values of our other financial assets and liabilities fair value measured on a nonrecurring basis were as follows:

	December 31, 2017		December 31, 2016	
(in millions)	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Cash and cash equivalents	$ 658	$ 658	$ 390	$ 390
Restricted cash	9	9	22	22
Accounts receivable, net	1,104	1,104	1,286	1,286
Short-term debt	82	82	28	28
Long-term debt	1,979	2,070	1,913	1,933

The fair value amounts for Cash and cash equivalents, Restricted cash and Accounts receivable, net, approximate carrying amounts due to the short maturities of these instruments. The fair value of Short and Long-term debt was estimated based on the current rates offered to us for debt of similar maturities (Level 2). The difference between the fair value and the carrying value represents the theoretical net premium or discount we would pay or receive to retire all debt at such date.

The fair value of the Goodwill impairment charge of $935 million recorded in 2016, was estimated based on a determination of the implied fair value of goodwill, leveraging discounted cash flows (level 3). Refer to Note 6 – Goodwill and Intangible Assets, Net for additional information regarding this impairment.

Table of Contents

Note 11 – Employee Benefit Plans

Our defined benefit pension plans are primarily associated with certain employees in our Human Resources and Consulting business located in the U.S., Canada and the United Kingdom (U.K.). Prior to an amendment to freeze future service benefits, these defined benefit pension plans had provided benefits for participating employees based on years of service and average compensation for a specified period before retirement (see Plan Amendment below for further information).

Certain of our employees participate in post-employment medical plans. These plans are not material to our results of operations or financial position and are not included in the disclosures below.

December 31 is the measurement date for all of our defined benefit pension plans.

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
(in millions)	2017	2016	2017	2016
Change in Benefit Obligation:				
Benefit obligation, January 1	$ 89	$ 74	$ 164	$ 157
Service cost	—	—	2	2
Interest cost	4	3	5	5
Actuarial loss	10	13	5	27
Currency exchange rate changes	—	—	14	(19)
Benefits paid/settlements	(1)	(1)	(12)	(8)
Benefit Obligation, December 31	$ 102	$ 89	$ 178	$ 164
Change in Plan Assets:				
Fair value of plan assets, January 1	$ 52	$ 47	$ 140	$ 150
Actual return on plan assets	8	2	13	15
Employer contribution	3	4	5	2
Currency exchange rate changes	—	—	14	(19)
Benefits paid/settlements	(1)	(1)	(12)	(8)
Fair Value of Plan Assets, December 31	$ 62	$ 52	$ 160	$ 140
Net Funded Status at December 31[1]	$ (40)	$ (37)	$ (18)	$ (24)
Amounts Recognized in the Consolidated Balance Sheets:				
Asset held for sale	$ —	$ —	$ 1	$ —
Accrued compensation and benefit costs	—	—	—	(2)
Liabilities held for sale	(40)	—	(11)	—
Pension and other benefit liabilities	—	(37)	(8)	(22)
Net Amounts Recognized	$ (40)	$ (37)	$ (18)	$ (24)

(1) Includes under-funded and un-funded plans.

Benefit plans pre-tax amounts recognized in Accumulated other comprehensive loss (AOCL) at December 31:

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
(in millions)	2017	2016	2017	2016
Net actuarial loss	$ 38	$ 31	$ 42	$ 42

Table of Contents

Aggregate information for pension plans with an Accumulated benefit obligation in excess of plan assets is presented below:

	December 31, 2017			December 31, 2016		
(in millions)	Projected benefit obligation	Accumulated benefit obligation	Fair value of plan assets	Projected benefit obligation	Accumulated benefit obligation	Fair value of plan assets
Underfunded Plans:						
U.S.	$ 102	$ 102	$ 62	$ 89	$ 89	$ 52
Non U.S.	60	55	46	162	156	140
Unfunded Plans:						
Non U.S.	5	3	—	2	1	—
Total Underfunded and Unfunded Plans:						
U.S.	$ 102	$ 102	$ 62	$ 89	$ 89	$ 52
Non U.S.	65	58	46	164	157	140
Total	$ 167	$ 160	$ 108	$ 253	$ 246	$ 192

Our pension plan assets and benefit obligations at December 31, 2017 were as follows:

(in millions)	Fair Value of Pension Plan Assets	Pension Benefit Obligations	Net Funded Status	Accumulated Benefit Obligation
U.S.	$ 62	$ 102	$ (40)	$ 102
U.K.	114	113	1	114
Canada	44	55	(11)	53
Other	2	10	(8)	5
Total	$ 222	$ 280	$ (58)	$ 274

The components of Net periodic benefit cost and other changes in plan assets and benefit obligations were as follows:

	Year Ended December 31,					
	U.S. Plans			Non-U.S. Plans		
(in millions)	2017	2016	2015	2017	2016	2015
Components of Net Periodic Benefit Costs:						
Service cost	$ —	$ —	$ —	$ 2	$ 2	$ 3
Interest cost	4	3	3	5	5	6
Expected return on plan assets	(5)	(4)	(4)	(8)	(8)	(9)
Recognized net actuarial loss	1	—	—	1	1	2
Net Periodic Benefit Cost	—	(1)	(1)	—	—	2
Other changes in plan assets and benefit obligations recognized in Other Comprehensive Income:						
Net actuarial loss (gain)	7	13	4	(2)	18	(9)
Amortization of net actuarial loss	(1)	—	—	(1)	(1)	(2)
Total Recognized in Other Comprehensive Income	6	13	4	(3)	17	(11)
Total Recognized in Net Periodic Benefit Cost and Other Comprehensive Income	$ 6	$ 12	$ 3	$ (3)	$ 17	$ (9)

The net actuarial loss for the defined benefit pension plans that will be amortized from AOCL into net periodic benefit cost over the next fiscal year is $2 million.

Table of Contents

Plan Amendments

Pension Plan Freezes

In 2015, we amended several of our major defined benefit pension plans to freeze current benefits and eliminate benefits accruals for future service, including our plans in the U.S., Canada and the U.K. The freeze of current benefits is the primary driver of the reduction in pension service costs since 2015. In certain non-U.S. plans, we are required to continue to consider salary increases and inflation in determining the benefit obligation related to prior service.

Plan Assets

Current Allocation

As of the 2017 and 2016 measurement dates, the global pension plan assets were $222 million and $192 million, respectively. These assets were invested among several asset classes.

The following tables presents the defined benefit plans assets measured at fair value and the basis for that measurement:

	December 31, 2017									
(in millions)	U.S. Plans					Non-U.S. Plans				
Asset Class	Level 1	Level 2	Level 3	Total	%	Level 1	Level 2	Level 3	Total	%
Cash and cash equivalents	$ 1	$ —	$ —	$ 1	2%	$ 3	$ —	$ —	$ 3	2%
Equity Securities	12	31	—	43	69%	—	47	—	47	29%
Fixed Income Securities	18	—	—	18	29%	—	46	—	46	29%
Other	—	—	—	—	—%	—	55	9	64	40%
Total Fair Value of Plan Assets	$ 31	$ 31	$ —	$ 62	100%	$ 3	$ 148	$ 9	$ 160	100%

	December 31, 2016									
(in millions)	U.S. Plans					Non-U.S. Plans				
Asset Class	Level 1	Level 2	Level 3	Total	%	Level 1	Level 2	Level 3	Total	%
Cash and cash equivalents	$ 3	$ —	$ —	$ 3	6%	$ —	$ —	$ —	$ —	—%
Equity Securities	9	24	—	33	63%	—	61	—	61	44%
Fixed Income Securities	10	6	—	16	31%	—	60	—	60	43%
Other	—	—	—	—	—%	—	11	8	19	13%
Total Fair Value of Plan Assets	$ 22	$ 30	$ —	$ 52	100%	$ —	$ 132	$ 8	$ 140	100%

Valuation Method

Our primary Level 3 assets are Real Estate and Guaranteed Investment Contract investments which are individually immaterial. The fair value of our real estate investment funds are based on the Net Asset Value (NAV) of our ownership interest in the funds. NAV information is received from the investment advisers and is primarily derived from third-party real estate appraisals for the properties owned. The fair value for our Guaranteed Investment Contract investments have been determined based on the higher of the surrender value of the contract or the present value of the cash flow of the related pension obligations. The valuation techniques and inputs for our Level 3 assets have been consistently applied for all periods presented.

Investment Strategy

The target asset allocations for our worldwide defined benefit pension plans were:

	2017		2016	
	U.S.	Non-U.S.	U.S.	Non-U.S.
Equity investments	55%	28%	55%	41%
Fixed income investments	23%	43%	25%	45%
Real estate	—%	4%	—%	4%
Other	22%	25%	20%	10%
Total Investment Strategy	100%	100%	100%	100%

Table of Contents

We employ a total return investment approach whereby a mix of equities and fixed income investments are used to maximize the long-term return of plan assets for a prudent level of risk. The intent of this strategy is to minimize plan expenses by exceeding the interest growth in long-term plan liabilities. Risk tolerance is established through careful consideration of plan liabilities, plan funded status and corporate financial condition. This consideration involves the use of long-term measures that address both return and risk. The investment portfolio contains a diversified blend of equity and fixed income investments. Furthermore, equity investments are diversified across U.S. and non-U.S. stocks, as well as growth, value and small and large capitalizations. Other assets such as real estate, are used to improve portfolio diversification. Derivatives may be used to hedge market exposure in an efficient and timely manner; however, derivatives may not be used to leverage the portfolio beyond the market value of the underlying investments. Investment risks and returns are measured and monitored on an ongoing basis through annual liability measurements and quarterly investment portfolio reviews.

Contributions

In 2017, we made cash contributions of $8 million ($3 million U.S. and $5 million non-U.S.) to our defined benefit pension plans.

In 2018, based on current actuarial calculations, we expect to make contributions of approximately $8 million ($8 million non-U.S. and none for U.S.) to our defined benefit pension plans.

Estimated Future Benefit Payments

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid during the following years:

	Pension Benefits		
(in millions)	U.S.	Non-U.S.	Total
2018	$ 2	$ 4	$ 6
2019	2	5	7
2020	2	5	7
2021	3	5	8
2022	3	5	8
Years 2023-2026	19	30	49

Assumptions

Weighted-average assumptions used to determine benefit obligations at the plan measurement dates:

	Pension Benefits					
	2017		2016		2015	
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.
Discount rate	3.8%	2.9%	4.2%	3.2%	4.3%	3.9%
Rate of compensation increase	n/a	0.8%	n/a	1.0%	n/a	1.0%

Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31:

	Pension Benefits							
	2018		2017		2016		2015	
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.
Discount rate	3.8%	3.1%	4.2%	3.1%	4.3%	3.9%	4.0%	3.4%
Expected return on plan assets	7.8%	4.8%	7.8%	4.8%	7.8%	5.7%	7.8%	5.8%
Rate of compensation increase	n/a	0.8%	n/a	0.8%	n/a	1.0%	n/a	1.1%

Table of Contents

Defined Contribution Plans

We have post-retirement savings and investment plans in several countries, including the U.S., U.K. and Canada. In many instances, employees from those defined benefit pension plans that have been amended to freeze future service accruals (see "Plan Amendments" for additional information) were transitioned to an enhanced defined contribution plan. In these plans employees are allowed to contribute a portion of their salaries and bonuses to the plans, and we match a portion of the employee contributions. We recorded charges related to our defined contribution plans of $35 million in 2017, $35 million in 2016 and $34 million in 2015.

Note 12 - Income Taxes

Prior to the spin-off from Xerox Corporation, Conduent's operating results were included in various Xerox consolidated U.S. federal and state income tax returns, as well as non-U.S. tax filings. For the purposes of the Company's Consolidated and Combined Financial Statements for periods prior to the spin-off, income tax expense and deferred tax balances have been recorded as if the Company filed tax returns on a standalone basis, separate from Xerox. The Separate Return Method applies the accounting guidance for income taxes to the standalone financial statements as if the Company was a separate taxpayer and a standalone enterprise for fiscal 2016 and prior.

On December 22, 2017, the Tax Reform was enacted. The effects of changes in tax rates and laws are recognized in the period in which the new legislation is enacted. In the case of US federal income taxes, the enactment date is the date the bill becomes law. The income tax effects of the Tax Reform have been initially accounted for on a provisional basis pursuant to the SEC staff guidance on income taxes. Reasonable estimates for all material tax effects of the Tax Reform (other than amounts related to accounting policy elections) have been provided and adjustments to provisional amounts will be made in subsequent reporting periods as information becomes available to complete provisional computations. With respect to this legislation, we recorded a provisional tax benefit of $198 million, which included a $210 million tax benefit due to the re-measurement of deferred tax assets and liabilities resulting from the decrease in the corporate U.S. federal income tax rate from 35% to 21%, and $12 million as a one-time-charge on the transition tax for Post-1986 undistributed and not previously taxed foreign earnings and profits. The impacts of Tax Reform on our 2017 Consolidated Financial Statements are provisional, and could change during 2018 as we further evaluate the impacts of the Tax Reform. The Company has provisionally adopted the policy of treating the Global Intangible Low Taxed Income (GILTI) regime as a period cost. The GILTI regime enacted as part of Tax Reform subjects certain post 2017 foreign earnings (i.e. amounts in excess of deemed return on net tangible assets of non-US subsidiaries) to US tax. In January 2018, the FASB released guidance on the accounting for tax on GILTI. The guidance indicates that either accounting for deferred taxes on GILTI or treating GILTI as a period cost are both acceptable accounting elections.

(Loss) income before income taxes (pre-tax (loss) income) was as follows:

	Year Ended December 31,		
(in millions)	2017	2016	2015
Domestic loss	$ (91)	$ (1,329)	$ (654)
Foreign income	75	102	80
Loss Before Income Taxes	$ (16)	$ (1,227)	$ (574)

Table of Contents

(Benefit) provision for income taxes were as follows:

(in millions)	Year Ended December 31, 2017	2016	2015
Federal Income Taxes			
Current	$ 4	$ (116)	$ (130)
Deferred	(233)	(132)	(99)
Foreign Income Taxes			
Current	25	31	24
Deferred	(3)	(3)	6
State Income Taxes			
Current	8	1	(17)
Deferred	6	(25)	(22)
Total Benefit	$ (193)	$ (244)	$ (238)

A reconciliation of the U.S. federal statutory income tax rate to the consolidated effective income tax rate is as follows:

	Year Ended December 31, 2017	2016	2015
U.S. federal statutory income tax rate	35.0 %	35.0 %	35.0 %
Nondeductible expenses[1]	(155.9)%	(19.0)%	(1.3)%
Effect of tax law changes	1,282.4 %	— %	0.9 %
Change in valuation allowance for deferred tax assets	(39.5)%	0.1 %	(1.0)%
State taxes, net of federal benefit	1.2 %	1.8 %	4.2 %
Audit and other tax return adjustments	— %	1.4 %	0.1 %
Tax-exempt income, credits and incentives	38.9 %	0.7 %	0.7 %
Foreign rate differential adjusted for U.S. taxation of foreign profits[2]	47.7 %	0.7 %	2.4 %
Other	(3.5)%	(0.8)%	0.5 %
Effective Income Tax Rate	1,206.3 %	19.9 %	41.5 %

(1) In 2017, nondeductible expenses primarily related to the nondeductible portion of the goodwill and officers life insurance.
(2) The "U.S. taxation of foreign profits" represents the U.S. tax, net of foreign tax credits, associated with actual and deemed repatriations of earnings from our non-U.S. subsidiaries, except for transition tax, which is reported on the line Effect of tax law changes.

On a consolidated basis, we paid/(received) a total of $29 million, $(123) million and $194 million in income taxes to federal, foreign and state jurisdictions during the three years ended December 31, 2017, 2016 and 2015, respectively.

Total income tax expense (benefit) was allocated as follows:

(in millions)	Year Ended December 31, 2017	2016	2015
Pre-tax income	$ (193)	$ (244)	$ (238)
Discontinued operations[1]	3	—	81
Common shareholders' equity:			
Changes in defined benefit plans	—	8	2
Stock option and incentive plans, net	—	—	(6)
Total Income Tax Benefit	$ (190)	$ (236)	$ (161)

(1) Refer to Note 3 – Assets/Liabilities Held for Sale for additional information regarding discontinued operations.

Table of Contents

Unrecognized Tax Benefits and Audit Resolutions

We recognize tax liabilities when, despite our belief that our tax return positions are supportable, we believe that certain positions may not be fully sustained upon review by tax authorities. Each period we assess uncertain tax positions for recognition, measurement and effective settlement. Benefits from uncertain tax positions are measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon settlement. Where we have determined that our tax return filing position does not satisfy the more-likely-than-not recognition threshold, we have recorded no tax benefits.

We are also subject to ongoing tax examinations in numerous jurisdictions due to the extensive geographical scope of our operations. Our ongoing assessments of the more-likely-than-not outcomes of the examinations and related tax positions require judgment and can increase or decrease our effective tax rate, as well as impact our operating results. The specific timing of when the resolution of each tax position will be reached is uncertain. As of December 31, 2017, we do not believe that there are any positions for which it is reasonably possible that the total amount of unrecognized tax benefits will significantly increase or decrease within the next 12 months.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

(in millions)	2017	2016	2015
Balance at January 1	$ 14	$ 24	$ 32
Additions related to current year	—	1	3
Additions related to prior years positions	—	—	—
Reductions related to prior years positions	—	(5)	(10)
Settlements with taxing authorities[1]	—	(5)	—
Currency	1	(1)	(1)
Balance at December 31	$ 15	$ 14	$ 24

(1) 2016 settlement results in $5 million cash paid.

Included in the balances at December 31, 2017, 2016 and 2015 are $0, $0 and $8 million, respectively, of tax positions that are highly certain of realization but for which there is uncertainty about the timing. Because of the impact of deferred tax accounting, other than for the possible incurrence of interest and penalties, the disallowance of these positions would not affect the annual effective tax rate. In addition, for other uncertain tax positions, we maintain offsetting benefits from other jurisdictions of $16 million, $16 million and $14 million, at December 31, 2017, 2016 and 2015, respectively.

We recognized interest and penalties accrued on unrecognized tax benefits, as well as interest received from favorable settlements within income tax expense. We had $6 million, $4 million and $14 million accrued for the payment of interest and penalties associated with unrecognized tax benefits at December 31, 2017, 2016 and 2015, respectively.

In the U.S., we are no longer subject to U.S. federal income tax examinations for years before 2005. With respect to our major foreign jurisdictions, the years generally remain open back to 2006.

Deferred Income Taxes

The Company is in the position of having tax basis in excess of book basis in its U.S. investment in foreign subsidiaries. Nonetheless, the Company is indefinitely reinvesting its foreign subsidiaries' undistributed earnings of $253 million. For years after 2017, the Tax Reform does allow for certain earnings to be repatriated free from US Federal taxes. However, the repatriation of earnings could give rise to additional tax liabilities.

Table of Contents

The tax effects of temporary differences that give rise to significant portions of the deferred taxes were as follows:

(in millions)	December 31, 2017	2016
Deferred Tax Assets		
Net operating losses	$ 41	$ 42
Operating reserves, accruals and deferrals	90	155
Deferred compensation	59	101
Pension	15	18
Other	45	44
Subtotal	250	360
Valuation allowance	(35)	(24)
Total	$ 215	$ 336
Deferred Tax Liabilities		
Unearned income	$ 134	$ 217
Intangibles and goodwill	413	680
Depreciation	10	15
Other	25	29
Total	$ 582	$ 941
Total Deferred Taxes, Net	$ (367)	$ (605)

The deferred tax assets for the respective periods were assessed for recoverability and, where applicable, a valuation allowance was recorded to reduce the total deferred tax asset to an amount that will, more-likely-than-not, be realized in the future. The net change in the total valuation allowance for the years ended December 31, 2017 and 2016 was an increase of $11 million and a decrease of $14 million, respectively. The valuation allowance relates primarily to certain net operating loss carryforwards, tax credit carryforwards and deductible temporary differences for which we have concluded it is more-likely-than-not that these items will not be realized in the ordinary course of operations.

Although realization is not assured, we have concluded that it is more-likely-than-not that the deferred tax assets, for which a valuation allowance was determined to be unnecessary, will be realized in the ordinary course of operations based on the available positive and negative evidence, including scheduling of deferred tax liabilities and projected income from operating activities. The amount of the net deferred tax assets considered realizable, however, could be reduced in the near term if actual future income or income tax rates are lower than estimated, or if there are differences in the timing or amount of future reversals of existing taxable or deductible temporary differences.

At December 31, 2017, we had tax credit carryforwards of $27 million available to offset future income taxes which will expire between 2018 and 2037 if not utilized. We also had net operating loss carryforwards for income tax purposes of $422 million that will expire between 2018 and 2037, if not utilized; and $43 million available to offset future taxable income indefinitely.

Table of Contents

Note 13 – Contingencies and Litigation

As more fully discussed below, we are involved in a variety of claims, lawsuits, investigations and proceedings concerning: securities law; governmental entity contracting, servicing and procurement law; intellectual property law; environmental law; employment law; the Employee Retirement Income Security Act (ERISA); and other laws and regulations. We determine whether an estimated loss from a contingency should be accrued by assessing whether a loss is deemed probable and can be reasonably estimated. We assess our potential liability by analyzing our litigation and regulatory matters using available information. We develop our views on estimated losses in consultation with outside counsel handling our defense in these matters, which involves an analysis of potential results, assuming a combination of litigation and settlement strategies. Should developments in any of these matters cause a change in our determination as to an unfavorable outcome and result in the need to recognize a material accrual, or should any of these matters result in a final adverse judgment or be settled for significant amounts, this could have a material adverse effect on our results of operations, cash flows and financial position in the period or periods in which such change in determination, judgment or settlement occurs. We believe that we have recorded adequate provisions for any such matters as of December 31, 2017. Litigation is inherently unpredictable, and it is not possible to predict the ultimate outcome of these matters and such outcome in any such matter could be in excess of any amounts accrued and could be material to our results of operations, cash flows or financial position in any reporting period.

Additionally, guarantees, indemnifications and claims arise during the ordinary course of business from relationships with suppliers, customers and nonconsolidated affiliates when we undertake an obligation to guarantee the performance of others if specified triggering events occur. Nonperformance under a contract could trigger an obligation of the Company. These potential claims include actions based upon alleged exposures to products, real estate, intellectual property such as patents, environmental matters and other indemnifications. The ultimate effect on future financial results is not subject to reasonable estimation because considerable uncertainty exists as to the final outcome of these claims. However, while the ultimate liabilities resulting from such claims may be significant to results of operations in the period recognized, management does not anticipate they will have a material adverse effect on the consolidated financial position or liquidity. As of December 31, 2017, we have accrued our estimate of liability incurred under our indemnification arrangements and guarantees.

Litigation Against the Company

State of Texas v. Xerox Corporation, Xerox State Healthcare, LLC, and ACS State Healthcare, LLC: On May 9, 2014, the State of Texas, via the Texas Office of Attorney General (the “State”), filed a lawsuit in the 53rd Judicial District Court of Travis County, Texas. The lawsuit alleges that Xerox Corporation, Xerox State Healthcare, LLC and ACS State Healthcare (collectively, the "Xerox Defendants") violated the Texas Medicaid Fraud Prevention Act in the administration of its contract with the Texas Department of Health and Human Services (“HHSC”). The State alleges that the Xerox Defendants made false representations of material facts regarding the processes, procedures, implementation and results regarding the prior authorization of orthodontic claims. The State seeks recovery of amounts paid for orthodontic treatment under the Texas Medicaid program for the period from approximately 2004 to 2012, three times the amount of the payments made as a result of the alleged unlawful acts, civil penalties, pre- and post-judgment interest and all costs and attorneys’ fees. The Xerox Defendants filed their Answer in June, 2014 denying all allegations. A trial date is scheduled for November, 2018. During the first quarter of 2018, the State notified the Xerox Defendants in the litigation discovery process that its claim is in excess of two billion dollars based primarily on the assertion of treble damages and civil penalties per illegal act for almost two hundred thousand purported illegal acts. The Xerox Defendants will forcefully contest this assertion and continue to vigorously defend themselves in this matter. We are not able to determine or predict the ultimate outcome of this proceeding or to estimate any reasonably possible loss or range of losses, if any, in excess of the thirty-eight million dollars we have already accrued. In the course of litigation, we periodically engage in discussions with the State's counsel for possible resolution of the matter. Should developments cause a change in our determination as to an unfavorable outcome, or result in a final adverse judgment or settlement for a significant amount, there could be a material adverse effect on our results of operations, cash flows and financial position in the period in which such change in determination, judgment or settlement occurs.

Table of Contents

Dennis Nasrawi v. Buck Consultants et al.: On October 8, 2009, plaintiffs filed a lawsuit in the Superior Court of California, Stanislaus County, and on November 24, 2009, the case was removed to the U.S. Court for the Eastern District of California, Fresno Division. Plaintiffs allege actuarial negligence against Buck Consultants, LLC ("Buck"), a wholly-owned subsidiary of Conduent, for the use of faulty actuarial assumptions in connection with the 2007 actuarial valuation for the Stanislaus County Employees Retirement Association ("StanCERA"). Plaintiffs allege that the employer contribution rate adopted by StanCERA based on Buck's valuation was insufficient to fund the benefits promised by the County. On July 13, 2012, the Court entered its ruling that the plaintiffs lacked standing to sue in a representative capacity on behalf of all plan participants. The Court also ruled that plaintiffs had adequately pleaded their claim that Buck allegedly aided and abetted StanCERA in breaching its fiduciary duty. Plaintiffs then filed their Fifth Amended Complaint and added StanCERA to the litigation. Buck and StanCERA filed demurrers to the amended complaint. On September 13, 2012, the Court sustained both demurrers with prejudice, completely dismissing the matter and barring plaintiffs from refiling their claims. Plaintiffs appealed, and ultimately the California Court of Appeals (Sixth District) reversed the trial court's ruling and remanded the case back to the trial court. Buck will continue to aggressively defend these lawsuits. We are not able to determine or predict the ultimate outcome of this proceeding or reasonably provide an estimate or range of estimate of the possible outcome or loss, if any.

Conduent Business Services, LLC v. Cognizant Business Services, LLC: On April 12, 2017, Conduent Business Services LLC ("Conduent") filed a lawsuit against Cognizant Business Services Corporation ("Cognizant") in the Supreme Court of New York County, New York. The lawsuit relates to the Amended and Restated Master Outsourcing Services Agreement effective as of October 24, 2012, and the service delivery contracts and work orders thereunder, between Conduent and Cognizant, as amended and supplemented (the "Contract"). The Contract contains certain minimum purchase obligations by Conduent through the date of expiration. The lawsuit alleges that Cognizant committed multiple breaches of the Contract, including Cognizant's failure to properly perform its obligations as subcontractor to Conduent under Conduent's contract with the New York Department of Health to provide a Medicaid Management Information Systems (the "NY MMIS Contract"). In the lawsuit, Conduent seeks damages in excess of one hundred fifty million dollars. During the first quarter of 2018, Conduent provided notice to Cognizant that it was terminating the Contract for cause and will be recording in that period certain charges associated with the termination. Cognizant has asserted counterclaims against Conduent in the lawsuit seeking damages in excess of twenty-two million dollars. Conduent has responded to Cognizant's counterclaims by denying the allegations. Conduent will continue to vigorously defend itself against the counterclaims but we are not able to determine or predict the ultimate outcome of this proceeding or reasonably provide an estimate or range of estimate of the possible outcome.

Other Matters:

On January 5, 2016, the Consumer Financial Protection Bureau (the "CFPB") notified Xerox Education Services, Inc. (XES) that, in accordance with the CFPB's discretionary Notice and Opportunity to Respond and Advise (NORA) process, the CFPB's Office of Enforcement is considering recommending that the CFPB take legal action against XES, alleging that XES violated the Consumer Financial Protection Act's prohibition of unfair practices. Should the CFPB commence an action, it may seek restitution, civil monetary penalties, injunctive relief or other corrective action. The purpose of a NORA letter is to provide a party being investigated an opportunity to present its position to the CFPB before an enforcement action is recommended or commenced. This notice stems from an inquiry that commenced in 2014 when XES received and responded to a Civil Investigative Demand containing a broad request for information. During this process, XES self-disclosed to the Department of Education and the CFPB certain adjustments of which it had become aware that had not been timely made relating to its servicing of a small percentage of third-party student loans under outsourcing arrangements for various financial institutions. The CFPB and the Department of Education, as well as certain states' attorney general offices and other regulatory agencies, began similar reviews. XES has cooperated and continues to fully cooperate with all regulatory agencies, and XES has submitted its NORA response. We cannot provide assurance that the CFPB or another party will not ultimately commence a legal action against XES in this matter nor are we able to predict the likely outcome of the investigations into this matter or reasonably provide an estimate or range of estimate of possible outcome or loss, if any. We could in future periods incur judgments or enter into settlements in connection with this matter and there could be a material adverse effect on our results of operations, cash flows and financial position in the period in which such change in judgment or settlement occurs.

Table of Contents

Guarantees, Indemnifications and Warranty Liabilities

Indemnifications Provided as Part of Contracts and Agreements

Acquisitions/Divestitures:

We have indemnified, subject to certain deductibles and limits, the purchasers of businesses or divested assets for the occurrence of specified events under certain of our divestiture agreements. In addition, we customarily agree to hold the other party harmless against losses arising from a breach of representations and covenants, including such matters as adequate title to assets sold, intellectual property rights, specified environmental matters and certain income taxes arising prior to the date of acquisition. Where appropriate, an obligation for such indemnifications is recorded as a liability at the time of the acquisition or divestiture. Since the obligated amounts of these types of indemnifications are often not explicitly stated or are contingent on the occurrence of future events, the overall maximum amount of the obligation under such indemnifications cannot be reasonably estimated. Other than obligations recorded as liabilities at the time of divestiture, we have not historically made significant payments for these indemnifications. Additionally, under certain of our acquisition agreements, we have provided for additional consideration to be paid to the sellers if established financial targets are achieved post-closing. We have recognized liabilities for these contingent obligations based on an estimate of the fair value of these contingencies at the time of acquisition. Contingent obligations related to indemnifications arising from our divestitures and contingent consideration provided for by our acquisitions are not expected to be material to our financial position, results of operations or cash flows.

Other Agreements:

We are also party to the following types of agreements pursuant to which we may be obligated to indemnify the other party with respect to certain matters:

- Guarantees on behalf of our subsidiaries with respect to real estate leases. These lease guarantees may remain in effect subsequent to the sale of the subsidiary.
- Agreements to indemnify various service providers, trustees and bank agents from any third-party claims related to their performance on our behalf, with the exception of claims that result from the third-party's own willful misconduct or gross negligence.
- Guarantees of our performance in certain services contracts to our customers and indirectly the performance of third parties with whom we have subcontracted for their services. This includes indemnifications to customers for losses that may be sustained as a result of our performance of services at a customer's location.

In each of these circumstances, our payment is conditioned on the other party making a claim pursuant to the procedures specified in the particular contract and such procedures also typically allow us to challenge the other party's claims. In the case of lease guarantees, we may contest the liabilities asserted under the lease. Further, our obligations under these agreements and guarantees may be limited in terms of time and/or amount, and in some instances, we may have recourse against third parties for certain payments we made.

Also in December 2017, a customer released our former parent company from a performance guarantee for a service contract resulting in a release of escrow funds of $15 million to the Company.

Intellectual Property Indemnifications

We do not own most of the software that we use to run our business. Instead, we license this software from a small number of primary vendors. We indemnify certain software providers against claims that may arise as a result of our use or our subsidiaries', customers' or resellers' use of their software in our services and solutions. These indemnities usually do not include limits on the claims, provided the claim is made pursuant to the procedures required in the services contract.

Table of Contents

Indemnification of Officers and Directors

Our corporate by-laws require that, except to the extent expressly prohibited by law, we must indemnify our officers and directors against judgments, fines, penalties and amounts paid in settlement and reasonable expenses, including attorneys' fees, incurred in connection with civil or criminal action or proceedings or any appeal, as it relates to their services to our Company and our subsidiaries. Although the by-laws provide no limit on the amount of indemnification, we may have recourse against our insurance carriers for certain payments made by us. However, certain indemnification payments (such as those related to "clawback" provisions in certain compensation arrangements) may not be covered under our directors' and officers' insurance coverage. We also indemnify certain fiduciaries of our employee benefit plans for liabilities incurred in their service as fiduciary whether or not they are officers of the Company. Finally, in connection with our acquisition of businesses, we may become contractually obligated to indemnify certain former and current directors, officers and employees of those businesses in accordance with pre-acquisition by-laws or indemnification agreements or applicable state law.

Other Contingencies

Certain contracts, primarily in our Public Sector segment, require us to provide a surety bond or a letter of credit as a guarantee of performance. As of December 31, 2017, we had $576 million for outstanding surety and bid bonds used to secure our performance of contractual obligations with our clients, and we had $256 million of outstanding letters of credit issued to secure our performance of contractual obligations to our clients as well as other corporate obligations.

In general, we would only be liable for the amount of these guarantees in the event of default in our performance of our obligations under each contract. We believe we have sufficient capacity in the surety markets and liquidity from our cash flow and our various credit arrangements (including our Credit Facility) to allow us to respond to future requests for proposals that require such credit support.

We have service arrangements where we service third-party student loans in the Federal Family Education Loan program (FFEL) on behalf of various financial institutions. We service these loans for investors under outsourcing arrangements and do not acquire any servicing rights that are transferable by us to a third-party. At December 31, 2017, we serviced a FFEL portfolio of loans with an outstanding principal balance of approximately $5.2 billion. Some servicing agreements contain provisions that, under certain circumstances, require us to purchase the loans from the investor if the loan guaranty has been permanently terminated as a result of a loan default caused by our servicing error. If defaults caused by us are cured during an initial period, any obligation we may have to purchase these loans expires. Loans that we purchase may be subsequently cured, the guaranty reinstated and the loans repackaged for sale to third parties. We evaluate our exposure under our purchase obligations on defaulted loans and establish a reserve for potential losses. The reserve is evaluated periodically and adjusted based upon management’s analysis of the historical performance of the defaulted loans. As of December 31, 2017, other current liabilities include reserves of approximately $1 million, which we believe to be adequate. In addition to potential purchase obligations arising from servicing errors, various laws and regulations applicable to student loan borrowers could give rise to fines, penalties and other liabilities associated with loan servicing errors.

Note 14 - Preferred Stock

Series A Preferred Stock

In connection with the December 31, 2016 spin-off from Xerox Corporation, we issued 120 thousand shares of Series A convertible perpetual preferred stock with an aggregate liquidation preference of $120 million and an initial fair value of $142 million. The convertible preferred stock pays quarterly cash dividends at a rate of 8% per year ($9.6 million per year). Each share of convertible preferred stock is convertible at any time, at the option of the holder, into 44.9438 shares of common stock for a total of 5,393 thousand shares (reflecting an initial conversion price of approximately $22.250 per share of common stock), subject to customary anti-dilution adjustments.

Table of Contents

If the closing price of our common stock exceeds 137% of the initial conversion price for 20 out of 30 trading days, we have the right to cause any or all of the convertible preferred stock to be converted into shares of common stock at the then applicable conversion rate. The convertible preferred stock is also convertible, at the option of the holder, upon a change in control, at the applicable conversion rate plus an additional number of shares determined by reference to the price paid for our common stock upon such change in control. In addition, upon the occurrence of certain fundamental change events, including a change in control or the delisting of Conduent's common stock, the holder of convertible preferred stock has the right to require us to redeem any or all of the convertible preferred stock in cash at a redemption price per share equal to the liquidation preference and any accrued and unpaid dividends to, but not including, the redemption date. As a result of the contingent redemption feature, the convertible preferred stock is classified as temporary equity and reflected separately from permanent equity in the Consolidated Balance Sheets.

Note 15 – Shareholders' Equity

Preferred Stock

As of December 31, 2017, we had one class of preferred stock outstanding. See Note 14 – Preferred Stock for further information. We are authorized to issue approximately 100 million shares of cumulative preferred stock at $0.01 par value per share.

Common Stock

We have 1 billion authorized shares of common stock at $0.01 par value per share. At December 31, 2017, 15 million shares were reserved for issuance under our incentive compensation plans and 5.4 million shares were reserved for conversion of the Series A convertible preferred stock.

Stock Compensation Plans

Certain of our employees participate in a long-term incentive plan. Our long-term incentive plan authorizes the issuance of restricted stock units / shares (RSU), performance stock units / share (PSU) and non-qualified stock options to employees. All awards for these plans prior to 2017, were made in Xerox stock and therefore converted into Conduent stock effective upon the Separation. Using a formula designed to preserve the value of the award immediately prior to the Separation, all of these awards will be settled and are reflected in Conduent's Consolidated Statements of Stockholders' Equity. Stock-based compensation expense includes expense based on the awards and terms previously granted to the employees.

Stock-based compensation expense was as follows:

	Year Ended December 31,		
(in millions)	2017	2016	2015
Stock-based compensation expense, pre-tax	$ 42	$ 23	$ 19
Income tax benefit recognized in earnings	17	9	7

Restricted Stock Units / Shares Compensation expense is based upon the grant date market price. The compensation expense is recorded over the vesting period, which is normally three years from the date of grant, based on management's estimate of the number of shares expected to vest.

Performance Stock Units / Shares: The Company granted PSUs that vest contingent upon its achievement of certain specified financial performance criteria over a three-year period. If the three-year actual results exceed the stated targets, then the plan participants have the potential to earn additional shares of common stock, which cannot exceed 100% of the original grant.

The fair value of PSUs is based upon the market price of Conduent's common stock on the date of the grant and then converted to Conduent's common stock upon the Separation. Compensation expense is recognized over the vesting period, which is normally three years from the date of grant, based on management's estimate of the number of shares expected to vest. If the stated targets are not met, any recognized compensation cost would be reversed.

Employee Stock Options: Stock options were issued by a former parent company and were converted to Conduent's common stock upon the Separation. These options generally expire within the next two years. Other than these options, Conduent has not issued any new stock options.

Table of Contents

Summary of Stock-based Compensation Activity

(shares in thousands)	2017 Shares	2017 Weighted Average Grant Date Fair Value	2016 Shares	2016 Weighted Average Grant Date Fair Value	2015 Shares	2015 Weighted Average Grant Date Fair Value
Restricted Stock Units / Shares						
Outstanding at January 1	1,961	$ 13.99	782	$ 11.70	3,422	$ 8.47
Granted	1,988	16.75	2,602	9.61	260	11.86
Vested	(215)	19.98	(119)	9.43	(2,768)	7.83
Canceled	(609)	15.88	(121)	10.55	(132)	9.52
Impact of spin-off[1]	—	n/a	(1,183)	n/a	—	n/a
Outstanding at December 31	3,125	16.29	1,961	13.99	782	11.70
Performance Stock Units / Shares						
Outstanding at January 1	4,926	$ 13.99	7,522	$ 11.57	5,771	$ 11.68
Granted	3,933	16.76	1,850	9.35	3,583	10.68
Vested	(1,696)	19.67	—	—	(610)	7.88
Canceled	(1,734)	17.46	(1,478)	11.96	(1,222)	11.36
Impact of spin-off[1]	—	n/a	(2,968)	n/a	—	n/a
Outstanding at December 31	5,429	16.55	4,926	13.99	7,522	11.57

(1) Stock-based compensation was converted from former parent stock into Conduent common stock at spin-off.

The Company issued 77 thousand Deferred Stock Units (DSU) to non-employee members of the Board of Directors. These DSUs are fully vested and will be issued when the directors leave the Board.

The Company has 348 thousand stock options outstanding as of December 31, 2017 at strike prices ranging from $10.15 to $11.38. These stock options are fully vested and exercisable.

The total unrecognized compensation cost related to non-vested stock-based awards at December 31, 2017 was as follows (in millions):

Awards	Unrecognized Compensation	Remaining Weighted-Average Vesting Period (Years)
Restricted Stock Units / Shares	$ 27	1.9
Performance Stock Units / Shares	30	1.6
Total	$ 57	

The aggregate intrinsic value of outstanding RSUs and PSs awards was as follows (in millions):

Awards	December 31, 2017
Restricted Stock Units / Shares	$ 50
Performance Stock Units / Shares	88

Information related to stock options outstanding and exercisable at December 31, 2017 was as follows:

(in millions)	Options	
	Outstanding	Exercisable
Aggregate intrinsic value	$ 6	$ 6
Weighted-average remaining contractual life (years)	1.3	1.3

Table of Contents

The total intrinsic value and actual tax benefit realized for vested and exercised stock-based awards were as follows:

(in millions)	December 31, 2017			December 31, 2016			December 31, 2015		
Awards	Total Intrinsic Value	Cash Received	Tax Benefit	Total Intrinsic Value	Cash Received	Tax Benefit	Total Intrinsic Value	Cash Received	Tax Benefit
Restricted Stock Units / Shares	$ 3	$ —	$ 1	$ 1	$ —	$ —	$ 30	$ —	$ 11
Performance Stock Units / Shares	25	—	10	—	—	—	7	—	2
Stock Options	3	6	1	3	9	1	14	19	5

Note 16 – Other Comprehensive Income (Loss)

Other Comprehensive Loss is comprised of the following:

	Year Ended December 31,					
	2017		2016		2015	
(in millions)	Pre-tax	Net of Tax	Pre-tax	Net of Tax	Pre-tax	Net of Tax
Translation Adjustments Gains (Losses)	$ 35	$ 35	$ (135)	$ (135)	$ (60)	$ (60)
Unrealized Gains (Losses):						
Changes in fair value of cash flow hedges gains (losses)	1	1	(2)	(1)	(4)	(2)
Changes in cash flow hedges reclassed to earnings[1]	2	1	2	1	5	3
Net Unrealized Gains (Losses)	3	2	—	—	1	1
Defined Benefit Plans Gains (Losses)						
Net actuarial/prior service gains (losses)	(5)	(4)	(31)	(23)	5	4
Actuarial loss amortization/settlement[2]	2	2	1	1	2	2
Other gains (losses)[3]	(4)	(3)	3	2	2	1
Changes in Defined Benefit Plans Gains (Losses)	(7)	(5)	(27)	(20)	9	7
Other Comprehensive Income (Loss)	$ 31	$ 32	$ (162)	$ (155)	$ (50)	$ (52)

(1) Reclassified to Cost of sales - refer to Note 9 – Financial Instruments for additional information regarding our cash flow hedges.
(2) Reclassified to Total Net Periodic Benefit Cost - refer to Note 11 – Employee Benefit Plans for additional information.
(3) Primarily represents currency impact on cumulative amount of benefit plan net actuarial losses and prior service credits in AOCL.

Accumulated Other Comprehensive Loss (AOCL)

AOCL is comprised of the following:

	December 31,		
(in millions)	2017	2016	2015
Cumulative translation adjustments[1]	$ (437)	$ (472)	$ (147)
Other unrealized losses, net	1	(1)	(1)
Benefit plans net actuarial losses and prior service credits	(58)	(53)	(33)
Total Accumulated Other Comprehensive Loss	$ (494)	$ (526)	$ (181)

(1) 2016 includes $190 million of AOCL transferred from former parent as part of the spin-off.

Table of Contents

Note 17 – Earnings per Share

We did not declare any common stock dividends in the periods presented.

The following table sets forth the computation of basic and diluted earnings per share of common stock:

	Year Ended December 31,		
(in millions, shares in thousands)	2017	2016	2015
Basic Earnings (Loss) per Share:			
Net income (loss) from continuing operations attributable to Conduent	$ 177	$ (983)	$ (336)
Accrued dividends on preferred stock	(10)	—	—
Adjusted Net Income (Loss) From Continuing Operations Available to Common Shareholders	167	(983)	(336)
Net income (loss) from discontinued operations attributable to Conduent	4	—	(78)
Adjusted Net Income (Loss) Available to Common Shareholders	$ 171	$ (983)	$ (414)
Weighted-average common shares outstanding	204,007	202,875	202,875
Basic Earnings (Loss) per Share:			
Continuing operations	$ 0.82	$ (4.85)	$ (1.65)
Discontinued operations	0.02	—	(0.39)
Basic Earnings (Loss) per Share	$ 0.84	$ (4.85)	$ (2.04)
Diluted Earnings (Loss) per Share:			
Net income (loss) from continuing operations attributable to Conduent	$ 177	$ (983)	$ (336)
Accrued dividends on preferred stock	(10)	—	—
Adjusted Net Income (Loss) From Continuing Operations Available to Common Shareholders	167	(983)	(336)
Net income (loss) from discontinued operations attributable to Conduent	4	—	(78)
Adjusted Net Income (Loss) Available to Common Shareholders	$ 171	$ (983)	$ (414)
Weighted-average common shares outstanding	204,007	202,875	202,875
Common shares issuable with respect to:			
Stock options	195	—	—
Restricted stock and performance units / shares	2,491	—	—
Convertible preferred stock	—	—	—
Adjusted Weighted Average Common Shares Outstanding	206,693	202,875	202,875
Diluted Earnings (Loss) per Share:			
Continuing operations	$ 0.81	$ (4.85)	$ (1.65)
Discontinued operations	0.02	—	(0.39)
Diluted Earnings (Loss) per Share	$ 0.83	$ (4.85)	$ (2.04)
The following securities were not included in the computation of diluted earnings per share as they were either contingently issuable shares or shares that if included would have been anti-dilutive (shares in thousands):			
Stock Options	—	857	—
Restricted stock and performance shares	2,568	5,719	—
Convertible preferred stock	5,393	5,393	—
Total Securities	7,961	11,969	—

Table of Contents

Note 18 – Related Party Transactions and Former Parent Company Investment

Allocation of Corporate Expenses

The Consolidated Statements of Income (Loss), Consolidated Statements of Comprehensive Income (Loss) and Consolidated Statements of Cash Flows for the years ended December 31, 2016 and 2015 include an allocation of general corporate expenses from Xerox, the Company's former parent. The financial information in these Consolidated Financial Statements does not necessarily include all the expenses that would have been incurred or held had we been a separate, standalone company and it is not practicable to estimate actual costs that would have been incurred had we been a separate, standalone company during the periods presented. Management considers these allocations to be a reasonable reflection of the utilization of services by, or the benefits provided. Allocations for management costs and corporate support services provided totaled $165 million and $170 million for the years ended December 31, 2016 and 2015, respectively. These amounts include costs for corporate functions including, but not limited to, senior management, legal, human resources, finance and accounting, treasury, information technology and other shared services. Where possible, these costs were allocated based on direct usage, with the remainder allocated on a basis of costs, headcount and/or other measures we have determined as reasonable.

	Year Ended December 31,	
(in millions)	2016	2015
Research and development	$ 25	$ 43
Selling, general and administrative	140	127
Total Allocated Corporate Expenses	$ 165	$ 170

Final Cash Allocation To Former Parent

In January 2017, in connection with the Separation, we paid Xerox $161 million for settlement of the management and support services received.

The components of Net transfers to former parent and the reconciliation to the corresponding amount presented on the Consolidated Statements of Cash Flows are as follows:

(in millions)	Year Ended December 31,	
	2016	2015
Cash pooling and general financing activities	$ (466)	$ (396)
Corporate cost allocations	165	170
Income taxes	(157)	168
Divestitures and acquisitions, net	54	(742)
Capitalization of related party notes payable	—	1,017
Total net transfers (to) from former parent	(404)	217
Stock-based compensation	(23)	(19)
Capitalization of related party notes payable	—	(1,017)
Net payments on notes payable with former parent company	(1,132)	(91)
Other, net	(161)	147
Total Net payments to former parent company per Consolidated Statements of Cash Flows	$ (1,720)	$ (763)

Related Party Notes Receivable/Payable

Certain operating units of the Company had various interest bearing notes under contractual agreements to and from Xerox Corporation and other related parties. The purpose of these notes was to provide funds for certain working capital or other capital and operating requirements of the business. Net interest expense on these notes with related party companies was recorded net in Related Party Interest in the Consolidated Statements of Income (Loss) and was $26 million and $61 million for the years ended December 31, 2016 and 2015, respectively. These notes had fixed interest rates that ranged from 1% to 8%. The balances were settled as part of the Separation transaction.

Table of Contents

Related Party Revenue and Purchases

We provide various services to Xerox Corporation, including those related to human resources, accounting and finance and customer care, which are reported as Related party revenue in the Consolidated Statements of Income (Loss). The costs related to these services are reported as Related party cost of services in the Consolidated Statements of Income (Loss).

We also leased equipment and received related services, supplies and parts, from Xerox and Xerox subsidiaries in the amount of $21 million and $24 million, for the years ended December 31, 2016 and 2015, respectively. The costs related to these services, supplies and parts are reported in Cost of services and Selling, administrative and general expenses in the Consolidated Statements of Income (Loss).

Note 19 – Subsequent Events

In the first quarter of 2018, the Company will be moving the Health Enterprise business from the Other segment into the Public Sector segment. In addition, the Company plans to move the divested businesses' historical results to Other segment from both the Commercial Industries and the Public Sector segments.

See Note 13 – Contingencies and Litigation as it relates to the termination of the Cognizant agreement.

Table of Contents

QUARTERLY RESULTS OF OPERATIONS (Unaudited)

(in millions, except per-share data)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Full Year
2017					
Revenues	$ 1,553	$ 1,496	$ 1,480	$ 1,493	$ 6,022
Costs and Expenses	1,575	1,507	1,467	1,489	6,038
(Loss) Income before Income Taxes	(22)	(11)	13	4	(16)
Income tax (benefit) expense	(12)	(7)	30	(204)	(193)
(Loss) Income from Continuing Operations	(10)	(4)	(17)	208	177
Income from discontinued operations, net of tax	4	—	—	—	4
Net (Loss) Income	$ (6)	$ (4)	$ (17)	$ 208	$ 181
Basic Earnings (Loss) per Share[1]:					
Continuing operations	$ (0.06)	$ (0.03)	$ (0.09)	$ 1.00	$ 0.82
Discontinued operations	0.02	—	—	—	0.02
Total Basic (Loss) Earnings per Share:	$ (0.04)	$ (0.03)	$ (0.09)	$ 1.00	$ 0.84
Diluted Earnings (Loss) per Share[1]:					
Continuing operations	$ (0.06)	$ (0.03)	$ (0.09)	$ 0.98	$ 0.81
Discontinued operations	0.02	—	—	—	0.02
Total Diluted (Loss) Earnings per Share	$ (0.04)	$ (0.03)	$ (0.09)	$ 0.98	$ 0.83
2016					
Revenues	$ 1,685	$ 1,613	$ 1,596	$ 1,514	$ 6,408
Costs and Expenses	1,739	1,647	1,594	2,655	7,635
(Loss) Income before Income Taxes	(54)	(34)	2	(1,141)	(1,227)
Income tax (benefit) expense	(31)	(24)	1	(190)	(244)
(Loss) Income from Continuing Operations	(23)	(10)	1	(951)	(983)
Income (loss) from discontinued operations, net of tax	—	—	—	—	—
Net (Loss) Income	$ (23)	$ (10)	$ 1	$ (951)	$ (983)
Basic Earnings (Loss) per Share[1]:					
Continuing operations	$ (0.12)	$ (0.05)	$ 0.01	$ (4.69)	$ (4.85)
Total Basic (Loss) Earnings per Share:	$ (0.12)	$ (0.05)	$ 0.01	$ (4.69)	$ (4.85)
Diluted Earnings (Loss) per Share[1]:					
Continuing operations	$ (0.12)	$ (0.05)	$ 0.01	$ (4.69)	$ (4.85)
Total Diluted (Loss) Earnings per Share	$ (0.12)	$ (0.05)	$ 0.01	$ (4.69)	$ (4.85)

(1) *The sum of quarterly earnings per share may differ from the full-year amounts due to rounding, or in the case of diluted earnings per share, because securities that are anti-dilutive in certain quarters may not be anti-dilutive on a full-year basis.*

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None

Table of Contents

ITEM 9A. CONTROLS AND PROCEDURES

Management's Responsibility for Financial Statements

Our management is responsible for the integrity and objectivity of all information presented in this annual report. The consolidated financial statements were prepared in conformity with accounting principles generally accepted in the United States of America and include amounts based on management's best estimates and judgments. Management believes the consolidated financial statements fairly reflect the form and substance of transactions and that the financial statements fairly represent the Company's financial position and results of operations.

The Audit Committee of the Board of Directors, which is composed solely of independent directors, meets regularly with the independent registered public accountants, PricewaterhouseCoopers LLP, the internal auditors and representatives of management to review accounting, financial reporting, internal control and audit matters, as well as the nature and extent of the audit effort. The Audit Committee is responsible for the engagement of the independent registered public accountants. The independent registered public accountants and internal auditors have access to the Audit Committee.

Disclosure Controls and Procedures

The Company’s management evaluated, with the participation of our principal executive officer and principal financial officer, or persons performing similar functions, the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, as of December 31, 2017, the end of the period covered by this report. Based on this evaluation, our principal executive officer and principal financial officer have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective to ensure that information we are required to disclose in the reports that we file or submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms relating to Conduent Incorporated, including our consolidated subsidiaries, and was accumulated and communicated to the Company’s management, including the principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Securities Exchange Act of 1934, as amended. Under the supervision and with the participation of our management, including our principal executive officer, principal financial and accounting officers, we have conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in "Internal Control - Integrated Framework" (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on the above evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2017.

The effectiveness of our internal control over financial reporting as of December 31, 2017 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears in Part II, Item 8 of this Form 10-K.

Changes in Internal Control over Financial Reporting

In connection with the evaluation required by paragraph (d) of Rule 13a-15 under the Exchange Act, there was no change identified in our internal control over financial reporting that occurred during the last fiscal quarter ended December 31, 2017 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None

Table of Contents

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information regarding directors is incorporated herein by reference to the section entitled “Proposal 1 - Election of Directors” in our definitive Proxy Statement (2018 Proxy Statement) to be filed pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended, for our 2018 Annual Meeting of Stockholders. The Proxy Statement will be filed within 120 days after the end of our fiscal year ended December 31, 2017.

The information regarding compliance with Section 16(a) of the Securities and Exchange Act of 1934 is incorporated herein by reference to the section entitled “Section 16(a) Beneficial Ownership Reporting Compliance” of our 2018 Proxy Statement.

The information regarding the Audit Committee, its members and the Audit Committee financial experts is incorporated by reference herein from the subsection entitled “Committee Functions, Membership and Meetings” in the section entitled “Proposal 1 - Election of Directors” in our 2018 Proxy Statement.

We have adopted a code of ethics applicable to our principal executive officer, principal financial officer and principal accounting officer. The Finance Code of Conduct can be found on our website at: http://www.conduent.com/investor and then clicking on Corporate Governance. Information concerning our Finance Code of Conduct can be found under "Corporate Governance" in our 2018 Proxy Statement and is incorporated here by reference.

Executive Officers of Conduent

The following is a list of the executive officers of Conduent, their current ages, their present positions and the year appointed to their present positions.

Each officer is elected to hold office until the meeting of the Board of Directors held on the day of the next annual meeting of shareholders, subject to the provisions of the By-Laws.

Name	Age	Present Position	Year Appointed to Present Position	Conduent Officer Since
Ashok Vemuri*	49	Chief Executive Officer	2017	2017
David Amoriell	61	Executive Vice President & President, Public Sector	2017	2017
Allan Cohen	48	Vice President & Chief Accounting Officer	2017	2017
Jeffrey Friedel	56	Executive Vice President & Chief People Officer	2017	2017
James Michael Peffer	56	Executive Vice President, General Counsel & Secretary	2017	2017
Brian J. Webb-Walsh	42	Executive Vice President & Chief Financial Officer	2017	2017

* Member of Conduent Board of Directors

Each of the officers named above has been an officer or an executive of Conduent or its subsidiaries for less than five years.

Mr. Vemuri served as Chief Executive Officer of Xerox Business Services, LLC and an Executive Vice President of Xerox Corporation since July 2016. Mr. Vemuri previously was President, Chief Executive Officer and a member of the Board of Directors of IGATE Corporation. Prior to IGATE, Mr. Vemuri spent 14 years at Infosys Limited, a multinational consulting and IT services company, in a variety of leadership and business development roles.

Mr. Amoriell served as the chief operating officer of the Public Sector Business Group for Xerox Services. He was named to that position in June 2014 and appointed a corporate vice president of Xerox in February 2012. Prior to that, Mr. Amoriell was the chief operating officer for the Government & Transportation Sector of Xerox Services.

Prior to joining Conduent, Mr. Cohen served as Senior Vice President and Controller of NBC Universal since 2011. Mr Cohen also previously served as Vice President, Assistant Controller at Time Warner, Professional Accounting Fellow in the Division of Corporate Finance at the Securities and Exchange Commission and Senior Manager at PriceWaterhouseCoopers.

Table of Contents

Prior to joining Conduent, Mr. Friedel served as Vice President and Head of the Office of Integrity and Compliance at Infosys Limited from January 2016 to September 2016, a global leader in technology services and consulting, where he oversaw SEC compliance, internal investigations, code of conduct, whistleblower, and anti-bribery and export regulations. Mr. Friedel has also previously served as Senior Vice President and General Counsel at IGATE Corporation from June 2014 to December 2015, an IT services and business process outsourcing company which was acquired by CapGemini. Prior to June 2014, Mr. Friedel held a variety of leadership roles at Infosys Limited.

Mr. Peffer served as Vice President, General Counsel and Secretary for Xerox Corporation from August 2016 to December 2016. Prior to this, Mr. Peffer served as Associate General Counsel of Xerox Corporation and Executive Vice President of Xerox Business Services, LLC. since 2010. Prior to 2010, Mr. Peffer was Senior Vice President and Deputy General Counsel of ACS from May 2009.

Mr. Webb-Walsh served as the Chief Financial Officer of Xerox Services since January 2016. Prior to this, Mr. Webb-Walsh was Senior Vice President of Finance for the Government Healthcare Group and the Platform Development and Systems Integration Group of Xerox Services. Mr. Webb-Walsh joined Xerox Corporation in 1997 and has held a variety of leadership positions.

ITEM 11. EXECUTIVE COMPENSATION

The information included under the following captions under “Proposal 1 - Election of Directors” in our 2018 Proxy Statement is incorporated herein by reference: “Compensation Discussion and Analysis”, “Summary Compensation Table”, “Grants of Plan-Based Awards in 2017”, “Outstanding Equity Awards at 2017 Fiscal Year-End”, “Option Exercises and Stock Vested in 2017”, “Pension Benefits for the 2017 Fiscal Year”, “Nonqualified Deferred Compensation for the 2017 Fiscal Year”, “Potential Payments upon Termination or Change in Control”, “Summary of Director Annual Compensation, "Compensation Committee Interlocks and Insider Participation” and “Compensation Committee”. The information included under the heading “Compensation Committee Report” in our 2018 Proxy Statement is incorporated herein by reference; however, this information shall not be deemed to be “soliciting material” or to be “filed” with the Commission or subject to Regulation 14A or 14C, or to the liabilities of Section 18 of the Exchange Act of 1934, as amended.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information regarding security ownership of certain beneficial owners and management and securities authorized for issuance under equity compensation plans is incorporated herein by reference to the subsections entitled “Ownership of Company Securities,” and “Equity Compensation Plan Information” under “Proposal 1 - Election of Directors” in our 2018 Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS, RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Information regarding certain relationships and related transactions is incorporated herein by reference to the subsection entitled “Certain Relationships and Related Person Transactions” under “Proposal 1 - Election of Directors” in our 2018 Proxy Statement. The information regarding director independence is incorporated herein by reference to the subsections entitled “Corporate Governance” and “Director Independence” in the section entitled “Proposal 1 - Election of Directors” in our 2018 Proxy Statement.

ITEM 14. PRINCIPAL AUDITOR FEES AND SERVICES

The information regarding principal auditor fees and services is incorporated herein by reference to the section entitled “Proposal 2 - Ratification of Election of Independent Registered Public Accounting Firm” in our 2018 Proxy Statement.

Table of Contents

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) (1) Index to Financial Statements and Financial Statement Schedule, incorporated by reference or filed as part of this report:

- Report of Independent Registered Public Accounting Firm including Report on Financial Statement Schedule;
- Consolidated Statements of Income (Loss) for each of the years in the three-year period ended December 31, 2017;
- Consolidated Statements of Comprehensive Income (Loss) for each of the years in the three-year period ended December 31, 2017;
- Consolidated Balance Sheets as of December 31, 2017 and 2016;
- Consolidated Statements of Cash Flows for each of the years in the three-year period ended December 31, 2017;
- Consolidated Statements of Shareholders' Equity for each of the years in the three-year period ended December 31, 2017;
- Notes to the Consolidated Financial Statements;
- Schedule II - Valuation and Qualifying Accounts for the three years ended December 31, 2017; and
- All other schedules are omitted as they are not applicable, or the information required is included in the financial statements or notes thereto.

(2) Supplementary Data:

- Quarterly Results of Operations (unaudited).
- SCHEDULE II

VALUATION AND QUALIFYING ACCOUNTS

For the three years ended December 31, 2017

(in millions)	Balance at beginning of period	Additions charged to expense[1]	Amounts (credited) charged to other income statement accounts [2]	Deductions and other, net of recoveries [3][4]	Balance at end of period
Allowance for Losses:					
2017 Accounts Receivable	$ 7	$ (1)	$ —	$ (4)	$ 2
2016 Accounts Receivable	6	4	—	(3)	7
2015 Accounts Receivable	6	4	—	(4)	6
Tax Valuation Allowance:					
2017 Tax Valuation	24	11	—	—	35
2016 Tax Valuation	38	—	—	(14)	24
2015 Tax Valuation	35	—	5	(2)	38

(1) Account Receivables: additions charged to expense represent bad debt provisions relate to estimated losses due to credit and similar collectibility issues.
(2) Account Receivables: Other charges (credits) relate to adjustments to reserves necessary to reflect events of non-payment such as customer accommodations and contract terminations.
(3) Account Receivables: Deductions and other, net of recoveries primarily relates to receivable write-offs, but also includes the impact of foreign currency translation adjustments and recoveries of previously written off receivables.
(4) Tax Valuation: Reductions to tax valuation allowance are primarily related to certain net operating loss carryforwards, tax credit carryforwards and deductible temporary differences for which we have concluded it is more-likely-than-not that these items will not be realized in the ordinary course of operations.

Table of Contents

(3) The exhibits listed below are filed or incorporated by reference are part of this Form 10-K.

Management contracts or compensatory plans or arrangements listed that are applicable to the executive officers named in the Summary Compensation Table which appears in Registrant's 2018 Proxy Statement or to our directors are preceded by an asterisk (*).

Exhibit No.	
2.1	Separation and Distribution Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
3.1	Restated Certificate of Incorporation of Registrant as of December 23, 2016.
	Incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K dated December 23, 2016. (See SEC File Number 001-37817).
3.2	Amended and Restated By-Laws of Registrant as amended through December 31, 2016.
	Incorporated by reference to Exhibit 3.2 to Registrant's Current Report on Form 8-K dated December 23, 2016. (See SEC File Number 001-37817).
4.1	Indenture, dated as of December 7, 2016, among Conduent Finance, Inc., Xerox Business Services, LLC, the Guarantors named therein and U.S. Bank National Association, as trustee.
	Incorporated by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K dated December 9, 2016. (See SEC File Number 001-37817).
10.1(a)	Credit Agreement, dated as of December 7, 2016, among Conduent Incorporated, Xerox Business Services, LLC, Affiliated Computer Services International B.V., Conduent Finance, Inc., the Lenders from time to time party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent.
	Incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated December 9, 2016. (See SEC File Number 001-37817).
10.1(b)	Amendment No. 1 to Credit Agreement, dated as of April 1, 2017, among Conduent Incorporated, Conduent Business Services, LLC (f/k/a Xerox Business Services, LLC), Affiliated Computer Services International B.V., Conduent Finance, Inc., the Lenders from time to time party thereto and JPMorgan Chase Bank, N.A. as Administrative Agent.
	Incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated April 11, 2017. (See SEC File Number 001-37817).
10.1(c)	Amendment No. 2 to Credit Agreement, dated as of October 10, 2017, among Conduent Incorporated, Conduent Business Services, LLC (f/k/a Xerox Business Services, LLC), Affiliated Computer Services International B.V., Conduent Finance, Inc., the Lenders from time to time party thereto and JPMorgan Chase Bank, N.A. as Administrative Agent.
	Incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated October 10, 2017. (See SEC File Number 001-37817).
10.1(d)	First Incremental Agreement, dated as of January 3, 2017, among JPMorgan Chase Bank, N.A., as Administrative Agent and Xerox Business Services, LLC.
	Incorporated by reference to Exhibit 10.1(b) to the Registrant's Annual Report on Form 10-K dated March 10, 2017, (See SEC File Number 001-37817).
10.3(a)	Transition Services Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
10.3(b)	Tax Matters Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
10.3(c)	Employee Matters Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 10.3 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
10.3(d)	Intellectual Property Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.

Table of Contents

	Incorporated by reference to Exhibit 10.4 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
10.3(e)	Trademark License Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 10.5 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
10.4(a)	Joinder Agreement to Agreement, dated December 31, 2016, among Conduent Incorporated, Xerox Corporation, Icahn Partners Master Fund LP, Icahn Partners LP, Icahn Onshore LP, Icahn Offshore LP, Icahn Capital LP, IPH GP LLC, Icahn Enterprises Holdings L.P., Icahn Enterprises G.P. Inc., Beckton Corp., High River Limited Partnership, Hopper Investments LLC, Barberry Corp., Jonathan Christodoro and Carl C. Icahn.
	Incorporated by reference to Exhibit 10.6 to Registrant's Current Report on Form 8-K dated January 3, 2017. (See SEC File Number 001-37817).
10.4(b)	Agreement, dated January 28, 2016, among Xerox Corporation, Icahn Partners Master Fund LP, Icahn Partners LP, Icahn Onshore LP, Icahn Offshore LP, Icahn Capital LP, IPH GP LLC, Icahn Enterprises Holdings L.P., Icahn Enterprises G.P. Inc., Beckton Corp., High River Limited Partnership, Hopper Investments LLC, Barberry Corp., Jonathan Christodoro and Carl C. Icahn.
	Incorporated by reference to Exhibit 10.6 to Registrant's Amendment No. 1 to Form 10 dated August 15, 2016. (See SEC File Number 001-37817).
10.5	Exchange Agreement dated October 27, 2016 by and among Darwin A. Deason, Conduent Incorporated and Xerox Corporation.
	Incorporated by reference to Exhibit 10.14 to Registrant's Amendment No. 5 to Form 10 dated October 28, 2016. (See SEC File Number 001-37817).
The management contracts or compensatory plans or arrangements listed below that are applicable to the executive officers named in the Summary Compensation Table which will appear in the Registrant's 2018 Proxy Statement or to our directors are preceded by an asterisk (*).	
*10.6(a)(i)	Registrant's Performance Incentive Plan dated as of December 15, 2016 ("PIP").
	Incorporated by reference to Exhibit 4.3 to Registrant's Registration Statement No. 333-215361 dated December 29, 2016. (See SEC File Number 001-37817).
*10.6(a)(ii)	Form of Restricted Stock Award Agreement under the PIP.
	Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated March 29, 2017. (See SEC File Number 001-37817).
*10.6(a)(iii)	Form of Performance Share Award Agreement (ELTIP) under the PIP.
	Incorporated by reference to Exhibit 10.2 to the Registrant's Current Report on Form 8-K dated March 29, 2017. (See SEC File Number 001-37817).
*10.6(a)(iv)	Form of Performance Share Award Agreement (SIG) under the PIP.
*10.6(a)(v)	Forms of Restricted Stock Unit Award Agreement 2017 under the PIP.
*10.6(a)(vi)	Forms of Performance Stock Unit Award Agreement 2017 under the PIP
	Incorporated by reference to Exhibit 10.3 to the Registrant's Current Report on Form 8-K dated March 29, 2017. (See SEC File Number 001-37817).
*10.6(b)(i)	Registrant's Equity Compensation Plan for Non-Employee Directors dated as of December 15, 2016 ("ECPNED").
	Incorporated by reference to Exhibit 4.4 to Registrant's Registration Statement No. 333-215361 dated December 29, 2016. (See SEC File Number 001-37817).
*10.6(b)(ii)	Form of Agreement under the ECPNED.
	Incorporated by reference to Exhibit 10.6(b)(ii) to the Registrant's Annual Report on From 10-K dated March 10, 2017. (See SEC File Number 001-37817).
*10.6.(c)	Registrant's Executive Change in Control Severance Plan dated as of April 25, 2017.
	Incorporated by reference to Exhibit 10.1 to the Registrant's Current Report on Form 8-K dated August 28, 2017. (See SEC File Number 001-37817).

Table of Contents

*10.6(d)	Letter Agreement dated June 10, 2016 between Xerox Corporation and Ashok Vemuri regarding compensation arrangements.
	Incorporated by reference to Exhibit 99.2 to Xerox Corporation's Current Report on Form 8-K dated June 14, 2016. (See SEC File Number 001-04471).
*10.6(e)	Letter Agreement dated July 22, 2016 between Xerox Corporation and J. Michael Peffer regarding compensation arrangements.
	Incorporated by reference to Exhibit 10.12 to Registrant's Amendment No. 4 to Form 10 dated October 21, 2016. (See SEC File Number 001-37817).
*10.6(f)	Letter Agreement dated September 6, 2016 between Xerox Corporation and Brian Webb-Walsh regarding compensation arrangements.
	Incorporated by reference to Exhibit 10.13 to Registrant's Amendment No. 4 to Form 10 dated October 21, 2016. (See SEC File Number 001-37817).
*10.6(g)	Letter Agreement dated September 28, 2017 between Conduent Incorporated and Allan Cohen regarding compensation arrangements.
21.1	List of subsidiaries of Registrant.
23	Consent of PricewaterhouseCoopers LLP.
31(a)	Certification of CEO pursuant to Rule 13a-14(a) or Rule 15d-14(a).
31(b)	Certification of CFO pursuant to Rule 13a-14(a) or Rule 15d-14(a).
32	Certification of CEO and CFO pursuant to 18 U.S.C. §1350 as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase.
101.DEF	XBRL Taxonomy Extension Definition Linkbase.
101.INS	XBRL Instance Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase.
101.SCH	XBRL Taxonomy Extension Schema Linkbase.

Table of Contents

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CONDUENT INCORPORATED

/s/ ASHOK VEMURI

Ashok Vemuri
Chief Executive Officer
March 1, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

March 1, 2018

Signature	Title
Principal Executive Officer:	
/s/ ASHOK VEMURI	Chief Executive Officer and Director
Ashok Vemuri	
Principal Financial Officer:	
/s/ BRIAN WEBB-WALSH	Executive Vice President and Chief Financial Officer
Brian Webb-Walsh	
Principal Accounting Officer:	
/s/ ALLAN COHEN	Vice President and Chief Accounting Officer
Allan Cohen	
/s/ PAUL S. GALANT	Director
Paul S. Galant	
/s/ JOIE A. GREGOR	Director
Joie A. Gregor	
/s/ VINCENT J. INTRIERI	Director
Vincent J. Intrieri	
/s/ COURTNEY MATHER	Director
Courtney Mather	
/s/ MICHAEL NEVIN	Director
Michael Nevin	
/s/ MICHAEL A. NUTTER	Director
Michael A. Nutter	
/s/ WILLIAM G. PARRETT	Director and Chairman of the Board
William G. Parrett	
/s/ VIRGINIA M. WILSON	Director
Virginia M. Wilson	

EXHIBIT 10.6(a)(v)

PERFORMANCE STOCK UNIT AWARD AGREEMENT PURSUANT TO CONDUENT INCORPORATED PERFORMANCE INCENTIVE PLAN

AGREEMENT, by Conduent Incorporated, a New York corporation (the "Company"), dated as of the date that appears in the award summary that provides the number of Performance Stock Units and vesting provisions of the award (the "Award Summary"), in favor of the individual whose name appears on the Award Summary (the "Employee"), who is an employee of the Company, one of the Company's subsidiaries or one of its affiliates (the Company, or such subsidiary or affiliate, the "Employer").

In accordance with the provisions of the Conduent Performance Incentive Plan (the "Plan"), the Compensation Committee of the Board of Directors of the Company (the "Committee") or the Chief Executive Officer of the Company (the "CEO") has authorized the execution and delivery of this Agreement.

Terms used herein that are defined in the Plan or in this Agreement shall have the meanings assigned to them in the Plan or this Agreement, respectively.

The Award Summary contains the details of the awards covered by this Agreement and is incorporated herein in its entirety.

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration, the Company agrees as follows:

AWARDS

1. Award of Performance Stock Units. Subject to all terms and conditions of the Plan and this Agreement, the Company has awarded to the Employee on the date indicated on the Award Summary Performance Stock Units (individually, a "PS") as shown on the Award Summary, representing the target number of shares of Common Stock covered by this Agreement (the "Target PSs"). Notwithstanding anything herein to the contrary, only active employees and those employees on Short Term Disability Leave, Social Service Leave, Family Medical Leave or Paid Uniform Services Leave (pursuant to the Company's Human Resources Policies or similar policies of the Company's subsidiaries or affiliates) on the effective date of the award as shown on the Award Summary shall be eligible to receive the award.

TERMS OF THE PERFORMANCE STOCK UNITS

2. Entitlement to Shares. As soon as practicable on or after the Vesting Date (as defined below) (or such earlier date provided in Section 9) in connection with the PSs, the Company shall deliver to the Employee, in such manner as the Company shall determine, a number of shares of Common Stock equal to the number of vested PSs (subject to reduction for withholding of the Employee's taxes in relation to the award as described in Section 11) within 60 days following the Vesting Date (or, if earlier, a distribution event set forth in Section 9 that satisfies the requirements of Section 409A(a)(2) of the Code).

No fractional shares shall be issued pursuant to this Agreement. Instead, the Company shall apply the equivalent of any fractional share amount to amounts withheld for taxes. Notwithstanding the foregoing, the Company shall be entitled to delay delivery of such shares of Common Stock (or cash payment in lieu thereof, as applicable) until it shall have received from the Employee a duly executed Form W-8 or W-9, as applicable, and any other information or completed forms the Company may reasonably require.

3. Vesting. Except as otherwise determined by the Committee in its sole discretion (subject to Section 23 of the Plan) or as otherwise provided in this Section 3 or Section 9, the vesting of the PSs covered hereby shall be subject to (i) the achievement of the performance goals as set forth in the Award Summary (the "Performance Goals") as determined by the Committee and (ii) the Employee's continued employment with the Company or a subsidiary or affiliate through the vesting date indicated on the Award Summary (the "Vesting Date"). In the event the achievement of the Performance Goals is "below threshold" level, then all of the PSs will be forfeited; in the event that achievement of the Performance Goals is between "threshold" and "target" level, then no less than 50% and no more than 100% of the Target PSs will vest; and in the event achievement of the Performance Goals is between "target" and "maximum" level, then no less than 100% and no more than 200% of the Target PSs will vest, in each case as set forth in the Award Summary and subject to the Employee's continued employment through the Vesting Date as described in clause (ii) of the immediately preceding sentence.

Upon the occurrence of an event constituting a Change in Control prior to the Vesting Date, notwithstanding anything to the contrary in Section 22(b) of the Plan, the Performance Goals shall be deemed achieved at target level, but thereafter the PSs, and any dividend equivalents with respect thereto, shall remain outstanding and thereafter the vesting of such PSs, and any dividend equivalents with respect thereto, shall be subject to the Employee's continued employment with the Company or a subsidiary or an affiliate through the Vesting Date, at which time such PSs shall be paid in cash in accordance with Section 22(f) of the Plan at the earliest time set forth in Section 22(c) of the Plan that will not trigger tax or penalty under Section 409A of the Code, as determined by the Committee; provided that such PSs, and any dividend equivalents with respect thereto, shall vest and shall be paid to the extent provided in Section 9 in the event of the Employee's termination of employment following such Change in Control and prior to the Vesting Date or in the event such Change in Control occurs following a termination of the Employee's employment. Upon payment pursuant to the terms of the Plan, such awards shall be cancelled.

4. Dividend Equivalents. The Employee shall become entitled to receive from the Company on the Vesting Date (or such earlier date provided in Section 9) a cash payment equaling the same amount(s) that the holder of record of a number of shares of Common Stock equal to the number of vested PSs (if any) would have been entitled to receive as dividends on such Common Stock during the period commencing on the effective date hereof and ending on the Vesting Date (or such earlier date provided in Section 9) as provided under Section 3. Payments under this Section shall be net of any required withholding taxes.

OTHER TERMS

5. Ownership Guidelines. Guidelines pertaining to the Employee's required ownership of Common Stock (the "Stock Ownership Guidelines") shall be determined by the Committee or its authorized delegate, as applicable, in its sole discretion from time to time as communicated to the Employee in writing.

6. Holding Requirements. In the event of non-compliance with the Stock Ownership Guidelines under Section 5 hereof, following a five-year noncompliance period as described in the Stock Ownership Guidelines, the Employee must retain fifty percent (50%) of the net shares of Common Stock acquired in connection with the vesting of PSs (net of withholding tax and any applicable fees) until the threshold set forth in the Stock Ownership Guidelines is satisfied. Such shares shall be held in the Employee's Morgan Stanley account or in another account acceptable to the Company. In addition, shares used to maintain the Employee's ownership level pursuant to this award should be held with Morgan Stanley or in another account acceptable to the Company.

7. Voting Rights/ Dividends. Except as otherwise provided herein, the Employee shall have no rights as a shareholder with respect to the PSs until the date of issuance of a stock certificate to him for such PSs and no adjustment shall be made for dividends or other rights for which the record date is prior to the date the PSs become vested.

8. Non-Assignability. Unless otherwise provided by the Committee in its discretion, PSs may not be sold, assigned, alienated, transferred, pledged, attached or otherwise encumbered except as provided in Section 11 of the Plan. Any purported sale, assignment, alienation, transfer, pledge, attachment or other encumbrance of a PS in violation of the provisions of this Section 8 and Section 11 of the Plan shall be void.

9. Effect of Termination of Employment or Death.

(a) Effect on PSs. In the event the Employee

(i) voluntarily ceases to be an employee of the Employer for any reason other than (A) retirement or (B) following a Change in Control, Termination For Good Reason, the PSs that have not vested in accordance with Section 3 shall be canceled and forfeited on the date of such voluntary termination of employment;

(ii) involuntarily ceases to be an employee of the Employer prior to a Change in Control for any reason other than due to death, Disability or termination for Cause, the number of PSs covered by this Agreement, and any dividend equivalents with respect thereto, shall be prorated based on a fraction, the numerator of which is the number of full months elapsed during the three-year performance period prior to such termination of employment and the denominator of which is 36, and any remaining PSs shall be forfeited. The vesting of such prorated number of PSs, and any dividend equivalents with respect thereto, shall remain subject to the achievement of the Performance Goals in accordance with Section 3 and shall be settled within 60 days following the Vesting Date in accordance with Section 2. Such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity, in a form acceptable to the Company) and such release becoming effective and irrevocable within such 60-day period; provided

that, to the extent such 60-day period straddles two calendar years, then such prorated number of PSs, and any dividend equivalents with respect thereto, shall settled in the second calendar year;

(iii) involuntarily ceases to be an employee of the Employer following a Change in Control for any reason other than due to death, Disability or termination for Cause, then the PSs (the Performance Goals for which shall have been deemed achieved at target level, pursuant to Section 3), and any dividend equivalents with respect thereto, shall immediately vest (without proration based on the portion of the three-year performance period elapsed prior to such termination) and shall be paid in cash in accordance with Section 22(f) of the Plan within 60 days following the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee. Such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity, in a form acceptable to the Company) and such release becoming effective and irrevocable within such 60-day period; provided that, to the extent such 60-day period straddles two calendar years, then such PSs, and any dividend equivalents with respect thereto, shall be paid in cash in the second calendar year;

(iv) involuntarily ceases to be an employee of the Employer by reason of death or Disability, (1) the vesting of the PSs shall remain subject to the achievement of the Performance Goals in accordance with Section 3, if such termination of employment occurs prior to a Change in Control and shall be settled within 60 days following the Vesting Date in accordance with Section 2, and (2) if such termination of employment occurs following a Change in Control, then the PSs (the Performance Goals for which shall have been deemed achieved at target level, pursuant to Section 3), and any dividend equivalents with respect thereto, shall immediately vest and shall be paid in cash in accordance with Section 22(f) of the Plan within 60 days following the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee, in either case without proration based on the portion of the three-year performance period elapsed prior to such termination;

(v) voluntarily ceases to be an employee of the Employer by reason of retirement (for purposes of this Agreement only, "retirement" for U.S. employees shall mean termination of employment at or above age 55 with 10 years of service or age 60 with 5 years of service), the PSs, and any dividend equivalents with respect thereto, shall be prorated based on a fraction, the numerator of which is the number of full months elapsed during the three-year performance period prior to such termination of employment and the denominator of which is 36, and any remaining PSs shall be forfeited. If such termination occurs prior to a Change in Control, the vesting of such prorated number of PSs, and any dividend equivalents with respect thereto, shall remain subject to the achievement of the Performance Goals in accordance with Section 3 and shall be settled within 60 days following the Vesting Date in accordance with Section 2. If such termination occurs following a Change in Control, the proration described in this Section 9(a)(v) shall be applied to the PSs (the Performance Goals for which shall have been deemed achieved at target level, pursuant to Section 3), immediately following which such prorated number of PSs, and any dividend equivalents with respect thereto, shall vest and shall be paid in cash in accordance with Section 22(f) of the Plan within 60 days following the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee. In each case, whether such termination of employment occurs prior to or following a Change of Control, such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity, in a form acceptable to the Company) and such release becoming effective and irrevocable within such 60-day period; provided that, to the extent such 60-day period straddles two calendar years, then such prorated number of PSs, and any dividend equivalents with respect thereto, shall be settled or paid in cash, as applicable, in the second calendar year;

(vi) involuntarily ceases to be an employee of the Employer due to termination for Cause, the PSs shall, subject to any Plan provisions to the contrary, be cancelled and forfeited on the date of such termination of employment; and

(vii) voluntarily ceases to be an employee due to a Termination for Good Reason following a Change in Control, the PSs (the Performance Goals for which shall have been deemed achieved at target level, pursuant to Section 3), and any dividend equivalents with respect thereto, shall immediately vest and shall be paid in cash in accordance with Section 22(f) of the Plan within 60 days following the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee, without proration based on the portion of the three-year performance period elapsed prior to such termination. Such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity, in a form acceptable to the Company) and such release becoming effective and irrevocable within such 60-day period; provided that, to the extent such 60-

day period straddles two calendar years, then such PSs, and any dividend equivalents with respect thereto, shall be paid in cash in the second calendar year;

(b) Cause. "Cause" means (i) a violation of any of the rules, policies, procedures or guidelines of the Employer, including but not limited to the Company's Business Ethics Policy and the Proprietary Information and Conflict of Interest Agreement (ii) any conduct which qualifies for "immediate discharge" under the Employer's Human Resource Policies as in effect from time to time (iii) rendering services to a firm which engages, or engaging directly or indirectly, in any business that is competitive with the Employer, or represents a conflict of interest with the interests of the Employer; (iv) conviction of, or entering a guilty plea with respect to, a crime whether or not connected with the Employer; or (v) any other conduct determined to be injurious, detrimental or prejudicial to any interest of the Employer.

(c) "Termination For Good Reason" has the meaning set forth in Section 22(a)(vi) of the Plan.

(d) "Disability" shall include cessation of active employment due to commencement of long-term disability under the Employer's long-term disability plan or under a disability policy of any subsidiary or Affiliate, as applicable; provided that a Disability shall not be deemed to have occurred for such purposes unless the circumstances would also result in a "disability" within the meaning of Section 409A of the Code.

10. General Restrictions. If at any time the Committee or its authorized delegate, as applicable, shall determine, in its discretion, that the listing, registration or qualification of any shares of Common Stock subject to this Agreement upon any securities exchange or under any state or Federal law, or the consent or approval of any government regulatory body, is necessary or desirable as a condition of, or in connection with, the awarding of the PSs or the issue or purchase of shares of Common Stock hereunder, the certificates for shares of Common Stock may not be issued in respect of PSs in whole or in part unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Committee or its authorized delegate, as applicable, and any delay caused thereby shall in no way affect the date of termination of the PSs.

11. Responsibility for Taxes. The Employee acknowledges that the ultimate responsibility for the Employee's Federal, state and municipal individual income taxes, the Employee's portion of social security and other payroll taxes, and any other taxes related to the Employee's participation in the Plan and legally applicable to the Employee, is and remains his or her responsibility and may exceed the amount actually withheld by the Company or the Employer. In the event that there is withholding tax liability in connection with the vesting of the PSs, the Employee may satisfy, in whole or in part, any withholding tax liability: (a) by cash payment of an amount equal to such withholding liability; or (b) by having the Company withhold from the number of PSs in which the Employee would be entitled to vest a number of shares of Common Stock having a fair value equal to such withholding tax liability in accordance with the Company's share withholding procedures.

12. Nature of Award. In accepting the award, the Employee acknowledges that:

(a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time in a manner consistent with Section 13 of the Plan regarding Plan amendment and termination and, in addition, the PSs are subject to modification and adjustment under Section 6 of the Plan.

(b) the award of the PSs is voluntary and occasional and does not create any contractual or other right to receive future grants of PSs, or benefits in lieu of PSs, even if PSs have been granted repeatedly in the past;

(c) all decisions with respect to future PS awards, if any, will be at the sole discretion of the Committee or its authorized delegate, as applicable;

(d) The Employee's participation in the Plan shall not create a right to further employment with the Employer and shall not interfere with the ability of the Employer to terminate Employee's employment relationship at any time; further, the PS award and Employee's participation in the Plan will not be interpreted to form an employment contract or relationship with the Employer;

(e) The Employee is voluntarily participating in the Plan;

(f) the PSs and the shares of Common Stock subject to the PSs are an extraordinary item that does not constitute compensation of any kind for services of any kind rendered to the Employer, and which is outside the scope of the Employee's employment contract, if any;

(g) the PSs and the shares of Common Stock subject to the PSs are not intended to replace any pension rights or compensation;

(h) the PSs and the shares of Common Stock subject to the PSs are not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end of service payments, bonuses, long-service awards, pension or retirement or welfare benefits or similar payments and in no event should be considered as compensation for, or relating in any way to, past services for the Employer;

(i) the future value of the underlying shares of Common Stock is unknown and cannot be predicted with certainty;

(j) in consideration of the award of the PSs, no claim or entitlement to compensation or damages shall arise from forfeiture of the PSs, including, but not limited to, forfeiture resulting from termination of the Employee's employment with the Employer (for any reason whatsoever and whether or not in breach of local labor laws) and the Employee irrevocably releases the Company and the Employer from any such claim that may arise; if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, the Employee shall be deemed irrevocably to have waived the Employee's entitlement to pursue such claim; and

(k) subject to the provisions in the Plan regarding Change in Control, PSs and the benefits under the Plan, if any, will not automatically transfer to another company in the case of a merger, take-over or transfer of liability.

13. No Advice Regarding Award. Neither the Company nor the Employer is providing any tax, legal or financial advice, nor is the Company or Employer making any recommendations regarding the Employee's participation in the Plan, or his or her acquisition or sale of the underlying shares of Common Stock. The Employee is hereby advised to consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

14. Amendment of This Agreement. With the consent of the Employee, the Committee or its authorized delegate, as applicable, may amend this Agreement in a manner not inconsistent with the Plan.

15. Subsidiary. As used herein the term "subsidiary" shall mean any present or future corporation which would be a "subsidiary corporation" of the Company as the term is defined in Section 425 of the Internal Revenue Code (the "Code") of 1986 on the date of award.

16. Affiliate. As used herein the term "affiliate" shall mean any entity in which the Company has a significant equity interest, as determined by the Committee.

17. Recoupments.

(a) If an employee or former employee of the Employer is reasonably deemed by the Committee or its authorized delegate, as applicable, to have engaged in detrimental activity against the Employer, any awards granted to such employee or former employee shall be cancelled and be of no further force or effect and any payment or delivery of an award from six months prior to such detrimental activity may be rescinded. In the event of any such rescission, the Employee shall pay to the Company the amount of any gain realized or payment received as a result of the rescinded exercise, payment or delivery, in such manner and on such terms and conditions as may be required by the Committee or its authorized delegate, as applicable. Detrimental activity may include:

(i) violating terms of a non-compete agreement with the Employer, if any;

(ii) disclosing confidential or proprietary business information of the Employer to any person or entity including but not limited to a competitor, vendor or customer without appropriate authorization from the Employer;

(iii) violating any rules, policies, procedures or guidelines of the Employer;

(iv) directly or indirectly soliciting any employee of the Employer to terminate employment with the Employer;

(v) directly or indirectly soliciting or accepting business from any customer or potential customer or encouraging any customer, potential customer or supplier of the Employer, to reduce the level of business it does with the Employer; or

EXHIBIT 10.6(a)(v)

(vi) engaging in any other conduct or act that is determined to be injurious, detrimental or prejudicial to any interest of the Employer.

(b) If an accounting restatement by the Company is required in order to correct any material noncompliance with financial reporting requirements under relevant securities laws, the Company will have the authority to recover from executive officers or former executive officers, whether or not still employed by the Employer, any excess incentive-based compensation (in excess of what would have been paid under the accounting restatement), including entitlement to shares, provided under this Agreement to executive officers of the Employer, that was based on such erroneous data and paid during the three-year period preceding the date on which the Company is required to prepare the accounting restatement. Notwithstanding anything herein to the contrary, the Company may implement any policy or take any action with respect to the recovery of excess incentive-based compensation, including entitlement to shares of Common Stock that the Company determines to be necessary or advisable in order to comply with the requirements of the Dodd-Frank Wall Street Financial Reform and Consumer Protection Act.

18. Cancellation and Rescission of Award. Without limiting the foregoing Section regarding non-engagement in detrimental activity against the Employer, the Company may cancel any award provided hereunder if the Employee is not in compliance with all of the following conditions:

(a) The Employee shall not render services for any organization or engage directly or indirectly in any business which would cause the Employee to breach any of the post-employment prohibitions contained in any agreement between the Employer and the Employee.

(b) The Employee shall not, without prior written authorization from the Employer, disclose to anyone outside the Employer, or use in other than the Employer's business, any confidential information or material, as specified in any agreement between the Employer and the Employee which contains post-employment prohibitions, relating to the business of the Employer acquired by the Employee either during or after employment with the Employer.

Notwithstanding the above, this Agreement does not in any manner restrict the Employee from reporting possible violations of federal, state or local laws or regulations to any governmental agency or entity, and shall not, and not be interpreted to, impair the participant from exercising any legally protected whistleblower rights (including under Rule 21F under the Exchange Act). Similarly, the Employer does not in any manner restrict the Employee from participating in any proceeding or investigation by a federal, state or local government agency or entity responsible for enforcing such laws. The Employee is not required to notify the Employer that he or she has made such report or disclosure, or of his or her participation in an agency investigation or proceeding.

(c) The Employee, pursuant to any agreement between the Employer and the Employee which contains post-employment prohibitions, shall disclose promptly and assign to the Employer all right, title and interest in any invention or idea, patentable or not, made or conceived by the Employee during employment with the Employer, relating in any manner to the actual or anticipated business, research or development work of the Employer, and shall do anything reasonably necessary to enable the Employer to secure a patent where appropriate in the United States and in foreign countries.

(d) Failure to comply with the provision of subparagraphs (a), (b) or (c) of this Section 18 prior to, or during the six months after, any payment or delivery shall cause such payment or delivery to be rescinded. The Company shall notify the Employee in writing of any such rescission within two years after such payment or delivery. Within ten days after receiving such a notice from the Company, the Employee shall pay to the Company the amount of any payment received as a result of the rescinded payment or delivery pursuant to an award. Such payment to the Company by the Employee shall be made either in cash or by returning to the Company the number of shares of Common Stock that the Employee received in connection with the rescinded payment or delivery.

19. Notices. Notices hereunder shall be in writing and if to the Company shall be mailed to the Company at 100 Campus Dr. Suite 200 Florham Park, NJ 07932 USA, addressed to the attention of Stock Plan Administrator, and if to the Employee shall be delivered personally or mailed to the Employee at his address as the same appears on the records of the Company.

20. Language. If the Employee has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

EXHIBIT 10.6(a)(v)

21. Electronic Delivery and Acceptance. The Company will deliver any documents related to current or future participation in the Plan by electronic means. The Employee hereby consents to receive such documents by electronic delivery, and agrees to participate in the Plan and be bound by the terms and conditions of this Agreement, through an on-line or electronic system established and maintained by the Company or a third party designated by the Company. Electronic acceptance by the Employee is required and the award will be cancelled for any employee who fails to comply with the Company's acceptance requirement within six months of the effective date of the award.

22. Interpretation of This Agreement. The Committee or its authorized delegate, as applicable, shall have the authority to interpret the Plan and this Agreement and to take whatever administrative actions, including correction of administrative errors in the awards subject to this Agreement and in this Agreement, as the Committee or its authorized delegate, as applicable, in its sole good faith judgment shall determine to be advisable. All decisions, interpretations and administrative actions made by the Committee or its authorized delegate, as applicable, hereunder or under the Plan shall be binding and conclusive on the Company and the Employee. In the event there is inconsistency between the provisions of this Agreement and of the Plan, the provisions of the Plan shall govern.

23. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties hereto and the successors and assigns of the Company and to the extent provided in Section 11 of the Plan to the personal representatives, legatees and heirs of the Employee.

24. Governing Law and Venue. The validity, construction and effect of the Agreement and any actions taken under or relating to this Agreement shall be determined in accordance with the laws of the state of New York and applicable Federal law.

This grant is made and/or administered in the United States. For purposes of litigating any dispute that arises under this grant or the Agreement the parties hereby submit to and consent to the jurisdiction of the state of New York, agree that such litigation shall be conducted in the state or federal courts located in New York.

25. Section 409A. It is intended that the provisions of this Agreement comply with, or are exempt from, Section 409A, and all provisions of this Agreement shall be construed and interpreted in a manner consistent with the requirements for avoiding taxes or penalties under Section 409A.

Neither the Employee nor any of the Employee's creditors or beneficiaries shall have the right to subject any deferred compensation (within the meaning of Section 409A) payable under this Agreement to any anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, attachment or garnishment. Except as permitted under Section 409A, any deferred compensation (within the meaning of Section 409A) payable to the Employee or for the Employee's benefit under this Agreement may not be reduced by, or offset against, any amount owing by the Employee to the Company or any of its Affiliates.

If, at the time of the Employee's separation from service (within the meaning of Section 409A), (a) the Employee shall be a specified employee (within the meaning of Section 409A and using the identification methodology selected by the Company from time to time) and (b) the Company shall make a good faith determination that an amount payable hereunder constitutes deferred compensation (within the meaning of Section 409A) the payment of which is required to be delayed pursuant to the six-month delay rule set forth in Section 409A in order to avoid taxes or penalties under Section 409A, then the Company shall not pay such amount on the otherwise scheduled payment date but shall instead pay it, without interest, on the first business day after such six-month period.

Notwithstanding any provision of this Agreement to the contrary, in light of the uncertainty with respect to the proper application of Section 409A, the Company reserves the right to make amendments to this Agreement as the Company deems necessary or desirable to avoid the imposition of taxes or penalties under Section 409A. In any case, the Employee shall be solely responsible and liable for the satisfaction of all taxes and penalties that may be imposed on the Employee or for the Employee's account in connection with this Agreement (including any taxes and penalties under Section 409A), and neither the Company nor any of its Affiliates shall have any obligation to indemnify or otherwise hold the Employee harmless from any or all of such taxes or penalties.

26. Separability. In case any provision in the Agreement, or in any other instrument referred to herein, shall become invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions in the Agreement, or in any other instrument referred to herein, shall not in any way be affected or impaired thereby.

27. Integration of Terms. Except as otherwise provided in this Agreement, this Agreement contains the entire agreement between the parties relating to the subject matter hereof and supersedes any and all oral statements and prior writings with respect thereto.

EXHIBIT 10.6(a)(v)

28. Appendix for Non-U.S. Countries. Notwithstanding any provisions in this Agreement, the PS award shall be subject to any special terms and conditions set forth in any appendix to this Agreement for the Employee's country (the "Appendix"). Moreover, if the Employee relocates to one of the countries included in the Appendix, the special terms and conditions for such country will apply to the Employee, to the extent the Company determines that the application of such terms and conditions is necessary or advisable in order to comply with local law or facilitate the administration of the Plan. The Appendix constitutes part of this Agreement.

29. Imposition of Other Requirements. The Committee or its authorized delegate, as applicable, reserves the right to impose other requirements on the Employee's participation in the Plan, on the PSs and on any shares of Common Stock acquired under the Plan, to the extent the Committee or its authorized delegate, as applicable, determines it is necessary or advisable in order to comply with local law or facilitate the administration of the Plan, and to require the Employee to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

IN WITNESS WHEREOF, the Company has executed this Agreement as of the day and year set forth on the Award Summary.

CONDUENT INCORPORATED

B

Signature

EXHIBIT 10.6(a)(vi)

RESTRICTED STOCK UNIT AWARD AGREEMENT PURSUANT TO CONDUENT INCORPORATED PERFORMANCE INCENTIVE PLAN

AGREEMENT, by Conduent Incorporated, a New York corporation (the "Company"), dated as of the date that appears in the award summary that provides the number of Restricted Stock Units and vesting provisions of the award (the "Award Summary"), in favor of the individual whose name appears on the Award Summary (the "Employee"), who is an employee of the Company, one of the Company's subsidiaries or one of its affiliates (the Company, or such subsidiary or affiliate, the "Employer").

In accordance with the provisions of the Conduent Performance Incentive Plan (the "Plan"), the Compensation Committee of the Board of Directors of the Company (the "Committee") or the Chief Executive Officer of the Company (the "CEO") has authorized the execution and delivery of this Agreement.

Terms used herein that are defined in the Plan or in this Agreement shall have the meanings assigned to them in the Plan or this Agreement, respectively.

The Award Summary contains the details of the awards covered by this Agreement and is incorporated herein in its entirety.

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration the Company agrees as follows:

AWARDS

1 . Award of Restricted Stock Units. Subject to all terms and conditions of the Plan and this Agreement, the Company has awarded to the Employee on the date indicated on the Award Summary the number of Restricted Stock Units (individually, a "RSU") as shown on the Award Summary. Notwithstanding anything herein to the contrary, only active employees and those employees on Short Term Disability Leave, Social Service Leave, Family Medical Leave or Paid Uniform Services Leave (pursuant to the Company's Human Resources Policies or similar policies of the Company's subsidiaries or affiliates) on the effective date of the award as shown on the Award Summary shall be eligible to receive the award.

TERMS OF THE RESTRICTED STOCK UNITS

2 . Entitlement to Shares. As soon as practicable on or after the vesting dates indicated on the Award Summary (each, a "Vesting Date") (or such earlier date provided in Section 9), the Company shall deliver to the Employee, in such manner as the Company shall determine, a number of shares of Common Stock equal to the number of vested RSUs (subject to reduction for withholding of the Employee's taxes in relation to the award as described in Section 11) within 60 days following each applicable Vesting Date (or, if earlier, a distribution event set forth in Section 9 that satisfies the requirements of Section 409A(a)(2) of the Code).

No fractional shares shall be issued as a result of such tax withholding. Instead, the Company shall apply the equivalent of any fractional share amount to amounts withheld for taxes. Notwithstanding the foregoing, the Company shall be entitled to delay delivery of such shares of Common Stock (or cash payment in lieu thereof, as applicable) until it shall have received from the Employee a duly executed Form W-8 or W-9, as applicable, and any other information or completed forms the Company may reasonably require.

3. Vesting. Except as otherwise determined by the Committee in its sole discretion (subject to Section 23 of the Plan) or as otherwise provided in this Section 3 or Section 9, the vesting of RSUs covered hereby shall be subject to the Employee's continued employment with the Company or a subsidiary or affiliate through the applicable Vesting Date. The Employee shall be eligible to vest on each Vesting Date in the applicable percentage of the shares of Common Stock covered by this Agreement set forth in the Award Summary.

Upon the occurrence of an event constituting a Change in Control, notwithstanding anything to the contrary in Section 22(b) of the Plan, the RSUs outstanding on the date of such Change in Control, and any dividend equivalents with respect thereto, shall remain outstanding and thereafter the vesting of such RSUs, and any dividend equivalents with respect thereto, shall be subject to Employee's continued employment with the Company or a subsidiary or an affiliate through each applicable Vesting Date as provided in this Section 3, at which time such RSUs shall vest and shall be paid in cash in accordance with Section 22(f) of the Plan at the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee; provided that the RSUs, and any dividend equivalents with respect thereto, shall vest and shall be paid to the extent provided

EXHIBIT 10.6(a)(vi)

in Section 9 in the event of the Employee's termination of employment following such Change in Control and prior to a Vesting Date. Upon payment pursuant to the terms of the Plan, such awards shall be cancelled.

4. Dividend Equivalents. The Employee shall become entitled to receive from the Company on each applicable Vesting Date (or such earlier date provided in Section 9) a cash payment equaling the same amount(s) that the holder of record of a number of shares of Common Stock equal to the number of vested RSUs (if any) would have been entitled to receive as dividends on such Common Stock during the period commencing on the effective date hereof and ending on each applicable Vesting Date (or such earlier date provided in Section 9) as provided under Section 3. Payments under this Section shall be net of any required withholding taxes.

OTHER TERMS

5. Ownership Guidelines. Guidelines pertaining to the Employee's required ownership of Common Stock (the "Stock Ownership Guidelines") shall be determined by the Committee or its authorized delegate, as applicable, in its sole discretion from time to time as communicated to the Employee in writing.

6. Holding Requirements. In the event of non-compliance with the Stock Ownership Guidelines under Section 5 hereof, following a five-year noncompliance period as described in the Stock Ownership Guidelines, the Employee must retain fifty percent (50%) of the net shares of Common Stock acquired in connection with the vesting of RSUs (net of withholding tax and any applicable fees) until the threshold set forth in the Stock Ownership Guidelines is satisfied. Such shares shall be held in the Employee's Morgan Stanley account or in another account acceptable to the Company. In addition, shares used to maintain the Employee's ownership level pursuant to this award should be held with Morgan Stanley or in another account acceptable to the Company.

7. Voting Rights/Dividends. Except as otherwise provided herein, the Employee shall have no rights as a shareholder with respect to the RSUs until the date of issuance of a stock certificate to him for such RSUs and no adjustment shall be made for dividends or other rights for which the record date is prior to the date the RSUs become vested.

8. Non-Assignability. Unless otherwise provided by the Committee in its discretion, RSUs may not be sold, assigned, alienated, transferred, pledged, attached or otherwise encumbered except as provided in Section 11 of the Plan. Any purported sale, assignment, alienation, transfer, pledge, attachment or other encumbrance of a RSU in violation of the provisions of this Section 8 and Section 11 of the Plan shall be void.

9. Effect of Termination of Employment or Death.

(a) Effect on RSUs. In the event the Employee

(i) voluntarily ceases to be an employee of the Employer for any reason other than (A) retirement or (B) following a Change in Control, Termination For Good Reason, the RSUs that have not vested in accordance with Section 3 shall be canceled and forfeited on the date of such voluntary termination of employment;

(ii) involuntarily ceases to be an employee of the Employer prior to a Change in Control for any reason other than due to death, Disability or termination for Cause, the number of RSUs scheduled to vest on the Vesting Date immediately following such termination, and any dividend equivalents with respect thereto, shall be prorated based on a fraction, the numerator of which is the number of full months elapsed since the most recent Vesting Date immediately preceding such date of termination (or since the date the award was granted, in the case of a termination of employment prior to the first Vesting Date) and the denominator of which is 12, and any remaining RSUs shall be forfeited. Such prorated number of RSUs, and any dividend equivalents with respect thereto, shall immediately vest and shall be settled within 60 days following such termination in accordance with Section 2; provided that such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity in a form acceptable to the Company) and such release becoming effective and irrevocable within such 60-day period; provided further that, to the extent such 60-day period straddles two calendar years, then such prorated number of RSUs, and any dividend equivalents with respect thereto, shall be settled in the second calendar year;

(iii) involuntarily ceases to be an employee of the Employer following a Change in Control for any reason other than due to death, Disability or termination for Cause, then the RSUs covered by this Agreement, and any dividend equivalents with respect thereto, shall immediately vest (without proration based on the portion of the vesting period elapsed prior to such termination) and shall be paid in cash in accordance with Section 22(f) of the Plan within 60 days following the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under

EXHIBIT 10.6(a)(vi)

Section 409A of the Code, as determined by the Committee. Such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity, in a form acceptable to the Company) and such release becoming effective and irrevocable within such 60-day period; provided that, to the extent such 60-day period straddles two calendar years, then the RSUs covered by this Agreement, and any dividend equivalents with respect thereto, shall be paid in cash in the second calendar year;

(iv) involuntarily ceases to be an employee of the Employer by reason of death or Disability, (1) the RSUs covered by this Agreement, and any dividend equivalents with respect thereto, shall immediately vest if such termination of employment occurs prior to a Change in Control and shall be settled within 60 days of such termination in accordance with Section 2, and (2) if such termination of employment occurs following a Change in Control, then the number of RSUs covered by this Agreement, and any dividend equivalents with respect thereto, shall immediately vest and shall be paid in cash in accordance with Section 22(f) of the Plan within 60 days following the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee, in either case without proration based on the portion of the vesting period elapsed prior to such termination;

(v) voluntarily ceases to be an employee of the Employer by reason of retirement (for purposes of this Agreement only, "retirement" for U.S. employees shall mean termination of employment at or above age 55 with 10 years of service or age 60 with 5 years of service with the Employer), the number of RSUs scheduled to vest on the Vesting Date immediately following such termination, and any dividend equivalents with respect thereto, shall be prorated based on a fraction, the numerator of which is the number of full months elapsed since the most recent Vesting Date immediately preceding such date of termination (or since the date the award was granted in the case of a termination of employment prior to the first Vesting Date) and the denominator of which is 12, and any remaining RSUs shall be forfeited. If such termination of employment occurs prior to a Change in Control, then such prorated number of RSUs, and any dividend equivalents with respect thereto, shall immediately vest and shall be settled within 60 days following such termination in accordance with Section 2. If such termination of employment occurs following a Change in Control, such prorated number of RSUs, and any dividend equivalents with respect thereto, shall immediately vest and shall be paid in cash in accordance with Section 22(f) of the Plan within 60 days of the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee. In each case, whether such termination of employment occurs prior to or following a Change of Control, such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity, in a form acceptable to the Company) and such release becoming effective and irrevocable within such 60-day period; provided that, to the extent the 60-day period straddles two calendar years, then such prorated number of RSUs, and any dividend equivalents with respect thereto, shall be settled or paid in cash, as applicable, in the second calendar year;

(vi) involuntarily ceases to be an employee of the Employer due to termination for Cause, the RSUs shall, subject to any Plan provisions to the contrary, be cancelled and forfeited on the date of such termination of employment; and

(vii) voluntarily ceases to be an employee due to a Termination for Good Reason following a Change in Control, the number of RSUs covered by this Agreement, and any dividend equivalents with respect thereto, shall immediately vest (without proration based on the portion of the vesting period elapsed since the most recent Vesting Date (or since the date the award was granted, in the case of a termination of employment prior to the first Vesting Date) prior to such termination) and shall be paid in cash in accordance with Section 22(f) of the Plan within 60 days following the earliest time set forth in Section 22(c) of the Plan that will not trigger a tax or penalty under Section 409A of the Code, as determined by the Committee. Such vesting shall be contingent, at the discretion of the Company, upon the Employee executing a general release (which may include an agreement with respect to engagement in detrimental activity, in a form acceptable to the Company) and such release becoming effective and irrevocable within such 60-day period; provided that, to the extent such 60-day period straddles two calendar years, then the RSUs covered by this Agreement, and any dividend equivalents with respect thereto, shall settled or paid in cash, as applicable, in the second calendar year;

(b) Cause. "Cause" means (i) a violation of any of the rules, policies, procedures or guidelines of the Employer, including but not limited to the Company's Business Ethics Policy and the Proprietary Information and Conflict of Interest Agreement (ii) any conduct which qualifies for "immediate discharge" under the Employer's Human Resource Policies as in effect from time to time (iii) rendering services to a firm which engages, or engaging directly or indirectly, in any business that is competitive with the Employer, or represents a conflict of interest with the interests

of the Employer; (iv) conviction of, or entering a guilty plea with respect to, a crime whether or not connected with the Employer; or (v) any other conduct determined to be injurious, detrimental or prejudicial to any interest of the Employer.

(c) "Termination For Good Reason" has the meaning set forth in Section 22(a)(vi) of the Plan.

(d) "Disability" shall include cessation of active employment due to commencement of long-term disability under the Employer's long-term disability plan or under a disability policy of any subsidiary or Affiliate, as applicable; provided that a Disability shall not be deemed to have occurred for such purposes unless the circumstances would also result in a "disability" within the meaning of Section 409A of the Code.

10. General Restrictions. If at any time the Committee or its authorized delegate, as applicable, shall determine, in its discretion, that the listing, registration or qualification of any shares of Common Stock subject to this Agreement upon any securities exchange or under any state or Federal law, or the consent or approval of any government regulatory body, is necessary or desirable as a condition of, or in connection with, the awarding of the RSUs or the issue or purchase of shares of Common Stock hereunder, the certificates for shares of Common Stock may not be issued in respect of RSUs in whole or in part unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Committee or its authorized delegate, as applicable, and any delay caused thereby shall in no way affect the date of termination of the RSUs.

11. Responsibility for Taxes. The Employee acknowledges that the ultimate responsibility for the Employee's Federal, state and municipal individual income taxes, the Employee's portion of social security and other payroll taxes, and any other taxes related to the Employee's participation in the Plan and legally applicable to the Employee, is and remains his or her responsibility and may exceed the amount actually withheld by the Company or the Employer. In the event that there is withholding tax liability in connection with the vesting of RSUs, the Employee may satisfy, in whole or in part, any withholding tax liability: (a) by cash payment of an amount equal to such withholding liability; or (b) by having the Company withhold from the number of RSUs in which the Employee would be entitled to vest a number of shares of Common Stock having a fair value equal to such withholding tax liability in accordance with the Company's share withholding procedures.

12. Nature of Award. In accepting the award, the Employee acknowledges that:

(a) the Plan is established voluntarily by the Company, it is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time in a manner consistent with Section 13 of the Plan regarding Plan amendment and termination and, in addition, the RSUs are subject to modification and adjustment under Section 6 of the Plan.

(b) the award of the RSUs is voluntary and occasional and does not create any contractual or other right to receive future grants of RSUs, or benefits in lieu of RSUs, even if RSUs have been granted repeatedly in the past;

(c) all decisions with respect to future RSU awards, if any, will be at the sole discretion of the Committee or its authorized delegate, as applicable;

(d) The Employee's participation in the Plan shall not create a right to further employment with the Employer and shall not interfere with the ability of the Employer to terminate Employee's employment relationship at any time; further, the RSU award and Employee's participation in the Plan will not be interpreted to form an employment contract or relationship with the Employer;

(e) The Employee is voluntarily participating in the Plan;

(f) the RSUs and the shares of Common Stock subject to the RSUs are an extraordinary item that does not constitute compensation of any kind for services of any kind rendered to the Employer, and which is outside the scope of the Employee's employment contract, if any;

(g) the RSUs and the shares of Common Stock subject to the RSUs are not intended to replace any pension rights or compensation;

(h) the RSUs and the shares of Common Stock subject to the RSUs are not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end of service payments, bonuses, long-service awards, pension or retirement

or welfare benefits or similar payments and in no event should be considered as compensation for, or relating in any way to, past services for the Employer;

(i) the future value of the underlying shares of Common Stock is unknown and cannot be predicted with certainty;

(j) in consideration of the award of the RSUs, no claim or entitlement to compensation or damages shall arise from forfeiture of the RSUs, including, but not limited to, forfeiture resulting from termination of the Employee's employment with the Employer (for any reason whatsoever and whether or not in breach of local labor laws) and the Employee irrevocably releases the Company and the Employer from any such claim that may arise; if, notwithstanding the foregoing, any such claim is found by a court of competent jurisdiction to have arisen, the Employee shall be deemed irrevocably to have waived the Employee's entitlement to pursue such claim; and

(k) subject to the provisions in the Plan regarding Change in Control, RSUs and the benefits under the Plan, if any, will not automatically transfer to another company in the case of a merger, take-over or transfer of liability.

13. No Advice Regarding Award. Neither the Company nor the Employer is providing any tax, legal or financial advice, nor is the Company or Employer making any recommendations regarding the Employee's participation in the Plan, or his or her acquisition or sale of the underlying shares of Common Stock. The Employee is hereby advised to consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

14. Amendment of This Agreement. With the consent of the Em-ployee, the Committee or its authorized delegate, as applicable, may amend this Agreement in a manner not inconsistent with the Plan.

15. Subsidiary. As used herein the term "subsidiary" shall mean any present or future corporation which would be a "subsidiary corporation" of the Company as the term is defined in Section 425 of the Internal Revenue Code (the "Code") of 1986 on the date of award.

16. Affiliate. As used herein the term "affiliate" shall mean any entity in which the Company has a significant equity interest, as determined by the Committee.

17. Recoupments.

(a) If an employee or former employee of the Employer is reasonably deemed by the Committee or its authorized delegate, as applicable, to have engaged in detrimental activity against the Employer, any awards granted to such employee or former employee shall be cancelled and be of no further force or effect and any payment or delivery of an award from six months prior to such detrimental activity may be rescinded. In the event of any such rescission, the Employee shall pay to the Company the amount of any gain realized or payment received as a result of the rescinded exercise, payment or delivery, in such manner and on such terms and conditions as may be required by the Committee or its authorized delegate, as applicable. Detrimental activity may include:

(i) violating terms of a non-compete agreement with the Employer, if any;

(ii) disclosing confidential or proprietary business information of the Employer to any person or entity including but not limited to a competitor, vendor or customer without appropriate authorization from the Employer;

(iii) violating any rules, policies, procedures or guidelines of the Employer;

(iv) directly or indirectly soliciting any employee of the Employer to terminate employment with the Employer;

(v) directly or indirectly soliciting or accepting business from any customer or potential customer or encouraging any customer, potential customer or supplier of the Employer, to reduce the level of business it does with the Employer; or

(vi) engaging in any other conduct or act that is determined to be injurious, detrimental or prejudicial to any interest of the Employer.

(b) If an accounting restatement by the Company is required in order to correct any material noncompliance with financial reporting requirements under relevant securities laws, the Company will have the

authority to recover from executive officers or former executive officers, whether or not still employed by the Employer, any excess incentive-based compensation (in excess of what would have been paid under the accounting restatement), including entitlement to shares, provided under this Agreement to executive officers of the Employer, that was based on such erroneous data and paid during the three-year period preceding the date on which the Company is required to prepare the accounting restatement. Notwithstanding anything herein to the contrary, the Company may implement any policy or take any action with respect to the recovery of excess incentive-based compensation, including entitlement to shares of Common Stock that the Company determines to be necessary or advisable in order to comply with the requirements of the Dodd-Frank Wall Street Financial Reform and Consumer Protection Act.

18. Cancellation and Rescission of Award. Without limiting the foregoing Section regarding non-engagement in detrimental activity against the Employer, the Company may cancel any award provided hereunder if the Employee is not in compliance with all of the following conditions:

(a) The Employee shall not render services for any organization or engage directly or indirectly in any business which would cause the Employee to breach any of the post-employment prohibitions contained in any agreement between the Employer and the Employee.

(b) The Employee shall not, without prior written authorization from the Employer, disclose to anyone outside the Employer, or use in other than the Employer's business, any confidential information or material, as specified in any agreement between the Employer and the Employee which contains post-employment prohibitions, relating to the business of the Employer acquired by the Employee either during or after employment with the Employer.

Notwithstanding the above, this Agreement does not in any manner restrict the Employee from reporting possible violations of federal, state or local laws or regulations to any governmental agency or entity, and shall not, and not be interpreted to, impair the participant from exercising any legally protected whistleblower rights (including under Rule 21F under the Exchange Act). Similarly, the Employer does not in any manner restrict the Employee from participating in any proceeding or investigation by a federal, state or local government agency or entity responsible for enforcing such laws. The Employee is not required to notify the Employer that he or she has made such report or disclosure, or of his or her participation in an agency investigation or proceeding.

(c) The Employee, pursuant to any agreement between the Employer and the Employee which contains post-employment prohibitions, shall disclose promptly and assign to the Employer all right, title and interest in any invention or idea, patentable or not, made or conceived by the Employee during employment with the Employer, relating in any manner to the actual or anticipated business, research or development work of the Employer, and shall do anything reasonably necessary to enable the Employer to secure a patent where appropriate in the United States and in foreign countries.

(d) Failure to comply with the provision of subparagraphs (a), (b) or (c) of this Section 18 prior to, or during the six months after, any payment or delivery shall cause such payment or delivery to be rescinded. The Company shall notify the Employee in writing of any such rescission within two years after such payment or delivery. Within ten days after receiving such a notice from the Company, the Employee shall pay to the Company the amount of any payment received as a result of the rescinded payment or delivery pursuant to an award. Such payment to the Company by the Employee shall be made either in cash or by returning to the Company the number of shares of Common Stock that the Employee received in connection with the rescinded payment or delivery.

19. Notices. Notices hereunder shall be in writing and if to the Company shall be mailed to the Company at 100 Campus Dr. Suite 200 Florham Park, NJ 07932 USA, addressed to the attention of Stock Plan Administrator, and if to the Employee shall be delivered personally or mailed to the Employee at his address as the same appears on the records of the Company.

20. Language. If the Employee has received this Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version is different than the English version, the English version will control.

21. Electronic Delivery and Acceptance. The Company will deliver any documents related to current or future participation in the Plan by electronic means. The Employee hereby consents to receive such documents by electronic delivery, and agrees to participate in the Plan and be bound by the terms and conditions of this Agreement, through an on-line or electronic system established and maintained by the Company or a third party designated by the

EXHIBIT 10.6(a)(vi)

Company. Electronic acceptance by the Employee is required and the award will be cancelled for any employee who fails to comply with the Company's acceptance requirement within six months of the effective date of the award.

22. Interpretation of This Agreement. The Committee or its authorized delegate, as applicable, shall have the authority to interpret the Plan and this Agreement and to take whatever administrative actions, including correction of administrative errors in the awards subject to this Agreement and in this Agreement, as the Committee or its authorized delegate, as applicable, in its sole good faith judgment shall determine to be advisable. All decisions, interpretations and administrative actions made by the Committee or its authorized delegate, as applicable, hereunder or under the Plan shall be binding and conclusive on the Company and the Employee. In the event there is inconsistency between the provisions of this Agreement and of the Plan, the provisions of the Plan shall govern.

23. Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties hereto and the successors and assigns of the Company and to the extent provided in Section 11 of the Plan to the personal representatives, legatees and heirs of the Employee.

24. Governing Law and Venue. The validity, construction and effect of the Agreement and any actions taken under or relating to this Agreement shall be determined in accordance with the laws of the state of New York and applicable Federal law.

This grant is made and/or administered in the United States. For purposes of litigating any dispute that arises under this grant or the Agreement the parties hereby submit to and consent to the jurisdiction of the state of New York, agree that such litigation shall be conducted in the state or federal courts located in New York.

25. Section 409A. It is intended that the provisions of this Agreement comply with, or are exempt from, Section 409A, and all provisions of this Agreement shall be construed and interpreted in a manner consistent with the requirements for avoiding taxes or penalties under Section 409A.

Neither the Employee nor any of the Employee's creditors or beneficiaries shall have the right to subject any deferred compensation (within the meaning of Section 409A) payable under this Agreement to any anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, attachment or garnishment. Except as permitted under Section 409A, any deferred compensation (within the meaning of Section 409A) payable to the Employee or for the Employee's benefit under this Agreement may not be reduced by, or offset against, any amount owing by the Employee to the Company or any of its Affiliates.

If, at the time of the Employee's separation from service (within the meaning of Section 409A), (a) the Employee shall be a specified employee (within the meaning of Section 409A and using the identification methodology selected by the Company from time to time) and (b) the Company shall make a good faith determination that an amount payable hereunder constitutes deferred compensation (within the meaning of Section 409A) the payment of which is required to be delayed pursuant to the six-month delay rule set forth in Section 409A in order to avoid taxes or penalties under Section 409A, then the Company shall not pay such amount on the otherwise scheduled payment date but shall instead pay it, without interest, on the first business day after such six-month period.

Notwithstanding any provision of this Agreement to the contrary, in light of the uncertainty with respect to the proper application of Section 409A, the Company reserves the right to make amendments to this Agreement as the Company deems necessary or desirable to avoid the imposition of taxes or penalties under Section 409A. In any case, the Employee shall be solely responsible and liable for the satisfaction of all taxes and penalties that may be imposed on the Employee or for the Employee's account in connection with this Agreement (including any taxes and penalties under Section 409A), and neither the Company nor any of its Affiliates shall have any obligation to indemnify or otherwise hold the Employee harmless from any or all of such taxes or penalties.

26. Separability. In case any provision in the Agreement, or in any other instrument referred to herein, shall become invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions in the Agreement, or in any other instrument referred to herein, shall not in any way be affected or impaired thereby.

27. Integration of Terms. Except as otherwise provided in this Agreement, this Agreement contains the entire agreement between the parties relating to the subject matter hereof and supersedes any and all oral statements and prior writings with respect thereto.

28. Appendix for Non-U.S. Countries. Notwithstanding any provisions in this Agreement, the RSU award shall be subject to any special terms and conditions set forth in any appendix to this Agreement for the Employee's country (the "Appendix"). Moreover, if the Employee relocates to one of the countries included in the Appendix, the special

EXHIBIT 10.6(a)(vi)

terms and conditions for such country will apply to the Employee, to the extent the Company determines that the application of such terms and conditions is necessary or advisable in order to comply with local law or facilitate the administration of the Plan. The Appendix constitutes part of this Agreement.

29. Imposition of Other Requirements. The Committee or its authorized delegate, as applicable, reserves the right to impose other requirements on the Employee's participation in the Plan, on the RSUs and on any shares of Common Stock acquired under the Plan, to the extent the Committee or its authorized delegate, as applicable, determines it is necessary or advisable in order to comply with local law or facilitate the administration of the Plan, and to require the Employee to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

IN WITNESS WHEREOF, the Company has executed this Agreement as of the day and year set forth on the Award Summary.

CONDUENT INCORPORATED

By:

Signature

EXHIBIT 10.6(g)

September 27, 2017

Allan Cohen

190 Vandelinda Avenue

Teaneck, New Jersey 07666

Dear Allan:

I am pleased to offer you the position of Vice President, Chief Accounting Officer, Conduent, Inc., reporting to me. The expected start date is October 17, 2017. Your work location will be at 100 Campus Drive in Florham Park, New Jersey. This offer is contingent upon approval of the Board of Directors.

Annual Base Salary

Your starting base salary for this position will be paid bi-weekly, one week in arrears, at the annualized rate of $400,000.

Annual Performance Incentive Plan

You will be eligible to participate in the 2018 Annual Performance Incentive Plan (APIP) at an annual target level of 60% of base salary prorated for time eligible to participate in the plan. The payout can be up to 2 times target and this varies based on company and individual performance.

Executive Long-Term Incentive Plan

You will be eligible to participate in the Executive Long-Term Incentive Plan (ELTIP) for 2018 with a target award of $250,000. Grants are typically made in April of each year. Additional details of the ELTIP will be provided to you separately.

You will also be eligible to receive a sign-on ELTIP grant of $250,000 at grant date, expected to be on or about December 29, 2017. Additional details of the ELTIP will be provided to you separately.

Benefits

We are pleased to offer you a comprehensive benefits package, including medical, dental, vision care, disability income protection, accident insurance, and life insurance. You are eligible for coverage on your first day of employment assuming an October 17, 2017 start date.

In addition, Conduent offers a 401(k) savings plan which includes a dollar-for-dollar company match of 3.0%. You will also be eligible for paid vacation totaling four weeks per year.

Severance

You will be eligible for the severance if your employment is terminated by Conduent for any reason (other than for cause) as defined herein. Severance benefits under this arrangement will be the equivalent of 6 months of your annual base salary and benefits coverage and will be paid in accordance with our regularly scheduled payroll. The payment of any severance benefits will be contingent upon your execution of both a general release of all claims and an agreement not to engage in detrimental activity as determined by the Company upon your termination.

For Cause Definition

The term for cause as used in this letter shall mean any one or more of the following reasons for termination: (i) your failure to follow the directions of your manager provided such directions are not inconsistent with your job duties and/or with applicable law; (ii) your performance of any act of fraud, dishonesty, misappropriation or embezzlement, or other similar willful misconduct while conducting business on behalf of Conduent or executing upon your job duties and responsibilities; (iii) your conviction of any felony or a crime involving moral turpitude (including pleading guilty or no contest to such crime or a lesser crime which results from plea bargaining); (iv) your performance becomes impaired due to alcohol or substance abuse and you refuse to seek treatment; (v) your performance of any act which injures or reasonably could be expected to injure the reputation, brand, business or business relationships of Conduent; and (vi) your violation of any material Conduent policy, including, but not limited to, policies prohibiting sexual harassment, retaliation, discrimination, and violence.

EXHIBIT 10.6(g)

Other Conditions

It is our sincere hope and belief that our relationship will be a beneficial one, however, Conduent does not offer employment on a fixed term basis. Unless otherwise prohibited by law, this letter should not be considered in any manner as a proposed contract for employment for any fixed term, as your employment will be "at will." That is, either you or Conduent can terminate this relationship at any time, with or without cause or notice. In addition, Conduent may change any term or condition of your employment at will; with or without cause or notice.

This offer of employment is contingent on the receipt of a waiver of non-competition agreements with current or prior employers, if any. This offer is also contingent upon the successful completion of a pre-employment background check (criminal, credit etc.) which will require your execution of a background screening consent. Additionally, your employment is contingent on your execution of Conduent Employee Confidentiality, Non-Solicitation and Intellectual Property Non-Compete Agreement. Lastly, you will be required to present documents necessary to complete an I−9 Form. Human Resources will contact you to make an appointment with an I−9 verifier prior to your scheduled start date.

This offer will remain in effect until October 2, 2017. Please notify me of your acceptance and ensure that all requirements are met before we finalize your start date (expected to be on or before Tuesday, October 17, 2017). All originals should be returned to me and if you have any questions, please feel free to contact me at (973) 526-7146.

Allan, I am delighted you are joining the Conduent leadership team. This is one of most exciting periods in our company's history; I look forward to your significant contributions and success.

Sincerely,

/s/ BRIAN WEBB-WALSH

Chief Financial Officer
Conduent Inc.

September 28, 2017

/s/ ALLAN COHEN
Allan Cohen

EXHIBIT 21.1

SUBSIDIARIES OF CONDUENT INCORORATED

The following companies are subsidiaries of Conduent Incorporated as of December 31, 2017. Unless otherwise noted, a subsidiary is a company in which Conduent Incorporated or a subsidiary of Conduent Incorporated holds 50% or more of the voting stock. The names of other subsidiaries have been omitted as they would not, if considered in the aggregate as a single subsidiary, constitute a significant subsidiary:

Name of Subsidiary	Jurisdiction of Incorporation or Organization
Conduent Care Management, Inc.	Arizona
Conduent Healthy Communities Corporation	California
Conduent Unclaimed Property Systems, Inc.	Colorado
Conduent Asset Management Group, LLC	Delaware
Conduent BPO Services, Inc.	Delaware
Conduent Workers Compensation Holdings Corporation	Delaware
Conduent Defense, LLC	Delaware
Conduent EDI Solutions, Inc.	Delaware
Conduent Education Loan Services LLC	Delaware
Conduent Enterprise Solutions, LLC	Delaware
Conduent Global, Inc.	Delaware
Conduent Health Administration, Inc.	Delaware
Conduent Human Resources Services, LLC	Delaware
Conduent Lending, Inc.	Delaware
Conduent Middle East, Inc.	Delaware
Conduent TradeOne Marketing, Inc.	Delaware
Conduent HR Consulting, LLC	Delaware
Conduent Securities LLC	Delaware
Conduent Care Solutions, LLC	Delaware
Conduent Card Service LLC	Delaware
Conduent Finance, Inc.	Delaware
Conduent Education Industry Services, LLC	Delaware
Conduent Government Records Services, Inc.	Delaware
Conduent Payment Integrity Solutions, Inc	Delaware
Conduent Public Health Solutions, LLC	Delaware
Conduent ParkIndy, LLC	Delaware
Conduent Health Assessments, LLC	Delaware
The National Abandoned Property Processing Corporation	Delaware
Conduent Title Records Corporation	Delaware
Conduent Business Services, LLC	Delaware
Conduent Education Services, LLC	Delaware
Conduent Education Solutions, LLC	Delaware
Conduent European Funding LLC	Delaware
Conduent Export LLC	Delaware
Conduent Federal Solutions, LLC	Delaware
Conduent Government Systems, LLC	Delaware
Conduent Mortgage Services, Inc.	Delaware
Conduent Credit Balance Solutions, LLC.	Delaware
Conduent Workers Compensation, LLC	Delaware

EXHIBIT 21.1

Conduent State Healthcare, LLC	Delaware
Conduent Transport Solutions, Inc.	Georgia
Conduent Wireless Data Services (Operations) Inc.	Idaho
Conduent Human Services, LLC	Indiana
Conduent Healthcare Information Services, Inc.	Indiana
Conduent Image Solutions, Inc.	Louisiana
Conduent Bill Review Corporation	Nevada
Conduent Commercial Solutions, LLC	Nevada
Conduent Patient Access Solutions, LLC	New Jersey
Conduent Compliance & Risk Consulting Corporation	New York
Conduent State & Local Solutions, Inc.	New York
Conduent Performance Improvement Solutions, Inc.	Oregon
Conduent Customer Care Solutions, Inc.	Oregon
Conduent HR Services, LLC	Pennsylvania
Conduent Healthcare Data Management, Inc.	Tennessee
Conduent Securities Services, Inc.	Texas
ACS Welfare Benefit Trust	Texas
Conduent Legal & Compliance Solutions, LLC	Texas
Mercury Fund II, Ltd.	Texas
Conduent Business Process Optimization Services, Inc.	Texas
Conduent WDS Global—Texas, Inc.	Texas
Conduent Heritage, LLC	Virginia
Conduent Learning Services, Inc.	Washington
Conduent Wireless Data Services North America Inc.	Washington
Conduent Care and Quality Solutions, Inc.	Wisconsin
Eagle Connect Sh.p.k.	Albania
Voice Star Sh.p.k.	Albania
Market Line S.A.	Argentina
Consilience Software Australasia Pty Ltd	Australia
Conduent Business Services (Australasia) PTY. LTD.	Australia
Wireless Data Services PTY Limited	Australia
Affiliated Computer Services Austria GmbH	Austria
Affiliated Computer Services International (Barbados) Limited	Barbados
Buck Consultants	Belgium
ACS Transportation Services Participacoes Ltda	Brazil
Conduent Servicos de Terceirizacao de Processos de Negocios Ltda.	Brazil
ACS HR Solucoes Servicos de Recursos Humanos do Brasil Ltda	Brazil
Conduent do Brasil Servicos de Call Center Ltda.	Brazil
Conduent HR Consultants Limited/Conseilliers HR Conduent Limitee	Canada
Conduent Insurance Agency Limited	Canada

EXHIBIT 21.1

CPAS Systems, Inc.	Canada
Conduent Business Services Canada, Inc./Services D'affaires Conduent Canada Inc.	Canada
Conduent HR Solutions Canada Co	Canada
Conduent Solutions Chile SA	Chile
ACS Road Technology Services (Beijing) Co. Ltd.	China
Affiliated Computer Services (Tianjin) Co., Ltd.	China
ML Colombia S.A.	Colombia
ACS Czech Republic s.r.o.	Czech Republic
Conduent Solutions Dominican Republic, SAS	Dominican Republic
Affiliated Computer Services (Fiji) Limited	Fiji
Conduent Business Process Solutions SAS	France
Conduent Business Solutions (France) SAS	France
Affiliated Computer Services of Germany GmbH	Germany
ACS Holdings (Germany) GmbH	Germany
ACS HR Solutions Deutschland GmbH	Germany
Invoco Holding GmbH	Germany
Invoco Business Solutions GmbH	Germany
Invoco Communication Center GmbH	Germany
Invoco Customer Service GmbH	Germany
Invoco Helpline Communication GmbH	Germany
Invoco Helpline GmbH	Germany
Invoco Marketing & Vetrieb GmbH	Germany
Invoco Media Sales GmbH	Germany
Invoco Multimeida GmbH	Germany
Invoco Sales GmbH	Germany
Invoco Service Center GmbH	Germany
Invoco Services & Sales GmbH	Germany
Invoco Technical Service GmbH	Germany
ACS-BPS (Ghana) Limited	Ghana
Conduent Business Services de Guatemala, Sociedad Anonima	Guatemala
ACS HR Solutions Share Plan Services (Guernsey), Limited	Guernsey
ACS China Solutions Hong Kong Limited	Hong Kong
Conduent Business Solutions (Hong Kong) Limited	Hong Kong
Conduent Business Services India LLP	India
Conduent Ireland Limited	Ireland
Conduent Business Services Italy S.r.l.	Italy
Nuova Karel Soluzioni S.r.l. unipersonale	Italy
Conduent Business Solutions Italia, S.p.A.	Italy
Conduent Solutions (Jamaica) Limited	Jamaica
Conduent Jamaica Limited	Jamaica
Sia Rigas Karte	Latvia
Affiliated Computer Services Holdings (Luxembourg) S.A.R.L.	Luxembourg
Conduent Business Services Malaysia Sdn. Bhd.	Malaysia

EXHIBIT 21.1

ACS Malta Limited	Malta
Conduent de Mexico, S.A. de C.V.	Mexico
Conduent Solutions de Mexico, S. de R.L. de C.V.	Mexico
Affiliated Computer Services International B.V.	Netherlands
ACS HR Solutions Nederland BV	Netherlands
Wilhaave Groep BV	Netherlands
Unamic Holding BV	Netherlands
Unamic/HCN BV	Netherlands
Conduent Business Services (Netherlands) B.V.	Netherlands
Market Line Peru S.A.C.	Peru
ACS Solutions Peru S.A.	Peru
Conduent Business Services Philippines, Inc.	Philippines
Conduent Solutions Philippines, Inc.	Philippines
ACS Solutions Poland Sp. Z.o.o.	Poland
Affiliated Computer Services of Poland Sp. z.o.o.	Poland
ACS Puerto Rico, LLC	Puerto Rico
Conduent Business Solutions of Puerto Rico, Inc.	Puerto Rico
Conduent Business Services Romania S.r.l.	Romania
Conduent Europe Finance Limited Partnership	Scotland
Wireless Data Services (Asia Pacific) PTE Ltd.	Singapore
Conduent (PTY) LTD	South Africa
Affiliated Computer Services of Spain, S.L., Sociedad Unipersonal	Spain
Xerox Business Solutions Spain, S.L.	Spain
e-Services Group (St. Lucia) Ltd.	St. Lucia
Telenamic N.V.	Suriname
Affiliated Computer Services GmbH	Switzerland
Conduent Business Solutions AG	Switzerland
Unamic HCN Musteri Hizmetleri Limited Sirketi	Turkey
Conduent Business Process Solutions Limited	United Kingdom
CVG Ltd	United Kingdom
Conduent Parking Enforcement Solutions Limited	United Kingdom
Wireless Data Services Limited	United Kingdom
Buck Consultants Limited	United Kingdom
Buck Consultants (Healthcare) Limited	United Kingdom
Buck Consultants (Administration & Investment) Limited	United Kingdom
Buck Consultants Shareplan Trustees Limited	United Kingdom
Buckingham Trustees Limited	United Kingdom
Talking People Limited	United Kingdom

EXHIBIT 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-215361) of Conduent Incorporated of our report dated March 1, 2018, relating to the financial statements, financial statement schedule, and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/S/ PRICEWATERHOUSECOOPERS LLP

PricewaterhouseCoopers LLP
Florham Park, New Jersey
March 1, 2018

EXHIBIT 31(a)

CEO CERTIFICATIONS

I, Ashok Vemuri, certify that:

1. I have reviewed this Annual Report on Form 10-K of Conduent Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 1, 2018

/s/ ASHOK VEMURI

Ashok Vemuri
Principal Executive Officer

EXHIBIT 31(b)

CFO CERTIFICATIONS

I, Brian Webb-Walsh, certify that:

1. I have reviewed this Annual Report on Form 10-K of Conduent Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 1, 2018

/s/ BRIAN WEBB-WALSH

Brian Webb-Walsh
Principal Financial Officer

EXHIBIT 32

**CERTIFICATION OF CEO AND CFO PURSUANT TO 18 U.S.C. § 1350,
AS ADOPTED PURSUANT TO § 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Form 10-K of Conduent Incorporated, a New York corporation (the "Company"), for the year ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Ashok Vemuri, Chief Executive Officer of the Company, and Brian Webb-Walsh, Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, to the best of his/her knowledge, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ ASHOK VEMURI

Ashok Vemuri
Chief Executive Officer
March 1, 2018

/s/ BRIAN WEBB-WALSH

Brian Webb-Walsh
Chief Financial Officer
March 1, 2018

This certification accompanies this Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of § 18 of the Securities Exchange Act of 1934, as amended.

A signed original of this written statement required by § 906 has been provided to Conduent Incorporated and will be retained by Conduent Incorporated and furnished to the Securities and Exchange Commission or its staff upon request.

Morningstar® Document Research℠

FORM 10-K

CONDUENT Inc - CNDT

Filed: March 10, 2017 (period: December 31, 2016)

Annual report with a comprehensive overview of the company

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended: December 31, 2016

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from: _____ to: _____

Commission File Number 001-37817

CONDUENT INCORPORATED
(Exact Name of Registrant as specified in its charter)

New York	**81-2983623**
(State of incorporation)	(IRS Employer Identification No.)
100 Campus Drive **Florham Park, New Jersey 07932**	**(973) 261-7100**
(Address of principal executive offices)	**(Registrants telephone number, including area code)**

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which registered
Common Stock, $0.01 par value	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☐ No ☒

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by a check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or a smaller reporting company. See definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ Smaller reporting company ☐

Indicate by a check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of June 30, 2016, Registrant's common stock was not publicly traded.

Indicate the number of shares outstanding of each of the Registrant's classes of common stock, as of the latest practicable date:

Class	Outstanding at February 28, 2017
Common Stock, $0.01 par value	203,630,042

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the following document are incorporated herein by reference:

Document	Part of Form 10-K in which Incorporated
Conduent Incorporated Notice of 2017 Annual Meeting of Shareholders and Proxy Statement (to be filed no later than 120 days after the close of the fiscal year covered by this report on Form 10-K)	III

FORWARD-LOOKING STATEMENTS

From time to time, we and our representatives may provide information, whether orally or in writing, including certain statements in this Annual Report on Form 10-K, which are deemed to be "forward-looking" within the meaning of the Private Securities Litigation Reform Act of 1995 (the "Litigation Reform Act"). These forward-looking statements and other information are based on our beliefs as well as assumptions made by us using information currently available.

The words “anticipate,” “believe,” “estimate,” “expect,” “intend,” “will,” “should” and similar expressions, as they relate to us, are intended to identify forward-looking statements. These statements reflect our current views with respect to future events and are subject to certain risks, uncertainties and assumptions. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein as anticipated, believed, estimated, expected or intended or using other similar expressions.

In accordance with the provisions of the Litigation Reform Act, we are making investors aware that such forward-looking statements, because they relate to future events, are by their very nature subject to many important factors that could cause actual results to differ materially from those contemplated by the forward-looking statements contained in this Annual Report on Form 10-K, any exhibits to this Form 10-K and other public statements we make.

Such factors include, but are not limited to: termination rights contained in our government contracts; our ability to renew commercial and government contracts awarded through competitive bidding processes; our ability to recover capital and other investments in connection with our contracts; our ability to attract and retain necessary technical personnel and qualified subcontractors; our ability to deliver on our contractual obligations properly and on time; competitive pressures; our significant indebtedness; changes in interest in outsourced business process services; our ability to obtain adequate pricing for our services and to improve our cost structure; claims of infringement of third-party intellectual property rights; the failure to comply with laws relating to individually identifiable information, and personal health information and laws relating to processing certain financial transactions, including payment card transactions and debit or credit card transactions; breaches of our security systems and service interruptions; our ability to estimate the scope of work or the costs of performance in our contracts; our ability to collect our receivables for unbilled services; a decline in revenues from or a loss or failure of significant clients; fluctuations in our non-recurring revenue; our failure to maintain a satisfactory credit rating; our ability to attract and retain key employees; increases in the cost of telephone and data services or significant interruptions in such services; our failure to develop new service offerings; our ability to receive dividends or other payments from our subsidiaries; changes in tax and other laws and regulations; changes in government regulation and economic, strategic, political and social conditions; changes in U.S. GAAP or other applicable accounting policies; and other factors that are set forth in the “Risk Factors” section, the “Legal Proceedings” section, the “Management's Discussion and Analysis of Financial Condition and Results of Operations” section and other sections of this Annual Report on Form 10-K, as well as in our Quarterly Reports on Form 10-Q and Current Reports on Form 8-K. We do not intend to update these forward-looking statements, except as required by law.

CONDUENT INCORPORATED
FORM 10-K
DECEMBER 31, 2016

TABLE OF CONTENTS

PART I

ITEM 1. BUSINESS

Our Business

Conduent is a leading provider of business process services with expertise in transaction-intensive processing, analytics and automation. We serve as a trusted business partner in both the front office and back office, enabling personalized, seamless interactions on a massive scale that improve end-user experiences.

On December 31, 2016, Conduent Incorporated (formerly known as the BPO business) spun-off from Xerox Corporation, pursuant to the separation agreement. As a result of the spin-off, we now operate as an independent, publicly traded company on the New York Stock Exchange, under the ticker "CNDT".

We create value for our Commercial and Public Sector clients by applying our expertise, technology and innovation to help them drive customer and constituent satisfaction and loyalty, increase process efficiency and respond rapidly to changing market dynamics.

Our portfolio includes industry-focused service offerings in attractive growth markets such as Healthcare and Transportation, as well as multi-industry service offerings such as Transaction Processing, Customer Care and Payment Services.

We believe our addressable market size in the global business process service industry is estimated at nearly $260 billion in 2016, with expected growth rates in the mid-single digits through 2019 according to third party industry reports. We have leadership positions in key market segments, including Healthcare and Transportation, which are expected to grow at 8% and 5% on a compounded annual basis through 2019, respectively, according to third party industry reports. In addition, we are well positioned to capitalize on key industry trends such as increased demand for productivity, automation, personalization and innovation to capture growth.

Our strategy is to drive portfolio focus, operational discipline, sales and delivery excellence and innovation, complemented by tightly aligned investments. As a result, we aim to deliver profitable growth and margin expansion and to deploy a disciplined capital allocation strategy.

With approximately 96,000 employees globally as of December 31, 2016, we provide differentiated services to clients spanning small, medium and large businesses and to governments of all sizes in 42 countries. In 2016, we generated $6.4 billion in total revenues, over 80% of which was recurring.

Our Transformation

We have a track-record of active portfolio management with an ongoing focus on optimizing our capabilities and effectively targeting attractive growth areas in a rapidly evolving business process services industry. In recent years, we have taken significant actions to improve our profitability and drive growth with a more focused portfolio of services. These include the divestiture of our Information Technology Outsourcing ("ITO") business, the refocusing of our Government Healthcare business, the re-organization of our delivery operations, as well as acquisitions and organic investments in key growth markets to expand our capabilities and client reach. We plan to continue enhancing our operational and portfolio focus as a standalone company.

Key initiatives include:

- ***Realigned Delivery.*** During 2016 we began to reorganize the business to better align to our vertical go-to-market strategy and to our global delivery capabilities. We believe this operating structure will allow us to better integrate and tailor business solutions for our customers.
- ***Divested Non-Core Assets.*** We completed the sale of our ITO business on June 30, 2015 to Atos SE. The sale enabled us to increase our focus on areas where we have a competitive advantage.
- ***Refocused our Government Healthcare Business.*** In 2015, we refocused our Government Healthcare business on higher margin, growing segments such as medical and pharmacy benefits management and fraud and abuse detection. We have also reduced our participation in certain Medicaid platform implementations that were

presenting unattractive levels of risk and exposure. We plan to continue to reduce our exposure to large-scale Medicaid platform implementations that have unattractive levels of risk and profitability in 2017.
- ***Increased Use of Automation.*** We have developed and deployed a set of advanced software-based automation tools as part of our service delivery operations. These tools reduce the amount of repetitive, manual labor required to deliver many of our services and improve service quality through lower error rates and faster processing times.

We are also in the process of a strategic transformation program to deliver cost savings through infrastructure optimization, labor productivity and automation initiatives, restructuring of unprofitable contracts and other efficiencies. This transformation program will enable us to better capitalize on our differentiated service offerings, industry expertise and global delivery excellence and position us for long-term shareholder value creation.

Our Market Opportunity

We believe our addressable market size in the global business process service industry is estimated at nearly $260 billion in 2016, according to third party industry reports, and we are a leader across several segments of this large, diverse and growing market. Providing business process services today is complex and multi-faceted with services that span many industries.

Ongoing competitive pressures and increasing demand for further productivity gains have motivated businesses to outsource elements of their day-to-day operations to accelerate performance and innovation. As a result, our clients have become more focused on their core businesses and the range of outsourced activities has expanded greatly. Increasing globalization has also required many companies to optimize cost structures to retain competitiveness and business process services have become a key component of this strategy.

The ongoing shift to next-generation software and automation technologies is driving greater demand for, and expectation of, efficiency and personalization by the constituents and customers of the businesses and governments we serve. Addressing these business and operational challenges is necessary for business process services companies to capitalize on these trends. In addition, business process services have the potential to meaningfully enhance productivity for businesses and governments and satisfaction for their constituents and customers.

Segments

Our reportable segments correspond to how management organizes and manages the business and are aligned to the industries in which our clients operate: Commercial Industries, Healthcare and Public Sector.

- Our *Commercial Industries* segment provides business process services and customized solutions to clients in a variety of industries (other than healthcare).
- Our *Healthcare* segment provides innovative industry-centric business process services to clients across the healthcare industry, including providers, payers, employers, pharmaceutical and life science companies and government agencies.
- Our *Public Sector* segment provides government-centric business process services and subject matter experts to U.S. federal, state and local and foreign governments.
- Our Government Health Enterprise (“HE”) Medicaid Platform for all current state clients and Student Loan businesses, as well as non-allocated expenses and inter-segment eliminations, are included in Other.

We present segment financial information in Note 2 to our Consolidated Financial Statements included in Part II, Item 8 of this Form 10-K, which is incorporated here by reference. The discussion below highlights our segment revenues for the year ended December 31, 2016.

Commercial Industries

Our Commercial Industries segment is our largest segment, with $2.7 billion in revenues in 2016, representing 42% of the total revenues. Across the Commercial Industries segment, we deliver end-to-end business-to-business and business-to-customer services that enable our clients to optimize their key processes. Our multi-industry competencies include Customer Care, Human Resource Management, Finance and Accounting, Workforce Learning Services and Legal Business Services. These services are complemented by innovative industry-specific services such as personalized product information for clients in the Automotive industry, digitized source-to-pay

solutions for clients in the Manufacturing industry, customer experience and marketing services for clients in the Retail industry, and mortgage and consumer loan processing for clients in the Financial Services industry.

Healthcare

Our Healthcare segment generated revenues of $1.7 billion in 2016, representing 26% of total revenues. Through this segment we offer innovative services and solutions and subject matter expertise to clients across the healthcare industry, including providers, payers, pharmaceutical and life science companies and government agencies. We strive to enable our healthcare clients to focus on improving the patient care experience, lowering total costs and enabling better long-term health outcomes. Our Healthcare segment primarily serves the following types of clients:

- ***Healthcare Payer:*** We deliver administrative efficiency services and customer experience services/solutions to the top 20 commercial payers. Our services offered include payment integrity solutions, the full spectrum of payer administrative services, member engagement services, health risk assessment, claims processing, mailroom services and outbound printing. Our broad set of services helps healthcare payers to optimize costs by streamlining business processes and recovering incorrectly attributed liabilities. In addition, our services assist with member risk assessment and improve member experience through enhanced engagement tools.

- ***Healthcare Provider Solutions:*** We provide care and quality analytics and workflow solutions and software adoption services to hospitals, clinicians and other healthcare providers, including large healthcare systems, with contracts in 49 of the 50 states. Our healthcare provider services include a care and quality platform (Midas+), systems integration and advisory services to support electronic health record system implementations, software adoption services and community health population analytics. Our services provide our customers enhanced clinical insights of patients to improve quality of care, achieve better regulatory compliance by meeting accurate and timely reporting needs and improve their return on technology investments through simulation-based software adoption.

- ***Government Healthcare:*** We provide medical management/fiscal agent care management services to Medicaid programs and federally-funded U.S. government healthcare programs in 29 states, Puerto Rico and the District of Columbia. Our services include a range of innovative solutions such as Medicaid management fiscal agent, pharmacy benefits management and clinical program management. These services help states optimize their costs by streamlining access to care and improve patient health outcomes through population health management and help families in need by improving beneficiary support.

- ***Pharmaceuticals & Life Sciences:*** We provide services to 9 of the top 10 global pharmaceutical and life science companies to support their revenue generation and clinical services. Our services include inside sales for drug detailing, clinical trial recruitment, patient access and medication adherence and compliance solutions. These services help generate incremental revenue by driving increased adoption of both mature and new drugs by clinicians and improving patient health outcomes by facilitating access to drugs and driving medication adherence.

Public Sector

Our Public Sector segment generated revenues of $1.7 billion in 2016, representing 27% of the total revenues. This segment provides government-centric business process services to U.S. federal, state and local and foreign governments for transportation, public assistance program administration, transaction processing and payment services. In order to provide targeted support to our government clients, our Public Sector segment is organized into two primary businesses:

- ***Transportation:*** We provide revenue-generating transportation services to government clients in over 25 countries. Our services include support for electronic toll collection, public transit, parking, photo enforcement and commercial vehicle operations. Across these offerings, we manage key processes on behalf of our clients including fee collection, compliance and violation management, notifications, statements and reporting. These innovative services significantly improve individual travel experiences, optimize how vehicles and goods move efficiently within cities, digitize integrated modes of transportation and help our government clients to better serve their constituents.

- ***Federal, State and Local Government:*** We support our government clients with services targeting key civilian agencies within federal, state and local governments, as well as government administrative offices. Our depth of agency-specific expertise combined with our scale allows us to deliver and manage programs at all levels of government. Our broad set of public sector services includes public assistance program administration such as child support, pension administration, records management, electronic benefits, eligibility and payment cards, unclaimed property, disease management and software offerings in support of federal, state and local government agencies.

Other

Other includes our Government HE Medicaid Platform business, where we are limiting our focus to maintaining systems for our current clients, and our Student Loan business, which is in runoff, as well as non-allocated expenses and inter-segment eliminations. In 2016, Other accounted for approximately $300 million of revenues, representing 5% of total revenues.

Our Service Offerings

Our portfolio of business process services includes a combination of industry-specific services and multi-industry services. We have subject matter experts who are responsible for implementing each of these services, delivering service excellence to clients, ensuring best practices to improve cost competitiveness, innovating our next generation offerings and supporting worldwide sales.

Industry-Specific Services

Commercial Industry-Specific Services
Examples of the services we offer include personalized product information for automotive clients, digitized source to pay solutions for manufacturing clients, mortgage and consumer loan processing for financial institution clients and customized workforce learning solutions for aerospace clients.

Healthcare Industry-Specific Services
Our healthcare services include care integration and coordination, member health risk assessments, payment integrity (*e.g.*, recovering claims from the appropriate payers), fiscal agent administrative services and providing management information systems in support of Medicaid programs, pharmacy benefits management, clinical trial recruitment and care and quality analytics.

Public Sector-Specific Services
Transportation Services: The transportation services we offer include support for electronic toll collection, public transit, parking, photo enforcement and commercial vehicle operations. Across these offerings, we manage key processes on behalf of our clients including fee collection, compliance and violation management, notifications, statements and reporting.

Other Public Sector Services: Our broad set of public sector services includes public assistance program administration, pension administration, records management, disease management and software offerings in support of federal, state and local government agencies.

Multi-Industry Services

Transaction Processing Services
We help our clients to improve communications with their customers and constituents, whether it is on paper, on-line or through other communication channels. By supporting our clients' customer communication processes, we help our clients deliver a better experience to their customers and operate with improved efficiency and greater effectiveness.

We offer a broad array of flexible transaction processing services that include data entry, scanning, image processing, enrollment processing, claims processing, high volume offsite print and mail services and file indexing. Our multi-channel communication capabilities (including secure print, email, text and web) enable the delivery of personalized and targeted communications that are designed to elicit the desired response from customers or other end-users (*e.g.*, on-time bill payment, increased marketing response rates). Our service offerings utilize both

proprietary and commercially available third-party technologies, combined with our expertise to ensure continued quality and innovation for our clients.

Payment Services
Prepaid Cards: We are an extensive provider of VISA and MasterCard prepaid debit cards, as well as other electronic payment cards in support of U.S. government benefit programs including Social Security, Supplemental Nutrition Assistance Program (formerly known as food stamps), Special Supplemental Nutrition Program for Women, Infants and Children and other specialized Electronic Benefits Transfer programs. Our secure payment services reduce fraud and eliminate paper checks by disbursing electronic payments directly to end users, even those without bank accounts. Our proprietary processing platform, significant operational expertise, advanced fraud analytics and adoption of Europay, MasterCard and Visa chip-enabled technology put us in the forefront of the Prepaid Card industry.

Health Savings Accounts: We provide clients with a simplified approach to help their employees manage their health care costs and accumulate wealth with tax-advantaged accounts. We consolidate administration of all
health spending accounts onto one common platform, including Health Savings Accounts, Health Reimbursement Arrangements, Flexible Spending Accounts and Health Incentive Accounts. By consolidating and integrating the management of health spending accounts, we help our clients improve benefit enrollment and account opening, consolidate customer service, simplify communications and streamline account funding and management.

Child Support Payments: We are an industry leader of U.S. State Government Disbursement Units for child support payments. We collect payments from non-custodial parents via check, credit card and transfers from employee payroll systems and disburse payments to the beneficiaries.

Customer Care Services
We offer customer care services that help our clients provide their own customers with a superior experience. Our service offerings range from answering simple billing questions to providing complex technical and customer support. We also offer both inbound and outbound sales and cross-selling programs through our contact center operations. We provide these services through multiple channels, including phone, SMS, chat, interactive voice response, social networks and email. We augment our customer care agents' efficiency and effectiveness with advanced technologies that help them resolve customer needs quickly and with consistently high quality.

Human Resources Services
We help our clients to support their employees at all stages of employment from initial on-boarding through retirement. We offer clients customized advisory, technology and administrative services that help them more
effectively involve employees in their health insurance, retirement plan and compensation programs. We design
and administer employee benefit programs that attract, reward and retain workforce talent through engaging technologies and decision support tools. Our service offerings include global health and retirement plan consultation and administration; cloud-based HR outsourcing; payroll and benefits administration; health savings and tax efficient account administration; and administration of, and consultation regarding, our proprietary private health care exchange, which allows employees to select from a set of predefined providers and also provides market-leading health and benefit decision support tools and ongoing health and wellness management.

Finance and Accounting Services
We serve clients by managing their critical finance, accounting and procurement processes. Our services include general accounting and reporting, billing and accounts receivable and purchasing, accounts payable and expense management services. We also offer wholesale and retail lockbox services and process auto and mortgage loans in the United States. With a global, dedicated team, we manage the core, end-to-end process areas of finance, accounting and procurement for some of the world's most recognized brands.

Legal Business Services
We have been providing client support to law firms and corporate legal departments for over 20 years. We work across the litigation lifecycle, with particular focus on the legal discovery and review process. Our offerings include litigation support services, compliance and risk review and managed services support.

Workforce Learning Services
We are a provider of end-to-end learning services, designed to accelerate the productivity and development of our clients' employees and extended work forces. Our global presence, superior innovation and expertise allow us to

deliver performance-based learning services tailored to our clients' unique strategic business goals. Our offerings include learning strategy and assessment, instructor management and learning administration.

Applied Automation and Analytics Solutions
Many of our service offerings described above incorporate our applied automation and analytics solutions to increase their value and effectiveness to clients across all industries. We deploy these solutions to personalize millions of interactions, optimize service delivery and simplify complex processes. For example, our customer care services harness the power of applied analytics and automation to help our customer service agents work more efficiently across different communication channels. Our applied automation solutions track and learn the most efficient means to address common customer service needs as they occur in real time so that we can solve the same problem faster the next time around. The combination of applied automation and analytics allows us to identify new service demand patterns and opportunities quickly so that we can proactively address them on behalf of our clients.

Our Competitive Strengths

We possess a number of competitive strengths that distinguish us from our competitors, including:

Leadership in attractive growth markets. We are a leader in business process services serving clients with a total addressable market that is estimated to be $260 billion, and is expected to grow mid-single digits through 2019. Our clients continue to outsource key business processes to accelerate performance and innovation. Additionally, clients are moving beyond services for back-office functions in order to drive customer satisfaction and loyalty, as well as productivity and efficiency. The increase in globalization and cost competition continues to accelerate, forcing companies to seek ways to stay ahead of the competition. These factors, along with clients and their customers demanding more personalized, seamless and secure solutions, are collectively driving the ongoing shift to next-generation software and automation technologies.

- ***Healthcare:*** U.S. healthcare spending is estimated to have represented greater than 15% of GDP in 2016 and is continuing to grow. As one of the most regulated industries, healthcare providers must balance increased utilization with heightened complexity and new financial pressures such as government budget challenges to significantly reduce reimbursements, reimbursement penalties for hospital readmissions and a shift from fee-for-service to "value-based" population health management. We are widely recognized by industry analysts as a leader in healthcare payer operations, serving all 20 of the top 20 U.S. managed healthcare plans and providing administrative and care management solutions to Medicaid programs and federally funded U.S. government healthcare programs in 29 states, Puerto Rico and the District of Columbia.
- ***Transportation:*** Traffic congestion continues to increase as urbanization and changing demographics take hold globally. As a result, optimized transportation systems are becoming critical to increase efficiency while maintaining strict safety requirements. Electronic toll collection, public transit and parking all represent key growth drivers as governments at all levels increasingly focus on transportation infrastructure. We maintain approximately 49% market share position in electronic toll collection in the United States based on toll revenues collected through our systems in 2016. We are also one of the largest U.S.-based commercial vehicle operations service providers in the United States with approximately 40% market share based on 2016 revenues, and we are an award-winning innovator in parking management.
- ***Transaction Processing***: We provide high volume print and mail services, enrollment processing and personalized and targeted marketing and communications, to large corporations and we believe we are a leading provider in this market.
- ***Prepaid Cards***: We are the leading provider of prepaid payment card services in support of the U.S. government prepaid card services market.

Global delivery expertise. Our scale and global delivery network enables us to deliver our proprietary technology, differentiated service offerings and service capabilities expertly to clients around the world. We have approximately 290 delivery centers, including operations in India, the Philippines, Jamaica, Guatemala, Mexico, Romania, the Dominican Republic and several locations within the United States, giving our customers the option for "onshore" or "offshore" outsourced business process services. This global delivery model enables us to leverage lower-cost production locations, consistent methodologies and processes, time zone advantages and business continuity plans. As of December 31, 2016, our employee location mix was approximately 48% in North America, 21% in Latin America / Caribbean, 20% in Asia Pacific and 11% in Europe / Middle East / Africa.

Differentiated suite of multi-industry service offerings at scale. We manage transaction-intensive processes and working directly with end-users to often meet their needs in real-time. We are unique in our ability to offer our clients these business process services on a large scale and with high quality. Additionally, we are able to leverage our multi-industry services to bring the same scale and quality to our portfolio of industry-specific service offerings, such as healthcare claims management, employee benefits management and public transit fare collection.

Innovation and development. We innovate by developing and acquiring new technologies and capabilities that improve business processes. We are constantly creating the next generation of simple, automated and touchless business processes to drive lower costs, higher quality and increased end-user satisfaction. Analytics allow us to transform big data into useful information that helps identify operational improvements and constituent insights. Additionally, we leverage robotic process automation and predictive analytics, combined with our deep subject matter expertise, to create intelligent services that improve security, increase speed, improve accuracy, quality and regulatory compliance and uncover insights that support better decision making and outcomes for our clients.

Stable recurring revenue model supported by a loyal, diverse client base. We have a broad and diverse base of clients in 42 countries across geographies and industries, including Fortune 1000 companies, small and midsize businesses as well as governmental entities. Our close client relationships and successful client execution support our stable recurring revenue model and high renewal rates. As of December 31, 2016, over 80% of our total revenues were recurring in nature, and our contract renewal rate was 86%.

Our Strategies

Our strategy is to drive leadership in attractive markets by leveraging and building on our competitive strengths. We intend to execute our strategy through increased business portfolio focus and operating discipline, enhanced sales and delivery capabilities and tightly aligned investments. Our strategy is designed to deliver value by delivering profitable growth, expanding operating margins and deploying a disciplined capital allocation strategy.

Specific elements of our strategy include the following:

Expand within attractive industries. The industries in which we operate have attractive revenue growth rates, generally in the mid-single digits. We intend to sharpen our focus and expand our business in industries with strong growth and profitability characteristics. We will employ a disciplined approach to portfolio management to complement our competitive strengths and build depth and breadth in our core businesses. Within the Healthcare industry, we intend to leverage our data analytics, differentiated service offerings and industry know-how to continue to service payer, provider and core government healthcare clients. Within the Transportation industry, we will leverage our global, end-to-end platforms to continue to deliver seamless travel experiences while providing back-end Transaction Processing and Call Center services for government clients globally.

Optimize and strengthen our services capabilities. We plan to optimize our services capabilities and strengthen several core areas, including Transaction Processing, Customer Care and Prepaid Card services by building out our services offerings and continuing to improve our competitive strengths. We have divested non-core assets, refocused our Government Healthcare business towards higher margin growing segments and consolidated delivery operations to enable greater productivity. Within Transaction Processing, we intend to continue to build industry-specific service offerings and advance inbound and outbound processing capabilities. Within Customer Care, we intend to capitalize on our global scale, cost efficiencies and our ability to provide seamless communications between our clients and their end-users through traditional (e.g., voice) and digital (e.g., web, mobile, Internet of Things) channels. In Prepaid Cards, we plan to continue to leverage our scalable platform to help our clients simplify their payment disbursement processes.

Continue to advance next-generation platforms and capabilities. We intend to maintain our focus on innovation to create next-generation solutions aligned with our clients' future needs and our growth strategies. We plan to advance our current platforms, further automate and personalize business processes and enhance data analytics capabilities to deliver value-added services for our clients.

Engage, develop and support our people. We intend to increasingly develop our employees by investing in training, processes and systems to equip them with modern tools that enable them to perform their jobs more efficiently. Further, we plan to strengthen our sales teams throughout improved and optimized coverage and effective talent management.

Competition

Although we encounter competition in all areas of our portfolio, we lead across many areas of our principal businesses. We compete on the basis of technology, performance, price, quality, reliability and customer service and support. In the current political environment in the U.S. and other territories, we also consider our "onshore" delivery capacity to be a competitive advantage. We participate in a highly competitive and rapidly evolving market, driven by changes in industry standards and demands of customers to become more efficient. Our competitors range from large international companies to relatively small firms. Our competitors include:

- Large multinational service providers such as CGI Group, Computer Sciences, Accenture, Aon Hewitt, Cognizant, Hewlett-Packard Enterprise, IBM, Teletech, and Teleperformance;
- Payroll processing and human capital management providers such as ADP and Paychex;
- Healthcare-focused IT and service solutions providers such as Cerner, Quintiles, and Maximus;
- U.S. Federal focused government services such as CACI International; and
- Smaller niche business processing service providers and in-house departments that perform functions that could be outsourced to us.

Sales and Marketing

We market our business process services to both potential and existing clients through our worldwide sales force and our business development team. Additionally, we have dedicated “solution architects” who work with clients to better understand their situation and develop a custom-tailored solution to meet their unique needs.

Our sales and marketing strategy is to go to market by industry to deliver key industry-specific and multi-industry service offerings to our clients. We focus on developing new prospects through market research and analysis, renewing expiring contracts and leveraging existing client relationships to offer additional services. We leverage our broad, multi-industry service offerings to package solutions through enterprise selling, while maintaining a disciplined approach to pricing and contracting. Our sales efforts typically involve extended selling cycles and our expertise in specific industries is critical to winning new business.

Our Geographies

We provide services globally and we have a diversified geographic delivery network, including a significant presence within the U.S. In 2016, approximately 11% of our revenues were generated by clients outside the United States. In 2016, our revenues by geography were as follows: $5,686 million in the United States (89% of total revenues), $547 million in Europe (8% of total revenues) and $175 million from the rest of the world (3% of total revenues). We present geographical information in Note 2 to our Consolidated Financial Statements included in Part II, Item 8 of this Form 10-K, which is incorporated here by reference.

Innovation and Research and Development

Our innovation and research and development (R&D) capabilities are critical to our client value proposition and competitive positioning. Our investments in innovation align with our growth strategies and are driven by a view of future needs and required competencies developed in close partnership with our clients and R&D partners. We are investing in attractive markets, such as healthcare and transportation, and building on proven platforms to create services that distinguish us from our competitors.

Our innovation and R&D are focused on three key areas: automation, personalization and analytics.

Automation—Create simple, automated and touchless business processes to drive lower cost, higher quality and increased agility. Businesses require agility to quickly respond to market changes and new customer requirements. To enable greater business process agility, our R&D goals are to simplify, automate and enable business processes via flexible platforms that run on robust and scalable infrastructures. Automation of business processes benefits from our strong image, video and robotic processing, as well as our machine learning capabilities. Application of these methods to business processes enables technology to perform tasks that today are performed manually. Examples include providing automation solutions in transportation by aggregating and automatically applying business rules to simplify toll payments, using our state-of-the-art video and image analytics to reduce the need for manual review of license plates in tolling and toll adjustment scenarios, analyzing data on

eligibility claims and checking for correctness on applications. The scope of automation is applied across our portfolio of services and is a key element of our ongoing strategy of modern, efficient services.

Personalization—Augment humans by providing secure, real-time, context-aware personalized products and services. Whether business correspondence, personal communication, manufactured items or an information service, personalization increases the value to the recipient. Our R&D investments lead to technologies that improve the efficiency, economics and relevance of business services, such as customer care and health and welfare services. In our current customer care service offerings, the human touch is seamlessly added as our software automatically takes telephony data and merges it with customer records pulled from multiple sources to seamlessly create targeted scripts and flows. This allows the agent to have the caller's data at their fingertips and provide a more personal experience to the customer—whether on the phone or online. In toll systems, our systems automatically pull up a customer's name, verify their information and prompt them for unpaid tolls. In transit systems, our mobile app aggregates and calculates the time, cost, carbon footprint and health benefits from walking, biking, driving, parking and taking public transit. For health and welfare, our systems provide state of the art personalized delivery to ensure the best utilization of funds for the neediest populations.

Analytics—Transform big data into useful information to support better decision making. Competitive advantage can be achieved by better utilizing available and real-time information. Today, information resides in an ever increasing universe of servers, repositories and formats. The vast majority of information is unstructured, including text, images, voice and videos. Here, we seek to better manage large data systems in order to extract business insights to provide our clients with actionable recommendations and new services. Tailoring these methods to various industry applications leads to new customer value propositions. In hospitals, we mine usage and clinical indicators to improve patient experiences. We also help our healthcare clients identify waste and fraud by identifying networks of providers and patients with suspicious behavior, such as sudden and dramatic increases in a provider's level of business or unusual or illogical patient treatment sequences. In transportation, we enable transport and parking operators to better understand and predict commuter needs, including adherence to schedules, passenger loading levels, car park utilization rates and the impact of varying factors such as weather and schedule variations. In our card payment services business, we perform geo location analytics to predict potential fraud behaviors to assure monies are being distributed to the intended recipients.

Our total R&D spending totaled $31 million in 2016, $52 million in 2015 and $46 million in 2014. In addition to the R&D spending, a significant portion of our technology advancements occur within client contracts and are recorded as either operating expenses or capital expenditures.

Intellectual Property

Our general policy is to seek patent protection for those inventions likely to be incorporated into our products and services or where obtaining such proprietary rights will improve our competitive position. We own approximately 1100 patents and pending applications. Our patent portfolio evolves as new patents are awarded to us and as older patents expire. These patents expire at various dates, generally 20 years from their original filing dates. While we believe that our portfolio of patents and applications has value, in general no single patent is essential to our business or any individual segment. In addition, any of our proprietary rights could be challenged, invalidated or circumvented, or may not provide significant competitive advantages.

Our business relies on software, provided, to an approximately equal extent by both internal development and external sourcing to deliver our services in our businesses. With respect to internally developed software, we claim copyright on all such software, registering works which may be accessible to third parties. In addition, we rely on maintaining source code confidentiality to assure our market competitiveness. With respect to externally sourced software, we rely on contracts assuring our continued access for our business usage.

In the United States, we own 154 trademarks, which are either registered or applied for, reflecting the many businesses we participate in. These trademarks may have a perpetual life, subject to renewal every 10 years and may be subject to cancellation or invalidation based on certain use requirements and third-party challenges, or on other grounds. We vigorously enforce and protect our trademarks.

People and Culture

We draw on the business and technical expertise of our talented and diverse global workforce to provide our clients with high-quality services. Our business leaders bring a strong diversity of experience in our industry and a track record of successful performance and execution.

We have historically operated according to the human resource policies and programs of Xerox, which are designed to meet general governance and regulatory requirements. Conduent established its own diversity and inclusion program post-separation, which is overseen by Conduent's human resources department. Conduent promotes understanding and inclusion through a comprehensive set of diversity initiatives and strategies, including addressing under-representation by identifying shortfalls and developing action plans to close those gaps and through work-life programs that assist employees in many aspects of their personal lives. Additionally, Conduent informs and educates all employees on diversity programs, policies and achievements. As an independent company, we intend to continue our commitment to diversity and inclusion and implement similar policies and programs.

In the United States, Conduent complies with Equal Employment Opportunity guidelines and all applicable federal, state and local laws that govern the hiring and treatment of its employees.

As of December 31, 2016, we had approximately 96,000 employees globally, with 48% located in the United States and the remainder located primarily in India, the Philippines, Jamaica, Guatemala and Mexico.

Training and Talent Development
We believe our people are our most important asset, which is why we invest in employee growth and development programs. We are focused on building a workplace where our people can do their best work and have access to the tools and resources they need to perform their jobs more effectively. We are building a culture of learning and have shifted from delivering training to incorporating learning into day-to-day work.

We have a strong performance management system in place that requires all employees to engage with their managers on goal-setting and performance feedback, enabling personal and professional development. There is a strong emphasis on mentorship and coaching, both formal and informal, to help employees get to the next level in their careers. We enable this by developing management capability for our front line leaders to ensure they are able to coach and mentor their teams and engage in constructive and continuous two-way dialogue.

Corporate Ethics
Our commitment to business ethics represents more than a declaration to do the right thing. It has become an integral part of the way we do business. We operate according to our ethics and compliance program, which is designed to meet general governance and specific industry and regulatory requirements with a focus on values, culture and performance with integrity. Conduent has a business ethics program, which is overseen by a business ethics office, and a code of business conduct (Code), which will serve as the foundation of our business ethics program. The code of business conduct makes clear Conduent’s expectations for ethical leadership, performance with integrity and compliance with company policies and the law. In addition, the code of business conduct embodies and reinforces Conduent’s commitment to integrity and helps employees resolve ethics and compliance concerns consistent with operating principles and legal and policy controls. In addition, as Conduent employees, our employees are required to complete business ethics training annually and we periodically solicit their input to gauge the state of Conduent’s ethical culture and help identify areas for improvement.

Our directors must act in accordance with our Code of Business Conduct and Ethics for Members of the Board; our principal executive officer, principal financial officer and principal accounting officer, among others, must act in accordance with our Finance Code of Conduct; and all of our executives and employees must act in accordance with our Code of Business Conduct. Each of these codes of conduct can be accessed through our website at www.conduent.com/corporate-governance. They are also available to any shareholder who requests them in writing addressed to Conduent Incorporated, 2nd Floor, 100 Campus Drive, Florham Park, NJ 07932, Attention: Corporate Secretary. We will disclose any future amendments to, or waivers from, provisions of our Code of Business Conduct and Ethics for members of the Board and, our Code of Business Conduct and our Finance Code of Conduct for our officers on our website as promptly as practicable, and consistent with the requirements of applicable SEC and NYSE rules.

Backlog

Backlog, or the value of the remaining term of our service contracts, is not a metric that we regularly use to measure our business. However, over 80% of our revenues in 2016 were tied to recurring revenue contracts.

Seasonality

Our revenues can be affected by various factors such as our clients' demand pattern for our services. These factors have historically resulted in higher revenues and profits in the fourth quarter.

Other

Conduent Incorporated is a New York corporation, organized in 2016. Our principal executive offices are located at 100 Campus Drive, Florham Park, New Jersey 07932. Our telephone number is (973) 261-7100.

In the Investor Information section of our Internet website, you will find our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and any amendments to these reports. We make these documents available as soon as we can after we have filed them with, or furnished them to the U.S. Securities and Exchange Commission.

Our Internet address is www.conduent.com.

ITEM 1A. RISK FACTORS

Our government contracts are subject to termination rights, audits and investigations, which, if exercised, could negatively impact our reputation and reduce our ability to compete for new contracts.

A significant portion of our revenues is derived from contracts with U.S. federal, state and local governments and their agencies, and some of our revenues are derived from contracts with foreign governments and their agencies. Government entities typically finance projects through appropriated funds. While these projects are often planned and executed as multi-year projects, government entities usually reserve the right to change the scope of or terminate these projects for lack of approved funding and/or at their convenience. Changes in government or political developments, including budget deficits, shortfalls or uncertainties, government spending reductions (e.g., Congressional sequestration of funds under the Budget Control Act of 2011) or other debt or funding constraints, such as those recently experienced in the United States and Europe, could result in lower governmental sales and in our projects being reduced in price or scope or terminated altogether, which also could limit our recovery of incurred costs, reimbursable expenses and profits on work completed prior to the termination. Additionally, if the government discovers improper or illegal activities or contractual non-compliance (including improper billing), we may be subject to various civil and criminal penalties and administrative sanctions, which may include termination of contracts, forfeiture of profits, suspension of payments, fines and suspensions or debarment from doing business with the government. Any resulting penalties or sanctions could materially adversely affect our results of operations and financial condition. Moreover, government contracts are generally subject to audits and investigations by government agencies. If the government finds that we inappropriately charged any costs to a contract, the costs are not reimbursable or, if already reimbursed, the cost must be refunded to the government. Further, the negative publicity that could arise from any such penalties, sanctions or findings in such audits or investigations could have an adverse effect on our reputation in the industry and reduce our ability to compete for new contracts and could materially adversely affect our results of operations and financial condition.

We derive significant revenue and profit from commercial and government contracts awarded through competitive bidding processes, including renewals, which can impose substantial costs on us, and we will not achieve revenue and profit objectives if we fail to accurately and effectively bid on such projects.

Many of these contracts are extremely complex and require the investment of significant resources in order to prepare accurate bids and proposals. Competitive bidding imposes substantial costs and presents a number of risks, including: (i) the substantial cost and managerial time and effort that we spend to prepare bids and proposals for contracts that may or may not be awarded to us; (ii) the need to estimate accurately the resources and costs that will be required to implement and service any contracts we are awarded, sometimes in advance of the final determination of their full scope and design; (iii) the expense and delay that may arise if our competitors protest or

challenge awards made to us pursuant to competitive bidding and the risk that such protests or challenges could result in the requirement to resubmit bids and in the termination, reduction or modification of the awarded contracts; and (iv) the opportunity cost of not bidding on and winning other contracts we might otherwise pursue. If our competitors protest or challenge an award made to us on a government contract, the costs to defend such an award may be significant and could involve subsequent litigation that could take years to resolve.

Our ability to recover capital and other investments in connection with our contracts is subject to risk.

In order to attract and retain large outsourcing contracts, we sometimes make significant capital and other investments to enable us to perform our services under those contracts, such as purchases of information technology equipment, facility costs, labor resources and costs incurred to develop and implement software. The net book value of certain assets recorded, including a portion of our intangible assets, could be impaired, and our results of operations and financial condition could be materially adversely affected in the event of the early termination of all or a part of such a contract or a reduction in volumes and services thereunder for reasons such as a customer's or client's merger or acquisition, divestiture of assets or businesses, business failure or deterioration or a customer's or client's exercise of contract termination rights.

We rely to a significant extent on third-party providers, such as subcontractors, a relatively small number of primary software vendors, utility providers and network providers; if they cannot deliver or perform as expected or if our relationships with them are terminated or otherwise change, our results of operations and financial condition could be materially adversely affected.

Our ability to service our customers and clients and deliver and implement solutions depends to a large extent on third-party providers such as subcontractors, a relatively small number of primary software vendors, software application developers, utility providers and network providers meeting their obligations to us and our expectations in a timely, quality manner. Our results of operations and financial condition could be materially adversely affected and we might incur significant additional liabilities if any of our third-party providers do not meet these obligations or our or our clients' expectations or if they terminate or refuse to renew their relationships with us or were to offer their products to us with less advantageous prices and other terms than we previously had.

Failure to deliver on our contractual obligations properly and on time could materially adversely affect our results of operations and financial condition.

Our business model depends in large part on our ability to retain existing and attract new work from our base of existing clients, as well as on relationships we develop with our clients so that we can understand our clients' needs and deliver solutions and services that are tailored to meet those needs. In order for our business to grow, we must successfully manage the provision of services under our contracts. If a client is not satisfied with the quality of work performed by us or a subcontractor, or with the type of services or solutions delivered, then we could incur additional costs to address the situation, the profitability of that work might be impaired and the client's dissatisfaction with our services could damage our ability to obtain additional work from that client or obtain new work from other potential clients. In particular, many of our contracts with non-government clients may be terminated by the client, without cause, upon specified advance notice, so clients who are not satisfied might seek to terminate existing contracts prior to their scheduled expiration date, which may result in our inability to fully recover our up-front investments. In addition, clients could direct future business to our competitors. We could also trigger contractual credits to clients or a contractual default. Failure to properly transition new clients to our systems, properly budget transition costs or accurately estimate contract operational costs could result in delays in our contract performance, trigger service level penalties, impair fixed or intangible assets or result in contract profit margins that do not meet our expectations or our historical profit margins.

In addition, we incur significant expenditures for the development and construction of system software platforms needed to support our clients' needs. Our failure to fully understand client requirements or implement the appropriate operating systems or databases or solutions which enable the use of other supporting software may delay the project and result in cost overruns or potential impairment of the related software platforms, which could materially adversely affect our results of operations and financial condition.

We face significant competition and our failure to compete successfully could materially adversely affect our results of operations and financial condition.

To remain competitive, we must develop services and applications; periodically enhance our existing offerings; remain cost efficient; and attract and retain key personnel and management. If we are unable to compete successfully, we could lose market share and important customers to our competitors and that could materially adversely affect our results of operations and financial condition.

Our significant indebtedness could materially adversely affect our results of operations and financial condition.

We have and will continue to have a significant amount of debt and other obligations. Our substantial debt and other obligations could have important consequences. For example, it could (i) increase our vulnerability to general adverse economic and industry conditions; (ii) limit our ability to obtain additional financing for future working capital, capital expenditures, acquisitions and other general corporate requirements; (iii) require us to dedicate a substantial portion of our cash flows from operations to service debt and other obligations thereby reducing the availability of our cash flows from operations for other purposes; (iv) limit our flexibility in planning for, or reacting to, changes in our businesses and the industries in which we operate; (v) place us at a competitive disadvantage compared to our competitors that have less debt; and (vi) become due and payable upon a change in control. If new debt is added to our current debt levels, these related risks could increase.

Our ability to make payments on and to refinance our indebtedness, including the debt incurred in connection with the Spin-Off, as well as any future debt that we may incur, will depend on our ability to generate cash in the future from operations, financings or asset sales. Our ability to generate cash is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control.

The terms of our indebtedness may restrict our current and future operations, particularly our ability to incur debt that we may need to fund initiatives in response to changes in our business, the industries in which we operate, the economy and governmental regulations.

The terms of our indebtedness includes a number of restrictive covenants that impose significant operating and financial restrictions on us and our subsidiaries and limit our ability to engage in actions that may be in our long-term best interests. These may restrict our and our subsidiaries' ability to take some or all of the following actions:

- incur or guarantee additional indebtedness or sell disqualified or preferred stock;
- pay dividends on, make distributions in respect of, repurchase or redeem, capital stock;
- make investments or acquisitions;
- sell, transfer or otherwise dispose of certain assets, including accounts receivable;
- create liens;
- enter into sale/leaseback transactions;
- enter into agreements restricting the ability to pay dividends or make other intercompany transfers;
- consolidate, merge, sell or otherwise dispose of all or substantially all of our or our subsidiaries' assets;
- enter into transactions with affiliates;
- prepay, repurchase or redeem certain kinds of indebtedness;
- issue or sell stock of our subsidiaries; and/or
- significantly change the nature of our business.

As a result of all of these restrictions, we may be:

- limited in how we conduct our business and pursue our strategy; unable to raise additional debt financing to operate during general economic or business downturns; or
- unable to compete effectively or to take advantage of new business opportunities.

A breach of any of these covenants, if applicable, could result in an event of default under the terms of this indebtedness. If an event of default occurs, the lenders would have the right to accelerate the repayment of such debt and the event of default or acceleration may result in the acceleration of the repayment of any other of our debt to which a cross-default or cross-acceleration provision applies. Furthermore, the lenders of this indebtedness may require that we pledge our assets as collateral as security for our repayment obligations. If we were unable to repay any amount of this indebtedness when due and payable, the lenders could proceed against the collateral that

secures this indebtedness. In the event our creditors accelerate the repayment of our borrowings, we may not have sufficient assets to repay such indebtedness, which could materially adversely affect our results of operations and financial condition.

Our business is dependent on continued interest in outsourcing.

Our business and growth depend in large part on continued interest in outsourced business process services. Outsourcing means that an entity contracts with a third party, such as us, to provide business process services rather than perform such services in-house. There can be no assurance that this interest will continue, as organizations may elect to perform such services themselves and/or the business process outsourcing industry
could move to an as-a-Service model, thereby eliminating traditional business process outsourcing tasks. A
significant change in this interest in outsourcing could materially adversely affect our results of operations and
financial condition. Additionally, there can be no assurance that our cross-selling efforts will cause clients to purchase additional services from us or adopt a single-source outsourcing approach.

Our profitability is dependent upon our ability to obtain adequate pricing for our services and to improve our cost structure.

Our success depends on our ability to obtain adequate pricing for our services that will provide a reasonable return to our shareholders. Depending on competitive market factors, future prices we obtain for our services may decline from previous levels. If we are unable to obtain adequate pricing for our services, it could materially adversely affect our results of operations and financial condition. In addition, our contracts are increasingly requiring tighter timelines for implementation as well as more stringent service level metrics. This makes the bidding process for new contracts much more difficult and requires us to adequately consider these requirements in the pricing of our services.

In order to meet the service requirements of our customers, which often includes 24/7 service, and to optimize our employee cost base, including our back-office support, we often locate our delivery service and back-office support centers in lower-cost locations, including several developing countries. Concentrating our centers in these locations presents a number of operational risks, many of which are beyond our control, including the risks of political instability, natural disasters, safety and security risks, labor disruptions, excessive employee turnover and rising labor rates. Additionally, a change in the political environment in the United States or the adoption and enforcement of legislation and regulations curbing the use of such centers outside of the United States could materially adversely affect our results of operations and financial condition. These risks could impair our ability to effectively provide services to our customers and keep our costs aligned to our associated revenues and market requirements.

Our ability to sustain and improve profit margins is dependent on a number of factors, including our ability to continue to improve the cost efficiency of our operations through such programs as robotic process automation, to absorb the level of pricing pressures on our services through cost improvements and to successfully complete information technology initiatives. If any of these factors adversely materialize or if we are unable to achieve and maintain productivity improvements through restructuring actions or information technology initiatives, our ability to offset labor cost inflation and competitive price pressures would be impaired, each of which could materially adversely affect our results of operations and financial condition.

We may be subject to claims of infringement of third-party intellectual property rights which could adversely affect our results of operation and financial condition.

We rely heavily on the use of intellectual property. We do not own a significant portion of the software that we use to run our business; instead we license this software from a small number of primary vendors. If these vendors assert claims that we or our clients are infringing on their software or related intellectual property, we could incur substantial costs to defend these claims, which could materially adversely affect our results of operations and financial condition. In addition, if any of our vendors' infringement claims are ultimately successful, our vendors could require us to (i) cease selling or using products or services that incorporate the challenged software or technology, (ii) obtain a license or additional licenses from our vendors or (iii) redesign our services which rely on the challenged software or technology. In addition, we may be exposed to claims for monetary damages. If we are unsuccessful in defending an infringement claim and our vendors require us to initiate any of the above actions, or we are required to pay monetary damages, then such actions could materially adversely affect our results of operations and financial condition.

We are subject to laws of the United States and foreign jurisdictions relating to individually identifiable information and personal health information, and failure to comply with those laws, whether or not inadvertent, could subject us to legal actions and negatively impact our operations.

We receive, process, transmit and store information relating to identifiable individuals, both in our role as a service provider and as an employer. As a result, we are subject to numerous United States (both federal and state) and foreign jurisdiction laws and regulations designed to protect both individually identifiable information as well as personal health information, including the Health Insurance Portability and Accountability Act of 1996, as amended ("HIPAA") and the HIPAA regulations governing, among other things, the privacy, security and electronic transmission of individually identifiable health information, and the European Union Directive on Data Protection (Directive 95/46/EC). Other United States (both federal and state) and foreign jurisdiction laws apply to our processing of individually identifiable information and these laws have been subject to frequent changes, and new legislation in this area may be enacted at any time. For example, the recent invalidation of the U.S.-EU Safe Harbor regime will require us to implement alternative mechanisms in order for some of our data flows from Europe to the United States to comply with applicable law. Changes to existing laws, introduction of new laws in this area or failure to comply with existing laws that are applicable to us may subject us to, among other things, additional costs or changes to our business practices, liability for monetary damages, fines and/or criminal prosecution, unfavorable publicity, restrictions on our ability to obtain and process information and allegations by our customers and clients that we have not performed our contractual obligations, any of which could materially adversely affect our results of operations and financial condition.

We are subject to laws of the United States and foreign jurisdictions relating to processing certain financial transactions, including payment card transactions and debit or credit card transactions, and failure to comply with those laws, whether or not inadvertent, could subject us to legal actions and materially adversely affect our results of operations and financial condition.

We receive, process and implement financial transactions, and disburse funds, on behalf of both government and commercial customers. This activity includes receiving debit and credit card information to process payments due to our customers as well as disbursing funds on payment or debit cards to payees of our customers. As a result, we are subject to numerous United States (both federal and state) and foreign jurisdiction laws and regulations, including the Electronic Fund Transfer Act, as amended, the Currency and Foreign Transactions
Reporting Act of 1970 (commonly known as the Bank Secrecy Act), as amended, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (including the so-called Durbin Amendment), as amended, the Gramm-Leach-Bliley Act (also known as the Financial Modernization Act of 1999), as amended, and the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism (USA PATRIOT ACT) Act of 2001, as amended. Other United States (both federal and state) and foreign jurisdiction laws apply to our processing of certain financial transactions and these laws have been subject to frequent changes, and new legislation in this area may be enacted at any time. Changes to existing laws, introduction of new laws in this area or failure to comply with existing laws that are applicable to us may subject us to, among other things, additional costs or changes to our business practices, liability for monetary damages, fines and/or criminal prosecution, unfavorable publicity, restrictions on our ability to process financial transactions and allegations by our customers and clients that we have not performed our contractual obligations, any of which
could materially adversely affect our results of operations and financial condition.

We are subject to breaches of our security systems and service interruptions which could expose us to liability, impair our reputation or temporarily render us unable to fulfill our service obligations under our contracts.

We have implemented security systems, both directly and with third-party subcontractors and service providers, with the intent of maintaining both the physical security of our facilities and the data security of our customers', clients' and suppliers' confidential information and information related to identifiable individuals (including payment card and debit and credit card information and health information) against unauthorized access through our information systems or by other electronic transmission or through the misdirection, theft or loss of physical media. These include, for example, the appropriate encryption of information. Despite such efforts, we are subject to breach of security systems which may result in unauthorized access to our facilities and/ or the information we are trying to protect. Because the techniques used to obtain unauthorized access are constantly changing and becoming increasingly more sophisticated and often are not recognized until launched against a target, we or our third-party service providers may be unable to anticipate these techniques or implement sufficient preventative measures. Additionally, with advances in computer capabilities and data protection requirements to address

ongoing threats, we may be required to expend significant capital and other resources to protect against potential security breaches or to alleviate problems caused by security breaches. Moreover, employee error or malfeasance, faulty password management or other irregularities may result in a defeat of our or our third-party service providers' security measures and breach our or our third-party service providers' information systems (whether digital or otherwise).

If unauthorized parties gain physical access to one of our or one of our third-party service providers' facilities or electronic access to our or one of our third-party service providers' information systems or such information is misdirected, lost or stolen during transmission or transport, any theft or misuse of such information could result in, among other things, unfavorable publicity, governmental inquiry and oversight, difficulty in marketing our services, allegations by our customers and clients that we have not performed our contractual obligations, litigation by affected parties and possible financial obligations for damages related to the theft or misuse of such information, any of which could materially adversely affect our results of operations and financial condition. Moreover, a security breach could require us to devote significant management resources to address the problems created by the security breach and to expend significant additional resources to upgrade further the security measures that we employ to guard such important personal information against cyber attacks maintain various systems and data centers for our customers. Often these systems and data centers must be maintained worldwide and on a 24/7 basis. Although we endeavor to ensure that there is adequate backup and maintenance of these systems and centers, we could experience service interruptions that could result in curtailed operations and loss of customers, which could reduce our revenues and profits in addition to impairing our reputation. If our information systems and our back-up systems are damaged, breached or cease to function properly, we may have to make a significant investment to repair or replace them, and we may suffer interruptions in our operations in the interim, each of which could materially adversely affect our results of operations and financial condition.

If we underestimate the scope of work or the costs of performance in our contracts, or we mis-perform our contracts, our results of operations and financial condition could be materially adversely affected.

In order to stay competitive in our industry, we must also keep pace with changing technologies and customer preferences. Many of our contracts require us to design, develop and implement new technological and operating systems for our customers. Many of these systems involve detailed and complex computer source code which must be created and integrated into a working system that meets contract specifications. The accounting for these contracts requires judgment relative to assessing risks, estimating contract revenues and costs and making assumptions for schedule and technical issues. To varying degrees, each contract type involves some risk that we could underestimate the costs and resources necessary to fulfill the contract. In each case, our failure to accurately estimate costs or the resources and technology needed to perform our contracts or to effectively manage and control our costs during the performance of our work could result, and in some instances has resulted, in reduced profits or in losses. In addition, in many of our contracts, we have complicated performance obligations, including, without limitation, designing and building new integrated computer systems or doing actuarial work for pension, medical and other plans with beneficiaries that can rely on future projection of obligations to determine appropriate levels of funding. These contracts carry potential financial penalties or could result in financial damages or exposures if we fail to properly perform those obligations and could result in our results of operations and financial condition being materially adversely affected.

If we are unable to collect our receivables for unbilled services, our results of operations and financial condition could be materially adversely affected.

The profitability of certain of our large contracts depends on our ability to successfully obtain payment from our clients of the amounts they owe us for work performed. Actual losses on client balances could differ from current estimates and, as a result, may require adjustment of our receivables for unbilled services. Our receivables include long-term contracts and over the course of a long-term contract, our customers' financial condition may change such that their ability to pay their obligations, and our ability to collect our fees for services rendered, is adversely affected. Additionally, we may perform work for the federal, state and local governments, with respect to which we must file requests for equitable adjustment or claims with the proper agency to seek recovery in whole or in part, for out-of-scope work directed or caused by the government customer in support of its project, and the amounts of such recoveries may not meet our expectations or cover our costs. Timely collection of client balances also depends on our ability to complete our contractual commitments (for example, achieve specified milestones in percentage-of-completion contracts) and bill and collect our contracted revenues. If we are unable to meet our contractual requirements, we might experience delays in collection of and/or be unable to collect our client balances, and if this occurs, our results of operations and cash flows could be adversely affected. In addition, if we

experience an increase in the time to bill and collect for our services, our results of operations and financial condition could be materially adversely affected.

A decline in revenues from or a loss or failure of significant clients could materially adversely affect our results of operations and financial condition.

Our results of operations and financial condition could be materially adversely affected by the loss or failure of significant clients. Some of our clients are in business sectors which have experienced significant financial difficulties or consolidation, and/or the reduction of volumes or their inability to make payments to us, as a result of, among other things, their merger or acquisition, divestiture of assets or businesses, contract expiration, nonrenewal or early termination (including termination for convenience) or business or financial failure or deterioration. Economic and political conditions could affect our clients' businesses and the markets they serve.

We have non-recurring revenue, which subjects us to a risk that our revenues and cash flows from operations may fluctuate from period to period.

Revenue generated from our non-recurring services may fluctuate due to factors both within and outside of our control. Our mix of non-recurring and recurring revenues is impacted by acquisitions as well as growth in our non-recurring lines of business. There is less predictability and certainty in the timing and amount of revenues generated by our non-recurring services and, accordingly, our results of operations and financial condition could be materially adversely affected by the timing and amount of revenues generated from our non-recurring services.

The failure to obtain or maintain a satisfactory credit rating could adversely affect our liquidity, capital position, borrowing costs, access to capital markets and ability to post surety or performance bonds to support clients' contracts.

Any future downgrades to our credit rating could negatively impact our ability to renew contracts with our existing clients, limit our ability to compete for new clients, result in increased premiums for surety or performance bonds to support our clients' contracts and/or result in a requirement that we provide collateral to secure our surety or performance bonds. Further, certain of our commercial outsourcing contracts provide that, in the event our credit ratings are downgraded to specified levels, the client may elect to terminate its contract with us and either pay a reduced termination fee or, in some limited instances, no termination fee. Such a credit rating downgrade could adversely affect these client relationships.

There can be no assurance that we will be able to maintain our credit ratings. Any additional actual or anticipated downgrades of our credit ratings, including any announcement that our ratings are under review for a downgrade, may have a negative impact on our liquidity, capital position and access to capital markets.

A failure to attract and retain necessary technical personnel and qualified subcontractors could materially adversely affect our results of operations and financial condition.

Because we operate in intensely competitive markets, our success depends to a significant extent upon our ability to attract, retain and motivate highly skilled and qualified technical personnel and to subcontract with qualified, competent subcontractors. If we fail to attract, train and retain sufficient numbers of qualified engineers, technical staff and sales and marketing representatives or are unable to contract with qualified, competent subcontractors, our results of operations and financial condition could be materially adversely affected. Experienced and capable personnel in the services industry remain in high demand, and there is continual competition for their talents. Additionally, we may be required to increase our hiring in geographic areas outside of the United States, which could subject us to increased geopolitical and exchange rate risk. The loss of any key technical employee or the loss of a key subcontractor relationship could materially adversely affect our results of operations and financial condition.

Increases in the cost of telephone and data services or significant interruptions in such services could materially adversely affect our results of operations and financial condition.

Our business is significantly dependent on telephone and data service provided by various local and long distance telephone and data service providers around the world. Accordingly, any disruption of these services

could materially adversely affect our results of operations and financial condition. We have taken steps to mitigate our exposure to service disruptions by investing in redundant circuits, although there is no assurance that the redundant circuits would not also suffer disruption. Any inability to obtain telephone or data services at favorable rates could materially adversely affect our results of operations and financial condition. Where possible, we have entered into long-term contracts with various providers to mitigate short-term rate increases and fluctuations. There is no obligation, however, for the vendors to renew their contracts with us, or to offer the same or lower rates in the future, and such contracts are subject to termination or modification for various reasons outside of our control. A significant increase in the cost of telephone or data services that is not recoverable through an increase in the price of our services could materially adversely affect our results of operations and financial condition. In addition, a number of our facilities are located in jurisdictions outside of the United States where the provision of utility services, including electricity and water, may not be consistently reliable, and while there are backup systems in many of our operating facilities, an extended outage of utility or network services could materially adversely affect our results of operations and financial condition.

We are a holding company and, therefore, may not be able to receive dividends or other payments in needed amounts from our subsidiaries.

Our principal assets are the shares of capital stock and indebtedness of our subsidiaries. We rely on dividends, interest and other payments from these subsidiaries to meet our obligations for paying principal and interest on outstanding debt obligations, paying corporate expenses and, if determined by our Board, paying dividends to shareholders and repurchasing common shares. Certain of our subsidiaries are subject to regulatory requirements of the jurisdictions in which they operate or other restrictions that may limit the amounts that these subsidiaries can pay in dividends or other payments to us. No assurance can be given that there will not be further changes in law, regulatory actions or other circumstances that could restrict the ability of our subsidiaries to pay dividends to us. In addition, due to differences in tax rates, repatriation of funds from certain countries into the United States could have unfavorable tax ramifications for us. Furthermore, no assurance can be given that our subsidiaries may be able to make timely payments to us in order for us to meet our obligations.

Our results of operations and financial condition could be materially adversely affected by legal and regulatory matters.

We are potentially subject to various contingent liabilities that are not reflected on our balance sheet, including those arising as a result of being involved in a variety of claims, lawsuits, investigations and proceedings concerning: securities law; governmental entity contracting, servicing and procurement law; intellectual property law; environmental law; employment law; the Employee Retirement Income Security Act of 1974 (ERISA); and other laws and regulations, as discussed under Note 15—Contingencies and Litigation in our Consolidated Financial Statements. Should developments in any of these matters cause a change in our determination as to an unfavorable outcome and result in the need to recognize a material accrual or materially increase an existing accrual, or should any of these matters result in a final adverse judgment or be settled for significant amounts above any existing accruals, it could materially adversely affect our results of operations and financial condition in the period or periods in which such change in determination, judgment or settlement occurs. There can be no assurances as to the favorable outcome of any claim, lawsuit, investigation or proceeding. It is possible that a resolution of one or more such proceedings could require us to make substantial payments to satisfy judgments, fines or penalties or to settle claims or proceedings, any of which could materially adversely affect our results of operations and financial condition. These proceedings could also result in reputational harm, criminal sanctions, consent decrees or orders preventing us from offering certain services, requiring a change in our business practices in costly ways or requiring development of non-infringing or otherwise altered products or technologies. In addition, it can be very costly to defend litigation and these costs could materially adversely affect our results of operations and financial condition. See Note 15—Contingencies and Litigation to our Consolidated Financial Statements.

Our results of operations and financial condition may be materially adversely affected by conditions abroad, including local economics, political environments, fluctuating foreign currencies and shifting regulatory schemes.

A portion of our revenues is generated from operations outside the United States. In addition, we maintain significant operations outside the United States. Our results of operations and financial condition could be materially adversely affected by changes in foreign currency exchange rates, as well as by a number of other factors, including, without limitation, changes in economic conditions from country to country, changes in a country's political conditions, trade protection measures, licensing requirements, local tax issues, capitalization and other related legal

matters. We generally hedge foreign currency denominated assets, liabilities and anticipated transactions primarily through the use of currency derivative contracts. The use of derivative contracts is intended to mitigate or reduce transactional level volatility in the results of foreign operations, but does not completely eliminate volatility. We do not hedge the translation effect of international revenues and expenses, which are denominated in currencies other than our U.S. parent functional currency, within our combined financial statements. If we are unable to effectively hedge these risks, our results of operations and financial condition could be materially adversely affected.

If we fail to successfully develop new service offerings, including new technology components, and protect our intellectual property rights, we may be unable to retain current customers and gain new customers and our revenues would decline.

The process of developing new service offerings, including new technology components, is inherently complex and uncertain. It requires accurate anticipation of customers' changing needs and emerging technological trends. We must make long-term investments and commit significant resources before knowing whether these investments will eventually result in service offerings that achieve customer acceptance and generate the revenues required to provide desired returns. For example, establishing internal automation processes to help us develop new service offerings will require significant up-front costs and resources, which, if not monetized effectively, could materially adversely affect our revenues. In addition, some of our service offerings rely on technologies developed by and licensed from third parties. We may not be able to obtain or continue to obtain licenses and technologies from these third parties at all or on reasonable terms, or such third parties may demand cross-licenses to our intellectual property. It is also possible that our intellectual property rights could be challenged, invalidated or circumvented, allowing others to use our intellectual property to our competitive detriment. We also must ensure that all of our service offerings comply with both existing and newly enacted regulatory requirements in the countries in which they are sold. If we fail to accurately anticipate and meet our customers' needs through the development of new service offerings (including technology components) or if we fail to adequately protect our intellectual property rights or if our new service offerings are not widely accepted or if our current or future service offerings fail to meet applicable worldwide regulatory requirements, we could lose market share and customers to our competitors and that could materially adversely affect our results of operations and financial condition.

Risks related to the Spin-off:

We may be unable to achieve some or all of the benefits that we expect to achieve from the Spin-Off.

We believe that, as an independent, publicly traded company, we will be able to, among other things, design and implement corporate strategies and policies that are targeted to our business, better focus our financial and operational resources on our specific business, create effective incentives for our management and employees that are more closely tied to our business performance, provide investors more flexibility and enable us to achieve alignment with a more natural shareholder base and implement and maintain a capital structure designed to meet our specific needs. However, by separating from Xerox, we may be more susceptible to market fluctuations and other adverse events. As an independent entity, we have an arm's-length relationship with Xerox and we may not be able to obtain supplies from Xerox on terms as favorable to us as those we had as a wholly owned subsidiary of Xerox prior to the Spin-Off. As a smaller, independent company, Conduent will have a narrower business focus and may be more vulnerable to changing market conditions as well as the risk of takeover by third parties. In addition, we may be unable to achieve some or all of the benefits that we expect to achieve as an independent company in the time we expect, if at all. Furthermore, Xerox used to guarantee our and our subsidiaries' performance under certain services contracts and real estate leases. Following the Spin-Off, we expect that Conduent will provide such performance guarantees, and we may be unable to retain or renew contracts or real estate leases or a failure to renew such contracts or leases on favorable terms and conditions could materially adversely affect our results of operations and financial condition. If we fail to achieve some or all of the benefits that we expect to achieve as an independent company, or do not achieve them in the time we expect, our results of operations and financial condition could be materially adversely affected.

We may be unable to make, on a timely or cost-effective basis, the changes necessary to operate as an independent, publicly traded company, and we may experience increased costs after the Spin-Off.

We have historically operated as part of Xerox's corporate organization, and Xerox has provided us with various corporate functions. Following the Spin-Off, Xerox will have no obligation to provide us with assistance other than the transition services described under "Certain Relationships and Related Party Transactions—Transition Services Agreement." These services do not include every service that we have received from Xerox

in the past, and Xerox is only obligated to provide these services for limited periods following completion of the Spin-Off. Accordingly, following the Spin-Off, we will need to provide internally or obtain from unaffiliated third parties the services we currently receive from Xerox. These services include senior management, legal, human resources, finance and accounting, treasury, information technology, marketing and communications, internal audit and other shared services, the effective and appropriate performance of which are critical to our operations. We may be unable to replace these services in a timely manner or on terms and conditions as favorable as those we receive from Xerox. Because our business has most recently operated as part of the wider Xerox organization, we may be unable to successfully establish the infrastructure or implement the changes necessary to operate independently, or may incur additional costs that could adversely affect our business. If we fail to obtain the quality of services necessary to operate effectively or incur greater costs in obtaining these services, our results of operations and financial condition could be materially adversely affected.

We have no recent operating history as an independent, publicly traded company, and our historical and pro forma financial data are not necessarily representative of the results we would have achieved as an independent, publicly traded company and may not be a reliable indicator of our future results.

We derived the historical financial data included in this Annual Report from Xerox's consolidated financial statements, and this data does not necessarily reflect the results of operations and financial condition we would have achieved as an independent, publicly traded company during the periods presented, or those that we will achieve in the future. This is primarily because of the following factors:

- Prior to the Spin-Off, we operated as part of Xerox's broader corporate organization and Xerox performed various corporate functions for us, including, but not limited to, senior management, legal, human resources, finance and accounting, treasury, information technology, marketing and communications, internal audit and other shared services. Our historical financial data reflect allocations of corporate expenses from Xerox for these and similar functions. These allocations may not reflect the costs we will incur for similar services in the future as an independent, publicly traded company.
- We entered into transactions with Xerox that did not exist prior to the Spin-Off, such as Xerox's provision of transition services, which will cause us to incur new costs.
- Our historical financial data do not reflect changes that we expect to experience in the future as a result of our separation from Xerox. As part of Xerox, we enjoyed certain benefits from Xerox's operating diversity, size, purchasing power, credit rating, borrowing leverage and available capital for investments. Many of our services contracts, particularly those for our transportation service offerings in our Public Sector business, require significant capital investments, and after the Spin-Off, we may not have access to the capital (from both internal and external sources) necessary to fund these services contracts. As an independent entity, we may be unable to purchase goods, services and technologies, such as insurance and health care benefits and computer software licenses, or access capital markets on terms as favorable to us as those we obtained as part of Xerox prior to the Spin-Off.

Following the Spin-Off, we are now responsible for the additional costs associated with being an independent, publicly traded company, including costs related to corporate governance, investor and public relations and public reporting. For additional information about our past financial performance and the basis of presentation of our financial statements, see "Selected Historical Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our historical financial statements and the notes thereto included in this annual report on Form 10-K. Some of the contracts to be transferred or assigned to us in connection with the Internal Transactions and Distribution contain provisions that require the consent of a third party to the Internal Transactions, the Distribution or both. Failure to obtain such consents on commercially reasonable and satisfactory terms may impair our entitlement to the benefit of these contracts in the future.

We may have been able to receive better terms from unaffiliated third parties than the terms we receive in our agreements with Xerox.

We entered into agreements with Xerox related to our separation from Xerox, including the Separation and Distribution Agreement, Transition Services Agreement, Tax Matters Agreement, Employee Matters Agreement and any other agreements, while we are still part of Xerox. Accordingly, these agreements may not reflect terms that would have resulted from arm's-length negotiations among unaffiliated third parties. The terms of these agreements relate to, among other things, allocations of assets, liabilities, rights, indemnifications and other obligations between Xerox and us. We may have received better terms from third parties. See "Certain Relationships and Related Party Transactions—Agreements with Xerox."

The Spin-Off could result in significant tax liability to Xerox and its shareholders.

Completion of the Spin-Off required Xerox's receipt of a written opinion of Cravath, Swaine & Moore LLP to the effect that the Distribution should qualify for non-recognition of gain and loss under Section 355 of the Code and the receipt and continuing effectiveness and validity of the IRS Ruling.

The opinion of counsel did not address any U.S. state or local or foreign tax consequences of the Spin-Off. The opinion assumed that the Spin-Off was completed according to the terms of the Separation and Distribution Agreement and relied on the facts as stated in the Separation and Distribution Agreement, the Tax Matters Agreement, the other ancillary agreements, the Information Statement included in our registration statement on Form 10 and a number of other documents. In addition, the opinion was based on certain representations as to factual matters from, and certain covenants by, Xerox and us. The opinion cannot be relied on if any of the assumptions, representations or covenants are incorrect, incomplete or inaccurate or are violated in any material respect.

Xerox has received the IRS Ruling. The IRS Ruling relies on certain facts, assumptions, representations and undertakings from Xerox and us regarding the past and future conduct of Xerox's and our businesses and other matters. If any of these facts, assumptions, representations or undertakings is incorrect or not otherwise satisfied, Xerox may not be able to rely on the IRS Ruling. In addition, the IRS ruling is not a comprehensive ruling from the IRS regarding all aspects of the U.S. federal income tax consequences of the transactions.

Accordingly, notwithstanding the opinion of counsel and the IRS Ruling, there can be no assurance that the IRS will not assert, or that a court would not sustain, a contrary position.

If the Distribution were determined not to qualify for non-recognition of gain and loss for U.S. federal income tax purposes, U.S. Holders could be subject to tax. In this case, each U.S. Holder who received our common stock in the Distribution would generally, for U.S. federal income tax purposes, be treated as having received a distribution in an amount equal to the fair market value of our common stock received, which would generally result in (i) a taxable dividend to the U.S. Holder to the extent of that U.S. Holder's pro rata share of Xerox's current and accumulated earnings and profits; (ii) a reduction in the U.S. Holder's basis (but not below zero) in Xerox common stock to the extent the amount received exceeds the shareholder's share of Xerox's earnings and profits; and (iii) a taxable gain from the exchange of Xerox common stock to the extent the amount received exceeds the sum of the U.S. Holder's share of Xerox's earnings and profits and the U.S. Holder's basis in its Xerox common stock.

We could have an indemnification obligation to Xerox if the Distribution were determined not to qualify for non-recognition treatment, which could materially adversely affect our results of operations and financial condition.

If it were determined that the Distribution did not qualify for non-recognition of gain and loss under Section 355 of the Code, we could, under certain circumstances, be required to indemnify Xerox for the resulting taxes and related expenses. Any such indemnification obligation could materially adversely affect our results of operations and financial condition.

In addition, Section 355(e) of the Code generally creates a presumption that the Distribution would be taxable to Xerox, but not to shareholders, if we or our shareholders were to engage in transactions that result in a 50% or greater change by vote or value in the ownership of our stock during the four-year period beginning on the date that begins two years before the date of the Distribution, unless it were established that such transactions and the Distribution were not part of a plan or series of related transactions giving effect to such a change in ownership. If the Distribution were taxable to Xerox due to such a 50% or greater change in ownership of our stock, Xerox would recognize gain equal to the excess of the fair market value of our common stock distributed to Xerox shareholders over Xerox's tax basis in our common stock and we generally would be required to indemnify Xerox for the tax on such gain and related expenses. Any such indemnification obligation could materially adversely affect our results of operations and financial condition.

We agreed to numerous restrictions to preserve the non-recognition treatment of the Distribution, which may reduce our strategic and operating flexibility.

We agreed in the Tax Matters Agreement to covenants and indemnification obligations that address compliance with Section 355 of the Code. These covenants and indemnification obligations may limit our ability to pursue strategic

transactions or engage in new businesses or other transactions that may otherwise maximize the value of our business, and might discourage or delay a strategic transaction that our shareholders may consider favorable.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None

ITEM 2. PROPERTIES

We lease and own numerous facilities worldwide with larger concentrations of space in Kentucky, New Jersey, California, Mexico, Guatemala, the Philippines, Jamaica, Romania and India. Our owned and leased facilities house general offices, sales offices, service locations, call centers and distribution centers. The size of our property portfolio as of December 31, 2016 was approximately 12.2 million square feet at an annual operating cost of approximately $294 million and comprised 513 leased properties and 8 owned properties. We believe that our current facilities are suitable and adequate for our current businesses. Because of the interrelation of our business segments, each of the segments use substantially all of these properties at least in part.

As a result of implementing our strategic transformation program as well as various productivity initiatives, several leased and owned properties may become surplus over the next three years. We are obligated to maintain our leased surplus properties through required contractual lease periods and plan to dispose of or sublease these
properties.

ITEM 3. LEGAL PROCEEDINGS

The information set forth under Note 15 "Contingencies and Litigation" in the Consolidated Financial Statements in Part II, Item 8, which is incorporated here by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

Part II

ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Stock Exchange Information

The common stock of Conduent Incorporated is listed on the New York Stock Exchange ("NYSE") with the ticker symbol "CNDT." Our common stock did not begin trading until January 3, 2017.

Conduent Common Stock Dividends

We intend to retain future earnings for use in the operation of our business and to fund future growth, We do not anticipate paying any dividends on our common stock for the foreseeable future.

ITEM 6. SELECTED FINANCIAL DATA

FIVE YEARS IN REVIEW
(in millions, except per-share data)

	2016	2015	2014	2013	2012 (unaudited)
Per-Share Data					
(Loss) income from continuing operations					
Basic	$ (4.85)	$ (1.65)	$ 0.17	$ 0.67	$ 0.68
Diluted	(4.85)	(1.65)	0.17	0.67	0.68
Net (loss) income attributable to Conduent					
Basic	(4.85)	(2.04)	(0.40)	0.90	0.84
Diluted	(4.85)	(2.04)	(0.40)	0.90	0.84
Common stock dividends declared[1]					
Operations					
Revenues	$ 6,408	$ 6,662	$ 6,938	$ 6,879	$ 6,873
(Loss) income from continuing operations	(983)	(336)	34	135	137
Net (loss) income	(983)	(414)	(81)	182	170
Financial Position					
Working capital	$ 515	$ (867)	$ (887)	$ (1,450)	$ (1,975)
Total Assets	7,709	9,058	10,954	11,205	11,217
Consolidated Capitalization					
Short-term debt and current portion of long-term debt	$ 28	$ 24	$ 268	$ 42	$ 37
Long-term debt	1,913	37	43	310	292
Total Debt[2]	1,941	61	311	352	329
Series A preferred stock	142	n/a	n/a	n/a	n/a
Conduent shareholders' equity/former parent investment	3,288	5,162	5,411	5,579	5,408
Total Consolidated Capitalization	$ 5,371	$ 5,223	$ 5,722	$ 5,931	$ 5,737
Selected Data and Ratios[3]					

_____
(1) We did not declare or pay dividends for the periods presented.
(2) Includes capital lease obligations.
(3) Selected data and ratios are not provided as the common stock of Conduent Incorporated did not begin "regular way" trading on the NYSE until January 3, 2017.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Introduction

The following Management's Discussion and Analysis (MD&A) is intended to help the reader understand the results of operations and financial condition of Conduent Incorporated. MD&A is provided as a supplement to, and should be read in conjunction with, our Consolidated Financial Statements and the accompanying notes. MD&A provides additional information about our operations, current developments, financial condition, cash flows and results of operations.

Throughout the MD&A, we refer to various notes to our Consolidated Financial Statements which appear in Item 8 of this 2016 Form 10-K, and the information contained in such notes is incorporated by reference into the MD&A in the places where such references are made.

Executive Overview

With revenues of $6.4 billion, we are a leading provider of business process services with expertise in transaction-intensive processing, analytics and automation. We serve as a trusted business partner in both the front office and back office, enabling personalized, seamless interactions on a massive scale that improve end-user experience. Our addressable market size in the global business process service industry is estimated at nearly $260 billion.

Headquartered in Florham Park, New Jersey, the 96,000 people of Conduent, as of December 31, 2016, serve customers in more than 40 countries. In 2016, 11% of our revenue was generated outside the U.S.

We organize our business around three main reportable segments: **Commercial Industries, Healthcare** and **Public Sector**.

- Our **Commercial Industries** segment is comprised of business process services and customized solutions offered to clients in a variety of industries (other than healthcare).
- Our **Healthcare** segment is comprised of industry-centric business process services offered to clients across the healthcare industry, including providers, payers, employers, pharmaceutical and life science companies and government agencies.
- Our **Public Sector** segment is comprised of government-centric business process services offered to U.S. federal, state and local governments, as well as foreign.

Separation

On December 31, 2016, Conduent Incorporated completed its Separation from Xerox Corporation and is now an independent public company trading on the New York Stock Exchange under the symbol "CNDT". In connection with the separation from Xerox, Conduent entered into several agreements to (1) affect the legal and structural separation of Conduent and Xerox, (2) govern the relationship between Conduent and Xerox up to and after the completion of the separation and (3) allocate between Conduent and Xerox various assets, liabilities and obligations, including, among other things, employee benefits and tax-related assets and liabilities. The agreements entered into include a separation and distribution agreement, a transition services agreement, a tax matters agreement, an employee matters agreement, an intellectual property agreement and a trademark license agreement.

Significant 2016 Charges

Goodwill Impairment Charge
As required by ASC 350 Intangibles - Goodwill and Other, we annually test the Goodwill of our reporting units for impairment. For Step 1 of the test, as in prior years, we determined the fair value of our reporting units utilizing a combination of both an Income Approach and a Market Approach to calculate fair value for each reporting units. We then compare the fair value of each reporting unit to its carrying value. The Income Approach utilizes a discounted cash flow analysis based upon the forecasted future business results of each reporting units. The Market Approach

utilizes the guideline public company method. We apply a two-thirds and one-third weighting to the results of the Income Approach and the Market Approach, respectively, to calculate the fair value of each reporting units.

Our Commercial Industries reporting units operating results declined in 2016 versus our expectations, including a weak fourth quarter 2016. In performing Step 1 of our annual impairment test during the fourth quarter of 2016, we determined that the carrying value of the Commercial Industries reporting unit exceeded fair value by 53%, indicating an impairment and; therefore, we performed Step 2 of the test. Our Healthcare and Public Sector reporting units passed Step 1 with fair value exceeding carrying value by 19% and 14%, respectively, and, therefore, we were not required to perform Step 2 of the test.

Step 2 for the Commercial Industries reporting unit required a hypothetical purchase price allocation and the calculation of the implied fair value of goodwill. As a result of performing Step 2, we calculated a goodwill impairment of $935 million. This has been presented as Goodwill impairment, a separate line item in the Consolidated Statements of Income (Loss). Refer to Note 7 - Goodwill and Intangible Assets, Net in the Consolidated Financial Statements for additional information.

Our annual test relies upon key assumptions about revenue and profitability, including the impact of significant planned cost reductions from our Strategic Transformation program. As with any forecast, there is an element of uncertainty and management has considered this when performing the annual impairment test. Key assumptions like the discount rate we use to calculate the present value of the forecasted cash flows for each reporting unit were risk adjusted to reflect these uncertainties. If our actual operating results do not achieve the risk-adjusted forecast of revenue and profitability, or delays in achieving the benefits from the cost reductions assumed in our Strategic Transformation program occur, there is the risk of future goodwill impairments.

As a result of the significant impact of the Goodwill impairment charge on our reported revenues, earnings and key metrics for the period, we also discuss our results excluding the impact of this charge. The adjusted results are noted as “adjusted” in the discussion below. Refer to the “Non-GAAP Financial Measures” section for a reconciliation and explanation of these non-GAAP financial measures.

NY MMIS Charge
In February 2017, we determined that it is probable that we will not fully complete our New York Medicaid Management Information System ("NY MMIS") project in its current form.

As a result of this decision and the application of percentage-of-completion accounting, we recorded a pre-tax charge (NY MMIS charge) of $161 million ($98 million after-tax) during the fourth quarter of 2016. The charge included $83 million for the write-off of contract receivables, which were recorded as a reduction in Revenues. In addition, in Cost of Outsourcing, we recorded a $78 million charge which included: $36 million for wind-down costs, $28 million related to the non-cash impairment of the Health Enterprise software and $14 million for the write-off of deferred contract set-up and transition costs and other related assets and liabilities.

At this time, we believe we have recorded our best estimate of the financial statement impact associated with the NY MMIS contract developments; however, our estimate of the financial statement impact is subject to change once the matter is settled with the State of New York.

As a result of the significant impact of the NY MMIS charge on our reported revenues, earnings and key metrics for the period, we also discuss our results excluding the impact of these charges. These adjusted results are noted as “adjusted” in the discussion below. Refer to the “Non-GAAP Financial Measures” section for a reconciliation and explanation of these non-GAAP financial measures.

Significant 2015 Charges

Health Enterprise Charge
Late in the third quarter of 2015, we determined that we would not fully complete the Health Enterprise Medicaid platform implementation projects in California and Montana. However, we would continue to process Medicaid claims using existing legacy systems in those states, thus providing uninterrupted service for the states' healthcare providers and constituents.

This determination resulted in recording a pre-tax charge (HE charge) of $389 million ($237 million after-tax) in 2015. The charge included $116 million for the write-off of contract receivables (primarily non-current), $34 million related to the non-cash impairment of the HE software and deferred contract set-up transition costs and $23 million for other related assets and liabilities. The remainder of the charge was primarily related to settlement costs including payments to subcontractors resulting in cash outflows in future quarters. Of the $389 million charge, $116 million was recorded as a reduction to revenues and the remaining $273 million was recorded to Cost of outsourcing. This development followed the Government Healthcare strategy change announced in July 2015, regarding our decision to focus our future HE implementations on current Medicaid customers and to discontinue investment in and sales of the Xerox Integrated Eligibility System. This change in strategy resulted in pre-tax non-cash software platform impairment charges of $146 million ($89 million after-tax) in the second quarter 2015.

As a result of the significant impact of the HE charge and the software impairment charges on our reported revenues, earnings and key metrics for the period, we are also discussing our results excluding the impact of these charges. These adjusted results are noted as “adjusted” in the discussion below. Refer to the "Non-GAAP Financial Measures" section for a reconciliation and explanation of these non-GAAP financial measures.

Divestitures

In December 2014, we announced an agreement to sell our Information Technology Outsourcing (ITO) business to Atos SE and began reporting it as a Discontinued Operation. The sale was completed on June 30, 2015. Refer to Note 4 - Divestitures in our Consolidated Financial Statements for additional information.

Financial Overview

Total revenues of $6.4 billion for the year ended December 31, 2016, decreased 4%, with a 1-percentage point negative impact from currency, as compared to 2015. On an adjusted[1] basis, excluding the NY MMIS charge, total revenues decreased 4% with a 1-percentage point negative impact from currency, resulting from declines in Commercial Industries and Healthcare. Operating margin[1] of 5.5% improved 0.7-percentage points as compared to 2015, reflecting cost and productivity improvements, including benefits from our strategic transformation program, as well as lower expenses from our decision to refocus our Government Healthcare business.

2016 Net loss was $983 million for the year ended December 31, 2016. The increase in loss is primarily due to the Goodwill impairment charge, the NY MMIS charge and profit declines in Commercial Industries, partially offset by profit increases in the Public Sector and Healthcare and the inclusion of the pre-tax HE charge of $389 million in 2015.

Cash flow from operations was $108 million for the year ended December 31, 2016 as compared to $493 million in 2015. The decrease in operating cash flow was primarily due to HE settlement payments, reduced factoring and timing of collections of accounts receivable, restructuring and separation payments. Cash provided by investing activities of $16 million primarily reflects the payments received on related party notes receivables, primarily offset by cost of additions to land, building and equipment and internal use software. Cash provided by financing activities was $132 million, primarily reflecting $1,902 million for proceeds on issuance of debt, $1,132 million of net payments on related party notes payable and $588 million for transfers to Xerox.

During 2016 we began a three-year transformation program targeting cumulative cost savings of $700 million from across the business. Focus areas of the program include increasing the use of automation across service delivery solutions, improving employee utilization, reducing attrition, utilizing our global delivery network more efficiently, updating our legacy IT infrastructure and reducing spend on third-party IT vendors, achieving efficiencies in procurement, and remediating under-performing contracts. We are on track to achieve these cumulative savings through 2018.

---

(1) Refer to the "Non-GAAP Financial Measures" section for an explanation of the non-GAAP financial measure.

2017 Outlook

Revenues - For 2017, we expect total revenues to decline similar to 2016 levels with stabilization in 2018 and building growth momentum later in the year.

Investments - We plan to balance investments in the business with margin expansion and will focus on capturing market growth opportunities by aligning our businesses by industry verticals, increasing our salesforce in targeted growth areas, investing in platforms and technology and considering potential acquisitions.

Currency Impact

To understand the trends in our business, we believe that it is helpful to analyze the impact of changes in the translation of foreign currencies into U.S. Dollars on revenue and expenses. We refer to this analysis as “currency impact” or “the impact from currency” or "constant currency". In 2016, 2015 and 2014, this impact is calculated by translating current period activity in local currency using the comparable prior year period's currency translation rate.

Application of Critical Accounting Policies

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires us to make estimates and assumptions in certain circumstances that affect amounts reported in the accompanying Consolidated Financial Statements and notes thereto. In preparing our Consolidated Financial Statements, we have made our best estimates and judgments of certain amounts included in the Consolidated Financial Statements giving due consideration to materiality. However, application of these accounting policies involves the exercise of judgment and use of assumptions as to future uncertainties and, as a result, actual results could differ from these estimates. Senior management has discussed the development and selection of the critical accounting policies, estimates and related disclosures included herein with the Audit Committee of the Board of Directors. We consider these as critical to understanding our Consolidated Financial Statements, as their application places the most significant demands on management's judgment, since financial reporting results rely on estimates of the effects of matters that are inherently uncertain. In instances where different estimates could have reasonably been used, we disclosed the impact of these different estimates on our operations. In certain instances, the accounting rules are prescriptive; therefore, it would not have been possible to reasonably use different estimates. Changes in assumptions and estimates are reflected in the period in which they occur. The impact of such changes could be material to our results of operations and financial condition in any quarterly or annual period.

Specific risks associated with these critical accounting policies are discussed throughout the MD&A, where such policies affect our reported and expected financial results. For a detailed discussion of the application of these and other accounting policies, refer to Note 1 - Basis of Presentation and Summary of Significant Accounting Policies in the Consolidated Financial Statements.

Revenue Recognition

Application of the various accounting principles in U.S. GAAP related to the measurement and recognition of revenue requires us to make judgments and estimates. Complex arrangements with nonstandard terms and conditions may require significant contract interpretation to determine the appropriate accounting. Refer to Note 1 - Basis of Presentation and Summary of Significant Accounting Policies - New Accounting Standards and Accounting Changes - Revenue Recognition in the Consolidated Financial Statements for additional information regarding our revenue recognition policies.

A significant portion of our revenue is recognized based on objective criteria that do not require significant estimates or uncertainties. For example, transaction volumes, time and material and cost reimbursable arrangements are based on specific, objective criteria under the contracts. Accordingly, revenues recognized under these contracts do not require the use of significant estimates that are susceptible to change. Revenue recognized using the percentage-of completion (POC) accounting method does require the use of estimates and judgment as discussed below.

We recognize revenues when we have persuasive evidence of an arrangement, the services have been provided, the transaction price is fixed or determinable and collectability is reasonably assured. During 2016, approximately 81% of our revenue was recognized based on transaction volumes, approximately 7% was recognized on a fixed fee basis (wherein our revenue is earned as we fulfill our performance obligations under the arrangement), approximately 2% was related to cost reimbursable contracts, approximately 4% recognized using POC accounting and the remaining 6% was related to time and material contracts. Our revenue mix is subject to change due to the impact of changing customer requirements, acquisitions, divestitures, new business and lost business.

Revenue Recognition - Percentage-of-Completion: A portion of our revenue (approximately 4%) is recognized using the percentage-of-completion (POC) accounting method. This method requires the use of estimates and judgment. Although not significant to total revenue, the POC methodology is normally applied to certain of our larger and longer term outsourcing contracts involving system development and implementation, primarily in government healthcare and certain government transportation contracts. In addition, we had unbilled receivables totaling $279 million and $289 million at December 31, 2016 and 2015, respectively, representing revenues recognized but not yet billable under the terms of our POC contracts.

The POC accounting methodology involves recognizing probable and reasonably estimable revenue using the percentage of services completed based on a current cumulative cost incurred to estimated total cost basis and a reasonably consistent profit margin over the period. Due to the long-term nature of these arrangements, developing the estimates of cost often requires significant judgment. Factors that must be considered in estimating the progress of work completed and ultimate cost of the projects include, but are not limited to, the availability of labor and labor productivity, the nature and complexity of the work to be performed and the impact of delayed performance. If changes occur in delivery, productivity or other factors used in developing the estimates of costs or revenues, we revise our cost and revenue estimates, which may result in increases or decreases in revenues and costs. Such revisions are reflected in income in the period in which the facts that give rise to that revision become known. We perform ongoing profitability analysis of our POC services contracts in order to determine whether the latest estimates require updating. Key factors reviewed by the company to estimate the future costs to complete each contract are future labor costs, future product costs, expected productivity efficiencies, achievement of contracted milestones and performance goals, as well as potential penalties for milestone and system implementation delays.

If at any time our estimates indicate the POC contract will be unprofitable, the entire estimated loss for the remainder of the contract is recorded immediately in cost of services. This results in the contract being recorded at a zero profit margin going forward with recognition of an equal amount of revenues and costs over the remaining contract term. A zero profit margin may also be applied when it is impractical to estimate specific amounts or ranges of contract revenues and costs; however, we can at least determine that we will not incur a loss on a particular contract.

The POC accounting process is particularly complex and challenging for contracts with significant system implementation deliverables due to their significant scope and duration, the highly technical nature of the implementations, the potential for additional costs related to productivity and performance penalties and other delivery factors. Accordingly, based on the significance of these projects, we continually monitor our progress and consider the potential for increased costs as well as risks and uncertainties in our estimates of revenues and costs under the POC accounting methodology. To the extent possible, we attempt to mitigate these risks through operational changes, project oversight and process improvements.

Capitalization of Outsourcing Contract Costs

In connection with our services arrangements, we incur and capitalize costs to originate these long-term contracts and to perform the migration, transition and setup activities necessary to enable us to perform under the terms of the arrangement. Certain initial direct costs of an arrangement are capitalized and amortized over the contractual service period of the arrangement to cost of services. From time to time, we also provide inducements to customers in various forms, including contractual credits, which are capitalized and amortized as a reduction of revenue over the term of the contract. We regularly review costs to determine appropriateness for deferral in accordance with the relevant accounting guidance. Key estimates and assumptions that we must make include projecting future cash

flows in order to assess the recoverability of deferred costs. To assess recoverability, undiscounted estimated cash flows of the contract are projected over its remaining life and compared to the carrying amount of contract related assets, including the unamortized deferred cost balance. Such estimates require judgment and assumptions, which are based upon the professional knowledge and experience of our personnel. Key factors that are considered in estimating the undiscounted cash flows include projected labor costs and productivity efficiencies. A significant change in an estimate or assumption on one or more contracts could have a material effect on our results of operations.

Capitalization of Software Development Costs

We capitalize certain costs incurred to develop commercial software products to be sold, leased or otherwise marketed after establishing technological feasibility, and we capitalize costs to develop or purchase internal-use software. Significant estimates and assumptions include: determining the appropriate period over which to amortize the capitalized costs based on estimated useful lives, estimating the marketability of the commercial software products and related future revenues and assessing the unamortized cost balances for impairment. For commercial software products, determining the appropriate amortization period is based on estimates of future revenues from sales of the products. We consider various factors to project marketability and future revenues, including an assessment of alternative solutions or products, current and historical demand for the product, and anticipated changes in technology that may make the product obsolete. For internal-use software, the appropriate amortization period is based on estimates of our ability to utilize the software on an ongoing basis. To assess the recoverability of capitalized software costs, we consider estimates of future revenue, costs and cash flows. Such estimates require assumptions about future cash inflows and outflows, and are primarily based on the historical experience and expectations regarding future revenues. A significant change in an estimate related to one or more software products could result in a material change to our results of operations.

Refer to Note 6—Land, Buildings, Equipment and Software, Net in the Consolidated Financial Statements for additional information regarding capitalized software costs.

Business Combinations

The accounting for business combinations requires the use of significant estimates and assumptions in the determination of the fair value of assets acquired and liabilities assumed in order to properly allocate the purchase price consideration between assets that are depreciated and amortized from goodwill. Our estimates of the fair values of assets and liabilities acquired are based upon assumptions believed to be reasonable and, when appropriate, include assistance from independent third-party valuation firms.

Refer to Note 3 - Acquisitions in the Consolidated Financial Statements for additional information regarding the allocation of the purchase price consideration for our acquisitions.

We are primarily a service business, which normally has a lower level of tangible assets; therefore, our acquisitions typically result in significant amounts of goodwill and other intangible assets. These assets affect the amount of future period amortization expense and possible expense we could incur as a result of an impairment. Acquired intangible assets are primarily related to customer relationships. There were no acquisitions in 2016. Acquired intangible assets and goodwill were $1.1 billion at December 31, 2016.

Refer to Note 7 - Goodwill and Intangible Assets in the Consolidated Financial Statements for additional information regarding our goodwill and intangible assets.

Intangible Assets

The fair values of identifiable intangible assets are primarily estimated using an income approach. These estimates include market participant assumptions and require projected financial information, including assumptions about future revenue growth and costs necessary to facilitate the projected growth. Other key inputs include assumptions about technological obsolescence, customer attrition rates, brand recognition, the allocation of projected cash flows to identifiable intangible assets and discount rates. We regularly review intangible assets with finite lives for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable. Factors we consider important which could trigger an impairment review include the following:

- significant underperformance relative to historical or projected future operating results;
- significant changes in the manner of our use of the acquired assets or the strategy for our overall business; and
- significant negative industry or economic trends.

When we determine that the carrying value of intangibles and long-lived assets may not be recoverable based upon the existence of one or more of the above indicators of potential impairment, we assess whether an impairment has

occurred based on whether net book value of the assets exceeds the related projected undiscounted cash flows from these assets. We consider a number of factors, including past operating results, budgets, economic projections, market trends and product development cycles in estimating future cash flows. Differing estimates and assumptions as to any of the factors described above could result in a materially different impairment charge, if any, and thus materially different results of operations.

Goodwill

Goodwill is not amortized but rather is tested for impairment annually or more frequently if an event or circumstance indicates that an impairment may have been incurred. Events or circumstances that might indicate an interim evaluation is warranted include, among other things, unexpected adverse business conditions, macro and reporting unit specific economic factors, supply costs, unanticipated competitive activities and acts by governments and courts.

Application of the annual goodwill impairment test requires judgment, including the identification of reporting units, assignment of assets and liabilities to reporting units, assignment of goodwill to reporting units and the assessment- qualitatively or quantitatively - of the fair value of each reporting unit against its carrying value. We determined that our reporting units were the same as our operating segments and, therefore, our business is comprised of three reporting units with goodwill balances. Our annual impairment test of goodwill was performed in the fourth quarter of 2016. Given the risk of an impairment of our Commercial Industries reporting unit, we determined to utilize a quantitative assessment of the recoverability of our goodwill balances for each of our reporting units.

In our quantitative test, we estimate the fair value of each reporting unit by weighting the results from the income approach (discounted cash flow methodology) and market approach. These valuation approaches require significant judgment and consider a number of factors that include, but are not limited to, expected future cash flows, growth rates and discount rates and comparable multiples from publicly traded companies in our industry. In addition, we are required to make certain assumptions and estimates regarding the current economic environment, industry factors and the future profitability of our businesses.

When performing our discounted cash flow analysis for each reporting unit, we incorporate the use of projected financial information and discount rates that are developed using market participant-based assumptions. The cash-flow projections are based on three-year financial forecasts developed by management that include revenue and expense projections, restructuring and strategic transformation activities, capital spending trends and investment in working capital to support anticipated revenue growth or other changes in the business. The selected discount rates consider the risk and nature of the respective reporting units' cash flows, appropriate capital structure and rates of return that market participants would require to invest their capital in our reporting units.

We believe these assumptions are appropriate and reflect our forecasted long-term business model and give appropriate consideration to our historical results as well as the current economic environment and markets that we serve. The average discount rate applied to our projected cash flows for our Commercial Industries reporting unit was approximately 16% and 9.5% was used for both the Public Sector and Healthcare reporting units, which we considered reasonable based on the estimated capital costs of applicable market participants.

Our impairment assessment methodology includes the use of outside valuation experts and the inclusion of factors and assumptions related to third-party market participants. When performing our market approach for each reporting unit, we rely specifically on the guideline public company method. Our guideline public company method incorporates revenues and earnings multiples from publicly traded companies with operations and other characteristics similar to each reporting unit. The selected multiples consider each reporting unit’s relative growth, profitability, size and risk relative to the selected publicly traded companies.

After completing our annual impairment review for each reporting unit in the fourth quarter of 2016, based on our quantitative assessments, we concluded that the fair value of our Commercial Industries reporting unit was less than its carrying value by approximately 53%, indicating an impairment. Accordingly, we preformed the next step based on Step 2 of the impairment assessment process, which resulted in our recording a pre-tax goodwill impairment charge of $935 during the fourth quarter of 2016, which is separately presented in the Consolidated Statements of Income (Loss). Our Healthcare and Public Sector reporting units passed Step 1 of the impairment test with fair value exceeded carrying value by approximately 19% and 14%, respectively.

Refer to Note 7 - Goodwill and Intangible Assets, Net in the Consolidated Financial Statements for additional information regarding goodwill by reportable segment and the 2016 goodwill impairment charge.

Restructuring and Asset Impairments

We have engaged in restructuring actions, which require management to estimate the timing and amount of severance and other employee separation costs for workforce reduction, the fair value of assets made redundant or obsolete and the fair value of lease cancellation and other exit costs. We accrue for severance and other employee separation costs under these actions when it is probable that benefits will be paid and the amount is reasonably estimable. The rates used in determining severance accruals are based on existing plans, historical experiences and negotiated settlements.

For a full description of our restructuring actions, refer to our discussions of restructuring in the MD&A and in Note 8—Restructuring Programs and Asset Impairment Charges in the Consolidated Financial Statements.

Income Taxes

We are subject to income taxes in the United States and numerous foreign jurisdictions. The determination of our provision for income taxes requires significant judgment, the use of estimates and the interpretation and application of complex tax laws. Our provision is based on nonrecurring events as well as recurring factors, including the taxation of foreign income. In addition, our provision will change based on discrete or other nonrecurring events such as audit settlements, tax law changes, changes in valuation allowances, and etc., that may not be predictable. In the event that there is a significant unusual or one-time item recognized in our operating results, the taxes attributable to that item would be separately calculated and recorded at the same time as an unusual or one-time item.

We record the estimated future tax effects of temporary differences between the tax bases of assets and liabilities and amounts reported in our Consolidated Balance Sheets, as well as operating loss and tax credit carryforwards. We follow very specific and detailed guidelines in each tax jurisdiction regarding the recoverability of any tax assets recorded in our Consolidated Balance Sheets and provide valuation allowances as required. We regularly review our deferred tax assets for recoverability considering historical profitability, projected future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies. Gross deferred tax assets of $360 million and $414 million had valuation allowances of $24 million and $38 million at December 31, 2016 and 2015, respectively.

We are subject to ongoing tax examinations and assessments in various jurisdictions. Accordingly, we may incur additional tax expense based upon our assessment of the more-likely-than-not outcomes of such matters. In addition, when applicable, we adjust previously recorded tax expense to reflect examination results. Our ongoing assessments of the more-likely-than-not outcomes of examinations and related tax positions require judgment and can materially increase or decrease our effective tax rate, as well as impact our operating results. Unrecognized tax benefits were $14 million, $24 million and $32 million at December 31, 2016, 2015 and 2014, respectively.

Refer to Note 14—Income Taxes in the Consolidated Financial Statements for additional information regarding deferred income taxes and unrecognized tax benefits.

Loss Contingencies

We are currently involved in various claims and legal proceedings. At least quarterly, we review the status of each significant matter and assess its potential financial exposure considering all available information including, but not limited to, the impact of negotiations, settlements, rulings, advice of legal counsel and other updated information and events pertaining to a particular matter. If the potential loss from any claim or legal proceeding is considered probable and the amount can be reasonably estimated, we accrue a liability for the estimated loss. Significant judgment is required in both the determination of probability and the determination as to whether an exposure is reasonably estimable. Because of uncertainties related to these matters, accruals are based only on the best information available at the time. As additional information becomes available, we reassess the potential liability related to pending claims and litigation, and may revise estimates. These revisions in the estimates of the potential liabilities could have a material impact on the results of operations and financial position.

Refer to Note 15—Contingencies and Litigation in the Consolidated Financial Statements for additional information regarding loss contingencies.

Revenue Results Summary

Total Revenue

Revenue for the three years ended December 31, 2016 was as follows:

	Revenues			% Change		CC % Change	
(in millions)	2016	2015	2014	2016	2015	2016	2015
Total Revenues	$ 6,408	$ 6,662	$ 6,938	(4)%	(4)%	(3)%	(2)%
Adjusted Total Revenues (1)	$ 6,491	$ 6,778	$ 6,938	(4)%	(2)%	(3)%	— %

CC - Refer to the "Non-GAAP Financial Measures" section for description of Constant Currency
(1) Refer to the "Non-GAAP Financial Measures" section for an explanation of this non-GAAP financial measure.

Revenue 2016

Total revenues decreased 4% compared to the prior year with a 1-percentage point negative impact from currency. On an adjusted[1] basis, excluding the NY MMIS charge, total revenue decreased 4% with a 1-percentage point negative impact from currency. Overall non-U.S. revenues represented approximately 11% of total revenues (Pound Sterling-denominated revenues represented approximately 2% of total revenues).

The decline was driven by lower volumes, delayed ramping of new business and contract exits, primarily in customer care contracts within our Commercial Industries and Healthcare segments, the run off of our Student Loan business and overall price declines that were consistent with prior-period trends. Partially offsetting these declines were new contracts in the Public Sector.

Revenue 2015

Total revenues decreased 4% compared to 2014 with a 2-percentage point negative impact from currency. On an adjusted[1] basis, excluding the HE charge, total revenues decreased 2%, with a 2-percentage point negative impact from currency. The negative impact from currency reflects the significant weakening of our major foreign currencies against the U.S. dollar as compared to prior year.

The decline in total revenues was primarily driven by the run-off of the Student Loan business, the termination of the Texas Medicaid contract and the impact of our determination in the third quarter of 2015 to not fully complete the HE platform implementations in California and Montana, which combined had approximately a 4.8-percentage point negative impact on revenue growth. Offsetting this decline was moderate acquisition contribution and organic growth in several lines of business, net of the impacts from lost business and lower pricing that were consistent with prior trends.

(1) Refer to the "Non-GAAP Financial Measures" section for an explanation of the non-GAAP financial measure.

Costs, Expenses and Other Income

Summary of Key Financial Ratios

	Year Ended December 31,			Change B/(W)		Adjusted(1)		Adjusted(1) B/(W)	
	2016	2015	2014	2016	2015	2016	2015	2016	2015
Total Gross Margin	14.2 %	10.3 %	16.4%	3.9 pts	(6.1) pts	16.5%	15.8%	0.7 pts	(0.6) pts
R&D as a % of Revenue	0.5 %	0.8 %	0.7%	0.3 pts	(0.1) pts	0.5%	0.8%	0.3 pts	(0.1) pts
SAG as a % of Revenue	10.7 %	10.5 %	9.5%	(0.2) pts	(1.0) pts	10.6%	10.3%	(0.3) pts	(0.8) pts
Pre-tax Income Margin	(19.1)%	(8.6)%	0.1%	(10.5) pts	(8.7) pts	4.8%	3.7%	1.1 pts	3.6 pts
Operating Margin(2)	3.0 %	(1.0)%	6.2%	4.0 pts	(7.2) pts	5.5%	4.8%	0.7 pts	(1.6) pts

(1) Refer to Key Financial Ratios reconciliation table in the "Non-GAAP Financial Measures" section.
(2) Refer to the Operating Income/Margin reconciliation table in the "Non-GAAP Financial Measures" section.

Pre-tax Income Margin

Pre-tax income margin for year ended December 31, 2016 of (19.1)% decreased 10.5-percentage points as compared to 2015. The decline was primarily driven by the NY MMIS charge, the Goodwill impairment charge and higher separation costs. Pre-tax income was also impacted by higher amortization of intangible assets.

Pre-tax income margin for the year ended December 31, 2015 of (8.6)% declined by 8.7-percentage points primarily due to the HE charge of $389 million, previously discussed, as well as higher Restructuring and related costs primarily as a result of the software impairment charge in our Government Healthcare business of $146 million. In addition, a 0.6-percentage point decrease in gross margin and a 0.8-percentage point increase in SAG as a percent of revenue reflecting targeted resource and other investments as well as higher costs associated with our HE platform implementations, prior to the implementation of the Government Healthcare strategy change noted above. The negative impacts were partially offset by restructuring savings and productivity improvements as well as lower related party interest expense and lower other expenses, net.

Pre-tax income margin includes the goodwill impairment, NY MMIS charge, amortization of intangible assets, related party interest, net, other expenses, net, restructuring and related costs and separation costs, all of which are separately discussed in subsequent sections. Operating margin excludes these items.

Operating Margin

Operating margin[1] for the year ended December 31, 2016 of 5.5% increased 0.7-percentage points as compared to 2015. The increase was driven by an improvement in gross margin due to transformation savings, reduced costs in our HE platform implementations as well as more favorable line-of-business mix. As noted above, the operating margin contains an allocation for management cost and corporate support services totaling $165 million, $170 million and $175 million for each of the three years ended December 31, 2016.

Operating margin[1] for the year ended December 31, 2015 of 4.8% decreased 1.6-percentage points as compared to 2014. The decline was driven primarily by a 0.6-percentage point decrease in gross margin and a 0.8-percentage point increase in SAG as a percent of revenue. The operating margin decline was driven by targeted resource and other investments as well as higher costs associated with our HE platform implementations, prior to the implementation of the change in strategy in our Government Healthcare business noted above. These negative impacts were partially offset by restructuring savings and productivity improvements.

(1) Refer to the Operating Income/Margin reconciliation table and the "Non-GAAP Financial Measures" section.

Gross Margins

Gross margin for the year ended December 31, 2016 of 14.2% increased 3.9-percentage points compared to 2015. On an adjusted[1] basis, gross margin of 16.5% increased by 0.7-percentage points as compared to 2015. The increase reflected restructuring and productivity improvements, benefits from lower expenses associated with our HE platform implementations and favorable line-of-business mix. These benefits were partially offset by continued margin pressures in our customer care service offerings, lower profitability in our Student Loan business and price declines.

Total gross margin for the year ended December 31, 2015 of 10.3% decreased 6.1-percentage points as compared to 2014. On an adjusted[1] basis, gross margin of 15.8% decreased by 0.6-percentage points as compared to 2014. Targeted resource and other investments, impacts from unfavorable line-of-business mix, increased expenses associated with our HE platform implementations, prior to the change in strategy in our Government Healthcare business noted above, and price declines were partially offset by productivity improvements and restructuring benefits.

Additional analysis of the change in gross margin for each business segment is included under "Operations Review of Segment Revenue and Profit" below.

(1) Refer to the Key Financial Ratios reconciliation table in the "Non-GAAP Financial Measures" section.

Research & Development Expenses (R&D)

R&D as a percentage of revenue of 0.5% for the year ended December 31, 2016 decreased 0.3-percentage points on an actual and adjusted[1] basis compared to 2015. The decrease was due primarily to lower R&D program spending and the benefits from ongoing restructuring. R&D expense of $31 million for the year ended December 31, 2016 decreased $21 million compared to the prior year period.

R&D as a percent of revenue for the year ended December 31, 2015 of 0.8% increased 0.1-percentage points on an actual and adjusted[1] basis compared to 2014. R&D expense of $52 million for the year ended December 31, 2015 was $6 million higher than the prior year period driven by investments in new offerings and capabilities.

_____

(1) Refer to the Key Financial Ratios reconciliation table in the "Non-GAAP Financial Measures" section.

Selling, Administrative and General Expenses (SAG)

SAG as a percentage of revenue of 10.7% for the year ended December 31, 2016, increased 0.2-percentage points compared to the prior year period. On an adjusted[1] basis, SAG increased 0.3-percentage points, as benefits from restructuring and cost initiatives were more than offset by the decline in total revenues and higher expenses due to favorable prior-year compensation adjustments.

SAG of $686 million for the year ended December 31, 2016, was $13 million lower than 2015 and reflected the following:

- $24 million decrease in selling expenses;
- $11 million increase in general and administrative expenses; and
- bad debt expense of $4 million was flat as compared to the prior year and less than one percent of receivables.

SAG as a percent of revenue of 10.5% for the year ended December 31, 2015, increased 1.0-percentage points as compared to 2014. On an adjusted[1] basis, SAG as a percentage of revenue of 10.3% increased 0.8-percentage points from 2014. The increase was driven by revenue declines and targeted resource and other investments partially offset by productivity improvements.

SAG expenses of $699 million for the year ended December 31, 2015 were $40 million higher than the prior year period. The increase in SAG expense reflects the following:

- $26 million increase in general and administrative expenses; and
- $14 million increase in selling expenses.

_____

(1) Refer to the Key Financial Ratios reconciliation table in the "Non-GAAP Financial Measures" section.

Restructuring and Related Costs

During the year ended December 31, 2016, we recorded net restructuring and related costs of $101 million, including $28 million of costs primarily related to professional support services associated with the implementation of the strategic transformation program. The remaining costs of $73 million included the following:

- $67 million of severance costs related to headcount reductions of approximately 3,600 employees globally. The actions impacted several functional areas and focused on gross margin improvements;
- $7 million for lease termination costs, primarily reflecting continued optimization of our worldwide operating locations; and
- $12 million of asset impairment charges.

The above charges were partially offset by $13 million of net reversals for changes in estimated reserves from prior period initiatives.

During the year ended December 31, 2015, we recorded net restructuring and related costs of $159 million that included the following:

- $20 million of severance costs related to headcount reductions of approximately 1,000 employees globally. These actions impacted several functional areas and focused on gross margin improvements;
- $1 million for lease termination costs, primarily reflecting continued optimization of our worldwide operating locations; and

- $146 million of asset impairment charges associated with software asset impairments resulting from the change in strategy in our Government Healthcare business in 2015.

The above charges were partially offset by $8 million of net reversals for changes in estimated reserves from prior period initiatives.

Restructuring Summary
The restructuring reserve balance as of December 31, 2016 for all programs was $21 million, of which approximately $18 million is expected to be spent over the next twelve months. In 2017, we expect to incur additional restructuring charges of approximately $75 million pre-tax.

Refer to Note 8 - Restructuring Programs and Asset Impairment Charges in the Consolidated Financial Statements for additional information regarding our restructuring programs.

Amortization of Intangible Assets

During the year ended December 31, 2016, we recorded $280 million of expense related to the amortization of intangible assets, which is $30 million higher than the prior year primarily due to the write-off of certain trade-names associated with prior acquisitions.

During the year ended December 31, 2015, we recorded $250 million of expense related to the amortization of intangible assets, which was flat compared to the prior year reflecting the increase in acquisitions in 2014.

Refer to Note 7 - Goodwill and Intangible assets, Net in the Consolidated Financial Statements for additional information regarding our intangible assets.

Goodwill Impairment

Our Commercial Industries reporting unit experienced declining operating results in 2016, including a weak 2016 fourth quarter versus expectations. As a result and in consideration of other factors, in performing our annual impairment test during the fourth quarter of 2016, we determined that the Commercial Industries reporting unit goodwill was impaired by approximately $935 million. Refer to Note 7 - Goodwill and Intangible assets, Net in the Consolidated Financial Statements for additional information regarding the Goodwill impairment charge.

Separation Costs

Separation costs are primarily for third-party investment banking, accounting, legal, consulting and other similar types of services related to the separation transaction as well as costs associated with the operational separation of the two companies, such as those related to human resources, brand management, real estate and information management to the extent not capitalized. Separation costs also include the costs associated with bonuses and restricted stock grants awarded to employees for retention through the separation.

Related-Party Interest Expense, Net

Related-party interest expense for the year ended December 31, 2016 of $26 million was $35 million lower than the prior year primarily due to the capitalization of certain related party notes payable in 2015, as a result of the proceeds received from the sale of the ITO business.

Refer to Note 20 - Related Party Transactions and Former Parent Company Investment in the Consolidated Financial Statements for additional information.

Other Expenses, Net

(in millions)	Year Ended December 31, 2016	2015	2014
Third-party interest expense	$ 14	$ 8	$ 11
Gains on sales of businesses and assets[(1)]	2	(1)	(1)
Currency (gains) losses, net	(2)	4	(1)
Litigation matters	40	18	38
Deferred compensation investment (gains) losses	(8)	1	(7)
Contingent consideration adjustment	(12)	—	—
All other expenses, net	—	8	5
Total Other Expenses, Net	$ 34	$ 38	$ 45

(1) Excludes the loss on sale of the ITO business reported in Discontinued Operations. Refer to Note 4 - Divestitures in the Consolidated Financial Statements for additional information.

Third-party Interest Expense: Represents interest on senior notes and capital lease obligations.

Refer to Note 10 - Debt in the Consolidated Financial Statements for additional information regarding third-party interest expense.

Currency (Gains) Losses, Net: Currency (gains) losses, net primarily result from the re-measurement of foreign currency-denominated assets and liabilities, the cost of hedging foreign currency-denominated assets and liabilities and the mark-to-market of foreign exchange contracts utilized to hedge those foreign currency-denominated assets and liabilities.

Litigation Matters: Litigation matters reflect probable losses and reserves for various legal matters.

Refer to Note 15 - Contingencies and Litigation, in the Consolidated Financial Statements for additional information regarding litigation against the Company.

Deferred Compensation Investment (Gains) Losses: Represents (gains) losses on investments supporting certain of our deferred compensation arrangements. These gains or losses are offset by an increase or decrease in compensation expense recorded in SAG as a result of the increase or decrease in the liability associated with these arrangements.

Contingent Consideration Adjustment: Represents an adjustment for settlements related to prior years acquisition earnout.

Income Taxes

The 2016 effective tax rate was 19.9%. This rate was lower than the U.S. statutory tax rate of 35% primarily as a result of pre-tax losses in the U.S. due to the following charges: goodwill impairment, NY MMIS, restructuring and related costs, amortization of intangible assets and separation costs, including tax-related separation costs discussed below. The U.S. pre-tax losses are taxed at a higher rate than our foreign pre-tax income, which can have the effect of increasing the overall effective tax rate above the statutory tax rate. However, since only $272 million of the $935 million Goodwill impairment charge is deductible for U.S. federal income tax purposes, which results in a decreased U.S. pre-tax loss, this has made our effective tax rate lower than the statutory tax rate. On an adjusted[1] basis, the 2016 effective tax rate, which excludes the tax effects of the previously noted charges, was 29.0%. This rate was lower than the U.S. statutory tax rate primarily due to the geographical mix of our earnings and differences in the tax rates at which our earnings are taxed as well as the redetermination of certain unrecognized tax positions upon conclusion of several audits.

The 2015 effective tax rate was 41.5%. This rate was higher than the U.S. statutory tax rate of 35% primarily due to our geographical mix of earnings which included pre-tax losses in the U.S. due to the following charges: restructuring and related costs, amortization of intangible assets, and the HE charge. The U.S. pre-tax losses are taxed at a higher rate than our foreign pre-tax income, which has the effect of increasing the overall effective tax rate above the statutory tax rate. On an adjusted[1] basis, the 2015 effective tax rate was 31.5%, which excludes the tax effect of the previously noted charges. This rate was lower than the U.S. statutory tax rate primarily due to the geographical mix of our earnings and differences in the tax rates at which our earnings are taxed.

The 2014 effective tax rate was (240)%. This rate was lower than the U.S. statutory tax rate of 35% primarily due to our geographical mix of earnings which included pre-tax losses in the U.S. due to the following charges: amortization of intangibles, restructuring and related costs. The U.S. pre-tax losses are taxed at a higher rate than our foreign pre-tax income, which has the effect of increasing the overall effective tax rate above the statutory tax rate. On an adjusted[1] basis, the 2014 effective tax rate was 28.6%, which was lower than the U.S. statutory tax rate primarily due to the redetermination of certain unrecognized tax positions and partially offset by the geographical mix of our earnings and differences in the tax rates at which our earnings are taxed.

Tax-related Separation Costs

As a result of the execution of the separation, it has been determined that approximately $37 million of the $44 million separation costs will be deducted on the 2016 U.S. federal income tax return. The remaining approximately $7 million is non-deductible.

In connection with the legal separation of the company, we have completed certain internal reorganizations of, and transactions among, our wholly-owned subsidiaries and operating activities in preparation for the legal form of separation. Although we believe that, for the most part, these reorganizations were completed in a tax-free manner, we incurred incremental income tax expense associated with certain elements of the reorganizations. Accordingly, for the year-to-date period of 2016, we recorded $10 million in connection with these internal reorganizations.

_____

(1) See the "Non-GAAP Financial Measures" section for an explanation of the adjusted effective tax rate non-GAAP financial measure.

Net Loss From Continuing Operations

Net loss from continuing operations for the year ended December 31, 2016 was $983 million, or $(4.85) per diluted share. On an adjusted[1] basis, net income from continuing operations was $223 million, or $1.06 per diluted share, and reflects the adjustments for the goodwill impairment, amortization of intangible assets and restructuring and related charges.

Net loss from continuing operations for the year ended December 31, 2015 was $336 million, or $(1.65) per diluted share. On an adjusted[1] basis, net income was $174 million, or $0.83 per diluted share, and included adjustments for the amortization of intangible assets, restructuring and related charges, software impairment and the HE charge.

Net income from continuing operations for the year ended December 31, 2014 was $34 million, or $0.17 per diluted share. On an adjusted[1] basis, net income was $225 million, or $1.07 per diluted share, and included adjustments for the amortization of intangible assets and restructuring and related charges.

_____

(1) See the "Non-GAAP Financial Measures" section for a reconciliation of reported net income from continuing operations to adjusted net income.

Discontinued Operations

There were no Discontinued Operations in 2016.

Discontinued operations are primarily related to our sale of the ITO business. As previously noted, in the fourth quarter 2014, we announced an agreement to sell the ITO business to Atos SE and began reporting it as a Discontinued Operation. The sale was completed on June 30, 2015.

Refer to Note 4 - Divestitures in the Consolidated Financial Statements for additional information regarding Discontinued Operations.

Other Comprehensive Loss

Other comprehensive loss was $155 million in 2016 as compared to a loss of $52 million in 2015. The increase in loss of $103 million was primarily due to the net losses from translation adjustments related to the separation of the company from Xerox. Translation losses in 2016 were $135 million compared to losses of $60 million in 2015.

Other comprehensive loss was $52 million in 2015 as compared to a loss of $71 million in 2014. The reduction in the loss of $19 million was primarily due to the net gains from changes in defined benefit plans of $7 million in 2015 as compared to losses of $25 million in 2014. This change is largely due to an increase in discount rates in 2015 versus a decrease in discount rates in 2014 and the corresponding impact on our defined benefit obligation (decrease in 2015 versus an increase in 2014). The improvement in defined benefit plans was offset by increased

losses from translation adjustments of $16 million in 2015. Translation losses in both 2015 and 2014 reflect the weakening of our major foreign currencies as compared to the U.S. Dollar.

Worldwide Employment

Worldwide employment of approximately 96,000 as of December 31, 2016 decreased by approximately 7,800 from December 31, 2015, due primarily to lower volumes and the impact of the strategic transformation initiatives, as well as seasonal reductions, partially offset by additions from ramping new business. Worldwide employment was approximately 103,800 and 97,200 at December 2015 and 2014, respectively.

Recent Accounting Pronouncements

Refer to Note 1 - Basis of Presentation and Summary of Significant Accounting Policies in the Consolidated Financial Statements for a description of recent accounting pronouncements including the respective dates of adoption and the effects on results of operations and financial conditions.

Operations Review of Segment Revenue and Profit

Our reportable segments correspond to how we organize and manage the business and are aligned to the industries in which our clients operate: Commercial Industries, Healthcare and Public Sector. Revenues by segment for the three years ended December 31, 2016 were as follows:

(in millions)	Total Revenue	% of Total Revenue	Segment Profit (Loss)	Segment Margin
2016				
Commercial Industries	$ 2,690	42%	$ 59	2.2 %
Healthcare	1,686	26%	159	9.4 %
Public Sector	1,731	27%	223	12.9 %
Other	301	5%	(245)	(81.4)%
Total	$ 6,408	100%	$ 196	3.1 %
Adjusted:[1]				
Other	$ 384	6%	$ (84)	(21.9)%
Total	$ 6,491	100%	$ 357	5.5 %
2015				
Commercial Industries	$ 2,896	44%	$ 69	2.4 %
Healthcare	1,750	26%	157	9.0 %
Public Sector	1,727	26%	200	11.6 %
Other	289	4%	(489)	*
Total	$ 6,662	100%	$ (63)	(0.9)%
Adjusted:[1]				
Other	$ 405	6%	$ (100)	(24.7)%
Total	$ 6,778	100%	$ 326	4.8 %
2014				
Commercial Industries	$ 2,953	43%	$ 152	5.1 %
Healthcare	1,743	25%	138	7.9 %
Public Sector	1,767	25%	206	11.7 %
Other	475	7%	(49)	(10.3)%
Total	$ 6,938	100%	$ 447	6.4 %

**Percentage not meaningful*
(1) Refer to the reconciliations table in the "Non-GAAP Financial Measures" section.

Commercial Industries Segment

Revenue 2016

Commercial Industries revenue of $2,690 million for the year ended December 31, 2016 was 42% of total revenues and decreased 7% from 2015. The decline was driven by lost business, lower volumes in our customer care offerings and reduced level of project work as a result of fewer large cases in our litigation services offering, negative impacts from currency and strategic contract exits. Partially offsetting the decline were benefits from ramping new contracts, primarily in our high-tech business area.

Segment Margin 2016

Commercial Industries segment margin of 2.2% for the year ended December 31, 2016 decreased by 0.2-percentage points from the prior year primarily due to margin pressure in our customer care services offering and reduced project work in our litigation services offering, only partially offset by cost and productivity benefits.

Revenue 2015

Commercial Industries revenue of $2,896 million for the year ended December 31, 2015 was 44% of total revenues and decreased 2% from 2014. The year-over-year decline was driven by the negative impacts from currency and price declines. The decline was partially offset by revenues from acquisitions as well as increased project-related work in our litigation services offering. In addition, within our customer care services offering, lost business was offset by ramping new contracts.

Segment Margin 2015

Commercial Industries segment margin of 2.4% for the year ended December 31, 2015, decreased by 2.7-percentage points from the prior year primarily due to margin pressure in our customer care offering, investments in sales and managerial resources to improve our operating performance over time, as well as the impacts of price declines.

Healthcare Segment

Revenue 2016

Healthcare revenue of $1,686 million for the year ended December 31, 2016, was 26% of total revenues and decreased 4% from the prior year with negligible impact from currency. The decline was driven by lost business and lower volumes in our customer care offering on the payer side, partially offset by ramping new business and moderating acquisition contribution.

Segment Margin 2016

Healthcare segment margin of 9.4% for the year ended December 31, 2016 increased 0.4-percentage points from the prior year primarily due to overall benefits from cost and productivity initiatives and from actions to improve profitability which more than offset margin pressures in our customer care service offering and the impacts of lost business and lower volumes.

Revenue 2015

Healthcare revenue of $1,750 million for the year ended December 31, 2015 was 26% of total revenues and remained flat from the prior year with a negligible impact from currency. Moderate acquisition contribution and organic growth in commercial payers offset the impacts from the loss of the Texas Medicaid contract and lower project-related work in commercial providers.

Segment Margin 2015

Healthcare segment margin of 9.0% for the year ended December 31, 2015 increased 1.1-percentage points from the prior year as improvements in Government Healthcare, including the prior year Nevada HIX impairment, more than offset margin declines on the commercial side driven in part by line of business mix and investments.

Public Sector Segment

Revenue 2016

Public Sector revenue of $1,731 million for the year ended December 31, 2016 was 27% of total revenues and was flat compared to the prior year as growth from ramping new business was offset by lower volumes and lost business in State Government Services.

Segment Margin 2016

Public Sector segment margin of 12.9% for the year ended December 31, 2016 increased 1.3-percentage points from the prior year, due to cost and productivity improvements and improved performance in our transportation offering, partially offset by the impact of lost business in state government services.

Revenue 2015

Public Sector revenue of $1,727 million for the year ended December 31, 2015 was 26% of total revenues and decreased 2% from the prior year. Negative impacts from currency and declines in federal services more than offset growth in state and transportation services.

Segment Margin 2015

Public Sector segment margin of 11.6% for the year ended December 31, 2015 decreased 0.1-percentage point from the prior year as improvements in federal and state services were more than offset by modest declines in transportation services.

Other

Revenue 2016

Other revenue of $301 million for the year ended December 31, 2016 was 5% of total revenue and decreased 5% on an adjusted[1] basis compared to the prior year. The decline was driven by the continued run-off of the Student Loan business and our prior-year decision to not complete the HE implementations in California and Montana.

Segment Loss 2016

Other loss of $245 million for the year ended December 31, 2016, improved $244 million from the prior year. On an adjusted[1] basis, Other loss decreased $16 million, partially offset by improvements in HE platform implementation expenses resulting from the refocusing of our Government Healthcare business in 2015 and the decision to not fully complete the HE platform implementation in California and Montana.

Revenue 2015

Other revenue of $289 million for the year ended December 31, 2015 decreased 39% from the prior year, with no impact from currency. On an adjusted[1] basis, Other revenue of $405 million was 6% of total revenue and decreased 15% compared to the prior year. The decline was primarily driven by the Student Loan business run-off and the impact of our determination in the third quarter of 2015 to not fully complete the HE platform implementations in California and Montana.

Segment Loss 2015

Other loss of $489 million for the year ended December 31, 2015 increased $440 million from the prior year. On an adjusted[1] basis, Other loss of $100 million increased $51 million from the prior year primarily due to higher losses in our HE platform implementations, prior to the refocusing of our Government Healthcare business, and lower profit from the declining Student Loan business.

(1) Refer to the reconciliations table in the "Non-GAAP Financial Measures" section.

Government Healthcare

In February 2017, we determined that it is not probable that the NY MMIS project will be completed. As a result of this determination, we recorded a pre-tax charge of $161 million ($98 million after-tax). The charge included $83 million for the write-off of contract receivables which was recorded as a reduction of revenue and $78 million recorded in cost of outsourcing, including $36 million for the wind down of costs, $28 million non-cash charge for the impairment of software and $14 million for the write-off of deferred contract set-up and transition costs and other related assets and liabilities.

Our HE platform is performing to contractual standards in the states where it has been fully implemented, which include New Hampshire, Alaska and North Dakota. New Hampshire was certified by the Center for Medicare and Medicaid Services in June 2015, we are currently in the process of obtaining certification for the Alaska HE implementation, and are in the planning phase of North Dakota certification.

Metrics

Signings

Signings are defined as estimated future revenues from contracts signed during the period, including renewals of existing contracts. Total Contract Value (TCV) is the estimated total contractual revenue related to signed contracts.

Signings for the three years ended December 31, 2016 were $6.9 billion, $8.0 billion and $7.3 billion, respectively.

Signings were an estimated $6.9 billion in TCV in 2016 and declined 14% as compared to the prior year, primarily reflecting lower contribution from new business, due in part to our decision not to pursue opportunities with lower margin and return profiles, and the prior year large NY MMIS new business signing. Excluding NY MMIS, TCV declined about 8%.

Signings were an estimated $8.0 billion in TCV in 2015 and increased 8% as compared to the prior year. Growth in 2015 included a 37% increase in new business TCV, which is inclusive of larger contracts such as the Florida Tolling and NY MMIS and was partially offset by lower renewal decision opportunities.

Renewal Rate

Renewal rate is defined as the annual recurring revenue (ARR) on contracts that are renewed during the period as a percentage of ARR on all contracts for which a renewal decision was made during the period. Our 2016 renewal rate of 86% was within our target range of 85%-90%.

Signings and renewal rate reflect, in part, our decision to not pursue opportunities with lower margin and return profiles.

Capital Resources and Liquidity

As of December 31, 2016 and 2015, total cash and cash equivalents were $390 million and $140 million, respectively. There were $1,444 million outstanding borrowings under our Credit Facility and we utilized $17 million of our Revolving Credit Facility capacity to issue letters of credit at December 31, 2016. We also issued $510 million 10.5% Senior Notes due 2024. Refer to the *Capital Market Activity* section below for additional information.

Cash Flow Analysis

The following summarizes our cash flows for the three years ended December 31, 2016, as reported in our Consolidated Statements of Cash Flows in the accompanying Consolidated Financial Statements:

	Year Ended December 31,			Change	
(in millions)	2016	2015	2014	2016	2015
Net cash provided by operating activities	$ 108	$ 493	$ 665	$ (385)	$ (172)
Net cash provided by (used in) investing activities	16	522	(488)	(506)	1,010
Net cash provided by (used in) financing activities	132	(1,023)	(149)	1,155	(874)
Effect of exchange rate changes on cash and cash equivalents	(6)	(11)	(8)	5	(3)
Increase (decrease) in cash and cash equivalents	250	(19)	20	269	(39)
Cash and cash equivalents at beginning of year	140	159	139	(19)	20
Cash and Cash Equivalents at End of Year	$ 390	$ 140	$ 159	$ 250	$ (19)

Cash Flows from Operating Activities

Net cash provided by operating activities was $108 million for the year ended December 31, 2016. The $385 million decrease in operating cash from 2015 was primarily due to the following:

- $12 million decrease in pre-tax income before depreciation and amortization, loss on sales of business, HE prior year charge, goodwill impairment charge, NY MMIS charge, separation-related costs and restructuring and related charges.
- $233 million decrease due to reduced factoring and timing of collections of accounts receivable in 2016.
- $136 million decrease reflecting settlement payments associated with our third quarter 2015 determination that we would not fully complete the HE implementations in California and Montana.
- $82 million decrease in accounts payable and accrued compensation primarily due to the timing of payments.
- $44 million decrease for payments for separation-related costs.
- $39 million decrease due to the prior year source of cash in the discontinued ITO business.
- $27 million decrease in restructuring payments as a result of increased restructuring initiatives in 2016.
- $317 million increase due to lower net income tax payments made in 2016 as a result of receiving refunds of prior year overpayments due to a change in tax treatment of unbilled revenue..
- $21 million increase primarily from lower spending for product software from the refocusing of our Government Healthcare business in 2015.

Net cash provided by operating activities was $493 million for the year ended December 31, 2015. The $172 million decrease in operating cash from 2014 was primarily due to the following:

- $149 million decrease in pre-tax income before depreciation and amortization, gain on sales of businesses and assets, stock-based compensation and restructuring charges as well as the HE charge.
- $128 million decrease from higher income tax payments primarily driven by the tax on the sale of the ITO business.
- $105 million decrease due to the loss of cash flow associated with the ITO business, post-divestiture.
- $167 million increase from accounts receivable primarily due to additional sales of accounts receivable under existing programs, select use of prompt pay discounts and lower revenues.
- $36 million increase from lower spending for product software and up-front costs for outsourcing service contracts.
- $22 million increase in accounts payable and accrued compensation primarily related to the timing our accounts payable.

Cash Flows from Investing Activities

Net cash provided by investing activities was $16 million for the year ended December 31, 2016. The $506 million decrease in cash from 2015 was primarily due to the following:

- $992 million decrease in proceeds from sales of businesses. The first twelve months of 2016 included a $52 million payment to Atos for final post-closing adjustments associated with the 2015 ITO divestiture. 2015 included $939 million of net proceeds from the sale of the ITO business.
- $3 million increase due to lower capital expenditures (including internal use software).
- $196 million increase due to lower acquisitions.
- $285 million increase in net payments on related party notes receivable.
- $11 million increase due to payment received on deferred comp investments.

Net cash provided by investing activities was $522 million for the year ended December 31, 2015. The $1,010 million increase in cash from 2014 was primarily due to the following:

- $923 million increase in net proceeds from the sale of businesses, primarily the ITO business. Refer to Note - 4 Divestitures, in the Consolidated Financial Statements for additional information.
- $109 million change from acquisitions. 2015 acquisitions include RSA Medical LLC for $141 million, Intellinex LLC for $28 million, InVentive Patient Access Solutions for $15 million and Healthy Communities Institute Corporation for $13 million. 2014 acquisitions include ISG Holdings, Inc. for $225 million, Invoco Holding GmbH for $54 million, Consilience Software, Inc. for $25 million.
- $31 million due to lower capital expenditures (including internal use software) partly due to the sale of the ITO business.
- $59 million charge due to higher net payments on related party notes receivable.

Capital expenditures (including internal use software) in 2015 and 2014 include $42 million and $107 million, respectively, for our ITO business, which was held for sale and reported as a Discontinued Operation
through June 30, 2015. Refer to Note 4 - Divestitures in the Consolidated Financial Statements for additional information.

Cash Flows from Financing Activities

Net cash provided by financing activities was $132 million for the year ended December 31, 2016. The $1,155 million increase in the cash from 2015 was primarily due to the following:

- $2.1 billion increase primarily due to proceeds received on third party debt in 2016 ($1.9 billion) and payment of $250 million on Senior Notes in 2015.
- $1.0 billion decrease due to net payments on related party notes payable.
- $18 million decrease due to escrow related to the separation
- $84 million increase due to net transfers from parent.

Net cash used in financing activities was $1,023 million for the year ended December 31, 2015. The $874 million increase in the use of cash from 2014 was primarily due to the following:

- $636 million decrease due to net transfers to parent.
- $242 million decrease from net debt activity. 2015 reflects payment of $250 million on Senior Notes and net payments of $15 million on capital leases. 2014 reflects net payments of $19 million on capital leases and net payments of $4 million on other debt.
- $9 million decrease from contingent consideration payments for certain acquisitions in 2014.

Sales of Accounts Receivable

Accounts receivable sales arrangements are utilized in the normal course of business as part of our cash and liquidity management. We have financial facilities in the U.S. and Europe that enable us to sell certain accounts receivable without recourse to third parties. The accounts receivable sold are generally short-term trade receivables with payment due dates of less than 60 days. The level of receivable sales and benefits may not be indicative of what we expect going forward as we evaluate our working capital needs.

Refer to Note 5 - Accounts Receivable, Net in the Consolidated Financial Statements for additional information.

Capital Market Activity

Senior Notes: On December 7, 2016, Xerox Business Services, LLC (XBS) and Conduent Finance, Inc. (CFI), each a wholly owned subsidiary of the Company, issued $510 million 10.5% Senior Unsecured Notes due 2024 (the "Senior Notes"). Interest is payable semi-annually, beginning on June 15, 2017 and debt issuance costs of $17 million were deferred.

The Senior Notes are jointly and severally guaranteed on a senior unsecured basis by the Company and each of the existing and future domestic subsidiaries of CFI or XBS that guarantee the obligations under the Senior Credit Facilities.

Proceeds from the issuance were used to fund a portion of the transfer of cash to Xerox Corporation in connection with the Spin-Off.

Credit Facility: On December 7, 2016, we entered into a $2.2 billion senior secured credit agreement ("Credit Agreement") among the Company, its subsidiaries XBS, Affiliated Computer Services International B.V. and CFI, the lenders party and JP Morgan Chase Bank, N.A., as the administrative agent. The Credit Agreement contains Senior Secured credit facilities ("Senior Credit Facilities") consisting of:

(i) Senior Secured Term Loan A (Term Loan A) due 2021 with an aggregate principal amount of $700 million;
(ii) Senior Secured Term Loan B (Term Loan B) due 2023 with an aggregate principal amount of $750 million;
(iii) Senior Revolving Credit Facility ("Revolving Credit Facility") due 2021 with an aggregate amount of $750 million. The Senior Credit Facilities includes access up to $300 million available for the issuance of letters of credit.

The net proceeds of the borrowings under the Term Loan A and B facilities were used to purchase our international subsidiaries from Xerox Corporation, to pay a distribution to Xerox Corporation and for working capital and other general corporate purposes. At December 31, 2016 we had $1,444 million outstanding borrowings under our Credit Facility and utilized $17 million or our Revolving Credit Facility capacity to issue letters of credit. Debt issuance costs of $39 million were paid and deferred.

In January 2017, we borrowed an additional $100 million on Term Loan B with proceeds used for general corporate purposes.

Refer to Note 10 - Debt in the Consolidated Financial Statements for additional information.

Financial Instruments

Refer to Note 11 - Financial Instruments in the Consolidated Financial Statements for additional information.

2017 Activity

In January we paid Xerox $161 million reflecting the settlement of the Separation.

Contractual Cash Obligations and Other Commercial Commitments and Contingencies

At December 31, 2016, we had the following contractual cash obligations and other commercial commitments and contingencies:

(in millions)	2017	2018	2019	2020	2021	Thereafter
Total debt, including capital lease obligations[1]	$ 28	$ 72	$ 67	$ 79	$ 528	$ 1,223
Interest on debt[2]	103	125	123	121	118	277
Minimum operating lease commitments[3]	176	127	89	56	36	46
Defined benefit pension plans	10	—	—	—	—	—
Estimated Purchase Commitments[4]	82	75	70	37	1	26
Total	$ 399	$ 399	$ 349	$ 293	$ 683	$ 1,572

(1) Total debt represents principal debt and capital leases. Refer to Note 10 - Debt in the Consolidated Financial Statements for additional information regarding debt.
(2) Represents interest on debt. Refer to Note 10 - Debt in the Consolidated Financial Statements for additional information.
(3) Refer to Note 6, Land, Buildings, Equipment and Software, Net in the Consolidated Financial Statements for additional information.
(4) Other purchase commitments: We enter into other purchase commitments with vendors in the ordinary course of business. Our policy with respect to all purchase commitments is to record losses, if any, when they are probable and reasonably estimable. We currently do not have, nor do we anticipate, material loss contracts.

Pension Benefit Plans

We sponsor defined benefit pension plans that require periodic cash contributions. Our 2016 cash contributions for these plans were $6 million. In 2017, based on current actuarial calculations, we expect to make contributions of approximately $10 million to our worldwide defined benefit pension plans.

Contributions to our defined benefit pension plans in subsequent years will depend on a number of factors, including the investment performance of plan assets and discount rates as well as potential legislative and plan changes. At December 31, 2016, the unfunded and underfunded balances of our U.S. and Non-U.S. defined benefit pension plans were $37 million and $24 million, respectively, or $61 million in the aggregate.

Refer to Note 13 - Employee Benefit Plans in the Consolidated Financial Statements for additional information regarding contributions to our defined benefit pension and post-retirement plans.

Other Contingencies and Commitments

As more fully discussed in Note 15 - Contingencies and Litigation in the Consolidated Financial Statements, we are involved in a variety of claims, lawsuits, investigations and proceedings concerning: securities law; governmental entity contracting, servicing and procurement law; intellectual property law; environmental law; employment law; the Employee Retirement Income Security Act (ERISA); and other laws and regulations. In addition, guarantees, indemnifications and claims may arise during the ordinary course of business from relationships with suppliers, customers and non-consolidated affiliates. Nonperformance under a contract including a guarantee, indemnification or claim could trigger an obligation of the Company.

We determine whether an estimated loss from a contingency should be accrued by assessing whether a loss is deemed probable and can be reasonably estimated. Should developments in any of these areas cause a change in our determination as to an unfavorable outcome and result in the need to recognize a material accrual, or should any of these matters result in a final adverse judgment or be settled for significant amounts, they could have a material adverse effect on our results of operations, cash flows and financial position in the period or periods in which such change in determination, judgment or settlement occurs.

Off-Balance Sheet Arrangements

We may occasionally utilize off-balance sheet arrangements in our operations (as defined by the SEC Financial Reporting Release 67 (FRR-67), "Disclosure in Management's Discussion and Analysis about Off-Balance Sheet Arrangements and Aggregate Contractual Obligations"). We enter into the following arrangements that have off-balance sheet elements:

- Operating leases in the normal course of business. The nature of these lease arrangements is discussed in Note 6 - Land, Buildings, Equipment and Software, Net in the Consolidated Financial Statements.
- We have facilities, primarily in the U.S.and Europe that enable us to sell to third-parties certain accounts receivable without recourse. In most instances, a portion of the sales proceeds are held back by the purchaser and payment is deferred until collection of the related sold receivables. Refer to Note 5 - Accounts Receivables, Net in the Consolidated Financial Statements for further information regarding these facilities.

As of December 31, 2016, we do not believe we have any off-balance sheet arrangements that have, or are reasonably likely to have, a material current or future effect on financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

In addition, see the preceding table for the Company's contractual cash obligations and other commercial commitments and Note 15 - Contingencies and Litigation in the Consolidated Financial Statements for additional information regarding contingencies, guarantees, indemnifications and warranty liabilities.

Non-GAAP Financial Measures

We have reported our financial results in accordance with U.S. generally accepted accounting principles (GAAP). In addition, we have discussed our financial results using the non-GAAP measures described below, consistent with Xerox's historical presentation. We believe these non-GAAP measures allow investors to better understand the trends in our business and to better understand and compare our results. Accordingly, we believe it is necessary to adjust several reported amounts, determined in accordance with GAAP, to exclude the effects of certain items as well as their related tax effects. Management believes that these non-GAAP financial measures provide an additional means of analyzing the current periods' results against the corresponding prior periods' results. However, these non-GAAP financial measures should be viewed in addition to, and not as a substitute for, the Company's reported results prepared in accordance with U.S. GAAP. Our non-GAAP financial measures are not meant to be considered in isolation or as a substitute for comparable U.S. GAAP measures and should be read only in conjunction with our Consolidated Financial Statements prepared in accordance with U.S. GAAP. Our management regularly uses our supplemental non-GAAP financial measures internally to understand, manage and evaluate our business and make operating decisions. These non-GAAP measures are among the primary factors management uses in planning for and forecasting future periods. Compensation of our executives is based in part on the performance of our business based on these non-GAAP measures.

These Non-GAAP financial measures should be viewed in addition to, and not as a substitute for, the Company's reported results prepared in accordance with GAAP. A reconciliation of the Non-GAAP financial measures to the most directly comparable financial measures calculated and presented in accordance with GAAP are provided below.

In connection with the preparation of our financial statements for the fiscal year ended December 31, 2016, during the fourth quarter, we performed our annual goodwill impairment test. Following the completion of the impairment

test, we determined that we will record a non-cash goodwill impairment charge of $935 million (approximately $828 million after-tax or ($4.08 per share) in our Commercial Industries reporting unit. Subsequent to the goodwill impairment charge, the Commercial Industries reporting unit's goodwill balance is approximately $908 million. This non-cash charge is attributable primarily to weaker than expected Commercial Industries revenues and operating profits, including in the fourth quarter of 2016. We do not expect to make any current or future cash expenditures as a result of this impairment.

We are in discussions with the State of New York regarding the status and scope of the Health Enterprise platform project, which evolved to include options to not fully complete the project. Based on those discussions, we believe it is probable that we will not fully complete the implementation of the platform in New York. As a result of these developments, we recorded a pre-tax charge of approximately $161 million (approximately $98 million after-tax or ($0.48) per share) in our fourth-quarter 2016 results reflecting estimated asset impairments, wind down costs and other impacts from this project. The charge includes approximately $115 million for the write-off of receivables and other related assets and non-cash impairment charges, with the remainder of the charge expected to be cash outflows in future quarters for wind down and related costs.

Late in the third quarter of 2015, we determined that we would not fully complete Health Enterprise Medicaid platform implementation projects in California and Montana and recorded a charge of $389 million. The charge included a $116 million reduction to revenues with the remaining $273 million recorded to cost of outsourcing.

As a result of the significant impact of the Goodwill Impairment, NY MMIS Charge and HE Charge on our reported revenues, costs and expenses as well as key metrics for the period, we discuss our 2016 and 2015 results using non-GAAP financial measures that exclude the impact of these items, as discussed below.

Adjusted Net Income (Loss), Adjusted Earnings per Share, and Adjusted Effective Tax Rate.

We make adjustments to Income (Loss) before Income Taxes for the following items, for the purpose of calculating Adjusted Net Income (Loss), Adjusted Earnings per Share, and Adjusted Effective Tax Rate.

In 2016, we adjusted Income (Loss) before Income Taxes for the Goodwill Impairment charge of $935 million recorded during the fourth quarter 2016.

Also in 2016, we adjusted Income (Loss) before Income Taxes for the New York Health Enterprise (NY MMIS) charge of $161 million recorded during the fourth quarter 2016. In 2015, we adjusted Income (Loss) before Income Taxes for the Health Enterprise (HE) charge of $389 million recorded during the third quarter 2015.

In addition to the items discussed above, for the quarter and full year ended December 31, 2016 and 2015 we Adjusted Net Income (Loss), Earnings per Share and Effective Tax Rate for the following items:

- Amortization of intangible assets. The amortization of intangible assets is driven by acquisition activity, which can vary in size, nature and timing as compared to other companies within our industry and from period to period.
- Restructuring and related costs. Restructuring and related costs include restructuring and asset impairment charges as well as costs associated with our strategic transformation program.
- Separation costs. Separation costs are expenses incurred in connection with separation from Xerox Corporation into a separate, independent, publicly traded company. Separation costs primarily relate to third-party investment banking, accounting, legal, consulting and other similar types of services related to the separation transaction as well as costs associated with the operational separation of the two companies.
- Other expenses, net, excluding third party interest expense. Other expenses, net includes losses (gains) on sales of businesses and assets, currency (gains) losses, net, litigation matters and all other expenses, net.

Adjusted Revenue, Costs and Expenses and Margin - Adjusted Operating Income. We make adjustments to Revenue, Costs and Expenses and Margin for the following items, for the purpose of calculating Adjusted Operating Income.

In 2016, we adjusted Income (Loss) before Income Taxes for the Goodwill Impairment charge of $935 million recorded during the fourth quarter 2016.

As a result of the nature and the significant impact of the NY MMIS and HE charges on our reported revenues, costs and expenses, as well as key metrics for the period, we discussed our 2016 and 2015 Adjusted Operating Income after excluding the impact of the NY MMIS and HE charges. In 2016, we Adjusted Operating Income by adjusting

Income (Loss) before Income Taxes for the fourth quarter NY MMIS charge of $161 million, which included an $83 million reduction in revenues. In 2015, we Adjusted Operating Income by adjusting Income (Loss) before Income Taxes for the third quarter HE charge of $389 million, which included a $116 million reduction in revenues.

In addition to the items discussed above, for the we adjusted Operating Income for the following items:

- As defined above in Adjusted Net Income (Loss), Adjusted Earnings per Share, and Adjusted Effective Tax Rate:
  - Amortization of intangible assets.
  - Restructuring and related costs.
  - Separation costs.
- We also adjust Operating Income for:
  - Related Party Interest. Includes interest payments to former parent.
  - Other expenses, net. Including third party interest, losses (gains) on sales of businesses and assets, currency (gains) losses, net, litigation matters and all other expenses, net.

Adjusted Revenues

As a result of the nature and the significant impact of the NY MMIS and HE charges on our reported revenues, we discussed our 2016 and 2015 revenues excluding the impact of the NY MMIS and HE charges. For 2016, we reduced revenues by $83 million for NY MMIS. For the 2015, we reduced revenues by $116 million to reflect the reduction in HE revenues.

Adjusted Other Segment Revenue and Profit

As a result of the nature and the significant impact of the NY MMIS and HE charges on our Other Segment Revenue and Profit, we discuss Other Segment Revenue and Profit excluding the impact of the NY MMIS and HE charges. In 2016, we adjusted Other Segment Revenue and Profit by adjusting for the fourth quarter NY MMIS charge of $161 million, which included an $83 million reduction in revenues. In 2015, we adjusted Other Segment Revenue and Profit by adjusting for the third quarter HE charge of $389 million, which included a $116 million reduction in revenue.

Constant Currency

To better understand trends in our business, we believe that it is helpful to adjust revenue to exclude the impact of changes in the translation of foreign currencies into U.S. Dollars. We refer to this adjusted revenue as “constant currency.” Currency impact can be determined as the difference between actual growth rates and constant currency growth rates.

Non GAAP Reconciliations:

Net Income (Loss) and EPS reconciliation:

	Year Ended December 31, 2016		Year Ended December 31, 2015		Year Ended December 31, 2014	
(in millions; except per share amounts)	Net Income (Loss)	EPS	Net Income (Loss)	EPS	Net Income (Loss)	EPS
Reported from continuing operations	$ (983)	$ (4.85)	$ (336)	$ (1.65)	$ 34	$ 0.17
Adjustments:						
Goodwill impairment	935		—		—	
Amortization of intangible assets	280		250		250	
NY MMIS	161		—		—	
Restructuring and related costs	101		159		21	
HE Charge	—		389		—	
Separation costs	44		—		—	
Other expenses, net excluding third-party interest[1]	20		30		34	
Subtotal Adjustments	1,541		828		305	
Less: Income tax adjustments[2]	(335)		(318)		(114)	
Adjusted	$ 223	$ 1.06	$ 174	$ 0.83	$ 225	$ 1.07
Weighted average shares for adjusted EPS[3]		210,774		210,774		210,774

_____

(1) Excludes third party interest expense of $14 million, $8 million and $11 million for the years ended December 31, 2016, 2015 and 2014, respectively.

(2) Reflects the income tax (expense) benefit of the adjustments. Refer to Effective Tax Rate reconciliation below for details.
(3) Average shares for the calculation of adjusted EPS include shares associated with our Series A convertible preferred stock and our stock compensation plan.

Effective Tax reconciliation:

	Year Ended December 31, 2016			Year Ended December 31, 2015			Year Ended December 31, 2014		
(in millions)	Pre-Tax Income (loss)	Income Tax (Benefit)Expense	Effective Tax Rate	Pre-Tax Income (loss)	Income Tax (Benefit)Expense	Effective Tax Rate	Pre-Tax Income (loss)	Income Tax (Benefit)Expense	Effective Tax Rate
Reported from continuing operations	$ (1,227)	$ (244)	19.9%	$ (574)	$ (238)	41.5%	$ 10	$ (24)	(240.0)%
Non-GAAP Adjustments[1]	1,541	335		828	318		305	114	
Adjusted[2]	$ 314	$ 91	29.0%	$ 254	$ 80	31.5%	$ 315	$ 90	28.6 %

(1) Refer to Net Income (Loss) reconciliation for details of non-GAAP adjustments.
(2) The tax impact of Adjusted Pre-tax income from continuing operations is calculated under the same accounting principles applied to the 'As Reported' Pre-tax income under ASC 740, which employs an annual effective tax rate method to the results.

Operating Income / Margin reconciliation:

	Year Ended December 31, 2016			Year Ended December 31, 2015			Year Ended December 31, 2014		
(in millions)	Profit (Loss)	Revenue	Margin	Profit (Loss)	Revenue	Margin	Profit (Loss)	Revenue	Margin
Reported Pre-tax (Loss) Income from Continuing Operations	$ (1,227)	$ 6,408	(19.1)%	$ (574)	$ 6,662	(8.6)%	$ 10	$ 6,938	0.1%
Adjustments:									
Goodwill impairment	935			—			—		
Amortization of intangible assets	280			250			250		
NY MMIS	161	83		—			—		
Restructuring and related charges	101			159			21		
Separation costs	44			—			—		
Related party interest	26			61			107		
HE Charge	—			389	116		—		
Other expenses, net	34			38			45		
Adjusted Operating Income / Margin	$ 354	$ 6,491	5.5 %	$ 323	$ 6,778	4.8 %	$ 433	$ 6,938	6.2%

The following non-GAAP reconciliation tables adjust for the NY MMIS and HE charges. There was no impact to the year ended December 31, 2014.

Revenue Reconciliation:

	Year Ended December 31,	
(in millions)	2016	2015
Revenue As Reported from Continuing Operations	$ 6,408	$ 6,662
NY MMIS	83	—
HE charge	—	116
Revenue Adjusted	$ 6,491	$ 6,778

Other Segment Revenue / Margin Reconciliation:

	Year Ended December 31, 2016			Year Ended December 31, 2015		
(in millions)	As Reported from Continuing Operations	NY MMIS	Adjusted	As Reported from Continuing Operations	HE Charge	Adjusted
Other Segment Revenue	$ 301	$ 83	$ 384	$ 289	$ 116	$ 405
Other Segment Loss	(245)	161	(84)	(489)	389	(100)
Other Segment Margin	n/a		(21.9)%	n/a		(24.7)%

Key Financial Ratios reconciliation:

(in millions)	Year Ended December 31, 2016 Gross Margin	R&D as % of Revenue	SAG as % of Revenue	Year Ended December 31, 2015 Gross Margin	R&D as % of Revenue	SAG as % of Revenue
As Reported from Continuing Operations	14.2%	0.5%	10.7 %	10.3%	0.8%	10.5 %
Adjustment:						
NY MMIS charge	2.3	—	(0.1)	—	—	—
HE charge	—	—	—	5.5	—	(0.2)
Adjusted	16.5%	0.5%	10.6 %	15.8%	0.8%	10.3 %

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market Risk

We are exposed to market risk from foreign currency exchange rates, which could affect operating results, financial position and cash flows. We manage our exposure to this market risk through our regular operating and financing activities and, when appropriate, through the use of derivative financial instruments. We utilized derivative financial instruments to hedge economic exposures, as well as reduce earnings and cash flow volatility resulting from shifts in market rates.

Recent market events have not caused us to materially modify or change our financial risk management strategies with respect to our exposures to foreign currency risk. Refer to Note 11 - Financial Instruments in the Consolidated Financial Statements for additional discussion on our financial risk management.

Foreign Exchange Risk Management

Assuming a 10% appreciation or depreciation in foreign currency exchange rates from the quoted foreign currency exchange rates at December 31, 2016, the potential change in the fair value of foreign currency-denominated assets and liabilities in each entity would not be significant because all material currency asset and liability exposures were economically hedged as of December 31, 2016. A 10% appreciation or depreciation of the U.S. Dollar against all currencies from the quoted foreign currency exchange rates at December 31, 2016 would have an impact on our cumulative translation adjustment portion of equity of approximately $56 million. The net amount invested in foreign subsidiaries and affiliates, primarily in the U.K. and Europe, and translated into U.S. Dollars using the year-end exchange rates, was approximately $559 million at December 31, 2016.

Interest Rate Risk Management

The consolidated weighted-average interest rates related to our total debt for 2016 approximated 2.99% for Term A due 2021, 6.81%, for Term B due 2023, 10.51% for Senior Notes due 2024 and 3.89% for Capital Lease Obligations. As of December 31, 2016, $1,487 million of our total debt of $1,997 million carried variable interest rates. The fair values of our fixed rate financial instruments are sensitive to changes in interest rates and at December 31, 2016, a 10% increase in market interest rates would decrease the fair values of such financial instruments by approximately $17 million. A 10% decrease in market interest rates would increase the fair values of such financial instruments by approximately $37 million.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Conduent Incorporated

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of income (loss), of comprehensive loss, of shareholders' equity and of cash flows present fairly, in all material respects, the financial position of Conduent Incorporated and its subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 15(a)(1) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Dallas, Texas
March 10, 2017

REPORTS OF MANAGEMENT

Management's Responsibility for Financial Statements

Our management is responsible for the integrity and objectivity of all information presented in this annual report. The consolidated financial statements were prepared in conformity with accounting principles generally accepted in the United States of America and include amounts based on management's best estimates and judgments. Management believes the consolidated financial statements fairly reflect the form and substance of transactions and that the financial statements fairly represent the Company's financial position and results of operations.

The Audit Committee of the Board of Directors, which is composed solely of independent directors, meets regularly with the independent auditors, PricewaterhouseCoopers LLP, the internal auditors and representatives of management to review accounting, financial reporting, internal control and audit matters, as well as the nature and extent of the audit effort. The Audit Committee is responsible for the engagement of the independent auditors. The independent auditors and internal auditors have free access to the Audit Committee.

Management's Report on Internal Control Over Financial Reporting

This annual report does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of the company's registered public accounting firm due to a transition period established by rules of the SEC for newly public companies.

/s/ Ashok Vemuri	/s/ Brian Webb-Walsh	/s/ Jay T. Chu
Chief Executive Officer	**Chief Financial Officer**	**Chief Accounting Officer**

CONDUENT INCORPORATED
CONSOLIDATED STATEMENTS OF INCOME (LOSS)

(in millions, except per-share data)	Year Ended December 31, 2016	2015	2014
Revenues			
Outsourcing	$ 6,358	$ 6,609	$ 6,884
Related party	50	53	54
Total Revenues	6,408	6,662	6,938
Costs and Expenses			
Cost of outsourcing	5,462	5,937	5,758
Related party cost of services	36	40	42
Research and development	31	52	46
Selling, administrative and general	686	699	659
Restructuring and related costs	101	159	21
Amortization of intangible assets	280	250	250
Goodwill impairment	935	—	—
Separation costs	44	—	—
Related party interest	26	61	107
Other expenses, net	34	38	45
Total Costs and Expenses	7,635	7,236	6,928
(Loss) Income Before Income Taxes	(1,227)	(574)	10
Income tax benefit	(244)	(238)	(24)
(Loss) Income from Continuing Operations	(983)	(336)	34
Loss from discontinued operations, net of tax	—	(78)	(115)
Net Loss	$ (983)	$ (414)	$ (81)
Basic Earnings (Loss) per Share:			
Continuing operations	$ (4.85)	$ (1.65)	$ 0.17
Discontinued operations	—	(0.39)	(0.57)
Total Basic Earnings (Loss) per Share	$ (4.85)	$ (2.04)	$ (0.40)
Diluted Earnings (Loss) per Share:			
Continuing operations	$ (4.85)	$ (1.65)	$ 0.17
Discontinued operations	—	(0.39)	(0.57)
Total Diluted Earnings (Loss) per Share	$ (4.85)	$ (2.04)	$ (0.40)

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONDUENT INCORPORATED
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

(in millions)	Year Ended December 31, 2016	2015	2014
Net Loss	$ (983)	$ (414)	$ (81)
Other Comprehensive Loss, Net[1]:			
Translation adjustments, net	$ (135)	$ (60)	$ (44)
Unrealized gain (losses), net	—	1	(2)
Changes in defined benefit plans, net	(20)	7	(25)
Other Comprehensive Loss, Net	(155)	(52)	(71)
Comprehensive Loss, Net	$ (1,138)	$ (466)	$ (152)

(1) Refer to Note 18 - Other Comprehensive Loss for gross components of Other Comprehensive Loss, reclassification adjustments out of Accumulated Other Comprehensive Loss and related tax effects.

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONDUENT INCORPORATED
CONSOLIDATED BALANCE SHEETS

(in millions, except share data in thousands)	December 31, 2016	2015
Assets		
Cash and cash equivalents	$ 390	$ 140
Accounts receivable, net	1,286	1,246
Related party notes receivable	—	248
Other current assets	241	240
Total current assets	1,917	1,874
Land, buildings and equipment, net	283	280
Intangible assets, net	1,144	1,425
Goodwill	3,889	4,872
Other long-term assets	476	607
Total Assets	$ 7,709	$ 9,058
Liabilities and Equity		
Short-term debt and current portion of long-term debt	$ 28	$ 24
Related party notes payable	—	1,132
Accounts payable	164	264
Accrued compensation and benefits costs	269	249
Unearned income	206	227
Net payable to former parent company	124	—
Other current liabilities	611	845
Total current liabilities	1,402	2,741
Long-term debt	1,913	37
Pension and other benefit liabilities	172	153
Deferred taxes	619	764
Other long-term liabilities	173	201
Total Liabilities	4,279	3,896
Commitments and contingencies (See Note 15)		
Series A Convertible Preferred Stock	142	—
Common stock	2	—
Additional paid-in capital	3,812	—
Former parent company investment	—	5,343
Accumulated other comprehensive loss	(526)	(181)
Total Equity	3,288	5,162
Total Liabilities and Equity	$ 7,709	$ 9,058
Shares of common stock issued and outstanding	202,875	—
Shares of Series A convertible preferred stock issued and outstanding	120	—

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONDUENT INCORPORATED
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in millions)	Year Ended December 31, 2016	2015	2014
Cash Flows from Operating Activities:			
Net loss	$ (983)	$ (414)	$ (81)
Adjustments required to reconcile net income to cash flows from operating activities:			
Depreciation and amortization	613	600	787
Goodwill impairment	935	—	—
Provision for receivables	4	4	3
Deferred tax benefit	(160)	(115)	(123)
Net loss on sales of businesses and assets	2	100	183
Stock-based compensation	23	19	28
Restructuring and asset impairment charges	73	159	23
Payments for restructurings	(46)	(19)	(23)
Contributions to defined benefit pension plans	(6)	(8)	(15)
(Increase) decrease in accounts receivable	(27)	239	(44)
Increase in other current and long-term assets	(90)	(86)	(168)
(Decrease) increase in accounts payable and accrued compensation	(60)	22	—
(Decrease) increase in other current and long-term liabilities	(210)	228	57
Net change in income tax assets and liabilities	39	(236)	38
Other operating, net	1	—	—
Net cash provided by operating activities	108	493	665
Cash Flows from Investing Activities:			
Cost of additions to land, buildings and equipment(1)	(149)	(158)	(189)
Cost of additions to internal use software	(39)	(27)	(27)
Proceeds from sale of businesses, net of adjustments	(53)	939	16
Acquisitions, net of cash acquired	(1)	(197)	(306)
Proceeds from investments	11	—	—
Net proceeds (payments) on related party notes receivable	248	(37)	22
Other investing, net	(1)	2	(4)
Net cash provided by (used in) investing activities	16	522	(488)
Cash Flows from Financing Activities:			
Proceeds on long term debt, net of issuance costs(1)	1,902	28	53
Payments on debt	(32)	(293)	(76)
Net payments on related party notes payable	(1,132)	(91)	(90)
Transfers to former parent	(588)	(672)	(36)
Restricted cash - related party	(18)	—	—
Excess tax benefits from stock-based compensation	—	6	10
Other financing	—	(1)	(10)
Net cash provided by (used in) financing activities	132	(1,023)	(149)
Effect of exchange rate changes on cash and cash equivalents	(6)	(11)	(8)
Increase (decrease) in cash and cash equivalents	250	(19)	20
Cash and cash equivalents at beginning of Year	140	159	139
Cash and Cash Equivalents at End of Year	$ 390	$ 140	$ 159

(1) Adjusted to exclude the initiation of capital leases of $8 and $59 in 2015 and 2014, respectively as the initiation of capital leases is a non-cash activity. Refer to Note 1 - Basis of Presentation and Summary of Significant Accounting Policies for additional information.

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONDUENT INCORPORATED
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(in millions)	Common Stock	Additional Paid-in Capital	AOCL[1]	Former Parent Company Investment	Conduent Shareholders' Equity
Balance at December 31, 2013	$ —	$ —	$ (58)	$ 5,637	$ 5,579
Comprehensive loss, net	—	—	(71)	(81)	(152)
Net transfers to former parent	—	—	—	(16)	(16)
Balance at December 31, 2014	$ —	$ —	$ (129)	$ 5,540	$ 5,411
Comprehensive loss, net	—	—	(52)	(414)	(466)
Net transfers from former parent	—	—	—	217	217
Balance at December 31, 2015	$ —	$ —	$ (181)	$ 5,343	$ 5,162
Comprehensive loss, net	—	—	(155)	(983)	(1,138)
Series A preferred stock transfer	—	—	—	(142)	(142)
Capitalization of Company	2	3,812		(3,814)	—
Net transfers to former parent	—	—	(190)	(404)	(594)
Balance at December 31, 2016	$ 2	$ 3,812	$ (526)	$ —	$ 3,288

(1) AOCL - Accumulated other comprehensive loss.

The accompanying notes are an integral part of these Consolidated Financial Statements.

CONDUENT INCORPORATED
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(in millions, except per-share data and where otherwise noted)

Note 1 – Basis of Presentation and Summary of Significant Accounting Policies

References herein to “we,” “us,” “our,” the “Company” and “Conduent” refer to Conduent Incorporated and its consolidated subsidiaries unless the context suggests otherwise.

Overview

On December 31, 2016, Conduent Incorporated (formerly known as the BPO business) spun-off from Xerox Corporation, pursuant to the separation agreement. The separation was completed by way of a pro rata distribution of Conduent Incorporated shares held by Xerox to Xerox’s shareholders. As a result of the spin-off, we now operate as an independent, publicly traded company on the New York Stock Exchange, under the ticker "CNDT".

Description of Business

We are a $6.4 billion global enterprise and a leading provider of business process services with expertise in transaction-intensive processing, analytics and automation. We serve as a trusted business partner in both the front office and back office, enabling personalized, seamless interactions on a massive scale that improve end user experience. We create value for our commercial and government clients by applying our expertise, technology and innovation to help them drive customer and constituent satisfaction and loyalty, increase process efficiency and respond rapidly to changing market dynamics. Our portfolio includes industry-focused service offerings in attractive growth markets such as healthcare and transportation, as well as multi-industry service offerings such as transaction processing, customer care and payment services.

Basis of Presentation

Prior to December 31, 2016, the Combined Financial Statements of the Company were derived from the Consolidated Financial Statements and accounting records of Xerox as if the Company operated on a standalone basis during the periods presented and were prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP) and pursuant to the rules and regulations of the SEC. Historically, the Company consisted of the Business Processing Outsourcing Operating segment within Xerox’s reportable Services segment and did not operate as a separate, standalone company. Accordingly, Xerox had reported the financial position and the related results of operations, cash flows and changes in equity of the Company in Xerox’s Consolidated Financial Statements.

The Combined Financial Statements included the historical basis of assets, liabilities, revenues and expenses of the individual businesses of the Company, including the joint ventures and partnerships over which the Company has a controlling financial interest. The Combined Financial Statements included certain assets and liabilities that were held by Xerox that are specifically identifiable or otherwise attributable to the Company. All intercompany transactions and balances within the Company have been eliminated. Cash was managed centrally through bank accounts controlled and maintained by Xerox. Accordingly, cash and cash equivalents held by Xerox at the corporate level were not attributable to the Company for any of the periods presented. Only cash amounts specifically attributable to the Company are reflected in the Combined Balance Sheets. Transfers of cash, both to and from Xerox’s centralized cash management system, were reflected as a component of Net Parent Investment in the Combined Balance Sheets and as a financing activity on the accompanying Combined Statements of Cash Flows. Historically, the Company received or provided funding as part of Xerox’s centralized treasury program.

Third-party debt obligations of Xerox and the corresponding financing costs related to those debt obligations, specifically those that relate to senior notes, term loans, commercial paper obligations and revolving credit facilities, have not been attributed to the Company, as the Company was not the legal obligor on the debt. The only third-party debt obligations included in these Combined Financial Statements are those for which the legal obligor is the Company or a legal entity within the Company.

During the periods presented, the Company functioned as part of the larger group of companies controlled by Xerox. Accordingly, Xerox performed certain corporate overhead functions for the Company. Therefore, certain corporate costs, including compensation costs for corporate employees supporting the Company, have been allocated from

Xerox. These allocated costs are for corporate functions including, but not limited to, senior management, legal, human resources, finance and accounting, treasury, information technology, marketing and communication, internal audit and other shared services, which were not provided at the Company level. Where possible, these costs were allocated based on direct usage, with the remainder allocated on a basis of cost, headcount or other measures we have determined as reasonable. The Combined Financial Statements do not necessarily include all the expenses that would have been incurred or held by the Company had it been a separate, standalone company. We expect to incur additional expenses as a separate, standalone publicly-traded company. It is not practicable to estimate actual costs that would have been incurred had the Company been a separate standalone company during the periods presented. Allocations for management costs and corporate support services provided to the Company totaled $165, $170 and $175 for the three years ended December 31, 2016.

The management of the Company believes the assumptions underlying the Combined Financial Statements, including the assumptions regarding the allocated expenses, reasonably reflect the utilization of services provided to or the benefit received by the Company during the periods presented. Nevertheless, the Combined Financial Statements may not be indicative of the Company's future performance, and do not necessarily include all of the actual expenses that would have been incurred by the Company and may not reflect the results of operations, financial position and cash flows of the Company had the Company been a separate, standalone company during the periods presented.

Operations of the Company are included in the consolidated U.S. federal, and certain state and local and foreign income tax returns filed by Xerox, where applicable. The Company also files certain separate state and local and foreign income tax returns. Income tax expense and other income tax related information contained in the Combined Financial Statements are presented on a separate return basis as if the Company filed its own tax returns. The income taxes of the Company as presented in the Combined Financial Statements may not be indicative of the income taxes that the Company will generate in the future. In jurisdictions where the Company has been included in the tax returns filed by Xerox, any income taxes payable resulting from the related income tax provisions have been reflected in the balance sheet.

Discontinued Operations

In 2014, we announced an agreement to sell our Information Technology Outsourcing (ITO) business to Atos SE (Atos). As a result of that agreement, we reported the ITO business as held for sale and a Discontinued Operation up through its date of sale on June 30, 2015. In 2014, we also completed the disposal of Truckload Management Services (TMS) which was also reported as a Discontinued Operation. All prior period results have been reclassified to conform to the presentation of these businesses as Discontinued Operations. Refer to Note 4 - Divestitures for additional information regarding Discontinued Operations.

Use of Estimates

The preparation of our Consolidated Financial Statements is in conformity with GAAP and requires that we make estimates and assumptions that affect the reported amounts of assets and liabilities, as well as the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Future events and their effects cannot be predicted with certainty; accordingly, our accounting estimates require the exercise of judgment. The accounting estimates used in the preparation of our Consolidated Financial Statements will change as new events occur, as more experience is acquired, as additional information is obtained and as our operating environment changes. Our estimates are based on management's best knowledge of current events, historical experience, actions that the company may undertake in the future and on various other assumptions that are believed to be reasonable under the circumstances. As a result, actual results may be different from these estimates.

The following table summarizes certain recurring type costs and expenses that require management estimates for the three years ended December 31, 2016:

	Year Ended December 31,		
Expense/(Income)	2016	2015	2014
Corporate allocations[1]	$ 165	$ 170	$ 175
Provisions for restructuring and asset impairments - continuing operations	73	159	21
Provisions for restructuring and asset impairments - discontinued operations	—	—	2
Provision for receivables	4	4	3
Provisions for litigation and regulatory matters	40	18	38
Depreciation of buildings and equipment [2]	130	126	145
Amortization of internal use software [2]	49	51	52
Amortization of product software	61	65	58
Amortization of acquired intangible assets [2]	280	250	250
Amortization of customer contract costs [2]	93	108	122
Income tax (benefit) expense - continuing operations	(244)	(238)	(24)
Income tax expense - discontinued operations	—	81	7

(1) Refer to Note 20 - Related Party and Former Parent Investment.
(2) Excludes amounts related to our ITO business, which was reported as a discontinued operation through its date of sale on June 30, 2015. Refer to Note 4 - Divestitures for additional information regarding this sale.

Changes in Estimates

In the ordinary course of accounting for the items discussed above, we make changes in estimates as appropriate and as we become aware of new or revised circumstances surrounding those estimates. Such changes and refinements in estimation methodologies are reflected in reported results of operations in the period in which the changes are made and, if material, their effects are disclosed in the Notes to the Consolidated Financial Statements and in Management's Discussion and Analysis of Financial Condition and Results of Operations.

Statement of Cash Flows Revision

During the 2016 year-end closing process, we determined that 2015 and 2014 Cash Flows from Investing Activities and Cash Flows from Financing Activities should have been $8 and $59 lower, respectively, as the initiation of capital leases is a non-cash activity. We have determined that these errors are immaterial to all prior period financial statements impacted and we have revised the applicable 2015 and 2014 Statement of Cash Flows amounts herein.

New Accounting Standards and Accounting Changes

Except for the Accounting Standard Updates (ASU's) discussed below, the new ASU's issued by the FASB during the last two years did not have any significant impact on the Company.

Revenue Recognition

In May 2014, the FASB issued **ASU 2014-09**, ***Revenue from Contracts with Customers (Topic 606)***, to supersede nearly all existing revenue recognition guidance under U.S. GAAP. The core principle of ASU 2014-09 is to recognize revenues when promised goods or services are transferred to customers in an amount that reflects the consideration that is expected to be received for those goods or services. ASU 2014-09 defines a five step process to achieve this core principle and, in doing so, it is possible more judgment and estimates may be required within the revenue recognition process than required under existing U.S. GAAP, including identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. ASU 2014-09 is effective for our fiscal year beginning January 1, 2018, with early adoption permitted for fiscal years beginning January 1, 2017. The standard will be adopted using either of two methods: (i) retrospective to each prior reporting period presented with the option to elect certain practical expedients as defined within ASU 2014-09; or (ii) retrospective with the cumulative effect of initially applying ASU 2014-09 recognized at the date of initial application and providing certain additional disclosures as defined per ASU 2014-09. In March 2016, the FASB issued ASU 2016-08, Revenue Recognition - Principal versus Agent (reporting revenue gross versus net). Also, in April 2016, the FASB issued ASU 2016-10 Revenue from Contracts with Customers - Identifying Performance Obligations and Licensing, and in May 2016, the FASB issued ASU 2016-12 Revenue Recognition - Narrow Scope Improvements and Practical Expedients. We will adopt this standard beginning January 1, 2018, and we will use the modified retrospective method. As a result of the Spin-off Transaction in 2016, we will need to complete most of our implementation activities in 2017.

Leases

In February 2016, the FASB issued **ASU 2016-02**, ***Leases***. This update requires the recognition of leased assets and lease obligations by lessees for those leases currently classified as operating leases under existing lease guidance. Short term leases with a term of 12 months or less are not required to be recognized. The update also requires disclosure of key information about leasing arrangements to increase transparency and comparability among organizations. The accounting for lessors does not fundamentally change except for changes to conform and align guidance to the lessee guidance as well as to the new revenue recognition guidance in ASU 2014-09. This update is effective for our fiscal year beginning January 1, 2019. We are currently evaluating the impact of the adoption of ASU 2016-02 on our consolidated financial statements.

Cash Flows

In August 2016, the FASB issued **ASU 2016-15**, **Statement of Cash Flows** - *Classification of Certain Cash Receipts and Cash Payments*. This update provides specific guidance on eight cash flow classification issues where current GAAP is either unclear or does not include specific guidance. This update is effective for our fiscal year beginning January 1, 2018 with early adoption permitted. We are currently evaluating the impact, if any, that the adoption of ASU 2016-15 may have on our statements of cash flows in future reporting periods.

Additionally, in November 2016 the FASB issued **ASU 2016-18, Statement of Cash Flows - Restricted Cash**. The update requires that amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts

shown on the statement of cash flows. We held $22 and $16 of restricted cash, currently reported in other current assets at December 31, 2016 and 2015, respectively. This update is effective for our fiscal year beginning January 1, 2018. We are currently evaluating the impact, if any, that the adoption of ASU 2016-18 may have on our statements of cash flows in future reporting periods.

Stock Compensation

In March 2016, the FASB issued **ASU 2016-09, *Compensation*** - *Stock Compensation, Improvements to Employee Share-Based payment Accounting (Topic 718).* This update includes provisions to simplify certain aspects related to the accounting for share-based awards and the related financial statement presentation. The update also requires that excess tax benefits and deficiencies be recorded in the income statement when the awards vest or are settled as compared to equity as allowed under certain conditions by current US GAAP. This change is required to be adopted prospectively in the period of adoption. In addition, the ASU modifies the classification of certain share-based payment activities within the statements of cash flows and these changes are required to be applied retrospectively to all periods presented. ASU 2016-09 is effective for our fiscal year beginning January 1, 2017.The update may add volatility to our income tax expense in future periods depending upon, among other things, the level of tax expense and the price of the Company's common stock at the date of vesting for share-based awards. We are currently evaluating the impact, if any, that the adoption of ASU 2016-09 may have on our consolidated financial statements in future reporting periods.

Income Taxes

In October 2016, the FASB issued **ASU 2016-16, Income Taxes** - *Intra-Entity Transfers of Assets Other than Inventory*. This update requires recognition of the income-tax consequences of an intra-entity transfer of assets other than inventory. Under current GAAP, recognition of the income tax consequences for assets other than inventory could only occur upon sale to a third party. This update is effective for our fiscal year beginning January 1, 2018. We are currently evaluating the impact of the adoption of ASU 2016-16 on our consolidated financial statements.

Financial Instruments - Credit Losses

In June 2016, the FASB issued **ASU 2016-13, Financial Instruments Credit Losses** - *Measurement of Credit Losses on Financial Instruments,* which requires measurement and recognition of expected credit losses for financial assets. The update impacts financial assets and net investment in leases that are not accounted for at fair value through net income. This update is effective for our fiscal year beginning January 1, 2020, with early adoption permitted as of January 1, 2019. We are currently evaluating the impact of the adoption of ASU 2016-13 on our consolidated financial statements.

Business Combinations

In January 2017, the FASB issued **ASU 2017-01, Business Combinations** (Topic 805): Clarifying the Definition of a Business, which clarifies the definition of a business to assist entities with evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. This update is effective for our fiscal year beginning January 1, 2018, with early adoption permitted. We are currently evaluating the impact of the adoption of ASU 2017-01 on our consolidated financial statements, intangible assets and goodwill.

In January 2017 the FASB issued **ASU 2017-04, Intangibles - Goodwill and Other** - Simplifying the Goodwill Impairment Test, which eliminates Step 2 from the goodwill impairment test. Instead, an entity should perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, not to exceed the total amount of goodwill allocated to the reporting unit. This update is effective for our fiscal year beginning January 1, 2020, with early adoption permitted for goodwill impairment tests performed after January 1, 2017. The adoption of this standard is not expected to have any effect on our financial condition, results of operations or cash flows. If this new accounting standard, ASU 2017-04 had been adopted as of December 31, 2016, the impairment charge for the Commercial Industries reporting unit would have been $992 versus the$935 under the current standard.

Equity Method Accounting

In March 2016, the FASB issued **ASU 2016-07, *Investments*** - *Equity Method and Joint Ventures (Topic 323), Simplifying the Transition to the Equity Method of Accounting.* This update eliminates the requirement that when an existing cost method investment qualifies for use of the equity method, an investor must restate its historical financial statements, as if the equity method had been used during all previous periods. Under the new guidance, at the point an investment qualifies for the equity method, any unrealized gain or loss in accumulated other comprehensive income(loss) ("AOCI") will be recognized through earnings. This update is effective for our fiscal year beginning January 1, 2017, with early adoption permitted. The adoption of this update is not expected to have a material impact on our financial condition, results of operations or cash flows.

Accounting for Income Taxes: Balance Sheet Presentation of Deferred Taxes

In November 2015, the FASB issued **ASU 2015-17**, *Income Taxes: Balance Sheet Classification of Deferred Taxes.* This update, which simplifies the presentation of deferred income taxes, requires that deferred tax liabilities and assets be classified as non-current in a classified statement of financial position. As allowed by the update, we early adopted ASU 2015-17 effective December 31, 2015 on a prospective basis. Adoption of this update resulted in a reclassification of our net current deferred tax asset and liabilities to the net non-current deferred tax asset and liabilities in our Consolidated Balance Sheet as of December 31, 2015. Prior periods were not retrospectively adjusted. The current requirement that deferred tax liabilities and assets of a tax-paying component (jurisdiction) of an entity be offset and presented as a single amount is not affected by this update.

Interest

In April 2015, the FASB issued **ASU 2015-03**, *Interest - Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs*. This update requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. In August 2015, the FASB issued **ASU 2015-15,** which indicated that the SEC staff would not object to an entity deferring and presenting debt issuance costs associated with a line-of-credit arrangement as an asset and subsequently amortizing those costs ratably over the term of the line-of-credit arrangement, regardless of whether there are any outstanding borrowings. We have $66 of debt issuance costs at December 31, 2016, of which $56 is reported as a reduction to Long term debt and $10 is recorded as a Long term asset. This update was effective for our fiscal year beginning January 1, 2016. The adoption of this standard did not have a material effect on our financial condition, results of operations or cash flows.

Discontinued Operations

In April 2014, the FASB issued **ASU 2014-08**, *Presentation of Financial Statements (Topic 205) and Property, Plant, and Equipment (Topic 360): Reporting Discontinued Operations and Disclosures of Disposals of Components of an Entity*. The update changes the requirements for reporting discontinued operations in Subtopic 205-20. A discontinued operation may include a component of an entity or a group of components of an entity, or a business. A disposal of a component of an entity or a group of components of an entity is required to be reported in discontinued operations if the disposal represents a strategic shift that has (or will have) a major effect on an entity’s operations and financial results. Examples include a disposal of a major geographic area, a major line of business or a major

equity method investment. Additionally, the update requires expanded disclosures about discontinued operations that will provide financial statement users with more information about the assets, liabilities, income and expenses of discontinued operations. This update was effective prospectively for our fiscal year beginning January 1, 2015. The standard primarily involves presentation and disclosure and, therefore, did not have a material impact on our financial condition, results of operations or cash flows.

Service Concession Arrangements

In January 2014, the FASB issued **ASU 2014-05**, *Service Concession Arrangements (Topic 853)*. This update specifies that an entity should not account for a service concession arrangement within the scope of this update as a lease in accordance with Topic 840, Leases. The update was effective for our fiscal year beginning January 1, 2015. The adoption of this standard did not have a material effect on our financial condition, results of operation or cash flows.

Disclosures of Going Concern Uncertainties

In August 2014, the FASB issued **ASU 2014-15**, *Presentation of Financial Statements - Going Concern (Subtopic 205-40); Disclosure of Uncertainties about an Entity's Ability to Continue as a Going Concern*, which was effective for our fiscal year ending December 31, 2016. The adoption of this standard did not have a material effect on our financial condition, results of operation or cash flows.

Other Updates

In 2016 and 2015, the FASB also issued the following Accounting Standards Updates which are not expected to have a material impact on our financial condition, results of operations or cash flows when adopted in future periods. Those updates are as follows:

- ***Accounting Changes and Error Corrections*** (Topic 250): **ASU 2017-03**, Accounting Changes and Error Corrections (Topic 250) and Investments-Equity Method and Joint Ventures (Topic 323). Transition guidance included in certain issued but not yet adopted ASUs was updated to reflect this amendment.
- ***Financial Instruments:*** **ASU 2016-01**, *Financial Instruments - Recognition and Measurement of Financial Instruments and Financial Liabilities,* which is effective for our fiscal year beginning January 1, 2018.
- ***Inventory:*** **ASU 2015-11**, *Simplifying the Subsequent Measurement of Inventory,* which is effective for our fiscal year beginning January 1, 2017.
- ***Fair Value Measurements:*** **ASU 2015-07**, *Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or its Equivalent)*, which was effective for our fiscal year beginning January 1, 2016.
- ***Stock Compensation:*** **ASU 2014-12**, *Compensation - Stock Compensation (Topic 718): Accounting for Share-Based Payments When the Terms of an Award Provide that a Performance Target Could be Achieved after the Requisite Service Period,* which was effective for our fiscal year beginning January 1, 2016.
- ***Business Combinations:*** **ASU 2015-16**, *Accounting for Measurement Period Adjustments in a Business Combination*, which was effective for our fiscal year beginning January 1, 2016.
- ***Intangibles - Goodwill and Other - Internal Use Software:*** **ASU 2015-05**, *Intangibles-Goodwill and Other-Internal Use Software - Customer's Accounting for Fees Paid in a Cloud Computing Arrangement,* which was effective for our fiscal year beginning January 1, 2016.
- ***Consolidation:*** **ASU 2015-02**, *Consolidation (Topic 810): Amendments to the Consolidation Analysis*. This update was effective for our fiscal year beginning January 1, 2016 with early adoption permitted, and is applied on a modified retrospective basis.
- ***Income Statement:*** **ASU 2015-01,** *Income Statement - Extraordinary and Unusual Items (Subtopic 225-20) - Simplifying Income Statement Presentation by Eliminating the Concept of Extraordinary Items*. The standard primarily involves presentation and disclosure.
- ***Derivatives and Hedging***: **ASU 2016-06**, *Contingent Put and Call Options in Debt Instruments*, which is effective for our fiscal year beginning January 1, 2017 with early adoption permitted.
- ***Derivatives and Hedging***: **ASU 2016-05**, *Effect of Derivative Contract Novations on Existing Hedge Accounting Relationships*, which is effective for our fiscal year beginning January 1, 2017 with early adoption permitted.
- ***Derivatives and Hedging:*** **ASU 2014-16**, *Derivatives and Hedging (Topic 815) - Determining Whether the Host Contract in a Hybrid Financial Instrument Issued in the Form of a Share Is More Akin to Debt or to Equity,* which was effective for our fiscal year beginning January 1, 2016.

Summary of Accounting Policies

Revenue Recognition

We primarily generate revenue through services. Revenue is recognized when it is realized or realizable and earned. We consider revenue realized or realizable and earned when we have persuasive evidence of an arrangement, delivery has occurred, the transaction price is fixed or determinable and collectibility is reasonably assured. Delivery does not occur until services have been provided to the customer, risk of loss has transferred to the customer, and either customer acceptance has been obtained, customer acceptance provisions have lapsed or the company has objective evidence that the criteria specified in the customer acceptance provisions have been satisfied. The transaction price is not considered to be fixed or determinable until all contingencies related to the sale have been resolved.

Outsourcing Services: Revenues associated with outsourcing services are generally recognized as services are rendered, which is generally on the basis of the number of accounts or transactions processed. In service arrangements where final acceptance of a system or solution by the customer is required, revenue is deferred until all acceptance criteria have been met. Revenues on cost reimbursable contracts are recognized by applying an estimated factor to costs as incurred, determined by the contract provisions and prior experience. Revenues on unit-price contracts are recognized at the contractual selling prices as work is completed and accepted by the customer. Revenues on time and material contracts are recognized at the contractual rates as the labor hours and direct expenses are incurred.

Revenues on certain fixed price contracts where we provide system development and implementation services are recognized over the contract term based on the percentage of development and implementation services that are provided during the period compared with the total estimated development and implementation services to be provided over the entire contract using the percentage-of-completion accounting methodology. These services require that we perform significant, extensive and complex design, development, modification or implementation of our customers' systems. Performance will often extend over long periods, and our right to receive future payment depends on our future performance in accordance with the agreement.

The percentage-of-completion methodology involves recognizing probable and reasonably estimable revenue using the percentage of services completed, on a current cumulative cost to estimated total cost basis, using a reasonably consistent profit margin over the period.

Revenues earned in excess of related billings are accrued, whereas billings in excess of revenues earned are deferred until the related services are provided. We recognize revenues for non-refundable, upfront implementation fees on a straight-line basis over the period between the initiation of the ongoing services through the end of the contract term.

In connection with our services arrangements, we incur and capitalize costs to originate these long-term contracts and to perform the migration, transition and setup activities necessary to enable us to perform under the terms of the arrangement. Certain initial direct costs of an arrangement are capitalized and amortized over the contractual service period of the arrangement to cost of services. From time to time, we also provide inducements to customers in various forms, including contractual credits, which are capitalized and amortized as a reduction of revenue over the term of the contract.

Spending associated with customer-related deferred set-up/transition and inducement costs for the three years ended December 31, 2016 were as follows:

	Year Ended December 31,		
	2016	2015	2014
Set-up/transition and inducement expenditures	$ 63	$ 65	$ 81

The capitalized amount of customer contract costs at December 31, 2016 and 2015 were as follows:

	Year Ended December 31,	
	2016	2015
Capitalized customer contract costs [1]	137	170

_____

(1) The balance at December 31, 2016 of $137 is expected to be amortized over a weighted average period of approximately 8 years.

Amortization expense for the next five years and thereafter is expected to be as follows:

2017	2018	2019	2020	2021	Thereafter
$ 58	$ 29	$ 16	$ 8	$ 5	$ 21

Long-lived assets used in the fulfillment of the arrangements are capitalized and depreciated over the shorter of their useful life or the term of the contract if an asset is contract specific.

Other Revenue Recognition Policies

Multiple Element Arrangements: As described above, we enter into the following revenue arrangements that may consist of multiple deliverables including contracts for multiple types of outsourcing services, as well as professional and value-added services. For instance, we may contract for an implementation or development project and also provide services to operate the system which we implement or develop over a period of time; or we may contract to scan, manage and store customer documents.

In substantially all of our multiple element arrangements, we are able to separate the deliverables since we normally will meet both of the following criteria:

- The delivered item(s) has value to the customer on a stand-alone basis; and
- If the arrangement includes a general right of return relative to the delivered item(s), delivery or performance of the undelivered item(s) is considered probable and substantially in our control.

Consideration in a multiple-element arrangement is allocated at the inception of the arrangement to all deliverables on the basis of the relative selling price. When applying the relative selling price method, the selling price for each deliverable is primarily determined based on vendor-specific objective evidence (VSOE), third-party evidence (TPE), or our best estimate of the selling price. The above noted revenue policies are then applied to each separated deliverable, as applicable.

Revenue Reporting: Revenue from sales of third-party vendor products or services is recorded net of costs when the company is acting as an agent between the customer and the vendor or supplier, and gross when the company is a principal to the transaction. Postage is generally recognized on a gross basis. Several factors are considered to determine whether the company is an agent or principal, most notably whether the company is the primary obligor to the customer, or has inventory risk. Consideration is also given to whether the company adds meaningful value to the vendor's product or service, was involved in the selection of the vendor's product or service, has latitude in establishing the sales price or has credit risk.

Revenue-based Taxes: We report revenue net of any revenue-based taxes assessed by governmental authorities that are imposed on and concurrent with specific revenue-producing transactions. The primary revenue-based taxes are sales tax and value-added tax (VAT).

Other Significant Accounting Policies

Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand, including money market funds and investments with original maturities of three months or less.

Receivable Sales

We regularly transfer certain portions of our receivable portfolios and normally account for those transfers as sales based on meeting the criteria for derecognition in accordance with ASC Topic 860 "Transfer and Servicing" of Financial Assets. Losses on the sale of receivables depend, in part, on both (a) the cash proceeds and (b) the net non-cash proceeds received or paid. When we sell receivables, we normally receive beneficial interests in the transferred receivables from the purchasers as part of the proceeds. Refer to Note 5 - Accounts Receivable, Net for more details on our receivable sales.

Land, Buildings and Equipment

Land, buildings and equipment are recorded at cost. Buildings and equipment are depreciated over their estimated useful lives. Leasehold improvements are depreciated over the shorter of the lease term or the estimated useful life. Significant improvements are capitalized and maintenance and repairs are expensed. Refer to Note 6 - Land, Buildings, Equipment and Software, Net for further discussion.

Software - Internal Use and Product

We capitalize direct costs associated with developing, purchasing or otherwise acquiring software for internal use and amortize these costs on a straight-line basis over the expected useful life of the software, beginning when the software is implemented (Internal Use Software). Costs incurred for upgrades and enhancements that will not result in additional functionality are expensed as incurred. Amounts expended for Internal Use Software are included in Cash Flows from Investing.

We also capitalize certain costs related to the development of software solutions to be sold to our customers upon reaching technological feasibility (Product Software). These costs are amortized on a straight-line basis over the estimated economic life of the software. Amounts expended for Product Software are included in Cash Flows from Operations. We perform periodic reviews to ensure that unamortized Product Software costs remain recoverable from estimated future operating profits (net realizable value or NRV). Costs to support or service licensed software are charged to Costs of outsourcing as incurred.

Refer to Note 6 - Land, Buildings, Equipment and Software, Net for further information.

Goodwill and Other Intangible Assets

Goodwill represents the excess of the purchase price over the fair value of acquired net assets in a business combination, including the amount assigned to identifiable intangible assets. The primary drivers that generate goodwill are the value of synergies between the acquired entities and the company and the acquired assembled workforce, neither of which qualifies as an identifiable intangible asset. Goodwill is not amortized but rather is tested for impairment annually or more frequently if an event or circumstance indicates that an impairment loss may have been incurred.

Impairment testing for goodwill is done at the reporting unit level. A reporting unit is an operating segment or one level below an operating segment (a "component") if the component constitutes a business for which discrete financial information is available, and segment management regularly reviews the operating results of that component. Our reporting units are the same as our operating segments and this is the level that discrete financial information is available.

When testing goodwill for impairment, we may assess qualitative factors for some or all of our reporting units to determine whether it is more-likely-than-not (that is, a likelihood of more than 50 percent) that the fair value of a reporting unit is less than its carrying amount, including goodwill. Alternatively, we may bypass this qualitative assessment for some or all of our reporting units and perform a detailed quantitative test of impairment (Step 1). If we perform the detailed quantitative impairment test and the carrying amount of the reporting unit exceeds its fair value, we would perform an analysis (Step 2) to measure such impairment.

As required by ASC 350 Intangibles - Goodwill and Other, we annually test the Goodwill of our reporting units for impairment. For Step 1 of the test, as in prior years, we determined the fair value of our reporting units utilizing a combination of both an Income Approach and a Market Approach to calculate fair value for each reporting units equity. We then compare fair value of equity to carrying value. The Income Approach utilizes a discounted cash flow analysis based upon the forecasted future business results of our reporting units. The Market Approach utilizes the guideline public company method. We apply a two-thirds and one-third weighting to the results of the Income Approach and the Market Approach, respectively, to calculate the fair value of each reporting unit’s equity.

In 2016, based on the declining operating results of our Commercial Industries reporting unit, including in the fourth quarter, we determined to proceed to the quantitative assessment of the recoverability of our goodwill balances for each of our reporting units in performing our annual impairment test. Based on our quantitative assessments, we concluded that the fair value of our Commercial Industries reporting unit was less than its carrying value by approximately 53%, indicating an impairment. Accordingly, based on Step 2 of the impairment process, we recorded a pre-tax goodwill impairment charge of $935 million during the fourth quarter of 2016, which is separately presented in the Consolidated Statements of Income (Loss). Our Healthcare and Public Sector reporting units passed Step 1 of the impairment test with fair value exceeding carrying value by approximately 19% and 14%, respectively.

Other intangible assets primarily consist of assets obtained in connection with business acquisitions, including installed customer base and distribution network relationships, patents on existing technology and trademarks. We apply an impairment evaluation whenever events or changes in business circumstances indicate that the carrying value of our intangible assets may not be recoverable. Other intangible assets are amortized on a straight-line basis over their estimated economic lives. We believe that the straight-line method of amortization reflects an appropriate allocation of the cost of the intangible assets to earnings in proportion to the amount of economic benefits obtained annually by the Company.

Refer to Note 7 - Goodwill and Intangible Assets, Net for further information.

Impairment of Long-Lived Assets

We review the recoverability of our long-lived assets, including buildings, equipment, internal use software, product software and other intangible assets, when events or changes in circumstances occur that indicate that the carrying value of the asset may not be recoverable. The assessment of possible impairment is based on our ability to recover the carrying value of the asset from the expected future pre-tax cash flows (undiscounted and without interest charges) of the related operations. If these cash flows are less than the carrying value of such asset, an impairment loss is recognized for the difference between estimated fair value and carrying value. Our primary measure of fair value is based on forecasted cash flows.

Pension Obligations

We sponsor various forms of defined benefit pension plans in several countries covering employees who meet eligibility requirements. We employ a delayed recognition feature in measuring the costs associated with our pension benefit plans. This requires changes in the benefit obligations and changes in the value of assets set aside to meet those obligations to be recognized not as they occur, but systematically and gradually over subsequent periods. All changes are ultimately recognized as components of net periodic benefit cost, except to the extent they may be offset by subsequent changes. At any point, changes that have been identified and quantified but not recognized as components of net periodic benefit cost, are recognized in Accumulated Other Comprehensive Loss, net of tax.

Several statistical and other factors that attempt to anticipate future events are used in calculating the expense, liability and asset values related to our pension plans. These factors include assumptions we make about the discount rate, expected return on plan assets, the rate of future compensation increases and mortality. In calculating the expected return on the plan asset component of our net periodic pension cost, we apply our estimate of the long-term rate of return on the plan assets that support our pension obligations.

The expected rate of return on plan assets is the long-term rate of return we expect to earn on plan assets. When estimating the expected rate of return, in addition to assessing recent performance, we consider the historical returns earned on plan assets, the rates of return expected in the future, and our investment strategy and asset mix with respect to the plans' funds. The expected rate of return on plan assets is reviewed annually and revised, as necessary, to reflect changes in financial markets and our investment strategy.

The discount rate is used to present value our future anticipated benefit obligations. The discount rate reflects the current rate at which benefit liabilities could be effectively settled considering the timing of expected payments for plan participants. In estimating our discount rate, we consider rates of return on high-quality fixed-income investments adjusted to eliminate the effects of call provisions, as well as the expected timing of pension and other benefit payments.

Each year, the difference between the actual return on plan assets and the expected return on plan assets, as well as increases or decreases in the benefit obligation as a result of changes in the discount rate and other actuarial assumptions, are added to or subtracted from any cumulative actuarial gain or loss from prior years. This amount is the net actuarial gain or loss recognized in Accumulated other comprehensive loss. We amortize net actuarial gains and losses as a component of net pension cost for a year if, as of the beginning of the year, that net gain or loss (excluding asset gains or losses that have not been recognized in market-related value) exceeds 10% of the greater of the projected benefit obligation or the market-related value of plan assets (the "corridor" method). This determination is made on a plan-by-plan basis. If amortization is required for a particular plan, we amortize the applicable net gain or loss in excess of the 10% threshold on a straight-line basis in net periodic pension cost over the remaining service period of the employees participating in that pension plan. In plans where substantially all participants are inactive, the amortization period for the excess is the average remaining life expectancy of the plan participants.

Refer to Note 13 - Employee Benefit Plans for further information regarding our Pension Benefit Obligations.

Income Taxes

Income taxes are recorded based on amounts refundable or payable and include the results of any difference between U.S. GAAP accounting and tax reporting, recorded as deferred tax assets or liabilities. We estimate deferred tax assets and liabilities based on current tax laws, regulations and rates. Changes in tax laws,
regulations and rates may affect recorded deferred tax assets and liabilities in the future.

Management establishes valuation allowances on deferred tax assets when it is determined “more-likely-than-not” that some portion or all of the deferred tax assets may not be realized. Management considers positive and negative evidence in evaluating the ability of the Company to realize its deferred tax assets, including its historical results and forecasts of future ability to realize its deferred tax assets, including projected future taxable income, the expected timing of the reversals of existing temporary differences and tax planning strategies.

We are subject to ongoing tax examinations and assessments in various jurisdictions. We have unrecognized tax benefits for uncertain tax positions. We follow U.S. GAAP which prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Our ongoing assessments of the more-likely-than-not outcomes of the examinations and related tax positions require judgment and can materially increase or decrease our effective tax rate, as well as impact our operating results.

Refer to Note 14—Income Taxes for further discussion.

Foreign Currency Translation and Re-measurement

The functional currency for most foreign operations is the local currency. Net assets are translated at current rates of exchange and income, expense and cash flow items are translated at average exchange rates for the applicable period. The translation adjustments are recorded in Accumulated other comprehensive loss.

The U.S. Dollar is used as the functional currency for certain foreign subsidiaries that conduct their business in U.S. Dollars. A combination of current and historical exchange rates is used in re-measuring the local currency transactions of these subsidiaries and the resulting exchange adjustments are recorded in Currency (gains) and losses within Other expenses, net together with other foreign currency re-measurements.

Note 2 – Segment Reporting

Our reportable segments correspond to how we organize and manage the business, as defined by our CEO who is also our Chief Operating Decision Maker, and are aligned to the industries in which our clients operate. All of our segments involve the delivery of business process services and include service arrangements where we manage a customer's business activity or process. We report our financial performance based on the following three primary reportable segments.

- Commercial Industries
- Healthcare
- Public Sector

Commercial Industries: Our Commercial Industries segment provides business process services and customized solutions to clients in a variety of industries (other than healthcare). Across the Commercial Industries segment, we deliver end-to-end business-to-business and business-to-customer services that enable our clients to optimize their key processes. Our multi-industry competencies include customer care, human resource management and finance and accounting services. These services are complemented by innovative industry-specific services such as personalized product information for the automotive industry; digitized source-to-pay solutions for clients in the manufacturing industry; customer experience and marketing services for clients in the retail industry; mortgage and consumer loan processing for clients in the financial services industry; and customized workforce learning solutions for clients in the aerospace industry.

Healthcare: Our Healthcare segment provides innovative industry-centric business process services and subject matter expertise to clients across the healthcare industry, including providers, payers, employers, pharmaceutical and life science companies and government agencies. We strive to enable our healthcare clients to focus on improving the patient care experience, lowering total costs and enabling better long-term health outcomes.

Public Sector: Our Public Sector segment provides government-centric business process services to U.S. federal, state and local and foreign governments for transportation, public assistance, program administration, transaction processing and payment services.

Other: Other includes our Government Health Enterprise Medicaid Platform business, where we are limiting our focus to implementing and maintaining systems for our current Health Enterprise clients, and our Student Loan business, which is in run-off. Other also includes non-allocated expenses as well as inter-segment eliminations.

Selected financial information for our reportable segments was as follows:

	Year Ended December 31,				
	Commercial Industries	Healthcare	Public Sector	Other[1]	Total
2016					
Revenue	$ 2,622	$ 1,681	$ 1,727	$ 328	$ 6,358
Related party revenue	48	2	1	(1)	50
Inter-segment revenue	20	3	3	(26)	—
Total Segment Revenue	$ 2,690	$ 1,686	$ 1,731	$ 301	$ 6,408
Depreciation and amortization[2]	$ 117	$ 66	$ 81	$ 69	$ 333
Segment profit (loss)	59	159	223	(245)	196
2015					
Revenue	$ 2,822	$ 1,746	$ 1,723	$ 318	$ 6,609
Related party revenue	51	2	—	—	53
Inter-segment revenue	23	2	4	(29)	—
Total Segment Revenue	$ 2,896	$ 1,750	$ 1,727	$ 289	$ 6,662
Depreciation and amortization[2]	$ 119	$ 64	$ 84	$ 83	$ 350
Segment profit (loss)	69	157	200	(489)	(63)
2014					
Revenue	$ 2,881	$ 1,738	$ 1,763	$ 502	$ 6,884
Related party revenue	51	3	—	—	54
Inter-segment revenue	21	2	4	(27)	—
Total Segment Revenue	$ 2,953	$ 1,743	$ 1,767	$ 475	$ 6,938
Depreciation and amortization[2]	$ 126	$ 101	$ 79	$ 71	$ 377
Segment profit (loss)	152	138	206	(49)	447

(1) Other results for 2016 includes a charge of $161 related to our NY MMIS project. $83 was recorded as a reduction to revenue and the remainder of $78 was recorded to Cost of outsourcing. Other results for 2015 include a charge of $389 related to our Health Enterprise platform implementations in California and Montana. $116 of the charge was recorded as a reduction to revenues and the remainder of $273 was recorded to Cost of outsourcing.

(2) Depreciation and amortization excludes amortization of intangible assets - see reconciliation below for amounts - as well as depreciation and amortization associated with Discontinued Operations. Refer to Note 4 - Divestitures for amounts.

The following is a reconciliation of segment (loss) profit to pre-tax (loss) income:

	Year Ended December 31,		
Segment (Loss) Profit Reconciliation to Pre-tax (Loss) Income	2016	2015	2014
Total Segment Profit (Loss)	$ 196	$ (63)	$ 447
Reconciling items:			
Goodwill impairment	(935)	—	—
Amortization of intangible assets	(280)	(250)	(250)
Restructuring and related costs[1]	(101)	(159)	(21)
Related party interest	(26)	(61)	(107)
Separation costs	(44)	—	—
Business transformation costs[2]	(3)	(3)	(14)
Other expenses, net	(34)	(38)	(45)
Pre-tax (Loss) Income	$ (1,227)	$ (574)	$ 10

(1) Restructuring and asset impairment charges were $73, $159, and $21 for each of the three years ended December 31, 2016, 2015 and 2014, respectively and Strategic transformation costs were $28 for the year ended December 31, 2016.

(2) Business transformation costs represent incremental costs incurred directly in support of our business transformation and restructuring initiatives such as compensation costs for overlapping staff, consulting costs and training costs.

Geographic area data is based upon the location of the subsidiary reporting the revenue or long-lived assets and is as follows for each of the years ended December 31:

	Revenues			Long-Lived Assets [1]	
	2016	2015	2014	2016	2015
United States	$ 5,686	$ 5,849	$ 5,923	$ 325	$ 393
Europe	547	616	786	38	42
Other areas	175	197	229	73	71
Total Revenues and Long-Lived Assets	$ 6,408	$ 6,662	$ 6,938	$ 436	$ 506

(1) Long-lived assets are comprised of (i) Land, buildings and equipment, net, (ii) Internal use software, net and (iii) Product software, net.

Our methodology to disclose revenue on a geographic basis changed to reflect where the work is contracted. All prior years have been adjusted to reflect this change in methodology.

Note 3 – Acquisitions

2016 Acquisitions
We did not make any acquisitions in 2016.

2015 Acquisitions
In September 2015 we acquired **RSA Medical LLC (RSA Medical)** for approximately $141 in cash. RSA Medical is a leading provider of health assessment and risk management for members interacting with health and life insurance companies. The acquisition of RSA Medical expands our portfolio of healthcare service offerings to payers and life insurers using predictive analytics to enhance member outreach services aimed at improving overall population health. RSA Medical is included in our Healthcare segment. In 2016, we recorded accelerated amortization of intangible assets of $16 as a result of the loss of a large contract.

In September 2015, we acquired **inVentive Patient Access Solutions (iPAS)**, an inVentiv Health company, for approximately $15 in cash. This acquisition expands our portfolio of pharmaceutical services with an offering to help pharmaceutical companies drive product adoption and support patients in minimizing and eliminating financial and reimbursement hurdles. iPAS is included in our Healthcare segment.

In May 2015, we acquired **Healthy Communities Institute Corporation (HCI)**, for approximately $13 in cash. HCI provides a leading cloud platform that puts socioeconomic and community health information at the fingertips of hospitals, public health agencies and community coalitions. HCI is included in our Healthcare segment.

In January 2015 we acquired **Intellinex LLC** (Intellinex), formerly Intrepid Learning Solutions, Inc., a Seattle-based company, for $28 in cash. Intellinex provides outsourced learning services primarily in the aerospace manufacturing and technology industries. The acquisition of Intellinex solidifies our position as a leading provider of end-to-end outsourced learning services, and adds key vertical market expertise in the aerospace industry. Intellinex is included in our Commercial Industries segment.

2015 Summary
All of our 2015 acquisitions resulted in 100% ownership of the acquired companies. The operating results of the acquired companies described above were not material to our consolidated financial statements and were included within our results from their respective acquisition dates. Our 2015 acquisitions contributed aggregate revenues of approximately $57 and $40 to our 2016 and 2015, respectively, total revenues from their respective acquisition dates. The purchase prices for all acquisitions were primarily allocated to intangible assets and goodwill based on third-party valuations and management's estimates. The primary elements that generated the goodwill are the value of synergies and the acquired assembled workforce. Approximately 60% of the goodwill recorded in 2015 is expected to be deductible for tax purposes.

2014 Acquisitions
In September 2014, we acquired **Consilience Software, Inc. (Consilience)** for approximately $25 in cash. Consilience provides case management and workflow automation software solutions to the public sector.

Consilience's proprietary Maven Case Management software system uses data and process analytics to help government agencies extract more value from their information. The intelligent case management system automates workflows for document- and labor-intensive processes and integrates previously siloed legacy systems for accelerated decision-making. Consilience is included in our Public Sector segment.

In May 2014, we acquired **ISG Holdings, Inc. (ISG)** for approximately $225 in cash. The acquisition of ISG enhances our Healthcare segment by providing a comprehensive workers' compensation suite of offerings to the property and casualty sector. In addition, the acquisition expands our services to property and casualty insurance carriers, third-party administrators, managed care services providers, governments and self-administered employers who require comprehensive reviews of medical bills and implementation of care management plans stemming from workers' compensation claims. ISG is included in our Healthcare segment.

In January 2014, we acquired **Invoco Holding GmbH (Invoco)**, a German company, for approximately $54 (€40 million) in cash. The acquisition of Invoco expands our European customer care services and provides our global customers immediate access to German-language customer care services and provides Invoco's existing customers access to our broad business process outsourcing capabilities. Invoco is included on our Commercial Industries segment.

We also acquired one additional business in 2014 for $2 in cash, primarily related to customer care and software support.

2014 Summary

All of our 2014 acquisitions resulted in 100% ownership of the acquired companies. The operating results of the acquired companies described above were not material to our consolidated financial statements and were included within our results from the respective acquisition dates. Our 2014 acquisitions contributed aggregate revenues of approximately $181, $183 and $130 to our 2016, 2015 and 2014 total revenues, respectively, from their respective acquisition dates. The purchase prices for all acquisitions were primarily allocated to intangible assets and goodwill based on third-party valuations and management's estimates.

Contingent Consideration

In connection with certain acquisitions, we are obligated to make contingent payments if specified contractual performance targets are achieved. Contingent consideration obligations are recorded at their respective fair value. In December 2016, we reversed approximately $12 related to a settlement of a previous years acquisition contingency. As of December 31, 2016, the maximum aggregate amount of outstanding contingent obligations to former owners of acquired entities was approximately $13, of which $11 was accrued representing the estimated fair value of this obligation.

Refer to Note 7 - Goodwill and Intangible Assets, Net for additional information regarding Acquisitions.

Note 4 – Divestitures

Information Technology Outsourcing (ITO)

In December 2014, we announced an agreement to sell our ITO business to Atos and began reporting it as a Discontinued Operation. All prior periods were accordingly revised to conform to this presentation. The sale was completed on June 30, 2015. The final sale price of approximately $940 ($930 net of cash sold) reflects closing adjustments, including an adjustment for changes in net asset values and additional proceeds for the condition of certain assets at the closing. Atos also assumed approximately $85 of capital lease obligations and pension liabilities. Net after-tax proceeds are estimated to be approximately $850, which reflects expected cash taxes as well as our transaction and transition costs associated with the disposal. The ITO business included approximately 9,600 employees in 42 countries, who were transferred to Atos upon closing.

In 2014, we recorded a net pre-tax loss of $181 related to the pending sale, reflecting the write-down of the carrying value of the ITO disposal group, inclusive of goodwill, to its estimated fair value less costs to sell. In 2015, we recorded an additional net pre-tax loss of $77 primarily at closing related to an adjustment of the sales price and related expenses associated with the disposal, as well as reserves for certain obligations and indemnifications we retained as part of the final closing negotiations. In addition, we recorded additional tax expense of $52 primarily related to the difference between the book basis and tax basis of allocated goodwill, which could only be recorded upon final disposal of the business.

In February 2016, we reached an agreement with Atos on the final adjustments to the closing balance of net assets sold as well as the settlement of certain indemnifications and recorded an additional pre-tax loss on the disposal in 2015 of $24 ($14 after-tax). The additional loss was recorded in 2015 as the financial statements had not yet been issued when the agreement was reached with Atos. We made a payment in 2016 to Atos of approximately $52, representing a $28 adjustment to the final sales price as a result of this agreement and a payment of $24 due from closing. The payment is reflected in Investing cash flows as an adjustment of the sales proceeds.

Other Discontinued Operations

In May 2014 we sold our **Truckload Management Services, Inc. (TMS)** business for $15 and recorded a net pre-tax loss on disposal of $1. TMS provided document capture and submission solutions as well as campaign management, media buying and digital marketing services to the long haul trucking and transportation industry.

Summarized financial information for our Discontinued Operations is as follows:

	Year Ended December 31,				
	2015		2014		
	ITO	Total	ITO	TMS	Total
Revenues	$ 619	$ 619	$ 1,320	$ 18	$ 1,338
Income (loss) from operations [1],[2]	$ 104	$ 104	$ 74	$ —	$ 74
Loss on disposal	(101)	(101)	(181)	(1)	(182)
Net income (loss) before income taxes	$ 3	$ 3	$ (107)	$ (1)	$ (108)
Income tax expense	(81)	(81)	(5)	(2)	(7)
Loss from discontinued operations, net of tax	$ (78)	$ (78)	$ (112)	$ (3)	$ (115)

(1) ITO income from operations for the year ended December 31, 2015, excludes approximately $80 of depreciation and amortization expense (including $14 for intangible amortization) since the business was held for sale.

(2) ITO Income from operations for the year ended December 31, 2014 includes approximately $160 of depreciation and amortization expense (including $27 for intangible amortization).

The following is a summary of selected financial information of the ITO business for the two years ended December 31,:

	Year Ended December 31,	
	2015	2014
Expenses:		
Depreciation of buildings and equipment[1]	$ —	$ 98
Amortization of internal use software[1]	—	9
Amortization of acquired intangible assets[1]	—	27
Amortization of customer contract costs[1]	—	26
Operating lease rent expense	130	258
Defined contribution plans	4	8
Interest expense [2]	2	4
Expenditures:		
Cost of additions to land, buildings and equipment	$ 41	$ 105
Cost of additions to internal use software	1	2
Customer-related deferred set-up/transition and inducement costs	10	26

(1) ITO income from operations for the year ended December 31, 2015, excludes approximately $80 of depreciation and amortization expense (including $14 for intangible amortization) since the business was held for sale.

(2) Interest expense is related to capital lease obligations, which were assumed by the purchaser of the ITO business.

Note 5 – Accounts Receivable, Net

Accounts receivable, net were as follows:

	December 31,	
	2016	2015
Amounts billed or billable	$ 1,014	$ 963
Unbilled amounts	279	289
Allowance for doubtful accounts	(7)	(6)
Accounts Receivable, Net	$ 1,286	$ 1,246

Unbilled amounts include amounts associated with percentage-of-completion accounting and other earned revenues not currently billable due to contractual provisions. Amounts to be invoiced in subsequent months for current services provided are included in amounts billable, and at December 31, 2016 and 2015 were approximately $429 and $443, respectively.

We perform ongoing credit evaluations of our customers and adjust credit limits based upon customer payment history and current creditworthiness. The allowance for uncollectible accounts receivables is determined principally on the basis of past collection experience as well as consideration of current economic conditions and changes in our customer collection trends.

Accounts Receivable Sales Arrangements

Accounts receivable sales arrangements were utilized in the normal course of business as part of our cash and liquidity management. We have facilities in the U.S. and Europe that enable us to sell certain accounts receivable without recourse to third-parties. The accounts receivables sold are generally short-term trade receivables with payment due dates of less than 60 days. All of our arrangements involve the sale of our entire interest in groups of accounts receivable for cash.

Under most of the agreements, we continue to service the sold accounts receivable. When applicable, a servicing liability is recorded for the estimated fair value of the servicing. The amounts associated with the servicing liability were not material.

Of the accounts receivables sold and derecognized from our balance sheet, zero remained as uncollected as of December 31, 2016 and $136 remained uncollected as of December 31, 2015. Accounts receivable sales were as follows:

	Year Ended December 31,		
	2016	2015	2014
Accounts receivable sales	$ 250	$ 325	$ 343
Estimated increase (decrease) to operating cash flows[1]	(136)	58	(4)

_____

(1) Represents the difference between current and prior year fourth quarter receivable sales adjusted for the effects of: (i) deferred proceeds, (ii) collections prior to the end of the year and (iii) currency.

Note 6 - Land, Buildings, Equipment and Software, Net

Land, buildings and equipment, net were as follows:

	Estimated Useful Lives	December 31,	
	(Years)	2016	2015
Land		$ 10	$ 10
Building and building equipment	25 to 50	20	28
Leasehold improvements	Varies	236	208
Office furniture and equipment	3 to 15	719	689
Other	4 to 20	1	3
Construction in progress		54	26
Subtotal		1,040	964
Accumulated depreciation		(757)	(684)
Land, Buildings and Equipment, Net		$ 283	$ 280

Depreciation expense and operating lease rent expense were as follows:

	Year Ended December 31,		
	2016	2015	2014
Depreciation expense	$ 130	$ 126	$ 145
Operating lease rent expense	$ 378	$ 389	$ 385

We lease buildings and equipment, substantially all of which are accounted for as operating leases. Certain leases were accounted for as capital leases and the remaining net book value of those assets, included in Land, Buildings and Equipment, Net were approximately $42 and $57 at December 31, 2016 and 2015, respectively.

Future minimum operating lease commitments that have initial or remaining non-cancelable lease terms in excess of one year at December 31, 2016 were as follows:

2017	2018	2019	2020	2021	Thereafter
$ 176	$ 127	$ 89	$ 56	$ 36	$ 46

Internal Use and Product Software[1]

Additions to Internal Use and Product Software as well as year-end balances for these assets were as follows:

	Year Ended December 31,		
Additions to:	2016	2015	2014
Internal use software	$ 39	$ 27	$ 27
Product software	10	19	23

	December 31,	
Capitalized Costs, Net	2016	2015
Internal use software	$ 115	$ 119
Product software	38	107

Useful lives of our internal use and product software generally vary from three to seven years.

Included within product software at December 31, 2016 and 2015 is $3 and $53, respectively, of capitalized costs associated with software system platforms developed for use in certain of our government services businesses.

During 2016 we determined that it is probable that we will not fully complete our NY MMIS project in its current form. As a result of this decision an impairment charge of approximately $28 was recorded in Cost of outsourcing. We also recorded an additional impairment charge in 2016 related to the 2015 HE charge of approximately $9 in Restructuring and asset impairment. In 2015 we decided to discontinue certain future implementations of these software system platforms, and recorded an impairment charge of $160 ($14 in Cost of outsourcing and $146 in Restructuring and asset impairments).

_____

(1) *Balances included in Other Long-term assets, refer to Note 9 - Supplementary Financial Information for additional information.*

Note 7 - Goodwill and Intangible Assets, Net

Goodwill

The following table presents the changes in the carrying amount of goodwill, by reportable segment:

	Commercial Industries	Healthcare	Public Sector	Total
Balance at December 31, 2014	$ 1,939	$ 1,123	$ 1,722	$ 4,784
Foreign currency translation	(30)	(9)	(18)	(57)
Acquisitions:				
RSA Medical	—	107	—	107
Intellinex	19	—	—	19
Consilience	—	12	—	12
Reclassifications[(1)]	(61)	61	—	—
Other	—	7	—	7
Balance at December 31, 2015	$ 1,867	$ 1,301	$ 1,704	$ 4,872
Foreign currency translation	(22)	(8)	(14)	(44)
Acquisitions: RSA Medical	—	(2)	—	(2)
Disposition: Nuova Karel Solutions	(2)	—	—	(2)
Impairment	(935)	—	—	(935)
Balance at December 31, 2016	$ 908	$ 1,291	$ 1,690	$ 3,889

_____

(1) Represents the reclassification of certain Healthcare contracts from our Commercial Industries segment to our Healthcare segment.

2016 Impairment Charge

As required by ASC 350 Intangibles - Goodwill and Other, we annually test the goodwill of our reporting units for impairment. For Step 1 of the test, as in prior years, we determined the fair value of our reporting units utilizing a combination of both an Income Approach and a Market Approach to calculate fair value for each reporting unit. We then compare the fair value of each reporting unit to its carrying value. The Income Approach utilizes a discounted cash flow analysis based upon the forecasted future business results of our reporting units. The Market Approach utilizes the guideline public company method. We apply a two-thirds and one-third weighting to the results of the Income Approach and the Market Approach, respectively, to calculate the fair value of each reporting unit's equity.

In 2016, based on the declining operating results of our Commercial Industries reporting unit, including a weak fourth quarter, we determined to proceed to the quantitative assessment of the recoverability of our goodwill balances for each of our reporting units in performing our annual impairment test. Based on our quantitative assessments, we concluded that the fair value of our Commercial Industries reporting unit was less than its carrying value by approximately 53%, indicating an impairment. Accordingly, based on Step 2 of the impairment process, we recorded a pre-tax goodwill impairment charge of $935 during the fourth quarter of 2016, which is separately presented in the Consolidated Statements of Income (Loss). After the charge, the goodwill of the Commercial Industries reporting unit approximates fair value. Our Healthcare and Public Sector reporting units passed Step 1 of the impairment test with fair value exceeding carrying value by approximately 19% and 14%, respectively.

Intangible Assets, Net

Net intangible assets were $1,144 at December 31, 2016 of which $458, $264 and $422 relate to our Commercial Industries, Healthcare and Public Sector segments, respectively. Intangible assets were comprised of the following:

		December 31, 2016			December 31, 2015		
	Weighted Average Amortization	Gross Carrying Amount	Accumulated Amortization	Net Amount	Gross Carrying Amount	Accumulated Amortization	Net Amount
Customer relationships	12 years	$ 2,924	$ 1,788	$ 1,136	$ 2,927	$ 1,528	$ 1,399
Trademarks	9 years	—	—	—	22	4	18
Technology, patents and non-compete	4 years	11	3	8	13	5	8
Total Intangible Assets		$ 2,935	$ 1,791	$ 1,144	$ 2,962	$ 1,537	$ 1,425

Amortization expense related to intangible assets was $280, $250, and $250 for the years ended December 31, 2016, 2015 and 2014, respectively. 2016 included $14 of accelerated amortization of Trademarks related to our re-branding to Conduent and $16 related to the accelerated amortization of RSA due to the loss of a large customer in customer relationships. Excluding the impact of additional acquisitions, amortization expense is expected to approximate $243 in 2017, $242 in 2018, $241 in 2019, $238 in 2020 and $136 in 2021.

Note 8 – Restructuring Programs and Asset Impairment Charges

We engage in a series of restructuring programs related to downsizing our employee base, exiting certain activities, outsourcing certain internal functions and engaging in other actions designed to reduce our cost structure and improve productivity. These initiatives primarily consist of severance actions and impact all major geographies and segments. Management continues to evaluate our business, therefore, in future years, there may be additional provisions for new plan initiatives as well as changes in previously recorded estimates as payments are made or actions are completed. Asset impairment charges were also incurred in connection with these restructuring actions for those assets sold, abandoned or made obsolete as a result of these programs.

Costs associated with restructuring, including employee severance and lease termination costs are generally recognized when it has been determined that a liability has been incurred, which is generally upon communication to the affected employees or exit from the leased facility. In those geographies where we have either a formal severance plan or a history of consistently providing severance benefits representing a substantive plan, we recognize employee severance costs when they are both probable and reasonably estimable.

A summary of our restructuring program activity during the three years ended December 31, 2016 is as follows:

	Severance and Related Costs	Lease Cancellation and Other Costs	Asset Impairments[1]	Total
Balance at December 31, 2013	$ 14	$ 3	$ —	$ 17
Restructuring provision	28	2	2	32
Reversals of prior accruals	(10)	(1)	—	(11)
Net current period charges - continuing operations[2]	18	1	2	21
Discontinued operations[3]	2	—	—	2
Total Net Current Period Charges	20	1	2	23
Charges against reserve and currency	(26)	(1)	(2)	(29)
Balance at December 31, 2014	8	3	—	11
Restructuring provision	20	1	146	167
Reversals of prior accruals	(6)	(2)	—	(8)
Net current period charges - continuing operations[2]	14	(1)	146	159
Charges against reserve and currency	(18)	(2)	(146)	(166)
Balance at December 31, 2015	4	—	—	4
Restructuring provision	67	7	12	86
Reversals of prior accruals	(13)	—	—	(13)
Net current period charges - continuing operations[2]	54	7	12	73
Charges against reserve and currency	(43)	(2)	(11)	(56)
Balance at December 31, 2016	$ 15	$ 5	$ 1	$ 21

(1) Charges associated with asset impairments represent the write-down of the related assets to their new cost basis and are recorded concurrently with the recognition of the provision.
(2) Represents amount recognized within the Consolidated Statements of Income for the years shown.
(3) Refer to Note 4 - Divestitures for additional information regarding Discontinued Operations.

We also recorded costs related to professional support services associated with the implementation of the strategic transformation program of $28 during the year ended December 31, 2016.The following table summarizes the reconciliation to the Consolidated Statements of Cash Flows:

	Year Ended December 31,		
	2016	2015	2014
Charges against reserve	$ (56)	$ (166)	$ (29)
Asset impairments	11	146	2
Effects of foreign currency and other non-cash items	(1)	1	4
Restructuring Cash Payments	$ (46)	$ (19)	$ (23)

The following table summarizes the total amount of costs incurred in connection with these restructuring programs by segment:

	Year Ended December 31,		
	2016	2015	2014
Commercial Industries	$ 41	$ 8	$ 11
Healthcare	19	3	4
Public Sector	9	2	4
Other[1]	4	146	2
Total Net Restructuring Charges	$ 73	$ 159	$ 21

(1) Refer to Note 6 - Land, Buildings, Equipment and Software, Net for additional information regarding the asset impairment in 2015.

Note 9 - Supplementary Financial Information

The components of Other assets and liabilities were as follows:

	December 31,	
	2016	2015
Other Current Assets		
Prepaid/deferred costs	$ 87	$ 92
Income taxes receivable	14	10
Value-added tax (VAT) receivable	18	16
Restricted cash	22	16
Inventories[1]	41	41
Advances and deposits	29	28
Other	30	37
Total Other Current Assets	$ 241	$ 240
Other Current Liabilities		
Income taxes payable	$ 5	$ 9
Other taxes payable	14	21
Consulting payable	12	11
Restructuring reserves	18	4
Legal settlements	78	57
Acquisition reserves	2	9
Due to customers	13	19
Software and hardware accruals	20	35
Servicer liabilities	—	10
Due to Atos[2]	—	52
Health Enterprise settlement	48	216
NY MMIS wind down cost accrual	46	—
Other	355	402
Total Other Current Liabilities	$ 611	$ 845
Other Long-term Assets		
Deferred taxes	$ 14	$ 13
Income taxes receivable	17	—
Prepaid pension costs	—	9
Internal use software, net	115	119
Product software, net	38	107
Customer contract costs, net	137	170
Deferred compensation plan investments	109	113
Unbilled contract receivables	14	53
Other	32	23
Total Other Long-term Assets	$ 476	$ 607
Other Long-term Liabilities		
Income taxes payable	17	24
Unearned income	74	100
Other	82	77
Total Other Long-term Liabilities	$ 173	$ 201

_____

(1) Represents Finished goods inventory.
(2) Refer to Note 4 - Divestitures for additional information.

Restricted Cash

As more fully discussed in Note 5 - Accounts Receivable, Net, we continue to service the receivables sold under most of our receivable sale agreements. As servicer, we may collect cash related to sold receivables prior to year-end that will be remitted to the purchaser the following year. Since we are acting on behalf of the purchaser in our capacity as servicer, such cash collected is reported as restricted cash. Restricted cash amounts are classified in our Consolidated Balance Sheets based on when the cash will be contractually or judicially released.

Restricted cash amounts were as follows:

	December 31,	
	2016	2015
Escrow and cash collections related to receivable sales	$ —	$ 10
Restricted cash - related party[1]	18	—
Other restricted cash	4	6
Total Restricted Cash	$ 22	$ 16

(1) *Represents restricted cash associated with former parent guarantees of our contractual performance. Amounts will be held in escrow until the parent guarantees have been removed from the underlying customer, vendor or lease contracts.*

NY MMIS and Health Enterprise

Due to a number of factors with the implementation of the Health Enterprise platform in New York ("NY MMIS"), we believe that it is probable that we will not fully complete the implementation; therefore, in the fourth quarter of 2016, we recorded a charge of approximately $161 reflecting estimated asset impairments, wind down costs and other impacts from this project. The charge included $83 for write-off of contract receivables, $28 related to the non-cash impairment of software, $14 for the write-off of customer contract costs and $36 for other related assets and liabilities. The balance of wind down costs of $46 expected to be cash outflows in future quarters.

Late in third quarter 2015, discussions took place with our Medicaid clients in California and Montana regarding the status and scope of our current Health Enterprise platform projects in those states. Based on those discussions, we determined that we would not fully complete the implementation of the platform in these states.

As a result of the determination that we would not complete these platform implementations, we recorded a pre-tax charge of $389 reflecting write-offs and estimated settlement costs as well as other impacts from this determination. The charge included $116 for the write-off of contract receivables (primarily non-current), $34 related to the non-cash impairment of the Health Enterprise software and deferred contract set-up and transition costs and $23 for other related assets and liabilities. The balance of settlement costs, including payments to subcontractors, was $48 at December 31, 2016, and is expected to be cash outflows in future quarters.

Note 10 – Debt

Short-term borrowings were as follows:

	December 31,	
	2016	2015
Related party notes payable[(1)]	$ —	$ 1,132
Current maturities of long-term debt	28	24
Total Short-term Debt	$ 28	$ 1,156

(1) Refer to Note 20 - Related Party Transactions and Former Parent Company Investment for additional information.

We classify our debt based on the contractual maturity dates of the underlying debt instruments or as of the earliest put date available to the debt holders. We defer costs associated with debt issuance over the applicable term. These costs are amortized as interest expense in our Consolidated Statements of Income.

Long-term debt was as follows:

	Weighted Average Interest Rates at December 31, 2016[1]	December 31, 2016	December 31, 2015
Term loan A due 2021	2.99%	$ 694	$ —
Term loan B due 2023	6.81%	750	—
Senior notes due 2024	10.51%	510	—
Capital lease obligations	3.89%	43	61
Principal Debt Balance		$ 1,997	$ 61
Debt issuance costs and unamortized discounts		(56)	—
Less: current maturities		(28)	(24)
Total Long-term Debt		$ 1,913	$ 37

(1) Represents weighted average effective interest rate which includes the effect of discounts and premiums on issued debt.

Scheduled principal payments due on our long-term debt for the next five years and thereafter are as follows:

2017[1]	2018	2019	2020	2021	Thereafter	Total
$ 28	$ 72	$ 67	$ 79	$ 528	$ 1,223	$ 1,997

(1) Quarterly long-term debt maturities for 2017 are $7, $7, $7 and $7 for the first, second, third and fourth quarters, respectively.

Credit Facility

On December 7, 2016, we entered into a $2.2 billion senior secured credit agreement (Credit Agreement) among the Company, its subsidiaries Xerox Business Services, LLC (XBS), Affiliated Computer Services International B.V. and Conduent Finance, Inc. (CFI), the lenders party and JP Morgan Chase Bank, N.A., as the administrative agent. The Credit Agreement contains senior secured credit facilities (Senior Credit Facilities) consisting of:

(i) Senior Secured Term Loan A (Term Loan A) due 2021 with an aggregate principal amount of $700;
(ii) Senior Secured Term Loan B (Term Loan B) due 2023 with an aggregate principal amount of $750;
(iii) Senior Revolving Credit Facility (Revolving Credit Facility) due 2021 with an aggregate available amount of $750 including a sublimit for up to $300 available for the issuance of letters of credit.

Borrowings under the Term Loan A Facility and the Revolving Credit Facility will bear interest at a rate equal to either the sum of a base rate plus a margin ranging from 1.00% and 1.50% or the sum of a Eurocurrency rate plus an applicable rate ranging from 2.00% to 2.50%, with either such margin varying according to the total net leverage ratio of XBS. Borrowing under Term Loan B Facility will bear interest at a rate equal to the sum of a base rate plus 4.5%, or the sum of a Eurocurrency rate plus 5.5%. XBS is required to pay a quarterly commitment fee under the Revolving Credit Facility at a rate ranging from 0.35% to 0.40% per annum, with such rate varying according to the total net leverage ratio of XBS and the actual daily unused portion of the commitments during the applicable quarter. XBS is also required to pay a fee equal to the adjusted LIBOR on the aggregate face amount of outstanding letters of credit under the Revolving Credit Facility.

The Credit Agreement permits us to incur incremental term loan borrowings and /or increase commitments under the Revolving Credit Facility, subject to certain limitations and satisfaction of certain conditions, in an aggregate amount not to exceed (i) $300 plus, (ii) if the senior secured net leverage ratio of XBS and its subsidiaries does not exceed 2.25 to 1.00 on a pro forma basis (without giving effect to any incurrence under clause (i) that is incurred substantially simultaneously with amounts incurred under clause (ii)), an unlimited amount.

All obligations under the Senior Credit Facilities are unconditionally guaranteed by the Company, XBS, CFI and the existing and future direct and indirect wholly owned domestic subsidiaries of XBS (subject to certain exceptions). All obligations under the Senior Credit Facilities, and the guarantees of those obligations, are secured, subject to certain exceptions, by substantially all of the assets of XBS and the guarantors under the Senior Credit Facilities (other than the Company and CFI), including a first-priority pledge of all the capital stock of XBS and the subsidiaries of XBS directly held by XBS or the guarantors (other than the Company and CFI) under the Senior

Credit Facilities (which pledge, in the case of any foreign subsidiary, will be limited to 65% of the capital stock of any first-tier foreign subsidiary).

The Credit Facility contains certain customary affirmative and negative covenants, restrictions and events of default. XBS is required to maintain a total net leverage ratio not to exceed 4.25 to 1.00 (a quarterly test) for each quarter through September 30, 2018 and 3.75 to 1.00 for each quarter thereafter.

The net proceeds of the borrowings under the Term Loan A of $700 (approximately $278 borrowed in Euros) and Term Loan B of $750, were used to purchase our international subsidiaries from Xerox Corporation, to pay a distribution to Xerox Corporation and for working capital and other general corporate purposes. At December 31, 2016 we had $1,444 outstanding borrowings under our Credit Facility and had utilized $17 of our Revolving Credit Facility capacity to issue letters of credit. Discounts and debt issuance costs of $39 were deferred.

Senior Notes

On December 7, 2016, XBS and CFI, each a wholly owned subsidiary of the Company, issued $510 Senior Unsecured Notes due 2024 bearing interest at 10.5% (the "Senior Notes"). Interest is payable semi-annually, beginning on June 15, 2017. Discounts and debt issuance costs of $17 were deferred.

At the option of the Issuers, the Senior Notes are redeemable in whole or in part, at any time prior to December 15, 2020, at a price equal to 100% of the aggregate principal amount of the Senior Notes plus accrued and unpaid interest, if any, to, but excluding, the redemption date plus a “make-whole” premium. The Issuers may also redeem the Senior Notes, in whole or in part, at any time on or after December 15, 2020, at the redemption prices specified in the Indenture, plus accrued and unpaid interest, if any, to but excluding the redemption date. Additionally, at any time prior to December 15, 2019, the Issuers may redeem up to 35% of the aggregate principal amount of the Senior Notes with the net cash proceeds from certain equity offerings at a price equal to 110.50% of the principal amount of the Senior Notes, plus accrued and unpaid interest, if any, to, but excluding, the redemption date.

The Senior Notes are jointly and severally guaranteed on a senior unsecured basis by the Company and each of the existing and future domestic subsidiaries of CFI or XBS that guarantee the obligations under the Senior Credit Facilities.

Proceeds from the issuance were used to fund a portion of the transfer of cash to Xerox Corporation in connection with the Spin-Off.

Interest

Interest paid on our short-term and long-term debt amounted to $6, $9 and $13 for the years ended December 31, 2016, 2015 and 2014, respectively.

Interest expense and interest income was as follows:

	Year Ended December 31,		
	2016	2015	2014
Interest expense	$ 14	$ 8	$ 11
Interest income	3	3	1

Note 11 – Financial Instruments

We are exposed to market risk from changes in foreign currency exchange rates and interest rates, which could affect operating results, financial position and cash flows. We manage our exposure to these market risks through our regular operating and financing activities and, when appropriate, through the use of derivative financial instruments. These derivative financial instruments are utilized to hedge economic exposures, as well as to reduce earnings and cash flow volatility resulting from shifts in market rates. We enter into limited types of derivative contracts to manage foreign currency exposures. Our primary foreign currency market exposures include the Philippine Peso, Indian Rupee and Mexican Peso. The fair market values of all our derivative contracts change with fluctuations in interest rates or currency exchange rates and are designed so that any changes in their values are offset by changes in the values of the underlying exposures. Derivative financial instruments are held solely as risk management tools and not for trading or speculative purposes. The related cash flow impacts of all of our derivative activities are reflected as cash flows from operating activities.

We do not believe there is significant risk of loss in the event of non-performance by the counterparty associated with our derivative instruments because these transactions are executed with a major financial institution. Further, our policy is to deal only with counterparties having a minimum investment grade or better credit rating. Credit risk is managed through the continuous monitoring of exposures to such counterparties.

Summary of Foreign Exchange Hedging Positions

At December 31, 2016, we had outstanding forward exchange with gross notional values of $139, which is typical of the amounts that are normally outstanding at any point during the year.

Approximately 61% of these contracts mature within three months, 15% in three to six months, 18% in six to twelve months and less than 6% in greater than 12 months.

The following is a summary of the primary hedging positions and corresponding fair values as of December 31, 2016:

Currencies Hedged (Buy/Sell)	Gross Notional Value	Fair Value Asset (Liability)[1]
Philippine Peso/U.S. Dollar	$ 52	$ (1)
Indian Rupee/U.S. Dollar	33	—
Mexican Peso/U.S. Dollar	18	(1)
Euro/U.S. Dollar	10	—
All Other	26	—
Total Foreign Exchange Hedging	$ 139	$ (2)

(1) Represents the net receivable (payable) amount included in the Consolidated Balance Sheet at December 31, 2016.

Foreign Currency Cash Flow Hedges

We designate a portion of our foreign currency derivative contracts as cash flow hedges of our foreign currency-denominated expenses. The net liability fair value of these contracts were $3 and $3 as of December 31, 2016 and December 31, 2015, respectively.

Summary of Derivative Instruments Fair Value

The following table provides a summary of the fair value amounts of our derivative instruments:

		December 31,	
Designation of Derivatives	Balance Sheet Location	2016	2015
Derivatives Designated as Hedging Instruments			
Foreign exchange contracts – forwards	Other current liabilities	$ (3)	$ (3)
Derivatives NOT Designated as Hedging Instruments			
Foreign exchange contracts – forwards	Other current assets	$ 1	$ —

Summary of Derivative Instruments Gains (Losses)

Derivative gains and (losses) affect the income statement based on whether such derivatives are designated as hedges of underlying exposures. The following is a summary of derivative gains and (losses).

Designated Cash Flow Derivative Instruments Gains (Losses)

The following tables provide a summary of gains (losses) on derivative instruments:

	Year Ended December 31,						
	Derivative Gain (Loss) Recognized in OCI (Effective Portion)			Location of Derivative Gain (Loss) Reclassified from AOCI into Income (Effective Portion)	Gain (Loss) Reclassified from AOCI to Income (Effective Portion)		
Derivatives in Cash Flow Hedging Relationships	2016	2015	2014		2016	2015	2014
Foreign exchange contracts – forwards	$ (2)	$ (4)	$ —	Cost of outsourcing	$ (2)	$ (5)	$ 3

No amount of ineffectiveness was recorded in the Consolidated Statements of Income (Loss) for these designated cash flow hedges and all components of each derivative's gain or (loss) were included in the assessment of hedge effectiveness. In addition, no amount was recorded for an underlying exposure that did not occur or was not expected to occur.

As of December 31, 2016, net after-tax losses of $1 were recorded in accumulated other comprehensive loss associated with our cash flow hedging activity. The entire balance is expected to be reclassified into net income within the next 12 months, providing an offsetting economic impact against the underlying anticipated transactions.

Non-Designated Derivative Instruments Losses

Non-designated derivative instruments are primarily instruments used to hedge foreign currency-denominated assets and liabilities. They are not designated as hedges since there is a natural offset for the re-measurement of the underlying foreign currency-denominated asset or liability.

The following table provides a summary of losses on non-designated derivative instruments:

		Year Ended December 31,		
Derivatives NOT Designated as Hedging Instruments	Location of Derivative Loss	2016	2015	2014
Foreign exchange contracts – forwards	Other expense – Currency losses, net	$ 1	$ 3	$ 2

During each of the three years ended December 31, 2016, 2015 and 2014, we recorded Currency gains (losses), net of $1, $(4) and $1, respectively. Currency gains (losses), net, includes the mark-to-market adjustments of the derivatives not designated as hedging instruments and the related cost of those derivatives, as well as the re-measurement of foreign currency-denominated assets and liabilities.

Note 12 – Fair Value of Financial Assets and Liabilities

The following table represents assets and liabilities fair value measured on a recurring basis. The basis for the measurement at fair value in all cases is Level 2 – Significant Other Observable Inputs.

	As of December 31,	
	2016	2015
Assets:		
Foreign exchange contracts - forwards	$ 1	$ —
Deferred compensation investments in cash surrender life insurance	99	92
Deferred compensation investments in mutual funds	10	21
Total	$ 110	$ 113
Liabilities:		
Foreign exchange contracts - forwards	$ 3	$ 3
Deferred compensation plan liabilities	113	110
Total	$ 116	$ 113

We utilize the income approach to measure the fair value for our derivative assets and liabilities. The income approach uses pricing models that rely on market observable inputs such as yield curves, currency exchange rates and forward prices, and therefore are classified as Level 2.

Fair value for our deferred compensation plan investments in company-owned life insurance is reflected at cash surrender value. Fair value for our deferred compensation plan investments in mutual funds is based on quoted market prices for actively traded investments similar to those held by the plan. Fair value for deferred compensation plan liabilities is based on the fair value of investments corresponding to employees' investment selections, based on quoted prices for similar assets in actively traded markets.

Summary of Other Financial Assets and Liabilities Fair Value Measured on a Nonrecurring Basis

The estimated fair values of our other financial assets and liabilities fair value measured on a nonrecurring basis were as follows:

	December 31, 2016		December 31, 2015	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Cash and cash equivalents	$ 390	$ 390	$ 140	$ 140
Restricted cash - related party	18	18	—	—
Accounts receivable, net	1,286	1,286	1,246	1,246
Short-term debt	28	28	24	24
Long-term debt	1,913	1,933	37	37

The fair value amounts for Cash and cash equivalents, Restricted cash - related party and Accounts receivable, net, approximate carrying amounts due to the short maturities of these instruments. The fair value of Short and Long-term debt was estimated based on the current rates offered to us for debt of similar maturities (Level 2). The difference between the fair value and the carrying value represents the theoretical net premium or discount we would pay or receive to retire all debt at such date.

The fair value of the Goodwill impairment charge of $935 recorded in 2016, was estimated based on a determination of the implied fair value of goodwill, leveraging discounted cash flows (Level 3). Refer to Note 7 - Goodwill and Intangible Assets for additional information regarding this impairment.

Note 13 – Employee Benefit Plans

Our defined benefit pension plans are primarily associated with certain employees in our Human Resources and Consulting business located in the U.S., Canada and the United Kingdom (U.K.). Prior to an amendment to freeze future service benefits, these defined benefit pension plans had provided benefits for participating employees based on years of service and average compensation for a specified period before retirement (see Plan Amendment below for further information).

Certain of our employees participate in post-employment medical plans. These plans are not material to our results of operations or financial position and are not included in the disclosures below.

December 31 is the measurement date for all of our defined benefit pension plans.

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
	2016	2015	2016	2015
Change in Benefit Obligation:				
Benefit obligation, January 1	$ 74	$ 74	$ 157	$ 177
Service cost	—	—	2	3
Interest cost	3	3	5	6
Actuarial (gain) loss	13	(2)	27	(13)
Currency exchange rate changes	—	—	(19)	(14)
Benefits paid/settlements	(1)	(1)	(8)	(5)
Other	—	—	—	3
Benefit Obligation, December 31	$ 89	$ 74	$ 164	$ 157
Change in Plan Assets:				
Fair value of plan assets, January 1	$ 47	$ 45	$ 150	$ 158
Actual return on plan assets	2	(2)	15	3
Employer contribution	4	4	2	4
Currency exchange rate changes	—	—	(19)	(12)
Benefits paid/settlements	(1)	(1)	(8)	(5)
Other	—	1	—	2
Fair Value of Plan Assets, December 31	$ 52	$ 47	$ 140	$ 150
Net Funded Status at December 31[1]	$ (37)	$ (27)	$ (24)	$ (7)
Amounts Recognized in the Consolidated Balance Sheets:				
Other long-term assets	$ —	$ —	$ —	$ 9
Accrued compensation and benefit costs	—	—	(2)	(1)
Pension and other benefit liabilities	(37)	(27)	(22)	(15)
Net Amounts Recognized	$ (37)	$ (27)	$ (24)	$ (7)

(1) Includes under-funded and un-funded plans.

Benefit plans pre-tax amounts recognized in Accumulated other comprehensive loss (AOCL) at December 31:

	Pension Benefits			
	U.S. Plans		Non-U.S. Plans	
	2016	2015	2016	2015
Net actuarial loss	$ 31	$ 18	$ 42	$ 29
Accumulated Benefit Obligation	$ 89	$ 74	$ 157	$ 154

Aggregate information for pension plans with an Accumulated benefit obligation in excess of plan assets is presented below:

	December 31, 2016			December 31, 2015		
	Projected benefit obligation	Accumulated benefit obligation	Fair value of plan assets	Projected benefit obligation	Accumulated benefit obligation	Fair value of plan assets
Underfunded Plans:						
U.S.	$ 89	$ 89	$ 52	$ 74	$ 74	$ 46
Non U.S.	162	156	140	50	48	36
Unfunded Plans:						
Non U.S.	2	1	—	2	1	—
Total Underfunded and Unfunded Plans:						
U.S.	$ 89	$ 89	$ 52	$ 74	$ 74	$ 46
Non U.S.	164	157	140	52	49	36
Total	$ 253	$ 246	$ 192	$ 126	$ 123	$ 82

Our pension plan assets and benefit obligations at December 31, 2016 were as follows:

	Fair Value of Pension Plan Assets	Pension Benefit Obligations	Net Funded Status
U.S.	$ 52	$ 89	$ (37)
U.K.	98	107	(9)
Canada	39	49	(10)
Other	3	8	(5)
Total	$ 192	$ 253	$ (61)

The components of Net periodic benefit cost and other changes in plan assets and benefit obligations were as follows:

	Year Ended December 31,					
	U.S. Plans			Non-U.S. Plans		
	2016	2015	2014	2016	2015	2014
Components of Net Periodic Benefit Costs:						
Service cost	$ —	$ —	$ 5	$ 2	$ 3	$ 6
Interest cost	3	3	3	5	6	7
Expected return on plan assets	(4)	(4)	(3)	(8)	(9)	(10)
Recognized net actuarial loss	—	—	—	1	2	—
Defined Benefit Plans	(1)	(1)	5	—	2	3
Defined contribution plans	28	28	27	7	6	4
Net Periodic Benefit Cost	27	27	32	7	8	7
Other changes in plan assets and benefit obligations recognized in Other Comprehensive Income:						
Net actuarial (gain) loss	13	4	9	18	(9)	34
Amortization of net actuarial loss	—	—	—	(1)	(2)	—
Total Recognized in Other Comprehensive Income	13	4	9	17	(11)	34
Total Recognized in Net Periodic Benefit Cost and Other Comprehensive Income	$ 40	$ 31	$ 41	$ 24	$ (3)	$ 41

The net actuarial loss for the defined benefit pension plans that will be amortized from AOCL into net periodic benefit cost over the next fiscal year is $2.

Plan Amendments

Pension Plan Freezes

In 2015, we amended several of our major defined benefit pension plans to freeze current benefits and eliminate benefits accruals for future service, including our plans in the U.S., Canada and the U.K. The freeze of current benefits is the primary driver of the reduction in pension service costs since 2015. In certain Non-U.S. plans, we are required to continue to consider salary increases and inflation in determining the benefit obligation related to prior service.

Plan Assets

Current Allocation

As of the 2016 and 2015 measurement dates, the global pension plan assets were $192 and $197, respectively. These assets were invested among several asset classes.

The following tables presents the defined benefit plans assets measured at fair value and the basis for that measurement:

	December 31, 2016									
	U.S. Plans					Non-U.S. Plans				
Asset Class	Level 1	Level 2	Level 3	Total	%	Level 1	Level 2	Level 3	Total	%
Cash and cash equivalents	$ 3	$ —	$ —	$ 3	6%	$ —	$ —	$ —	$ —	—%
Equity Securities	9	24	—	33	63%	—	61	—	61	44%
Fixed Income Securities	10	6	—	16	31%	—	60	—	60	43%
Other	—	—	—	—	—%	—	11	8	19	13%
Total Fair Value of Plan Assets	$ 22	$ 30	$ —	$ 52	100%	$ —	$ 132	$ 8	$ 140	100%

	December 31, 2015									
	U.S. Plans					Non-U.S. Plans				
Asset Class	Level 1	Level 2	Level 3	Total	%	Level 1	Level 2	Level 3	Total	%
Cash and cash equivalents	$ 3	$ —	$ —	$ 3	6%	$ 1	$ —	$ —	$ 1	1%
Equity Securities	17	8	—	25	53%	—	61	—	61	40%
Fixed Income Securities	—	19	—	19	41%	—	73	—	73	49%
Other	—	—	—	—	—%	—	4	11	15	10%
Total Fair Value of Plan Assets	$ 20	$ 27	$ —	$ 47	100%	$ 1	$ 138	$ 11	$ 150	100%

Valuation Method

Our primary Level 3 assets are Real Estate and Guaranteed Investment Contract investments which are individually immaterial. The fair value of our real estate investment funds are based on the Net Asset Value (NAV) of our ownership interest in the funds. NAV information is received from the investment advisers and is primarily derived from third-party real estate appraisals for the properties owned. The fair value for our Guaranteed Investment Contract investments have been determined based on the higher of the surrender value of the contract or the present value of the cash flow of the related pension obligations. The valuation techniques and inputs for our Level 3 assets have been consistently applied for all periods presented.

Investment Strategy

The target asset allocations for our worldwide defined benefit pension plans were:

	2016		2015	
	U.S.	Non-U.S.	U.S.	Non-U.S.
Equity investments	55%	41%	55%	55%
Fixed income investments	25%	45%	25%	36%
Real estate	—%	4%	—%	4%
Other	20%	10%	20%	5%
Total Investment Strategy	100%	100%	100%	100%

We employ a total return investment approach whereby a mix of equities and fixed income investments are used to maximize the long-term return of plan assets for a prudent level of risk. The intent of this strategy is to minimize plan expenses by exceeding the interest growth in long-term plan liabilities. Risk tolerance is established through careful consideration of plan liabilities, plan funded status and corporate financial condition. This consideration involves the use of long-term measures that address both return and risk. The investment portfolio contains a diversified blend of equity and fixed income investments. Furthermore, equity investments are diversified across U.S. and non-U.S. stocks, as well as growth, value and small and large capitalizations. Other assets such as real estate, are used to improve portfolio diversification. Derivatives may be used to hedge market exposure in an efficient and timely manner; however, derivatives may not be used to leverage the portfolio beyond the market value of the underlying investments. Investment risks and returns are measured and monitored on an ongoing basis through annual liability measurements and quarterly investment portfolio reviews.

Contributions

In 2016, we made cash contributions of $6 ($4 U.S. and $2 Non-U.S.) to our defined benefit pension plans.

In 2017, based on current actuarial calculations, we expect to make contributions of approximately $10 ($4 U.S. and $6 non-U.S.) to our defined benefit pension plans.

Estimated Future Benefit Payments

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid during the following years:

	Pension Benefits		
	U.S.	Non-U.S.	Total
2017	$ 1	$ 4	$ 5
2018	2	4	6
2019	2	4	6
2020	2	4	6
2021	2	5	7
Years 2022-2025	16	27	43

Assumptions

Weighted-average assumptions used to determine benefit obligations at the plan measurement dates:

	Pension Benefits					
	2016		2015		2014	
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.
Discount rate	4.2%	3.2%	4.3%	3.9%	4.0%	3.4%
Rate of compensation increase	—%	1.0%	—%	1.0%	—%	1.1%

Weighted-average assumptions used to determine net periodic benefit cost for years ended December 31:

	Pension Benefits							
	2017		2016		2015		2014	
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.
Discount rate	4.2%	3.9%	4.3%	3.9%	4.0%	3.4%	4.9%	4.4%
Expected return on plan assets	7.8%	5.7%	7.8%	5.7%	7.8%	5.8%	7.8%	6.6%
Rate of compensation increase	—%	1.0%	—%	1.0%	—%	1.1%	3.0%	3.5%

Defined Contribution Plans

We have post-retirement savings and investment plans in several countries, including the U.S., U.K. and Canada. In many instances, employees from those defined benefit pension plans that have been amended to freeze future service accruals (see "Plan Amendments" for additional information) were transitioned to an enhanced defined contribution plan. In these plans employees are allowed to contribute a portion of their salaries and bonuses to the plans, and we match a portion of the employee contributions. We recorded charges related to our defined contribution plans of $35 in 2016, $34 in 2015 and $31 in 2014.

Note 14 - Income Taxes

Prior to the Separation, Conduent's operating results were included in Xerox Corporation's various consolidated U.S. federal and state income tax returns, as well as non-U.S. tax filings. For the purposes of the Company's Consolidated and Combined Financial Statements for periods prior to the Separation, income tax expense and deferred tax balances have been recorded as if the Company filed tax returns on a standalone basis separate from Xerox. The Separate Return Method applies the accounting guidance for income taxes to the standalone financial statements as if the Company was a separate taxpayer and a standalone enterprise for fiscal 2016 and prior.

(Loss) income before income taxes (pre-tax (loss) income) was as follows:

	Year Ended December 31,		
	2016	2015	2014
Domestic (loss) income	$ (1,329)	$ (654)	$ (45)
Foreign (loss) income	102	80	55
(Loss) Income Before Income Taxes	$ (1,227)	$ (574)	$ 10

(Benefit) provision for income taxes were as follows:

	Year Ended December 31,		
	2016	2015	2014
Federal Income Taxes			
Current	$ (116)	$ (130)	$ 59
Deferred	(132)	(99)	(108)
Foreign Income Taxes			
Current	31	24	26
Deferred	(3)	6	1
State Income Taxes			
Current	1	(17)	14
Deferred	(25)	(22)	(16)
Total Benefit	$ (244)	$ (238)	$ (24)

A reconciliation of the U.S. federal statutory income tax rate to the consolidated effective income tax rate is as follows:

	Year Ended December 31,		
	2016	2015	2014
U.S. federal statutory income tax rate	35.0 %	35.0 %	35.0 %
Nondeductible expenses[1]	(19.0)%	(1.3)%	81.0 %
Effect of tax law changes	— %	0.9 %	(51.6)%
Change in valuation allowance for deferred tax assets	0.1 %	(1.0)%	35.3 %
State taxes, net of federal benefit	1.8 %	4.2 %	42.0 %
Audit and other tax return adjustments	1.4 %	0.1 %	(87.5)%
Tax-exempt income, credits and incentives	0.7 %	0.7 %	(63.9)%
Foreign rate differential adjusted for U.S. taxation of foreign profits[2]	0.7 %	2.4 %	(228.8)%
Other	(0.8)%	0.5 %	(1.5)%
Effective Income Tax Rate	19.9 %	41.5 %	(240.0)%

(1) In 2016, Nondeductible expenses primarily related to the nondeductible portion of the book goodwill impairment charge.
(2) The "U.S. taxation of foreign profits" represents the U.S. tax, net of foreign tax credits, associated with actual and deemed repatriations of earnings from our non-U.S. subsidiaries.

On a consolidated basis, we paid/(received) a total of $(123), $194 and $66 in income taxes to federal, foreign and state jurisdictions during the three years ended December 31, 2016, respectively.

Total income tax expense (benefit) was allocated as follows:

	Year Ended December 31,		
	2016	2015	2014
Pre-tax income	$ (244)	$ (238)	$ (24)
Discontinued operations[1]	—	81	7
Common shareholders' equity:			
Changes in defined benefit plans	8	2	(11)
Stock option and incentive plans, net	—	(6)	(10)
Cash flow hedges	—	—	(1)
Total Income Tax Benefit	$ (236)	$ (161)	$ (39)

(1) Refer to Note 4 - Divestitures for additional information regarding discontinued operations.

Unrecognized Tax Benefits and Audit Resolutions

We recognize tax liabilities when, despite our belief that our tax return positions are supportable, we believe that certain positions may not be fully sustained upon review by tax authorities. Each period we assess uncertain tax positions for recognition, measurement and effective settlement. Benefits from uncertain tax positions are measured at the largest amount of benefit that is greater than 50 percent likely of being realized upon settlement. Where we have determined that our tax return filing position does not satisfy the more-likely-than-not recognition threshold, we have recorded no tax benefits.

We are also subject to ongoing tax examinations in numerous jurisdictions due to the extensive geographical scope of our operations. Our ongoing assessments of the more-likely-than-not outcomes of the examinations and related tax positions require judgment and can increase or decrease our effective tax rate, as well as impact our operating results. The specific timing of when the resolution of each tax position will be reached is uncertain. As of December 31, 2016, we do not believe that there are any positions for which it is reasonably possible that the total amount of unrecognized tax benefits will significantly increase or decrease within the next 12 months.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	2016	2015	2014
Balance at January 1	$ 24	$ 32	$ 41
Additions related to current year	1	3	5
Additions related to prior years positions	—	—	1
Reductions related to prior years positions	(5)	(10)	(13)
Settlements with taxing authorities[1]	(5)	—	(2)
Currency	(1)	(1)	—
Balance at December 31	$ 14	$ 24	$ 32

(1) 2016 settlement results in $(5) cash paid; 2014 settlement of $(2) results in no cash paid.

Included in the balances at December 31, 2016, 2015 and 2014 are $0, $8 and $10, respectively, of tax positions that are highly certain of realization but for which there is uncertainty about the timing. Because of the impact of deferred tax accounting, other than for the possible incurrence of interest and penalties, the disallowance of these positions would not affect the annual effective tax rate. In addition, for other uncertain tax positions, we maintain offsetting benefits from other jurisdictions of $16, $14 and $16, at December 31, 2016, 2015 and 2014, respectively.

We recognized interest and penalties accrued on unrecognized tax benefits, as well as interest received from favorable settlements within income tax expense. We had $6, $14 and $14 accrued for the payment of interest and penalties associated with unrecognized tax benefits at December 31, 2016, 2015 and 2014, respectively.

In the U.S., we are no longer subject to U.S. federal income tax examinations for years before 2005. With respect to our major foreign jurisdictions, the years remain open generally back to 2006.

Deferred Income Taxes

The Company is in the position of having tax basis in excess of book basis in its U.S. investment in foreign subsidiaries. Nonetheless, the Company is indefinitely reinvested in its foreign subsidiaries which have undistributed earnings of $460. Despite having tax basis in excess of book basis in these foreign subsidiaries for which deferred taxes have not been provided, the repatriation of these earnings could give rise to a U.S. tax liability. Calculating the tax that would be due upon repatriation is not practical at this time.

The tax effects of temporary differences that give rise to significant portions of the deferred taxes were as follows:

	December 31,	
	2016	2015
Deferred Tax Assets		
Net operating losses	$ 42	$ 71
Operating reserves, accruals and deferrals	155	184
Deferred compensation	101	83
Pension	18	11
Other	44	65
Subtotal	360	414
Valuation allowance	(24)	(38)
Total	$ 336	$ 376
Deferred Tax Liabilities		
Unearned income	$ 217	$ 230
Intangibles and goodwill	680	808
Depreciation	15	61
Other	29	28
Total	$ 941	$ 1,127
Total Deferred Taxes, Net	$ (605)	$ (751)

As discussed in Note 1 - Basis of Presentation and Summary of Significant Accounting Policies, we early adopted **ASU 2015-17**, *Income Taxes: Balance Sheet Classification of Deferred Taxes*, which requires that deferred tax

liabilities and assets be classified as non-current in a classified statement of financial position. Adoption of this update resulted in a reclassification of our net current deferred tax asset and liabilities to the net non-current deferred tax asset and liabilities in our Consolidated Balance Sheet as of December 31, 2015. Prior periods were not retrospectively adjusted.

The deferred tax assets for the respective periods were assessed for recoverability and, where applicable, a valuation allowance was recorded to reduce the total deferred tax asset to an amount that will, more-likely-than-not, be realized in the future. The net change in the total valuation allowance for the years ended December 31, 2016 and 2015 was a decrease of $14 and an increase of $3, respectively. The valuation allowance relates primarily to certain net operating loss carryforwards, tax credit carryforwards and deductible temporary differences for which we have concluded it is more-likely-than-not that these items will not be realized in the ordinary course of operations.

Although realization is not assured, we have concluded that it is more-likely-than-not that the deferred tax assets, for which a valuation allowance was determined to be unnecessary, will be realized in the ordinary course of operations based on the available positive and negative evidence, including scheduling of deferred tax liabilities and projected income from operating activities. The amount of the net deferred tax assets considered realizable, however, could be reduced in the near term if actual future income or income tax rates are lower than estimated, or if there are differences in the timing or amount of future reversals of existing taxable or deductible temporary differences.

At December 31, 2016, we had tax credit carryforwards of $12 available to offset future income taxes which will expire 2017 through 2037 if not utilized. We also had net operating loss carryforwards for income tax purposes of $402 that will expire 2017 through 2037, if not utilized, and $38 available to offset future taxable income indefinitely.

Note 15 – Contingencies and Litigation

As more fully discussed below, we are involved in a variety of claims, lawsuits, investigations and proceedings concerning: securities law; governmental entity contracting, servicing and procurement law; intellectual property law; environmental law; employment law; the Employee Retirement Income Security Act (ERISA); and other laws and regulations. We determine whether an estimated loss from a contingency should be accrued by assessing whether a loss is deemed probable and can be reasonably estimated. We assess our potential liability by analyzing our litigation and regulatory matters using available information. We develop our views on estimated losses in consultation with outside counsel handling our defense in these matters, which involves an analysis of potential results, assuming a combination of litigation and settlement strategies. Should developments in any of these matters cause a change in our determination as to an unfavorable outcome and result in the need to recognize a material accrual, or should any of these matters result in a final adverse judgment or be settled for significant amounts, they could have a material adverse effect on our results of operations, cash flows and financial position in the period or periods in which such change in determination, judgment or settlement occurs. We believe that we have recorded adequate provisions for any such matters and, as of December 31, 2016, it was not reasonably possible that a material loss had been incurred in connection with such matters in excess of the amounts recognized in our financial statements.

Additionally, guarantees, indemnifications and claims arise during the ordinary course of business from relationships with suppliers, customers and nonconsolidated affiliates when we undertake an obligation to guarantee the performance of others if specified triggering events occur. Nonperformance under a contract could trigger an obligation of the Company. These potential claims include actions based upon alleged exposures to products, real estate, intellectual property such as patents, environmental matters, and other indemnifications. The ultimate effect on future financial results is not subject to reasonable estimation because considerable uncertainty exists as to the final outcome of these claims. However, while the ultimate liabilities resulting from such claims may be significant to results of operations in the period recognized, management does not anticipate they will have a material adverse effect on the consolidated financial position or liquidity. As of December 31, 2016, we have accrued our estimate of liability incurred under our indemnification arrangements and guarantees.

Litigation Against the Company

State of Texas v. Xerox Corporation, Xerox State Healthcare, LLC, and ACS State Healthcare, LLC: On May 9, 2014, the State of Texas, via the Texas Office of Attorney General (the “State”), filed a lawsuit in the 53rd Judicial District Court of Travis County, Texas. The lawsuit alleges that Xerox Corporation, Xerox State Healthcare, LLC and ACS State Healthcare (collectively, the "Xerox Defendants") violated the Texas Medicaid Fraud Prevention Act in the administration of its contract with the Texas Department of Health and Human Services (“HHSC”). The State

alleges that the Xerox Defendants made false representations of material facts regarding the processes, procedures, implementation and results regarding the prior authorization of orthodontic claims. The State seeks recovery of actual damages, two times the amount of any overpayments made as a result of unlawful acts, civil penalties, pre- and post-judgment interest and all costs and attorneys' fees. The State references the amount in controversy as exceeding hundreds of millions of dollars. The Xerox Defendants filed their Answer in June, 2014 denying all allegations. The Xerox Defendants will continue to vigorously defend themselves in this matter. We do not believe it is probable that we will incur a material loss in excess of the amount accrued for this matter. In the course of litigation, we periodically engage in discussions with plaintiff's counsel for possible resolution of the matter. Should developments cause a change in our determination as to an unfavorable outcome, or result in a final adverse judgment or settlement for a significant amount, there could be a material adverse effect on our results of operations, cash flows and financial position in the period in which such change in determination, judgment or settlement occurs.

Dennis Nasrawi v. Buck Consultants et al.: On October 8, 2009, plaintiffs filed a lawsuit in the Superior Court of California, Stanislaus County, and on November 24, 2009, the case was removed to the U.S. Court for the Eastern District of California, Fresno Division. Plaintiffs allege actuarial negligence against Buck Consultants, LLC ("Buck") for the use of faulty actuarial assumptions in connection with the 2007 actuarial valuation for the Stanislaus County Employees Retirement Association ("StanCERA"). Plaintiffs allege that the employer contribution rate adopted by StanCERA based on Buck's valuation was insufficient to fund the benefits promised by the County. On July 13, 2012, the Court entered its ruling that the plaintiffs lacked standing to sue in a representative capacity on behalf of all plan participants. The Court also ruled that plaintiffs had adequately pleaded their claim that Buck allegedly aided and abetted StanCERA in breaching its fiduciary duty. Plaintiffs then filed their Fifth Amended Complaint and added StanCERA to the litigation. Buck and StanCERA filed demurrers to the amended complaint. On September 13, 2012, the Court sustained both demurrers with prejudice, completely dismissing the matter and barring plaintiffs from refiling their claims. Plaintiffs appealed, and ultimately the California Court of Appeals (Sixth District) reversed the trial court's ruling and remanded the case back to the trial court. Buck entered into a stay agreement with plaintiffs that essentially postpones this litigation pending the outcome of parallel litigation between plaintiffs and StanCERA. Buck will continue to aggressively defend these lawsuits.

Other Matters:

On January 5, 2016, the Consumer Financial Protection Bureau (the "CFPB") notified Xerox Education Services, Inc. (XES) that, in accordance with the CFPB's discretionary Notice and Opportunity to Respond and Advise (NORA) process, the CFPB's Office of Enforcement is considering recommending that the CFPB take legal action against XES, alleging that XES violated the Consumer Financial Protection Act's prohibition of unfair practices. Should the CFPB commence an action, it may seek restitution, civil monetary penalties, injunctive relief or other corrective action. The purpose of a NORA letter is to provide a party being investigated an opportunity to present its position to the CFPB before an enforcement action is recommended or commenced. This notice stems from an inquiry that commenced in 2014 when XES received and responded to a Civil Investigative Demand containing a broad request for information. During this process, XES self-disclosed to the Department of Education and the CFPB certain adjustments of which it had become aware that had not been timely made relating to its servicing of a small percentage of third-party student loans under outsourcing arrangements for various financial institutions. The CFPB and the Department of Education, as well as certain states' attorney general offices and other regulatory agencies, began similar reviews. XES has cooperated and continues to fully cooperate with all regulatory agencies, and XES has submitted its NORA response. We cannot provide assurance that the CFPB or another party will not ultimately commence a legal action against XES in this matter nor are we able to predict the likely outcome of the investigations into this matter.

Guarantees, Indemnifications and Warranty Liabilities

Indemnifications Provided as Part of Contracts and Agreements

Acquisitions/Divestitures:

We have indemnified, subject to certain deductibles and limits, the purchasers of businesses or divested assets for the occurrence of specified events under certain of our divestiture agreements. In addition, we customarily agree to hold the other party harmless against losses arising from a breach of representations and covenants, including such matters as adequate title to assets sold, intellectual property rights, specified environmental matters and certain income taxes arising prior to the date of acquisition. Where appropriate, an obligation for such indemnifications is

recorded as a liability at the time of the acquisition or divestiture. Since the obligated amounts of these types of indemnifications are often not explicitly stated or are contingent on the occurrence of future events, the overall maximum amount of the obligation under such indemnifications cannot be reasonably estimated. Other than obligations recorded as liabilities at the time of divestiture, we have not historically made significant payments for these indemnifications. Additionally, under certain of our acquisition agreements, we have provided for additional consideration to be paid to the sellers if established financial targets are achieved post-closing. We have recognized liabilities for these contingent obligations based on an estimate of the fair value of these contingencies at the time of acquisition. Contingent obligations related to indemnifications arising from our divestitures and contingent consideration provided for by our acquisitions are not expected to be material to our financial position, results of operations or cash flows.

Other Agreements:

We are also party to the following types of agreements pursuant to which we may be obligated to indemnify the other party with respect to certain matters:

- Guarantees on behalf of our subsidiaries with respect to real estate leases. These lease guarantees may remain in effect subsequent to the sale of the subsidiary.
- Agreements to indemnify various service providers, trustees and bank agents from any third-party claims related to their performance on our behalf, with the exception of claims that result from the third-party's own willful misconduct or gross negligence.
- Guarantees of our performance in certain services contracts to our customers and indirectly the performance of third parties with whom we have subcontracted for their services. This includes indemnifications to customers for losses that may be sustained as a result of our performance of services at a customer's location.

In each of these circumstances, our payment is conditioned on the other party making a claim pursuant to the procedures specified in the particular contract and such procedures also typically allow us to challenge the other party's claims. In the case of lease guarantees, we may contest the liabilities asserted under the lease. Further, our obligations under these agreements and guarantees may be limited in terms of time and/or amount, and in some instances, we may have recourse against third parties for certain payments we made.

Intellectual Property Indemnifications

We do not own most of the software that we use to run our business. Instead, we license this software from a small number of primary vendors. We indemnify certain software providers against claims that may arise as a result of our use or our subsidiaries', customers' or resellers' use of their software in our services and solutions. These indemnities usually do not include limits on the claims, provided the claim is made pursuant to the procedures required in the services contract.

Indemnification of Officers and Directors

Our corporate by-laws require that, except to the extent expressly prohibited by law, we must indemnify our officers and directors against judgments, fines, penalties and amounts paid in settlement and reasonable expenses, including attorneys' fees, incurred in connection with civil or criminal action or proceedings or any appeal, as it relates to their services to our Company and our subsidiaries. Although the by-laws provide no limit on the amount of indemnification, we may have recourse against our insurance carriers for certain payments made by us. However, certain indemnification payments (such as those related to "clawback" provisions in certain compensation arrangements) may not be covered under our directors' and officers' insurance coverage. We also indemnify certain fiduciaries of our employee benefit plans for liabilities incurred in their service as fiduciary whether or not they are officers of the Company. Finally, in connection with our acquisition of businesses, we may become contractually obligated to indemnify certain former and current directors, officers and employees of those businesses in accordance with pre-acquisition by-laws or indemnification agreements or applicable state law.

Other Contingencies

Certain contracts, primarily in our Public Sector segment, require us to provide a surety bond or a letter of credit as a guarantee of performance. As of December 31, 2016, we had $613 for outstanding surety bonds used to secure our performance of contractual obligations with our clients, and we had $133 of outstanding letters of credit issued to secure our performance of contractual obligations to our clients as well as other corporate obligations.

In general, we would only be liable for the amount of these guarantees in the event of default in our performance of

our obligations under each contract; the probability of which we believe is remote. We believe we have sufficient capacity in the surety markets and liquidity from our cash flow and our various credit arrangements (including our Credit Facility) to allow us to respond to future requests for proposals that require such credit support.

We have service arrangements where we service third-party student loans in the Federal Family Education Loan program (FFEL) on behalf of various financial institutions. We service these loans for investors under outsourcing arrangements and do not acquire any servicing rights that are transferable by us to a third-party. At December 31, 2016, we serviced a FFEL portfolio of approximately 1.3 million loans with an outstanding principal balance of approximately $21.0 billion. Some servicing agreements contain provisions that, under certain circumstances, require us to purchase the loans from the investor if the loan guaranty has been permanently terminated as a result of a loan default caused by our servicing error. If defaults caused by us are cured during an initial period, any obligation we may have to purchase these loans expires. Loans that we purchase may be subsequently cured, the guaranty reinstated and the loans repackaged for sale to third parties. We evaluate our exposure under our purchase obligations on defaulted loans and establish a reserve for potential losses, or default liability reserve, through a charge to the provision for loss on defaulted loans purchased. The reserve is evaluated periodically and adjusted based upon management’s analysis of the historical performance of the defaulted loans. As of December 31, 2016, other current liabilities include reserves which we believe to be adequate. At December 31, 2016, other current liabilities include reserves of approximately $3 for losses on defaulted loans purchased. In addition to potential purchase obligations arising from servicing errors, various laws and regulations applicable to student loan borrowers could give rise to fines, penalties and other liabilities associated with loan servicing errors.

Note 16 - Preferred Stock

Series A Preferred Stock

In connection with the Spin-Off Transaction, we issued 120 thousand shares of Series A convertible perpetual preferred stock with an aggregate liquidation preference of $120 and an initial fair value of $142. The convertible preferred stock pays quarterly cash dividends at a rate of 8% per year ($9.6 per year). Each share of convertible preferred stock is convertible at any time, at the option of the holder, into 44.9438 shares of common stock for a total of 5,393 thousand shares (reflecting an initial conversion price of approximately $22.250 per share of common stock), subject to customary anti-dilution adjustments.

If the closing price of our common stock exceeds 137% of the initial conversion price for 20 out of 30 trading days, we have the right to cause any or all of the convertible preferred stock to be converted into shares of common stock at the then applicable conversion rate. The convertible preferred stock is also convertible, at the option of the holder, upon a change in control, at the applicable conversion rate plus an additional number of shares determined by reference to the price paid for our common stock upon such change in control. In addition, upon the occurrence of certain fundamental change events, including a change in control or the delisting of Conduent's common stock, the holder of convertible preferred stock has the right to require us to redeem any or all of the convertible preferred stock in cash at a redemption price per share equal to the liquidation preference and any accrued and unpaid dividends to, but not including, the redemption date. The convertible preferred stock is classified as temporary equity (i.e., apart from permanent equity) as a result of the contingent redemption feature.

Note 17 – Shareholders' Equity

Preferred Stock

As of December 31, 2016, we had one class of preferred stock outstanding. See Note 16 - Preferred Stock for further information. We are authorized to issue approximately 100 million shares of cumulative preferred stock, $0.01 par value per share.

Common Stock

We have 1 billion authorized shares of common stock, $0.01 par value per share. At December 31, 2016, 26 million shares were reserved for issuance under our incentive compensation plans and 5.4 million shares were reserved for conversion of the Series A convertible preferred stock.

Stock Compensation Plans

Certain of our employees participate in a long-term incentive plan. Our long-term incentive plan authorizes the issuance of restricted stock units (RSU's), performance shares (PSs) and non-qualified stock options to employees. All awards for these plans prior to 2017, were made in Xerox stock and therefore converted into Conduent stock effective upon separation. Using a formula designed to preserve the value of the award immediately prior to the Separation, all of these awards will be settled and are reflected in Conduent's Consolidated Statements of Stockholders' Equity. Stock-based compensation expense includes expense based on the awards and terms previously granted to the employees.

Stock-based compensation expense was as follows:

	Year Ended December 31,		
	2016	2015	2014
Stock-based compensation expense, pre-tax	$ 23	$ 19	$ 28
Income tax benefit recognized in earnings	9	7	11

Restricted Stock Units: Compensation expense is based upon the grant date market price. The compensation expense is recorded over the vesting period, which is normally three years from the date of grant, based on management's estimate of the number of shares expected to vest.

Performance Shares: Our former parent company granted PSs that vest contingent upon our achievement of certain specified financial performance criteria over a three-year period. If the three-year actual results exceed the stated targets, then the plan participants have the potential to earn additional shares of common stock, which could not exceed 50% of the original grant.

The fair value of PSs is based upon the market price of Conduent's common stock on the date of the grant and then converted to Conduent's common stock upon company separation. Compensation expense is recognized over the vesting period, which is normally three years from the date of grant, based on management's estimate of the number of shares expected to vest. If the stated targets are not met, any recognized compensation cost would be reversed.

Employee Stock Options: Stock options were issued by a former parent company and were converted to Conduent's common stock upon company separation. These options generally expire within the next 2 years. Other than these options, Conduent has not issued any new stock options.

Summary of Stock-based Compensation Activity

(shares in thousands)	2016 Shares	2016 Weighted Average Grant Date Fair Value	2015 Shares	2015 Weighted Average Grant Date Fair Value	2014 Shares	2014 Weighted Average Grant Date Fair Value
Restricted Stock Units						
Outstanding at January 1	782	$ 11.70	3,422	$ 8.47	4,842	$ 8.78
Granted	2,602	9.61	260	11.86	433	12.08
Vested	(119)	9.43	(2,768)	7.83	(1,499)	10.54
Canceled	(121)	10.55	(132)	9.52	(354)	8.39
Impact of Spin-off[1]	(1,183)	n/a	—	n/a	—	n/a
Outstanding at December 31	1,961	13.99	782	11.70	3,422	8.47
Performance Shares						
Outstanding at January 1	7,522	$ 11.57	5,771	$ 11.68	1,421	$ 9.02
Granted	1,850	9.35	3,583	10.68	5,674	12.28
Vested	—	—	(610)	7.88	(366)	10.71
Canceled	(1,478)	11.96	(1,222)	11.36	(958)	11.63
Impact of Spin-off[1]	(2,968)	n/a	—	n/a	—	n/a
Outstanding at December 31	4,926	13.99	7,522	11.57	5,771	11.68

(1) Stock-based compensation was converted from former parent stock into Conduent common stock at Spin-off.

In 2013, our former parent company deferred the annual grant of RSUs and PSs from July 1, 2013 to January 1, 2014. RSUs granted in 2013 represent off-cycle awards while PSs granted in 2013 represent over-achievement shares associated with the 2010 PSs grant, which vested in 2013. On January 1, 2014, we granted 2,771 thousand PSs with a grant date fair value of $12.17 per share (the deferral of the 2013 annual grant) and on July 1, 2014, we granted 2,903 thousand PSs with a grant date fair value of $12.38 per share (the 2014 annual grant).

We have 857 thousand stock options outstanding as of December 31, 2016 at strike prices ranging from $10.15 to $13.38. These stock options are fully vested and exercisable.

The total unrecognized compensation cost related to non-vested stock-based awards at December 31, 2016 was as follows:

Awards	Unrecognized Compensation	Remaining Weighted-Average Vesting Period (Years)
Restricted Stock Units	$ 19	2.3
Performance Shares	22	1.9
Total	$ 41	

The aggregate intrinsic value of outstanding RSUs and PSs awards was as follows:

Awards	December 31, 2016
Restricted Stock Units	$ 27
Performance Shares	69

Information related to stock options outstanding and exercisable at December 31, 2016 was as follows:

	Options	
	Outstanding	Exercisable
Aggregate intrinsic value	$ 3	$ 3
Weighted-average remaining contractual life (years)	2.0	2.0

The total intrinsic value and actual tax benefit realized for vested and exercised stock-based awards was as follows:

	December 31, 2016			December 31, 2015			December 31, 2014		
Awards	Total Intrinsic Value	Cash Received	Tax Benefit	Total Intrinsic Value	Cash Received	Tax Benefit	Total Intrinsic Value	Cash Received	Tax Benefit
Restricted Stock Units	$ 1	$ —	$ —	$ 30	$ —	$ 11	$ 19	$ —	$ 7
Performance Shares	—	—	—	7	—	2	5	—	2
Stock Options	3	9	1	14	19	5	42	55	15

Note 18 – Other Comprehensive Loss

Other Comprehensive Loss is comprised of the following:

	Year Ended December 31,					
	2016		2015		2014	
	Pre-tax	Net of Tax	Pre-tax	Net of Tax	Pre-tax	Net of Tax
Translation Adjustments Losses	$ (135)	$ (135)	$ (60)	$ (60)	$ (44)	$ (44)
Unrealized Gains (Losses):						
Changes in fair value of cash flow hedges gains (losses)	(2)	(1)	(4)	(2)	—	—
Changes in cash flow hedges reclassed to earnings[1]	2	1	5	3	(3)	(2)
Net Unrealized Gains (Losses)	—	—	1	1	(3)	(2)
Defined Benefit Plans (Losses) Gains						
Net actuarial/prior service (losses) gains	(31)	(23)	5	4	(43)	(32)
Actuarial loss amortization/settlement[2]	1	1	2	2	—	—
Other gains (losses)[3]	3	2	2	1	7	7
Changes in Defined Benefit Plans (Losses) Gains	(27)	(20)	9	7	(36)	(25)
Other Comprehensive Loss	$ (162)	$ (155)	$ (50)	$ (52)	$ (83)	$ (71)

(1) Reclassified to Cost of sales - refer to Note 11 - Financial Instruments for additional information regarding our cash flow hedges.
(2) Reclassified to Total Net Periodic Benefit Cost - refer to Note 13 - Employee Benefit Plans for additional information.
(3) Primarily represents currency impact on cumulative amount of benefit plan net actuarial losses and prior service credits in AOCL.

Accumulated Other Comprehensive Loss (AOCL)

AOCL is comprised of the following:

	December 31,		
	2016	2015	2014
Cumulative translation adjustments[1]	$ (472)	$ (147)	$ (87)
Other unrealized losses, net	(1)	(1)	(2)
Benefit plans net actuarial losses and prior service credits	(53)	(33)	(40)
Total Accumulated Other Comprehensive Loss	$ (526)	$ (181)	$ (129)

(1) 2016 includes $190 of AOCL transfered from former parent as part of the Spin-off.

Note 19 – Earnings per Share

We did not declare any common or preferred stock dividends in the periods presented.

The following table sets forth the computation of basic and diluted earnings per share of common stock (shares in thousands):

	Year Ended December 31,		
	2016	2015	2014
Basic Earnings per Share:			
Net Income From Continuing Operations Available to Common Shareholders	$ (983)	$ (336)	$ 34
Net (loss) income from discontinued operations attributable Conduent	—	(78)	(115)
Adjusted Net Income Available to Common Shareholders	$ (983)	$ (414)	$ (81)
Weighted-average common shares outstanding	202,875	202,875	202,875
Basic Earnings (Loss) per Share:			
Continuing operations	$ (4.85)	$ (1.65)	$ 0.17
Discontinued operations	—	(0.39)	(0.57)
Basic Earnings per Share	$ (4.85)	$ (2.04)	$ (0.40)
Diluted Earnings per Share:			
Adjusted Net Income From Continuing Operations Available to Common Shareholders	$ (983)	$ (336)	$ 34
Net (loss) income from discontinued operations attributable to Conduent	—	(78)	(115)
Adjusted Net Income Available to Common Shareholders	$ (983)	$ (414)	$ (81)
Weighted-average common shares outstanding	202,875	202,875	202,875
Diluted Earnings (Loss) per Share:			
Continuing operations	$ (4.85)	$ (1.65)	$ 0.17
Discontinued operations	—	(0.39)	(0.57)
Diluted Earnings per Share	$ (4.85)	$ (2.04)	$ (0.40)
The following securities were not included in the computation of diluted earnings per share as they were either contingently issuable shares or shares that if included would have been anti-dilutive (shares in thousands):			
Stock Options	857	—	—
Restricted stock and performance shares	5,719	—	—
Convertible preferred stock	5,393	—	—
Total Securities	11,969	—	—

Note 20 – Related Party Transactions and Former Parent Company Investment

Allocation of Corporate Expenses

The Consolidated Statements of Income (Loss), Consolidated Statements of Comprehensive Loss and Consolidated Statements of Cash Flows include an allocation of general corporate expenses from Xerox, the Company's former parent. The financial information in these Consolidated Financial Statements does not necessarily include all the expenses that would have been incurred or held had we been a separate, standalone company and it is not practicable to estimate actual costs that would have been incurred had we been a separate, standalone company during the periods presented. Management considers these allocations to be a reasonable reflection of the utilization of services by, or the benefits provided. Allocations for management costs and corporate support services provided totaled $165, $170 and $175 for each of the three years ended December 31, 2016, 2015 and 2014, respectively. These amounts include costs for corporate functions including, but not limited to, senior management, legal, human resources, finance and accounting, treasury, information technology and other shared services. Where possible, these costs were allocated based on direct usage, with the remainder allocated on a basis of costs, headcount or other measures we have determined as reasonable.

	Year Ended December 31,		
	2016	2015	2014
Research and development	$ 25	$ 43	$ 40
Selling, administrative and general	140	127	135
Total Allocated Corporate Expenses	$ 165	$ 170	$ 175

Final Cash Allocation To Former Parent

In January 2017, in connection with the Separation, we paid Xerox $161 for settlement of the management and support services received.

The components of Net transfers to former parent and the reconciliation to the corresponding amount presented on the Combined Statements of Cash Flows are as follows:

	Year Ended December 31,		
	2016	2015	2014
Cash pooling and general financing activities	$ (466)	$ (396)	$ (525)
Corporate cost allocations	165	170	175
Income taxes	(157)	168	44
Divestitures and acquisitions, net	54	(742)	290
Capitalization of related party notes payable	—	1,017	—
Total net transfers (to) from former parent	(404)	217	(16)
Stock-based compensation	(23)	(19)	(28)
Capitalization of related party notes payable	—	(1,017)	—
Other, net	(161)	147	8
Total Net transfers to former parent per Consolidated Statements of Cash Flows	$ (588)	$ (672)	$ (36)

Related Party Notes Receivable/Payable

Certain operating units of the Company had various interest bearing notes under contractual agreements to and from Xerox Corporation and other related parties. The purpose of these notes was to provide funds for certain working capital or other capital and operating requirements of the business. Net interest expense on these notes with related party companies was recorded net in Related Party Interest in the Consolidated Statements of Income and was $26, $61 and $107 for each of the three years ended December 31, 2016, 2015 and 2014, respectively. These notes had fixed interest rates that ranged from 1% to 8%. The balances were settled as part of the separation transaction.

Related Party Revenue and Purchases

We provide various services to Xerox Corporation including those related to human resources, accounting and finance and customer care, which are reported as Related party revenue in the Consolidated Statements of Income (Loss). The costs related to these services are reported as Related party cost of services in the Consolidated Statements of Income (Loss).

We also leased equipment and received related services, supplies and parts from Xerox and Xerox subsidiaries in the amount of $21, $24 and $24, for each of the three years ended December 31, 2016, 2015 and 2014, respectively. The costs related to these services, supplies and parts are reported in Cost of outsourcing and Selling, administrative and general expenses in the Consolidated Statements of Income (Loss).

Note 21 – Subsequent Events

NY MMIS

On February 16, 2017, after discussions with the State of New York regarding the status and scope of the Health Enterprise platform project, we determined that it was probable that we would not fully complete the implementations of this platform in New York. As a result of this development, we recorded a pre-tax charge of approximately $161 ($98 after-tax) in the fourth quarter 2016 reflecting the estimated asset impairments, wind down costs and other impacts from this project.

Other Events

Subsequent to December 31, 2016, we entered into favorable legal settlements with two former customers that will result in a net gain of $19 during the first quarter of 2017, $14 of which will be recorded in Other expenses, net in our Consolidated Statement of Income (Loss) and $7 of which will be recorded to discontinued operations.

QUARTERLY RESULTS OF OPERATIONS (Unaudited)

(in millions, except per-share data)	First Quarter[1]	Second Quarter[1]	Third Quarter	Fourth Quarter	Full Year
2016					
Revenues	$ 1,685	$ 1,613	$ 1,596	$ 1,514	$ 6,408
Costs and Expenses	1,739	1,647	1,594	2,655	7,635
(Loss) Income before Income Taxes	(54)	(34)	2	(1,141)	(1,227)
Income tax (benefit) expense	(31)	(24)	1	(190)	(244)
Net (Loss) Income	$ (23)	$ (10)	$ 1	$ (951)	$ (983)
Basic (Loss) Earnings per Share[2]:	$ (0.12)	$ (0.05)	$ 0.01	$ (4.69)	$ (4.85)
Diluted (Loss) Earnings per Share[2]:	$ (0.12)	$ (0.05)	$ 0.01	$ (4.69)	$ (4.85)
2015					
Revenues	$ 1,678	$ 1,683	$ 1,571	$ 1,730	$ 6,662
Costs and Expenses	1,698	1,855	1,961	1,722	7,236
(Loss) Income before Income Taxes	(20)	(172)	(390)	8	(574)
Income tax expense	(14)	(69)	(154)	(1)	(238)
(Loss) Income from Continuing Operations	(6)	(103)	(236)	9	(336)
Income (loss) from discontinued operations, net of tax	34	(95)	(3)	(14)	(78)
Net Income (Loss)	$ 28	$ (198)	$ (239)	$ (5)	$ (414)
Basic Earnings (Loss) per Share[2]:					
Continuing operations	$ (0.03)	$ (0.50)	$ (1.17)	$ 0.05	$ (1.65)
Discontinued operations	0.17	(0.47)	(0.01)	(0.08)	(0.39)
Total Basic Earnings(Loss) per Share:	$ 0.14	$ (0.97)	$ (1.18)	$ (0.03)	$ (2.04)
Diluted Earnings (Loss) per Share[2]:					
Continuing operations	$ (0.03)	$ (0.50)	$ (1.17)	$ 0.05	$ (1.65)
Discontinued operations	0.17	(0.47)	(0.01)	(0.08)	(0.39)
Total Diluted Earnings (Loss) per Share	$ 0.14	$ (0.97)	$ (1.18)	$ (0.03)	$ (2.04)

(1) *During the second quarter 2016 closing process, we determined that the first quarter 2016 income tax benefit of $25 million should have been $6 million higher. This additional income tax benefit was adjusted for and included in the six month results ended June 30, 2016. The Company concluded that this correction was not material to the Condensed Combined Financial Statements for the three months ended March 31, 2016.*

(2) *The sum of quarterly earnings per share may differ from the full-year amounts due to rounding, or in the case of diluted earnings per share, because securities that are anti-dilutive in certain quarters may not be anti-dilutive on a full-year basis.*

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None

ITEM 9A. CONTROLS AND PROCEDURES

Management's Responsibility for Financial Statements

Our management is responsible for the integrity and objectivity of all information presented in this annual report. The consolidated financial statements were prepared in conformity with accounting principles generally accepted in the United States of America and include amounts based on management's best estimates and judgments. Management believes the consolidated financial statements fairly reflect the form and substance of transactions and that the financial statements fairly represent the Company's financial position and results of operations.
The Audit Committee of the Board of Directors, which is composed solely of independent directors, meets regularly with the independent auditors, PricewaterhouseCoopers LLP, the internal auditors and representatives of management to review accounting, financial reporting, internal control and audit matters, as well as the nature and extent of the audit effort. The Audit Committee is responsible for the engagement of the independent auditors. The independent auditors and internal auditors have access to the Audit Committee.

Disclosure Controls and Procedures

The Company’s management evaluated, with the participation of our principal executive officer and principal financial officer, or persons performing similar functions, the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as of the end of the period covered by this report. Based on this evaluation, our principal executive officer and principal financial officer have concluded that, as of the end of the period covered by this report, our disclosure controls and procedures were effective to ensure that information we are required to disclose in the reports that we file or submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms relating to Conduent Incorporated, including our consolidated subsidiaries, and was accumulated and communicated to the Company’s management, including the principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

This annual report does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of the company's registered public accounting firm due to a transition period established by rules of the Securities and Exchange Commission for newly public companies.

Changes in Internal Control over Financial Reporting

In connection with the evaluation required by paragraph (d) of Rule 13a-15 under the Exchange Act, there was no change identified in our internal control over financial reporting that occurred during the last fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information regarding directors is incorporated herein by reference to the section entitled “Proposal 1 - Election of Directors” in our definitive Proxy Statement (2017 Proxy Statement) to be filed pursuant to Regulation 14A of the Securities Exchange Act of 1934, as amended, for our Annual Meeting of Stockholders to be held on May 25, 2017. The Proxy Statement will be filed within 120 days after the end of our fiscal year ended December 31, 2016.

The information regarding compliance with Section 16(a) of the Securities and Exchange Act of 1934 is incorporated herein by reference to the section entitled “Section 16(a) Beneficial Ownership Reporting Compliance” of our 2017 Proxy Statement.

The information regarding the Audit Committee, its members and the Audit Committee financial experts is incorporated by reference herein from the subsection entitled “Committee Functions, Membership and Meetings” in the section entitled “Proposal 1 - Election of Directors” in our 2017 Proxy Statement.

We have adopted a code of ethics applicable to our principal executive officer, principal financial officer and principal accounting officer. The Finance Code of Conduct can be found on our website at: http://www.conduent.com/investor and then clicking on Corporate Governance. Information concerning our Finance Code of Conduct can be found under "Corporate Governance" in our 2017 definitive Proxy Statement and is incorporated here by reference.

Executive Officers of Conduent

The following is a list of the executive officers of Conduent, their current ages, their present positions and the year appointed to their present positions.

Each officer is elected to hold office until the meeting of the Board of Directors held on the day of the next annual meeting of shareholders, subject to the provisions of the By-Laws.

Name	Age	Present Position	Year Appointed to Present Position	Conduent Officer Since
David Amoriell	60	Executive Vice President & President, Public Sector	2017	2017
Jay Chu	58	Vice President & Chief Accounting Officer	2017	2017
Jeffrey Friedel	52	Executive Vice President & Chief People Officer	2017	2017
James Michael Peffer	55	Executive Vice President, General Counsel & Secretary	2017	2017
Ashok Vemuri*	48	Chief Executive Officer	2017	2017
Brian J. Webb-Walsh	41	Executive Vice President & Chief Financial Officer	2017	2017

* Member of Conduent Board of Directors

Each officer named above, with the exception of the following, has been an officer or an executive of Conduent or its subsidiaries for at least the past five years.

Mr. Amoriell served as the chief operating officer of the Public Sector for Business Group for Xerox Services. He was named to this position in June 2014 and appointed a corporate vice president of Xerox in February 2012. Prior to that, Amoriell was the chief operating officer for the Government & Transportation Sector (GTS).

Mr. Chu has served as Senior Vice President and Chief Accountant for Xerox Services since 2013. In this role, Mr. Chu is responsible for Xerox Services’ accounting, internal controls, contract accounting support and international statutory accounting. Since joining Xerox Corporation in 1984, Mr. Chu has held various positions including Director Field Accounting and Internal Controls, Developing Markets Chief Financial Officer, Chief Financial Officer of Xerox Brazil, Controller of Xerox Canada and a variety of accounting, financing, marketing and sales roles.

Prior to joining Conduent, Mr. Friedel served as Vice President and Head of the Office of Integrity and Compliance at Infosys, a global leader in technology services and consulting, where he oversaw SEC compliance, internal investigations, code of conduct, whistleblower, anti-bribery and export regulations. Friedel has also previously

served as Senior Vice President and General Counsel at IGATE, an IT services and business process outsourcing company which was acquired by CapGemini.

Mr. Peffer has served as Vice President, General Counsel and Secretary for Xerox Corporation from August 2016 to December 2016. Prior to this role, Mr. Peffer served as Associate General Counsel of Xerox Corporation and Executive Vice President of Xerox Business Services, LLC. since 2010. Prior to 2010, Mr. Peffer was Senior Vice President and Deputy General Counsel of ACS from 2007 until 2009.

Mr. Vemuri served as Chief Executive Officer of Xerox Business Services, LLC and an Executive Vice President of Xerox Corporation since July 2016. Mr. Vemuri previously was President, Chief Executive Officer and a member of the Board of Directors of IGATE Corporation. Prior to IGATE, Mr. Vemuri spent 14 years at Infosys Limited, a multinational consulting and IT services company, in a variety of leadership and business development roles.

Mr. Webb-Walsh has served as the Chief Financial Officer of Xerox Services since January 2016. Prior to this role, Mr. Webb-Walsh was Senior Vice President of Finance for the Government Healthcare Group and the Platform Development and Systems Integration Group. Mr. Webb-Walsh joined Xerox Corporation in 1997 and has held a variety of leadership positions.

ITEM 11. EXECUTIVE COMPENSATION

The information included under the following captions under “Proposal 1 - Election of Directors” in our 2017 definitive Proxy Statement is incorporated herein by reference: “Compensation Discussion and Analysis”, “Summary Compensation Table”, “Grants of Plan-Based Awards in 2016”, “Outstanding Equity Awards at 2016 Fiscal Year-End”, “Option Exercises and Stock Vested in 2016”, “Pension Benefits for the 2016 Fiscal Year”, “Nonqualified Deferred Compensation for the 2016 Fiscal Year”, “Potential Payments upon Termination or Change in Control”, “Summary of Director Annual Compensation, "Compensation Committee Interlocks and Insider Participation” and “Compensation Committee”. The information included under the heading “Compensation Committee Report” in our 2017 definitive Proxy Statement is incorporated herein by reference; however, this information shall not be deemed to be “soliciting material” or to be “filed” with the Commission or subject to Regulation 14A or 14C, or to the liabilities of Section 18 of the Exchange Act of 1934, as amended.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Information regarding security ownership of certain beneficial owners and management and securities authorized for issuance under equity compensation plans is incorporated herein by reference to the subsections entitled “Ownership of Company Securities,” and “Equity Compensation Plan Information” under “Proposal 1 - Election of Directors” in our 2017 definitive Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS, RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

Information regarding certain relationships and related transactions is incorporated herein by reference to the subsection entitled “Certain Relationships and Related Person Transactions” under “Proposal 1 - Election of Directors” in our 2017 definitive Proxy Statement. The information regarding director independence is incorporated herein by reference to the subsections entitled “Corporate Governance” and “Director Independence” in the section entitled “Proposal 1 - Election of Directors” in our 2017 definitive Proxy Statement.

ITEM 14. PRINCIPAL AUDITOR FEES AND SERVICES

The information regarding principal auditor fees and services is incorporated herein by reference to the section entitled “Proposal 2 - Ratification of Election of Independent Registered Public Accounting Firm” in our 2017 definitive Proxy Statement.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) (1) Index to Financial Statements and Financial Statement Schedule, incorporated by reference or filed as part of this report:

- Report of Independent Registered Public Accounting Firm including Report on Financial Statement Schedule;
- Consolidated Statements of Income (Loss) for each of the years in the three-year period ended December 31, 2016;
- Consolidated Statements of Comprehensive Loss for each of the years in the three-year period ended December 31, 2016;
- Consolidated Balance Sheets as of December 31, 2016 and 2015;
- Consolidated Statements of Cash Flows for each of the years in the three-year period ended December 31, 2016;
- Consolidated Statements of Shareholders' Equity for each of the years in the three-year period ended December 31, 2016;
- Notes to the Consolidated Financial Statements;
- Schedule II - Valuation and Qualifying Accounts for the three years ended December 31, 2016; and
- All other schedules are omitted as they are not applicable, or the information required is included in the financial statements or notes thereto.

(2) Supplementary Data:

- Quarterly Results of Operations (unaudited); and
- Five Years in Review.

(3)The exhibits filed herewith or incorporated herein by reference are set forth in the Index of Exhibits included herein.

(b) The management contracts or compensatory plans or arrangements listed in the “Index of Exhibits” that are applicable to the executive officers named in the Summary Compensation Table which appears in Registrant's 2017 Proxy Statement or to our directors are preceded by an asterisk (*).

ITEM 16. FORM 10-K SUMMARY

None.

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CONDUENT INCORPORATED

/s/ ASHOK VEMURI

Ashok Vemuri
Chief Executive Officer
March 10, 2017

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the date indicated.

March 10, 2017

Signature	Title
Principal Executive Officer:	
/s/ ASHOK VEMURI	Chief Executive Officer and Director
Ashok Vemuri	
Principal Financial Officer:	
/s/ BRIAN WEBB-WALSH	Executive Vice President and Chief Financial Officer
Brian Webb-Walsh	
Principal Accounting Officer:	
/s/ JAY T. CHU	Vice President and Chief Accounting Officer
Jay T. Chu	
/s/ PAUL S. GALANT	Director
Paul S. Galant	
/s/ JOIE A. GREGOR	Director
Joie A. Gregor	
/s/ VINCENT J. INTRIERI	Director
Vincent J. Intrieri	
/s/ COURTNEY MATHER	Director
Courtney Mather	
/s/ MICHAEL NEVIN	Director
Michael Nevin	
/s/ MICHAEL A. NUTTER	Director
Michael A. Nutter	
/s/ WILLIAM G. PARRETT	Director and Chairman of the Board
William G. Parrett	
/s/ VIRGINIA M. WILSON	Director
Virginia M. Wilson	

SCHEDULE II
VALUATION AND QUALIFYING ACCOUNTS
For the three years ended December 31, 2016

(in millions)	Balance at beginning of period	Additions charged to expense[1]	Amounts (credited) charged to other income statement accounts [2]	Deductions and other, net of recoveries [3][4]	Balance at end of period
Allowance for Losses:					
2016 Accounts Receivable	$ 6	$ 4	$ —	$ (3)	$ 7
2015 Accounts Receivable	6	4	—	(4)	6
2014 Accounts Receivable	6	3	—	(3)	6
Tax Valuation Allowance:					
2016 Tax Valuation	38	—	—	(14)	24
2015 Tax Valuation	35	—	5	(2)	38
2014 Tax Valuation	41	—	7	(13)	35

(1) Account Receivables: additions charged to expense represent bad debt provisions relate to estimated losses due to credit and similar collectibility issues.
(2) Account Receivables: Other charges (credits) relate to adjustments to reserves necessary to reflect events of non-payment such as customer accommodations and contract terminations.
(3) Account Receivables: Deductions and other, net of recoveries primarily relates to receivable write-offs, but also includes the impact of foreign currency translation adjustments and recoveries of previously written off receivables.
(4) Tax Valuation: Reductions to tax valuation allowance are primarily related to the transfer of balances to the Xerox Corporation due to separation of the companies.

INDEX OF EXHIBITS
Document and Location

2.1	Separation and Distribution Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K dated December 29, 2016. (See SEC File Number 001-37817).
3.1	Restated Certificate of Incorporation of Registrant filed with the Department of the State of New York on December 23, 2016.
	Incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K dated December 23, 2016. (See SEC File Number 001-37817).
3.2	Amended and Restated By-Laws of Registrant as amended through December 31, 2016.
	Incorporated by reference to Exhibit 3.2 to Registrant's Current Report on Form 8-K dated December 23, 2016. (See SEC File Number 001-37817).
4.1	Indenture, dated as of December 7, 2016, among Conduent Finance, Inc., Xerox Business Services, LLC, the Guarantors named therein and U.S. Bank National Association, as trustee.
	Incorporated by reference to Exhibit 4.1 to Registrant's Current Report on Form 8-K dated December 7, 2016. (See SEC File Number 001-37817).
10.1(a)	Credit Agreement, dated as of December 7, 2016, among Conduent Incorporated, Xerox Business Services, LLC, Affiliated Computer Services International B.V., Conduent Finance, Inc., the Lenders from time to time party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent.
	Incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated December 7, 2016. (See SEC File Number 001-37817).
10.1(b)	First Incremental Agreement, dated as of January 3, 2017, among JPMorgan Chase Bank, N.A., as Administrative Agent and Xerox Business Services, LLC.
10.3(a)	Transition Services Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 10.1 to Registrant's Current Report on Form 8-K dated December 29, 2016. (See SEC File Number 001-37817).
10.3(b)	Tax Matters Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated
	Incorporated by reference to Exhibit 10.2 to Registrant's Current Report on Form 8-K dated December 29, 2016. (See SEC File Number 001-37817).
10.3(c)	Employee Matters Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated.
	Incorporated by reference to Exhibit 10.3 to Registrant's Current Report on Form 8-K dated December 29, 2016. (See SEC File Number 001-37817).
10.3(d)	Intellectual Property Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated
	Incorporated by reference to Exhibit 10.4 to Registrant's Current Report on Form 8-K dated December 29, 2016. (See SEC File Number 001-37817).
10.3(e)	Trademark License Agreement, dated as of December 30, 2016, by and between Xerox Corporation and Conduent Incorporated
	Incorporated by reference to Exhibit 10.5 to Registrant's Current Report on Form 8-K dated December 29, 2016. (See SEC File Number 001-37817).
10.4(a)	Joinder Agreement to Agreement, dated December 31, 2016, among Conduent Incorporated, Xerox Corporation, Icahn Partners Master Fund LP, Icahn Partners LP, Icahn Onshore LP, Icahn Offshore LP, Icahn Capital LP, IPH GP LLC, Icahn Enterprises Holdings L.P., Icahn Enterprises G.P. Inc., Beckton Corp., High River Limited Partnership, Hopper Investments LLC, Barberry Corp., Jonathan Christodoro and Carl C. Icahn.
	Incorporated by reference to Exhibit 10.6 to Registrant's Current Report on Form 8-K dated December 29, 2016. (See SEC File Number 001-37817).
10.4(b)	Agreement, dated January 28, 2016, among Xerox Corporation, Icahn Partners Master Fund LP, Icahn Partners LP, Icahn Onshore LP, Icahn Offshore LP, Icahn Capital LP, IPH GP LLC, Icahn Enterprises Holdings L.P., Icahn Enterprises G.P. Inc., Beckton Corp., High River Limited Partnership, Hopper Investments LLC, Barberry Corp., Jonathan Christodoro and Carl C. Icahn.

	Incorporated by reference to Exhibit 10.6 to Registrant's Amendment No. 1 to Form 10 dated August 15, 2016. (See SEC File Number 001-37817).
10.5	Exchange Agreement dated October 27, 2016 by and among Darwin Deason, Conduent Incorporated and Xerox Corporation.
	Incorporated by reference to Exhibit 10.14 to Registrant's Amendment No. 5 to Form 10 dated October 28, 2016. (See SEC File Number 001-37817).
	The management contracts or compensatory plans or arrangements listed below that are applicable to the executive officers named in the Summary Compensation Table which will appear in the Registrant's 2017 Proxy Statement or to our directors are preceded by an asterisk (*).
*10.6(a)(i)	Registrant's Performance Incentive Plan dated as of December 15, 2016 ("PIP").
	Incorporated by reference to Exhibit 4.3 to Registrant's Registration Statement No. 333-215361. (See SEC File Number 001-37817).
*10.6(b)(i)	Registrant's Equity Compensation Plan for Non-Employee Directors dated as of December 15, 2016 ("ECPNED").
	Incorporated by reference to Exhibit 4.4 to Registrant's Registration Statement No. 333-215361. (See SEC File Number 001-37817).
*10.6(b)(ii)	Form of Agreement under the ECPNED.
*10.6(c)	Letter Agreement dated June 10, 2016 between Xerox Corporation and Ashok Vemuri regarding compensation arrangements.
	Incorporated by reference to Exhibit 99.2 to Xerox Corporation's Current Report on Form 8-K dated June 14, 2016. (See SEC File Number 001-04471.
*10.6(d)	Letter Agreement dated September 7, 2016 between Xerox Corporation and Jay Chu regarding compensation arrangements.
	Incorporated by reference to Exhibit 10.10 to Registrant's Amendment No. 4 to Form 10 dated October 21, 2016. (See SEC File Number 001-37817).
*10.6(e)	Letter Agreement dated September 29, 2016 between Xerox Corporation and Frederick Koury regarding compensation arrangements.
	Incorporated by reference to Exhibit 10.11 to Registrant's Amendment No. 4 to Form 10 dated October 21, 2016. (See SEC File Number 001-37817).
*10.6(f)	Letter Agreement dated July 22, 2016 between Xerox Corporation and J. Michael Peffer regarding compensation arrangements.
	Incorporated by reference to Exhibit 10.12 to Registrant's Amendment No. 4 to Form 10 dated October 21, 2016. (See SEC File Number 001-37817).
*10.6(g)	Letter Agreement dated September 6, 2016 between Xerox Corporation and Brian Webb-Walsh regarding compensation arrangements.
	Incorporated by reference to Exhibit 10.13 to Registrant's Amendment No. 4 to Form 10 dated October 21, 2016. (See SEC File Number 001-37817).
21.1	List of subsidiaries of Registrant
23	Consent of PricewaterhouseCoopers LLP.
31(a)	Certification of CEO pursuant to Rule 13a-14(a) or Rule 15d-14(a).
31(b)	Certification of CFO pursuant to Rule 13a-14(a) or Rule 15d-14(a).
32	Certification of CEO and CFO pursuant to 18 U.S.C. §1350 as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase.
101.DEF	XBRL Taxonomy Extension Definition Linkbase.
101.INS	XBRL Instance Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase.
101.SCH	XBRL Taxonomy Extension Schema Linkbase.

**Pursuant to the Freedom of Information Act and/or a request for confidential treatment filed with the Securities and Exchange Commission under Rule 24b-2 of the Securities Exchange Act of 1934, as amended, the confidential portion of this material has been omitted and filed separately with the Securities and Exchange Commission.

EXHIBIT 10.1(b)
EXECUTION VERSION

FIRST INCREMENTAL AGREEMENT

This FIRST INCREMENTAL AGREEMENT, dated as of January 3, 2017 (this "First Incremental Agreement"), by and among JPMORGAN CHASE BANK, N.A., as the Administrative Agent (the "Administrative Agent"), XEROX BUSINESS SERVICES, LLC, a Delaware limited liability company (the "U.S. Borrower"), the other Loan Parties party hereto and the initial lenders party hereto (the "Initial Lenders").

RECITALS:

WHEREAS, reference is hereby made to the Credit Agreement, dated as of December 7, 2016 (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), among Conduent Incorporated, a New York corporation ("Holdings"), the U.S. Borrower, Affiliated Computer Services International B.V., a private limited company (*besloten vennootschap met beperkte aansprakelijkheid*) organized under the laws of the Netherlands, having its official seat in Amsterdam, the Netherlands and registered in the Trade Register of the Dutch Chamber of Commerce under number 34160388 (the "Dutch Borrower" and, together with the U.S. Borrower, the "Borrowers"), Conduent Finance, Inc., a Delaware corporation, the Lenders or other financial institutions or entities from time to time party thereto and the Administrative Agent (capitalized terms used but not defined herein having the meaning provided in the Credit Agreement);

WHEREAS, subject to the terms and conditions of the Credit Agreement, the Borrowers may obtain Incremental Term Loans by, among other things, entering into one or more Additional Credit Extension Amendments (with this First Incremental Agreement constituting an Additional Credit Extension Amendment);

WHEREAS, it is intended that the U.S. Borrower will obtain $100.0 million of incremental term loans (the "Incremental Term Loans") to be used for general corporate purposes and to pay fees and expenses in connection therewith, in each case, pursuant to the terms of this First Incremental Agreement (the transactions set forth in this clause, the "Transactions"); and

WHEREAS, the Borrower intends to incur the Incremental Term Loans pursuant to Section 2.19 of the Credit Agreement.

NOW, THEREFORE, in consideration of the premises and agreements, provisions and covenants herein contained, the parties hereto agree as follows:

Subject to the terms and conditions set forth herein and pursuant to the provisions of Section 2.19 of the Credit Agreement, the Initial Lenders hereby agree to provide the Incremental Term Loans on the Closing Date (as defined below) as set forth on Schedule A annexed hereto.

Each Initial Lender (i) confirms that it has received a copy of the Credit Agreement and the other Loan Documents and the exhibits thereto, together with copies of the financial statements referred to therein and such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this First Incremental Agreement, (ii) agrees that it will, independently and without reliance upon the Administrative Agent or any other Lender and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Credit Agreement, (iii) appoints and authorizes the Administrative Agent to take such actions as agent on its behalf and to exercise such powers under the

Credit Agreement and the other Loan Documents as are delegated to the Administrative Agent by the terms thereof, together with such powers as are reasonably incidental thereto and (iv) agrees that it will perform in accordance with their terms all of the obligations which by the terms of the Credit Agreement are required to be performed by it as an Initial Lender.

The Initial Lenders hereby agree that the Incremental Term Loans will be made on the following terms and conditions:

1. **Initial Drawing of Incremental Term Loans**. The Incremental Term Loans shall be denominated in Dollars and shall be made in a single drawing on the Closing Date.

2. **LIBOR Floor and Applicable Rate for Incremental Term Loans**.

Clause (ii) of the second proviso of the definition of "Eurocurrency Rate" shall apply to the Incremental Term Loans and the "Applicable Rate" for the Incremental Term Loans shall mean, as of any date of determination, the applicable percentage per annum as set forth below.

Incremental Term Loans	
Eurocurrency Incremental Term Loans	**Base Rate Incremental Term Loans**
5.50%	4.50%

3. **Principal Payments of the Incremental Term Loans**. The (i) scheduled amortization payments under Section 2.09(d) of the Credit Agreement shall be automatically increased to reflect the aggregate principal amount of the Incremental Term Loans and (ii) the Administrative Agent shall take any and all action as may be reasonably necessary to ensure that the Incremental Term Loans are included in each repayment of the Term B Loans on a pro rata basis (with the Incremental Term Loans being fungible with the Term B Loans) based upon the original principal amount of the Term B Loans and the Incremental Term Loans. Any remaining outstanding amount of the Term B Loans (including the Incremental Term Loans) shall be repaid in full on the Term B Loan Maturity Date.

4. **Incremental Term Loans Voluntary and Mandatory Prepayments; Incremental Term Loans Prepayment Fees**. Scheduled installments of principal of the Incremental Term Loans set forth above shall be reduced in connection with any voluntary or mandatory prepayments of the Incremental Term Loans in accordance with Sections 2.09 and 2.10 of the Credit Agreement, respectively, as if such Incremental Term Loans were (and on a pro rata basis with) Term B Loans. Without duplication of the obligations of the U.S. Borrower under Section 2.09(a)(iii) of the Credit Agreement, in the event that, on or prior to December 7, 2017, the U.S. Borrower (x) prepays, repays, refinances, substitutes or replaces any Term B Loans or Incremental Term Loans in connection with a Repricing Transaction (including, for the avoidance of doubt, any prepayment made pursuant to Section 2.10(b)(iii) of the Credit Agreement that constitutes a Repricing Transaction), or (y) effects any amendment, waiver or other modification of, or consent under, the Credit Agreement resulting in a Repricing Transaction, the U.S. Borrower shall pay to the Administrative Agent, for the ratable account of each of the applicable Term B Lenders and Initial Lenders, (A) in the case of clause (x), a premium of 1.00% of the aggregate principal amount of the Term B Loans or Incremental Term Loans so prepaid, repaid, refinanced, substituted or replaced and (B) in the case of clause (y), a fee equal to 1.00% of the aggregate principal amount of the Term B Loans or Incremental Term Loans outstanding immediately prior

to such amendment, waiver, modification or consent that are the subject of such Repricing Transaction. If, on or prior to December 7, 2017, all or any portion of the Term B Loans or Incremental Term Loans held by any Lender are prepaid, repaid, refinanced, substituted or replaced pursuant to Section 2.18 of the Credit Agreement as a result of, or in connection with, such Lender not consenting with respect to any amendment, waiver, modification or consent referred to in clause (y) above (or otherwise in connection with a Repricing Transaction), such prepayment, repayment, refinancing, substitution or replacement will be made at 101% of the principal amount so prepaid, repaid, refinanced, substituted or replaced. All such amounts shall be due and payable on the date of effectiveness of such Repricing Transaction.

5. **Use of Proceeds of the Incremental Term Loans**. The U.S. Borrower shall use the proceeds of the Incremental Term Loans for general corporate purposes and to pay fees and expenses related to the Transactions.

6. **Terms Generally for Incremental Term Loans**. Other than as set forth herein, for all purposes under the Credit Agreement and the other Loan Documents, the Incremental Term Loans shall have the same terms as the Term B Loans and shall be treated for purposes of voluntary and mandatory prepayments (including any applicable prepayment fees and for scheduled principal payments) and all other terms as the same Class of Term Loans as the Term B Loans. The Incremental Term Loans shall, to the extent permitted by applicable tax rules and regulations, be structured as an increase to the Term B Loans that will trade fungibly with such Term B Loans. Upon the funding of the Incremental Term Loans on the Closing Date, the Incremental Term Loans shall automatically and without further action by any Person constitute Term B Loans and Loans and the Initial Lenders shall be Lenders for all purposes of the Credit Agreement and the other Loan Documents. In furtherance of the foregoing, on the Closing Date, there shall commence an initial Interest Period with respect to the Incremental Term Loans, which Interest Period shall end on the last day of the Interest Period applicable to the Term B Loans as in effect immediately prior to the Closing Date.

7. **[Reserved]**

8. **Initial Lenders**. Each Initial Lender acknowledges and agrees that upon its execution of this First Incremental Agreement it shall become a "Lender" under, and for all purposes of, the Credit Agreement and the other Loan Documents, and shall be subject to and bound by the terms thereof, and shall perform all the obligations of and shall have all rights of a Lender thereunder. For all purposes of this First Incremental Agreement, the Credit Agreement and the other Loan Documents, the term "Initial Lender" shall include each Lender with a commitment to make an Incremental Term Loan or an outstanding Incremental Term Loan.

9. **Credit Agreement Governs**. Except as set forth in this First Incremental Agreement, the Incremental Term Loans shall otherwise be subject to the provisions of the Credit Agreement and the other Loan Documents. This First Incremental Agreement shall not by implication or otherwise limit, impair, constitute a waiver of or otherwise affect the rights and remedies of the Lenders under the Credit Agreement or any other Loan Document. This First Incremental Agreement shall not constitute a novation of the Credit Agreement or any of the other Loan Documents

10. **Closing Date Conditions**. The effectiveness of this First Incremental Agreement and the initial borrowing of the Incremental Term Loans shall become effective on the date upon which all of

the following shall have been satisfied (the "Closing Date"; provided that such date shall be no later than January 15, 2017):

(i) the Administrative Agent (or its counsel) shall have received either (A) counterparts of this First Incremental Agreement or (B) written evidence reasonably satisfactory to the Administrative Agent (which may include facsimile or electronic mail transmission in accordance with Section 9.01 of the Credit Agreement) that such party has signed a counterpart of this First Incremental Agreement that, when taken together, bear the signatures of the U.S. Borrower, the Guarantors, the Administrative Agent and the Initial Lenders; all reasonable and documented or invoiced out-of-pocket costs and expenses (including the reasonable fees, charges and disbursements of Cahill Gordon & Reindel LLP, as counsel to the Initial Lenders) of the Initial Lenders and the Administrative Agent incurred in connection with the transactions contemplated hereby for which invoices have been presented at least three Business Days prior to the Closing Date shall, to the extent required to be reimbursed or paid by the U.S. Borrower, have been paid;

(ii) the fees set forth in the Engagement Letter dated as of December 14, 2016, among Holdings, the U.S. Borrower, JPMorgan Chase Bank, N.A. and Merrill Lynch, Pierce, Fenner & Smith Incorporated, that are required to be paid on the Closing Date shall have been paid;

(iii) the Administrative Agent (or its counsel) shall have received the executed legal opinions, each in form reasonably satisfactory to the Administrative Agent, of (i) Cravath, Swaine & Moore LLP, special counsel to Holdings and the Guarantors organized under the laws of New York, (ii) Richards, Layton & Finger, P.A., special counsel to the U.S. Borrower and the Guarantors organized under the laws of Delaware, (iii) Kolesar and Leatham, special counsel to the Guarantors organized under the laws of Nevada, (iv) Morgan, Lewis & Bockius LLP, special counsel to the Guarantors organized under the laws of Pennsylvania and (v) Taft Stettinius & Hollister LLP, special counsel to the Guarantors organized under the laws of Indiana, or, in each case, such other legal counsel as may be reasonably acceptable to the Administrative Agent;

(iv) the Administrative Agent shall have received such customary closing documents and certificates as the Administrative Agent or its counsel may reasonably request relating to the organization, existence and good standing of the Loan Parties (to the extent such concept is applicable in the relevant jurisdiction) and the authorization of the Transactions, all in form and substance reasonably satisfactory to the Administrative Agent and its counsel (it being understood and agreed that no secretary certificates shall be required to the extent a Responsible Officer of the U.S. Borrower certifies that the secretary certificates delivered on the Closing Date (as defined in the Credit Agreement) remain true and complete in all material respects);

(v) the Administrative Agent shall have received a certificate attesting to the Solvency of the U.S. Borrower and its Subsidiaries (taken as a whole on a consolidated basis) on the Closing Date after giving effect to the Transactions to occur on the Closing Date, from a Financial Officer of the U.S. Borrower;

(vi) the Administrative Agent shall have received a certificate from an officer of the U.S. Borrower dated the Closing Date certifying that (a) the representations and warranties of each Loan Party set forth in Section 11 of this First Incremental Agreement are true and correct in all material respects (except that any representation and warranty that is qualified by materiality shall be true and correct in all respects) on and as of the Closing Date before and after giving effect to this First Incremental Agreement except where any representation and warranty is expressly made as of a specific earlier date, such representation and warranty shall be true in all material respects as of any such earlier date and (b) no Default or Event of Default has occurred and is continuing;

(vii) the Administrative Agent and the Initial Lenders shall have received a Borrowing Request in respect of the Incremental Term Loans; and

(viii) the Initial Lenders shall have received, at least three Business Days prior to the Closing Date, all documentation and other information reasonably requested in writing by them at least ten Business Days prior to the Closing Date in order to allow the Initial Lenders to comply with the Act.

11. **Representations and Warranties**. By its execution of this First Incremental Agreement, each Loan Party party hereto hereby represents and warrants to the Administrative Agent, the Initial Lenders and the Lenders that:

(i) This First Incremental Agreement has been duly authorized, executed and delivered by such Loan Party and constitutes the legal, valid and binding obligation of the Loan Parties party hereto, enforceable against such Loan Parties in accordance with its terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors' rights generally and subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law.

(ii) The execution, delivery and performance by such Loan Party of this First Incremental Agreement is within such Loan Party's corporate, limited liability company or partnership powers, has been duly authorized by all necessary corporate or other organizational action, and does not and will not (a) violate (i) any applicable law or regulation or order of any Governmental Authority or (ii) the charter, by-laws or other organizational documents of any Loan Party, (b) violate or result in a default under any indenture, agreement or other instrument binding upon any Loan Party or its assets, or give rise to a right thereunder to require any payment to be made by any Loan Party, and (c) will not result in the creation or imposition of any Lien on any material asset of any Loan Party (other than pursuant to the Loan Documents and Liens permitted by Section 6.02 of the Credit Agreement); except with respect to any violation or default referred to in clause (a)(i) or (b) above, to the extent that such violation or default could not reasonably be expected to have a Material Adverse Effect.

(iii) The representations and warranties of the U.S. Borrower and each other Loan Party contained in Article III of the Credit Agreement or any other Loan Document shall be true and correct in all material respects (except that any representation and warranty that is qualified by materiality shall be true and correct in all respects) on and as of the date hereof except where any representation and warranty is expressly made as of a specific earlier date, such representation and warranty shall be true in all material respects as of any such earlier date.

12. **Notice**. For purposes of the Credit Agreement, the initial notice address of the Initial Lenders shall be as separately identified to the Administrative Agent.

13. **Tax Forms**. For the Initial Lenders, delivered herewith to the Administrative Agent are such forms, certificates or other evidence with respect to United States federal income tax withholding matters as the Initial Lenders may be required to deliver to the Administrative Agent pursuant to the Credit Agreement.

14. **Recordation of the Incremental Term Loans**. Upon execution and delivery hereof, the Administrative Agent will record the Incremental Term Loans made by the Initial Lenders in the Register.

15. **Amendment, Modification and Waiver**. This First Incremental Agreement may not be amended, modified or waived except by an instrument or instruments in writing signed and delivered on behalf of each of the parties hereto. This First Incremental Agreement, the Credit Agreement and the other Loan Documents constitute the entire agreement among the parties with respect to the subject matter hereof and thereof and supersede all other prior agreements and understandings, both written and verbal, among the parties or any of them with respect to the subject matter hereof.

16. **GOVERNING LAW. THIS FIRST INCREMENTAL AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAW OF THE STATE OF NEW YORK (WITHOUT REGARD TO THE CONFLICT OF LAW PRINCIPLES THEREOF TO THE EXTENT THAT THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION WOULD BE REQUIRED THEREBY)**.

17. **Severability**. Any term or provision of this First Incremental Agreement held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

18. **Counterparts**. This First Incremental Agreement may be executed in counterparts (including by facsimile or other electronic transmission), each of which shall be deemed to be an original, but all of which shall constitute one and the same agreement.

19. **WAIVER OF JURY TRIAL**. EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS FIRST INCREMENTAL AGREEMENT OR ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY OR THEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PERSON HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PERSON WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

20. **Loan Document**. On and after the Closing Date, this First Incremental Agreement shall constitute a "Loan Document" for all purposes of the Credit Agreement and the other Loan Documents (it being understood that for the avoidance of doubt this First Incremental Agreement may be amended or waived solely by the parties hereto as set forth in Section 15 above).

21. **Consent and Affirmation of the Guarantors**. Each of the Guarantors, in its capacity as a guarantor under the Guarantee Agreement and a Pledgor under the Security Agreement or the Holdings Pledge Agreement, as the case may be, and as a party to each other Loan Document to which it is a party, hereby (i) consents to the execution, delivery and performance of this First Incremental Agreement and agrees that each of the Loan Documents to which it is a party is, and shall continue to be, in full force and effect and is hereby in all respects ratified and confirmed on the Closing Date, except that, on and after the Closing Date, each reference to the "Credit Agreement", "thereunder", "thereof", "therein" or words of like import referring to the Credit Agreement shall mean and be a reference to the Credit Agreement as amended and otherwise modified by this First Incremental Agreement and (ii) affirms and confirms its guarantee of the Obligations and its pledge/or grant of a security interest in its assets as Collateral to secure the Obligations with all such security interests continuing in full force and effect after giving effect to this First Incremental Agreement and that the Loan Documents to which each of the Guarantors is a party and all of the Collateral described therein do, and shall continue to, secure the payment of all of the Obligations, including the Incremental Term Loans.

22. **Affirmation of the Borrower**. The U.S. Borrower hereby (i) agrees that each of the Loan Documents to which it is a party is, and shall continue to be, in full force and effect and is hereby in all respects ratified and confirmed on the Closing Date, except that, on and after the Closing Date, each reference to the "Credit Agreement", "thereunder", "thereof", "therein" or words of like import referring to the Credit Agreement shall mean and be a reference to the Credit Agreement as amended and otherwise modified by this First Incremental Agreement and (ii) affirms and confirms its pledge/or grant of a security interest in its assets as Collateral to secure the Obligations with all such security interests continuing in full force and effect after giving effect to this First Incremental Agreement and that the Loan Documents to which it is a party and all of the Collateral described therein do, and shall continue to, secure the payment of all of the Obligations, including the Incremental Term Loans.

[signature pages to follow]

IN WITNESS WHEREOF, each of the undersigned has caused its duly authorized officer to execute and deliver this First Incremental Agreement as of the date first set forth above.

XEROX BUSINESS SERVICES, LLC

By: _____
Name:
Title:

[*Signature Page to Incremental Agreement*]

[[3630930]]

CONSENTED AND CONFIRMED BY:

[GUARANTORS]

By: _____
Name:
Title:

[*Signature Page to Incremental Agreement*]

[[3630930]]

JPMORGAN CHASE BANK, N.A., as Administrative Agent

By: _____
Name:
Title:

[*Signature Page to Incremental Agreement*]

[[3630930]]

JPMORGAN CHASE BANK, N.A., as Initial Lender

By: _____
Name:
Title:

[*Signature Page to Incremental Agreement*]

[[3630930]]

SCHEDULE A
TO FIRST INCREMENTAL AGREEMENT

Initial Lender	Incremental Term Loan Commitment Amount
JPMorgan Chase Bank, N.A.	$100,000,000

[[3630930]]

EXHIBIT

10.6(b)(ii)

Agreement for Non-Employee Directors - Equity Compensation Plan for Non-Employee Directors; DSUs Only

AGREEMENT PURSUANT TO
CONDUENT INCORPORATED
EQUITY COMPENSATION PLAN FOR NON-EMPLOYEE DIRECTORS

AGREEMENT, by Conduent Incorporated, a New York corporation (the "Company"). dated as of the date which appears as the "Date of Agreement and Award" in the Award Summary attached hereto (the "Award Summary") in favor of the individual whose name appears on the Award Summary, a non-employee Director of the Company (the "Director").

In accordance with the provisions of the "Conduent Incorporated Equity Compensation Plan for Non-Employee Directors," as amended and restated (the "Plan"), the Board of Directors of the Company (the "Board") has authorized the execution and delivery of this Agreement.

Terms used herein which are defined in the Plan or in this Agreement shall have the meanings assigned to them in the Plan or this Agreement, respectively.

The Award Summary contains the details of the awards covered by this Agreement and is incorporated herein in its entirety.

NOW, THEREFORE, in consideration of the premises and for other good and valuable consideration the Company agrees as follows:

AWARD OF DEFERRED STOCK UNITS

1. Award of Deferred Stock Units. Subject to all terms and conditions of the Plan and this Agreement, the Company has awarded to the Director on the date indicated on the Award Summary the number of Deferred Stock Units (individually, the "DSU") as shown on the Award Summary.

TERMS OF THE DEFERRED STOCK UNIT

2. Deferral Period and Entitlement to Shares. Upon the lapse of the Deferral Period indicated on the Award Summary in connection with the DSU, which shall be the earlier of: (1) one year following termination of Board service, (2) the date of death or (3) the date determined by the Board to the extent necessary for any Federal officer or employee in the executive branch to comply with an ethics agreement with the Federal government, the Company shall deliver to such person a certificate or certificates for a number of shares of Common Stock equal to the number of DSUs as to which a Deferral Period has lapsed. No fractional shares shall be issued. If service as a Director of the Company ends prior to the sixth month anniversary of the first day of the month of the date of this Agreement, the number of shares issuable at the end of the Deferral Period will be prorated in the following manner. For each month of Board service following the date of the award, Director or his or her estate, as the case may be, will receive a prorated number of shares of one-sixth of the total award provided pursuant to this Agreement. Termination of Board service prior to the end of a month will be treated as though Director served on the Board for the entire month for purposes of the award.

3. Dividend Equivalents. Director shall be entitled to receive from the Company dividend equivalents, which are credited in the form of additional DSUs payable in Common Stock following the lapse of the Deferral

EXHIBIT

10.6(b)(ii)

Agreement for Non-Employee Directors - Equity Compensation Plan for Non-Employee Directors; DSUs Only

Period, at the same time and in the same amounts that the holder of record of a number of shares of Common Stock equal to the number of DSUs covered by the Agreement would be entitled to receive as dividends on such Common Stock. Such right to dividend equivalents on a DSU covered hereby shall apply to all dividends the record date for which occurs at any time dung the period commencing on the date hereof and ending on the date that Director becomes a shareholder of record with respect to such DSU as a result of the lapse of a Deferral Period as provided under Paragraph 2.

OTHER TERMS

4. Rights of a Shareholder. Director shall have no rights as a shareholder with respect to any shares covered by this Agreement until the date of issuance of a stock certificate to him for such shares. Except as otherwise provided herein, no adjustment shall be made for dividends or other rights for which the record date is prior to the date such stock certificate is issued.

5. Non-Assignability. This Agreement shall not be assignable or transferable by Director except by will or by the laws of descent and distribution except pursuant to a domestic relations order entered by a court of competent jurisdiction. During the lifetime of Director the shares of Common Stock issued in connection with DSUs shall be delivered only to Director.

6. General Restrictions. If at any time the Chief Executive Officer of the Company ("CEO") shall determine, in his discretion, that the listing, registration or qualification of any shares subject to this Agreement upon any securities exchange or under any state or Federal law, or the consent or approval of any government regulatory body, is necessary or desirable as a condition of, or in connection with, the awarding of or the issuance of DSUs or shares hereunder, the DSUs or shares may not be awarded or issued unless such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the CEO and any delay caused thereby shall in no way affect the date of termination of the award.

7. Tax Withholding and Information Reporting. Whenever the Plan provides that shares of Common Stock are to be delivered following the lapse of the Deferral Period, the Company shall have the right to require Director to remit to the Company an amount sufficient to satisfy any federal, state, and/or local withholding tax requirements prior to the delivery of such certificates. In addition, the Company shall have the right to satisfy any withholding requirements by withholding shares of Common Stock from the shares of Common Stock otherwise deliverable to Director, provided, however, that no shares of Common Stock are to be withheld with a value exceeding the minimum amount of tax required to be withheld by law. The Company will report income to Director on IRS Form 1099, 1042-S, or other appropriate information form or return.

8. Amendment of this Agreement. With the consent of Director, the Board may amend this Agreement in a manner not inconsistent with the Plan.

9. Notices. Notices hereunder shall be in writing and if to the Company shall be mailed to the Company at 100 Campus Drive, Suite 200E, Florham Park, New Jersey 07932, addressed to the attention of Office of Corporate Secretary, and if to Director shall be delivered personally or mailed to Director at the address as the same appears on the records of the Company.

EXHIBIT 10.6(b)(ii)

Agreement for Non-Employee Directors - Equity Compensation Plan for Non-Employee Directors; DSUs Only

10. Interpretation of This Agreement. The Board shall have the authority to interpret the Plan and this Agreement and to take whatever administrative actions, including correction of administrative errors in the awards subject to this Agreement and in this Agreement, as the Board in its or his sole good faith judgment shall be determined to be advisable. All decisions, interpretations and administrative actions made by the Board hereunder or under the Plan shall be binding and conclusive on the Company and Director. In the event there is inconsistency between the provisions of this Agreement and of the Plan, the provisions of the Plan shall govern.

11. Successors and Assigns. This Agreement shall be binding and inure to the benefit of the parties hereto and the successors and assigns of the Company and to the extent provided in Paragraph 5 to the personal representatives, legatees and heirs of Director.

IN WITNESS WHEREOF, the Company has executed this Agreement as of the day and year set forth on the Award Summary.

CONDUENT INCORPORATED

By: _____

EXHIBIT 21.1

SUBSIDIARIES OF CONDUENT INCORORATED

The following companies are subsidiaries of Conduent Incorporated as of December 31, 2016. Unless otherwise noted, a subsidiary is a company in which Conduent Incorporated or a subsidiary of Conduent Incorporated holds 50% or more of the voting stock. The names of other subsidiaries have been omitted as they would not, if considered in the aggregate as a single subsidiary, constitute a significant subsidiary:

Name of Subsidiary	Jurisdiction of Incorporation or Organization
MidasPlus, Inc.	Arizona
Healthy Communities Institute Corporation	California
Breakaway Healthcare and Life Sciences LLC	Colorado
Education Sales and Marketing, LLC	Colorado
ESM Chaperone, LLC	Colorado
Wagers & Associates, Inc.	Colorado
ACS Asset Management Group, LLC	Delaware
ACS BPO Services, Inc.	Delaware
ACS BRC Holdings, LLC	Delaware
ACS Consultant Holdings Corporation	Delaware
ACS Defense, LLC	Delaware
ACS EDI Gateway, Inc.	Delaware
ACS Education Loan Services LLC	Delaware
ACS Enterprise Solutions, LLC	Delaware
ACS e-Services, LLC	Delaware
ACS Global, Inc.	Delaware
ACS Health Administration, Inc.	Delaware
ACS Healthcare Analytics, Inc.	Delaware
ACS HR Solutions World Services LLC	Delaware
ACS Human Resources Solutions, LLC	Delaware
ACS Lending, Inc.	Delaware
ACS Middle East, Inc.	Delaware
ACS TMC, Inc.	Delaware
ACS TradeOne Marketing, Inc.	Delaware
ACS Trust I	Delaware
ACS Trust II	Delaware
ACS/ECG Holdings, LLC	Delaware
ACS@Xerox LLC	Delaware
Buck Consultants, LLC	Delaware
Buck Kwasha Securities LLC	Delaware
Bunch CareSolutions, LLC	Delaware
CDR Associates, L.L.C.	Delaware
Conduent Card Service LLC	Delaware
Conduent Finance, Inc.	Delaware
Consilience Software, Inc.	Delaware
Education Services Company, LLC	Delaware
etravelexperts, LLC	Delaware
Government Records Services, Inc.	Delaware
Intellinex LLC	Delaware

EXHIBIT 21.1

ISG Holdings, Inc	Delaware
ISG Services, LLC	Delaware
ParkIndy, LLC	Delaware
RSA Enterprises LLC	Delaware
RSA Medical Exams LLC	Delaware
RSA Medical LLC	Delaware
Specialty I, LLC	Delaware
StrataCare, LLC	Delaware
The National Abandoned Property Processing Corporation	Delaware
Title Records Corporation	Delaware
TMS Health LLC	Delaware
Xerox Audit & Compliance Solutions, LLC	Delaware
Xerox Business Services, LLC	Delaware
Xerox Education Services, LLC	Delaware
Xerox Education Solutions, LLC	Delaware
Xerox European Funding LLC	Delaware
Xerox Export LLC	Delaware
Xerox Federal Solutions, LLC	Delaware
Xerox Government Systems, LLC	Delaware
Xerox HR Solutions, LLP	Delaware
Xerox Mortgage Services, Inc.	Delaware
Xerox Recovery Services, Inc.	Delaware
Xerox Relocation & Assignment Services, LLC	Delaware
Xerox State Healthcare, LLC	Delaware
LearnSomething, Inc.	Florida
ACB Airport Solutions, LLC	Georgia
Digital Information Systems Company, L.L.C.	Georgia
Xerox Transport Solutions, Inc.	Georgia
Wireless Data Services (Operations) Inc.	Idaho
ACS Human Services, LLC	Indiana
Health Technology Acquisition Company	Indiana
Outsourced Administrative Systems, Inc.	Indiana
ACS Image Solutions, Inc.	Louisiana
Xerox Consultant Company, Inc.	Michigan
ACS CompIQ Corporation	Nevada
Xerox Commercial Solutions, LLC	Nevada
TMS Health Patient Access Solutions, LLC	New Jersey
Consultec IPA, Inc.	New York
Smart Data Consulting Corp	New York
Xerox State & Local Solutions, Inc.	New York
LiveBridge, Inc.	Oregon
Newspaper Services Holding, Inc.	Oregon
Statit Software, Inc.	Oregon
Superior Venture Partner, Inc.	Pennsylvania

EXHIBIT 21.1

Xerox HR Solutions, LLC	Pennsylvania
CredenceHealth, Inc.	Tennessee
ACS Protection Services, Inc.	Texas
ACS Securities Services, Inc.	Texas
ACS Welfare Benefit Trust	Texas
Conduent Legal & Compliance Solutions, LLC	Texas
Mercury Fund II, Ltd.	Texas
Transaction Processing Specialists, Inc.	Texas
WDS Global—Texas, Inc.	Texas
Xerox Heritage, LLC	Virginia
Intellinex PS-OS, Inc.	Washington
Wireless Data Services North America Inc.	Washington
Xerox Care and Quality Solutions, Inc.	Wisconsin
Eagle Connect Sh.p.k.	Albania
Voice Star Sh.p.k.	Albania
Market Line S.A.	Argentina
Consilience Software Australasia Pty Ltd	Australia
Xerox Business Services (Australia) Pty. Ltd.	Australia
Wireless Data Services Pty Limited	Australia
Affiliated Computer Services Austria GmbH	Australia
Affiliated Computer Services International (Barbados) Limited	Barbados
Buck Consultants	Belgium
ACS Transportation Services Participacoes Ltda	Brazil
Affiliated Computer Services do Brasil Ltda.	Brazil
ACS HR Solucoes Servicos de Recursos Humanos do Brasil Ltda	Brazil
Affiliated Computer Services Call Center Operations do Brasil LTDA	Brazil
Buck Consultants Limited/Conseilliers Buck Limitee	Canada
Buck Consultants Insurance Agency Limited	Canada
CPAS Systems, Inc.	Canada
Xerox Business Services Canada, Inc.	Canada
ACS HR Solutions Canada Co	Canada
ACS Solutions Chile SA	Chile
ACS Road Technology Services (Beijing) Co. Ltd.	China
Affiliated Computer Services (Tianjin) Co., Ltd.	China
ML Colombia S.A.	Colombia
Penad NV	Curacao
ACS Czech Republic s.r.o.	Czech Republic

EXHIBIT 21.1

Xerox Business Services Dominican Republic, SAS	Dominican Republic
Affiliated Computer Services (Fiji) Limited	Fiji
Affiliated Computer Services Business Process Solutions SAS	France
Xerox Business Solutions (France) SAS	France
Affiliated Computer Services of Germany GmbH	Germany
ACS Holdings (Germany) GmbH	Germany
ACS HR Solutions Deutschland GmbH	Germany
Invoco Holding GmbH	Germany
GIP Dialog Gesellschaft fur Produktinformation mbH	Germany
Invoco Business Solutions GmbH	Germany
Invoco Communication Center GmbH	Germany
Invoco Customer Service GmbH	Germany
Invoco Helpline Communication GmbH	Germany
Invoco Helpline GmbH	Germany
Invoco Marketing & Vetrieb GmbH	Germany
Invoco Media Sales GmbH	Germany
Invoco Multimeida GmbH	Germany
Invoco Sales GmbH	Germany
Invoco Service Center GmbH	Germany
Invoco Service GmbH	Germany
Invoco Services & Sales GmbH	Germany
Invoco Technical Service GmbH	Germany
ACS-BPS (Ghana) Limited	Ghana
Xerox Business Services de Guatemala, Sociedad Anonima	Guatemala
ACS HR Solutions Share Plan Services (Guernsey), Limited	Guernsey
ACS China Solutions Hong Kong Limited	Hong Kong
Xerox Business Solutions (Hong Kong) Limited	Hong Kong
Xerox Business Services India LLP	India
Conduent Ireland Limited	Ireland
Xerox Business Services Italy S.r.l.	Italy
Nuova Karel Soluzioni S.r.l. unipersonale	Italy
Xerox Business Solutions Italia, S.p.A.	Italy
ACS Business Process Solutions (Jamaica) Limited	Jamaica
e-Services Group International (Jamaica) Limited	Jamaica
Sia Rigas Karte	Latvia
Affiliated Computer Services Holdings (Luxembourg) S.A.R.L.	Luxembourg
Xerox Business Services Malaysia Sdn. Bhd.	Malaysia
ACS Malta Limited	Malta

EXHIBIT 21.1

Xerox Business Services de Mexico, S.A. de C.V.	Mexico
Xerox Solutions de Mexico, S. de R.L. de C.V.	Mexico
Phenox Holding B.V.	Netherlands
Buck Consultants BV	Netherlands
Phenox Professionals BV	Netherlands
Affiliated Computer Services International B.V.	Netherlands
ACS HR Solutions Nederland BV	Netherlands
Wilhaave Groep BV	Netherlands
Unamic Holding BV	Netherlands
Unamic/HCN BV	Netherlands
Xerox Business Services (Netherlands) B.V.	Netherlands
Market Line Peru S.A.C.	Peru
ACS Solutions Peru S.A.	Peru
Xerox Business Services Philippines, Inc.	Philippines
ACS Solutions Poland Sp. Z.o.o.	Poland
Affiliated Computer Services of Poland Sp. z.o.o.	Poland
ACS Puerto Rico, LLC	Puerto Rico
Xerox Business Solutions of Puerto Rico, Inc.	Puerto Rico
Xerox Business Services Romania S.r.l.	Romania
Xerox Europe Finance Limited Partnership	Scotland
Wireless Data Services (Asia Pac) PTE Ltd.	Singapore
Wireless Data Services (Proprietary) Limited	South Africa
Affiliated Computer Services of Spain, S.L., Sociedad Unipersonal	Spain
Xerox Business Solutions Spain, S.L.	Spain
e-Services Group (St. Lucia) Ltd.	St. Lucia
Telenamic NV	Suriname
Affiliated Computer Services GmbH	Switzerland
Xerox Business Services (Switzerland) AG	Switzerland
Unamic HCN Musteri Hizmetleri Limited Sirketi	Turkey
ACS Business Process Solutions Limited	United Kingdom
CVG Ltd	United Kingdom
Spur Information Solutions Limited	United Kingdom
Wireless Data Services Limited	United Kingdom
Buck Consultants Limited	United Kingdom
Buck Consultants (Healthcare) Limited	United Kingdom
Buck Consultants (Administration & Investment) Limited	United Kingdom
Buck Consultants Shareplan Trustees Limited	United Kingdom

EXHIBIT 21.1

Buckingham Trustees Limited	United Kingdom
Talking People Limited	United Kingdom

EXHIBIT 23

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No. 333-215361) of Conduent Incorporated of our report dated March 10, 2017, relating to the consolidated financial statements and financial statement schedule, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
Dallas, Texas
March 10, 2017

EXHIBIT 31(a)

CEO CERTIFICATIONS

I, Ashok Vemuri, certify that:

1. I have reviewed this Annual Report on Form 10-K of Conduent Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 10, 2017

/s/ ASHOK VEMURI

Ashok Vemuri
Principal Executive Officer

EXHIBIT 31(b)

CFO CERTIFICATIONS

I, Brian Webb-Walsh, certify that:

1. I have reviewed this Annual Report on Form 10-K of Conduent Incorporated;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 10, 2017

/S/ BRIAN WEBB-WALSH

Brian Webb-Walsh
Principal Financial Officer

EXHIBIT 32

**CERTIFICATION OF CEO AND CFO PURSUANT TO 18 U.S.C. § 1350,
AS ADOPTED PURSUANT TO § 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Form 10-K of Conduent Incorporated, a New York corporation (the "Company"), for the year ended December 31, 2016, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), Ashok Vemuri, Chief Executive Officer of the Company, and Brian Webb-Walsh, Chief Financial Officer of the Company, each hereby certifies, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, to the best of his/her knowledge, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ ASHOK VEMURI

Ashok Vemuri
Chief Executive Officer
March 10, 2017

/s/ BRIAN WEBB-WALSH

Brian Webb-Walsh
Chief Financial Officer
March 10, 2017

This certification accompanies this Report pursuant to § 906 of the Sarbanes-Oxley Act of 2002 and shall not, except to the extent required by the Sarbanes-Oxley Act of 2002, be deemed filed by the Company for purposes of § 18 of the Securities Exchange Act of 1934, as amended.

A signed original of this written statement required by § 906 has been provided to Conduent Incorporated and will be retained by Conduent Incorporated and furnished to the Securities and Exchange Commission or its staff upon request.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2018
Or
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to
Commission File Number 000-50194

HMS HOLDINGS CORP.
(Exact name of registrant as specified in its charter)

Delaware	**11-3656261**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
5615 High Point Drive, Irving, TX	**75038**
(Address of principal executive offices)	(Zip Code)

(214) 453-3000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Name of each exchange on which registered**
Common Stock $0.01 par value	**The Nasdaq Stock Market LLC (Nasdaq Global Select Market)**

Securities registered pursuant to section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐ Non-accelerated filer ☐ Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act) Yes ☐ No ☒

The aggregate market value of the registrant's common stock held by non-affiliates as of June 29, 2018 the last business day of the registrant's most recently completed second quarter was approximately $1.8 billion based on the last reported sale price of the registrant's common stock on the Nasdaq Global Select Market on that date. Solely for purposes of this disclosure, shares of common stock held by executive officers, directors and persons who hold 10% or more of the outstanding shares of common stock of the registrant as of such date have been excluded because such persons may be deemed to be affiliates. This determination is not necessarily a conclusive determination for any other purposes.

There were 85,271,867 shares of common stock outstanding as of February 15, 2019.

Documents Incorporated by Reference

Unless provided in an amendment to this Annual Report on Form 10-K, the information required by Part III is incorporated by reference to the registrant's 2019 definitive proxy statement, to the extent stated herein. Such proxy statement or amendment will be filed with the Securities and Exchange Commission within 120 days of the registrant's fiscal year ended December 31, 2018.

HMS HOLDINGS CORP. AND SUBSIDIARIES
ANNUAL REPORT ON FORM 10-K
TABLE OF CONTENTS

Glossary of Terms and Abbreviations

ACA	Patient Protections and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010
ACO	Accountable Care Organization
ADR	Additional Documentation Request
ASO	Administrative Service Only
ASU	Accounting Standards Update
CHIP	Children's Health Insurance Program
CMS	Centers for Medicare & Medicaid Services
CMS NHE	CMS National Health Expenditures
COB	Coordination of Benefits
COSO	Committee of Sponsoring Organizations of the Treadway Commission
Credit Agreement	The Amended and Restated Credit Agreement dated as of May 3, 2013, as amended by Amendment No. 1 to Amended and Restated Credit Agreement dated as of March 8, 2017, and as further amended by Amendment No. 2 to Amended and Restated Credit Agreement, dated as of December 19, 2017, by and among HMS Holdings Corp., the Guarantors party thereto, the Lenders party thereto and Citibank, N.A. as Administrative Agent
DSO	Days Sales Outstanding
ERISA	Employment Retirement Income Security Act of 1974
Exchange Act	Securities Exchange Act of 1934, as amended
FASB	Financial Accounting Standards Board
HIPAA	Health Insurance Portability and Accountability Act of 1996
HITECH	Health Information Technology for Economic and Clinical Health
IRC	Internal Revenue Code
IRS	U.S. Internal Revenue Service
LIBO Rate	Intercontinental Exchange London Interbank Offered Rate (or any successor rate determined in accordance with the Credit Agreement)
MCO	Managed care organization
PBM	Pharmacy Benefit Manager
PHI	Protected health information
PI	Payment Integrity
R&D Credit	U.S. Research and Experimentation Tax Credit pursuant to IRC Section 41
RAC	Recovery Audit Contractor
RFP	Request for proposal
SEC	U.S. Securities and Exchange Commission
Securities Act	Securities Act of 1933, as amended
Section 199 Deduction	U.S. Production Activities Deduction pursuant to IRC Section 199
SG&A	Selling, general and administrative
TPL	Third-party liability
TPM	Total Population Management
U.S. GAAP	United States Generally Accepted Accounting Principles
401(k) Plan	HMS Holdings Corp. 401(k) Plan
2006 Stock Plan	HMS Holdings Corp. Fourth Amended and Restated 2006 Stock Plan, as amended by Amendment No. 1 to the HMS Holdings Corp. Fourth Amended and Restated 2006 Stock Plan dated as of February 16, 2012
2011 HDI Plan	HDI Holdings, Inc. Amended 2011 Stock option and Stock Issuance Plan
2016 Omnibus Plan	HMS Holdings Corp. 2016 Omnibus Incentive Plan
2017 Tax Act	Tax Cuts and Jobs Act of 2017
2018 Form 10-K	HMS Holdings Corp. Annual Report on Form 10-K for the year ended December 31, 2018

Cautionary Note Regarding Forward-Looking Statements

For purposes of this 2018 Form 10-K, the terms "HMS," "Company," "we, "us, and "our" refer to HMS Holdings Corp. and its consolidated subsidiaries unless the context clearly indicates otherwise. Included in this 2018 Form 10-K are "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. From time to time, we also provide forward-looking statements in other materials we release to the public, as well as oral forward-looking statements. Such statements relate to our current expectations, projections and assumptions about our business, the economy and future events or conditions. They do not relate strictly to historical or current facts.

We have tried to identify forward-looking statements by using words such as "aim," "anticipate," "believe," "estimate," "expect," "forecast," "future," "intend," "likely," "may," "plan," "project," "seek," "strategy," "target," "will," "would," "could," "should," and similar expressions and references to guidance, although some forward-looking statements may be expressed differently. These statements include, among other things, information concerning our future growth, business strategy, strategic or operational initiatives, our future operating or financial performance, our ability to invest in and utilize our data and analytics capabilities to expand our capabilities, the benefits and synergies to be obtained from completed and future acquisitions, the future performance of companies we have acquired, our future expenses, interest rates and tax rates, our ability to meet our future liquidity requirements, the impact of changes to U.S. healthcare legislation or healthcare spending affecting Medicare, Medicaid or other publicly funded or subsidized health programs, and other statements regarding our possible future actions, business plans, objectives and prospects.

Forward-looking statements are not guarantees and involve risks, uncertainties and assumptions that are difficult to predict. Actual results may differ materially from past results and from those indicated by such forward-looking statements if known or unknown risks or uncertainties materialize, or if underlying assumptions prove inaccurate. These risks and uncertainties include, among other things:

- *our ability to execute our business plans or growth strategy;*
- *our ability to innovate, develop or implement new or enhanced solutions or services;*
- *the nature of investment and acquisition opportunities we are pursuing, and the successful execution of such investments and acquisitions;*
- *our ability to successfully integrate acquired businesses and realize synergies;*
- *significant competition for our solutions and services;*
- *variations in our results of operations;*
- *our ability to accurately forecast the revenue under our contracts and solutions;*
- *our ability to protect our systems from damage, interruption or breach, and to maintain effective information and technology systems and networks;*
- *our ability to protect our intellectual property rights, proprietary technology, information processes and know-how;*
- *our failure to maintain a high level of customer retention or the unexpected reduction in scope or termination of key contracts with major customers;*
- *customer dissatisfaction or our non-compliance with contractual provisions or regulatory requirements;*
- *our failure to meet performance standards triggering significant costs or liabilities under our contracts;*
- *our inability to manage our relationships with data sources and suppliers;*
- *our reliance on subcontractors and other third party providers and parties to perform services;*
- *our ability to continue to secure contracts and favorable contract terms through the competitive bidding process;*
- *pending or threatened litigation;*
- *unfavorable outcomes in legal proceedings;*
- *our success in attracting and retaining qualified employees and members of our management team;*
- *our ability to generate sufficient cash to cover our interest and principal payments under our credit facility;*
- *unexpected changes in tax laws, regulations or guidance and unexpected changes in our effective tax rate;*
- *unanticipated increases in the number or amount of claims for which we are self-insured;*
- *changes in the U.S. healthcare environment or healthcare financing system, including regulatory, budgetary or political actions that affect healthcare spending or the practices and operations of healthcare organizations;*
- *our failure to comply with applicable laws and regulations governing individual privacy and information security or to protect such information from theft and misuse;*
- *our ability to comply with current and future legal and regulatory requirements;*

- *negative results of government or customer reviews, audits or investigations;*
- *state or federal limitations related to outsourcing of certain government programs or functions;*
- *restrictions on bidding or performing certain work due to perceived conflicts of interests;*
- *the market price of our common stock and lack of dividend payments; and*
- *anti-takeover provisions in our corporate governance documents.*

These and other risks are discussed under the headings "Part I, Item 1. Business," "Part I, Item 1A. Risk Factors," "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Part II, Item 7A. Quantitative and Qualitative Disclosures about Market Risk" of this 2018 Form 10-K and in other documents we file with the SEC.

Any forward-looking statements made by us in this 2018 Form 10-K speak only as of the date on which they are made. We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law. We caution readers not to place undue reliance upon any of these forward-looking statements. You are advised, however, to consult any further disclosures we make on related subjects in our Form 10-Q and Form 8-K reports and our other filings with the SEC.

Market and Industry Data

This 2018 Form 10-K contains market, industry and government data and forecasts that have been obtained from publicly available information, various industry publications and other published industry sources. We have not independently verified the information and cannot make any representation as to the accuracy or completeness of such information. None of the reports and other materials of third party sources referred to in this 2018 Form 10-K were prepared for use in, or in connection with, this 2018 Form 10-K.

Trademarks and Trade Names

We have a number of registered trademarks, including HMS®, as well as the corresponding HMS + logo design mark, HMS IntegritySource®, Eliza®, Essette® and Elli®. These and other trademarks of ours appearing in this 2018 Form 10-K are our property. Solely for convenience, trademarks and trade names of ours referred to in this 2018 Form 10-K may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to these trademarks and trade names. This 2018 Form 10-K contains additional trade names and trademarks of other companies. We do not intend our use or display of other companies' trade names or trademarks to imply an endorsement or sponsorship of us by such companies, or any relationship with any of these companies.

PART I

Item 1. Business

Founded in 1974, HMS is an industry-leading provider of cost containment solutions in the healthcare marketplace. We use healthcare data technology, analytics and related services to deliver coordination of benefits, payment integrity, population risk intelligence, care management and consumer engagement solutions to help payers reduce costs, improve healthcare outcomes and enhance member experiences. We provide coordination of benefits services to government and commercial healthcare payers to ensure that the correct party pays a claim, and payment integrity services to ensure the correct amount is paid. Our total population management solutions provide risk-bearing organizations with reliable intelligence across their member populations to identify risks and improve patient engagement and outcomes. Together these services help move the healthcare system forward for our customers and contribute to bending the healthcare cost curve for the nation.

HMS began its operations as Health Management Systems, Inc., which became our wholly owned subsidiary in March 2003 when we assumed its business in connection with the adoption of a holding company structure. In recent years HMS has grown both organically and through targeted acquisitions of businesses that helped expand our solution suite, including IntegriGuard, LLC (doing business as HMS Federal) in 2009; HealthDataInsights, Inc. ("HDI") in 2011; Essette, Inc. ("Essette") in 2016; and Eliza Holding Corp. ("Eliza") in 2017. We currently operate as one business segment with a single management team that reports to the Chief Executive Officer.

We were originally incorporated in the State of New York in October 2002 and reincorporated in the State of Delaware in July 2013. Our principal executive offices are located at 5615 High Point Drive, Irving, Texas 75038, and our telephone number is (214) 453-3000. As of December 31, 2018, we had approximately 2,500 employees. Additional information about HMS is available on our website at www.hms.com.

Copies of our recent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and Proxy Statements, as well as amendments to these reports or statements, are available free of charge on our website through the Investor Relations page, as soon as reasonably practicable after we electronically file them with, or furnish them to, the SEC. These materials, as well as similar materials for SEC registrants, may be obtained directly from the SEC through their website at http://www.sec.gov.

The content of any website referred to in this 2018 Form 10-K is not incorporated by reference into this filing unless expressly noted. References to the URLs for these websites are intended to be inactive textual references only.

Our Solutions

We provide solutions that apply broadly across Medicaid, Medicare, commercial at-risk, and employer self-insured populations. Our services span the payment and care continuum from an individual's enrollment in a program before medical service is rendered, to pre-payment review of a claim, through recovery where identification of improper payments is made via audit, and back to the individual where our consumer-driven solutions allow health plans to manage their members on a personal level, and at scale, by using actionable analytics that drive patients to take action to improve health outcomes. Our coordination of benefits and payment integrity services ensure payment accuracy by addressing a wide spectrum of payment errors, including eligibility and coordination of benefits errors, the identification and investigation of potential fraud, and the review of claims on a pre-payment and post-payment basis. Our total population management services assist customers in managing quality, risk, cost and compliance across all lines of business by engaging members, providing the tools to manage their care, and identifying existing or emerging health risk among members. As a result of these services, our customers saved billions of dollars in 2018 through the prevention of erroneous payments, improved clinical outcomes for their members, and reduced enrollment turnover; and they received billions more in cash recoveries for improperly paid claims.

Our comprehensive solutions offer value throughout the healthcare continuum and include the following:

Coordination of Benefits (COB)

Our COB services are provided primarily for state governments and Medicaid managed care plans, pursuant to Federal law which mandates that Medicaid is the payer of last resort, and draw principally upon proprietary information management and data mining techniques designed to ensure the correct party pays a healthcare claim. We offer cost avoidance services, which include providing validated insurance coverage information that is used by payers to coordinate benefits properly for future claims. With validated insurance information, Medicaid payers can avoid unnecessary costs by ensuring they pay only after all other insurance coverage available has been exhausted. Nevertheless, due to a variety of factors, many Medicaid claims are paid even when there is a known responsible third party. Our customers rely on us to identify Medicaid eligibility, before a claim is submitted, and retrospectively, for those claims that were paid in error, and then recover these payments from the liable third party. We

also provide services to assist customers in identifying other third-party insurance and recovering medical expenses where a member is involved in a casualty or tort incident. Lastly, for Medicaid agencies exclusively, we provide estate recovery services to identify and recover Medicaid expenditures from the estates of deceased Medicaid members in accordance with state policies. For the years ended December 31, 2018, 2017 and 2016, our COB services represented 66.4%, 73.4% and 72.2% of our total revenue, respectively.

Analytical services

Analytical services consists of our payment integrity and total population management solutions.

Payment Integrity (PI)

Our PI services ensure healthcare payments are accurate and appropriate. These services are applicable to all customers HMS serves, including federal and state governments, commercial health plans and other at-risk or self-insured entities. Our solutions verify that healthcare services are utilized, billed and paid appropriately. We combine data analytics, clinical expertise and proprietary algorithms and technology to identify and prevent improper payments on submitted claims to optimize savings before a claim is even paid, and on a post-payment basis, to identify and recover overpayments and correct underpayments; detect and prevent fraud, waste and abuse; and identify process improvements. For the years ended December 31, 2018, 2017 and 2016, our PI services represented 24.1%, 20.0% and 27.6% of our total revenue, respectively.

Total Population Management (TPM)

Our TPM services consist of population risk analytics, consumer engagement and care management solutions, which are the result of internal product development and our acquisitions of Essette in 2016 and Eliza in 2017. These solutions help customers better manage quality, cost, compliance and patient outcomes and improve their members' experience. The services span across the care continuum. Our flexible, scalable architecture and modular platform integrates early risk identification, advanced analytics, multi-channel outreach, social engagement and care management components to address our customers' increased focus on consumer engagement, performance management and program design—all key components of an effective population health management program. Our Elli, Eliza and Essette solutions leverage HMS data and advanced analytics to support population risk management, member engagement and care management, respectively, and provide customers with a tailored, integrated platform that addresses core healthcare industry challenges on an enterprise scale. For the years ended December 31, 2018, 2017 and 2016, our TPM services represented 9.5%, 6.6% and 0.2%, of our total revenue, respectively.

Intellectual Property

Our ability to develop and maintain the proprietary aspects of our technology and operate without infringing the proprietary rights of others is important to our business and competitive position. We establish and protect our proprietary technology and intellectual property through a combination of patents, patent applications, trademarks, copyrights, domain names and trade secrets, as well as through contractual rights, including confidentiality, non-disclosure and invention assignment agreements, and other security measures.

As of December 31, 2018, our patent portfolio is comprised of approximately 60 domestic and international patents, and we are currently pursuing several patent applications in the United States and around the world. Our principal trademarks are HMS®, and the corresponding HMS + logo design mark, HMS IntegritySource®, Eliza®, Essette®, and Elli®. We also hold copyrights relating to certain aspects of our solutions and services. While we consider all of our intellectual and proprietary rights important to HMS, we believe our business as a whole is not materially dependent on any particular patent, trademark, license or other intellectual property right.

Customers

We provide our solutions to customers across a broad range of entities within the healthcare industry, including health plans, state agencies, federal programs, private employers and other risk-bearing healthcare organizations. For the years ended December 31, 2018, 2017 and 2016, our total revenue was $598.3 million, $521.2 million and $489.7 million, respectively. No single customer accounted for 10% or more of our total revenue during any period presented.

The composition of our 10 largest customers changes periodically. For the years ended December 31, 2018, 2017 and 2016, our 10 largest customers represented 41.4%, 39.5% and 40.6% of our total revenue, respectively. We provide services under contracts (or subcontracts) that contain various revenue structures, including contingent revenue and to a lesser extent fixed-fee arrangements. The current terms of many of our federal and state government contracts range from one to five years, including renewal terms at the option of the customer. In many instances, we provide our services pursuant to agreements that are subject to periodic reprocurements. Several of our contracts, including those with some of our largest customers, may be terminated for convenience, in whole or in part, by the customer. Because we provide our services pursuant to agreements that are open to competition from various businesses in the U.S. healthcare arena, we cannot provide assurance that our contracts, including those with our largest customers, will not be terminated for convenience or awarded to other parties. Additionally, we cannot provide assurance that any contracts that are renewed will have the same fee structures as the expiring contracts or otherwise be on satisfactory terms. The early termination of key contracts with significant customers, or the inability to renew such contracts on favorable terms or at all, may have an adverse effect on our financial condition, results of operations and cash flows.

In providing solutions and services to our customers, we rely heavily upon our technology systems and networks, as well as on those of third-party providers, to process, transmit, maintain, store and host the confidential, proprietary and sensitive information and data we receive from our customers and other data suppliers, including private insurance plans and financial institutions. The secure processing and maintenance of this information is critical to our operations and business strategy. Although we have spent significant resources to implement security and privacy programs and controls, train our workforce and augment our security measures with the implementation of new technologies and processes, our information technology and infrastructure, and those of third parties on which we rely could continue to be potentially subject to various forms of cyber-attacks, as further discussed under the heading “Part I, Item 1A. Risk Factors.”

Healthcare Landscape

The market for cost containment solutions is large and growing, driven by increasing healthcare costs, rising program enrollment and payment complexities. Established in 1965 under the Social Security Act, Medicaid provides health insurance and long-term care services and support to low-income families and individuals with disabilities in the United States. Medicaid is funded jointly by the federal and state governments and administered by the states. The Balanced Budget Act of 1997 created CHIP to help states expand coverage primarily to children whose families earned too much to qualify for Medicaid, yet not enough to afford private health insurance. Medicare is a federal program that is administered by CMS, and provides eligible persons age 65 and over and some disabled persons with a variety of hospital, medical insurance and prescription drug benefits. All three of these programs have opted to contract with managed care organizations in whole or in part as a means of delivering quality healthcare to program beneficiaries and controlling costs.

By law, Medicaid programs serve as the payer of last resort and all other sources of coverage must pay for medical costs incurred by a Medicaid-eligible individual. The TPL rules of the Medicaid statute require, among other things, that states take reasonable measures to identify potentially liable third parties and process claims accordingly. Since 1985, we have provided state Medicaid agencies with services to identify third parties with primary liability for paying claims for Medicaid members, and since 2005, we have provided similar services to Medicaid managed care plans.

The Deficit Reduction Act enacted by Congress in 2006 contained provisions to strengthen the TPL rules and created the Medicaid Integrity Program under the Social Security Act to increase the government’s capacity to prevent, detect and address fraud, waste and abuse in the Medicaid program. Later that year, Congress passed the Tax Relief and Health Care Act of 2006, which established the Medicare RAC program. These measures, at both the federal and state level, have strengthened our ability to identify and recover erroneous payments on behalf of our customers. We also serve as a Medicaid RAC to certain states pursuant to provisions of the ACA and became the Medicare RAC for Region D with our acquisition of HDI. We again were awarded a region under the new Medicare RAC contracts in October 2016. Following the implementation of the new Medicare RAC contracts and completion of contract closeout activities for RAC Region D, our original Medicare RAC contract expired on January 31, 2018.

The ACA, generally referred to as Obamacare, was signed into law in 2010 and has made broad-based changes to the U.S. healthcare system, including many provisions impacting healthcare delivery and payment programs, such as employer-sponsored health coverage, Medicaid, Health Insurance Exchanges with premium subsidies and payment integrity efforts. The ACA also further expanded the recovery audit contractor program to states. CMS and various states have proposed Medicaid program design alternatives and changes to enrollment criteria which could impact future Medicaid enrollment. As ACA-related changes develop or are enacted, we will assess their potential impact, including opportunities they may present for our customers and for us.

Industry Trends and Opportunities

U.S. healthcare expenditures continue to escalate and consume an increasingly larger proportion of the U.S. GDP, presenting challenges for payers who wish to contain costs and promote quality healthcare outcomes. For 2019, Medicare and Medicaid are projected to pay approximately 37.9% of the nation's healthcare expenditures and serve over 136.3 million beneficiaries. Many of these beneficiaries are enrolled in managed care plans, which have the responsibility for both patient care and claims adjudication. The dual aims of cost containment and quality healthcare outcomes are the same across all at-risk entities, including commercial health plans and government healthcare programs, such as Medicaid and Medicare.

Within the commercial market, health plans sell policies directly to individuals (on the open market or via health insurance exchanges), contract with employers to underwrite their employees' care, or contract with self-insured employers to oversee benefit administration for their employees. This market also includes a growing number of risk bearing provider-sponsored plans that operate and market health plan benefits. According to CMS NHE projections, private health insurance covered approximately 197.5 million individuals at a cost of approximately $1.24 trillion in 2018.

Several commercial health plans also offer government-sponsored lines of business, including partnering with Medicare, Medicaid and CHIP to oversee care delivery for beneficiaries enrolled in those programs. States continue to focus on improving value, quality and outcomes through arrangements with MCOs. At the end of state fiscal year 2018, 47 states and the District of Columbia operated with some form of managed care, and Alaska reported plans to implement a managed care program in 2019. Comprehensive risk-based managed care continues to be the predominant delivery system for Medicaid services in the US. Among the 39 Medicaid programs with comprehensive risk-based MCOs, 33 reported that 75% or more of their Medicaid beneficiaries were enrolled in MCOs as of July 1, 2018. Of the 32 states that had implemented Medicaid expansion pursuant to the ACA, 27 were using MCOs to cover newly eligible adults as of July 1, 2018. Managed care health plans also continue to assume risk for a growing number of Medicare lives. Approximately 34% of all Medicare beneficiaries, or 20 million lives, were enrolled in Medicare Advantage plans in 2018.

HMS continues to serve government agency fee-for-service programs at the state and federal level. These plans are generally reliant on and susceptible to the government appropriations process that determines their budget and governs the number of beneficiaries they serve. According to the CMS NHE projections, Medicare programs in 2018 covered approximately 59 million people at a cost of approximately $748 billion and Medicaid/CHIP covered approximately 81.2 million people, costing approximately $641 billion. Altogether, it is projected that the government programs we serve covered approximately 140.2 million people at a total cost of nearly $1.39 trillion in 2018.

CMS projects that Medicare enrollment growth will increase by 3.03% in 2019, with expenditures to increase by 7.95% in 2019 compared to 2018; and Medicaid/CHIP enrollment growth will increase by 1.97% in 2019, with expenditures to increase by 5.5% in 2019 compared to 2018. As commercial and government health plans focus on strategies to contain costs across their different lines of business, HMS will continue offering solutions to meet their evolving needs.

Competitors

The U.S. healthcare marketplace is a dynamic industry with a range of businesses currently offering cost containment services, both directly or indirectly (through subcontracting), to some or all of the various healthcare payers, providers, employers and consumers. In addition, with improvements in technology and the growth in healthcare spending, new businesses are incentivized to enter this marketplace. Many customers also have the ability to perform some or all of the needed cost containment services themselves and choose to exercise that option to varying degrees. Therefore, competition is robust as customers have many alternatives available to them in their effort to contain healthcare costs.

We compete based on a variety of factors, including our ability to provide a broad range of solutions that span the entire healthcare claims payment and services continuum. These include payment accuracy solutions focused on COB and PI related functions, as well as TPM solutions which support the ability of payers to better understand and engage consumers, perform effective outreach, and impact both costs and health outcomes.

We have a proven record of delivering results that optimize savings and recoveries, enabled by:

- in-depth government and commercial healthcare program experience;
- clinical staff expertise;
- expansive data resources;

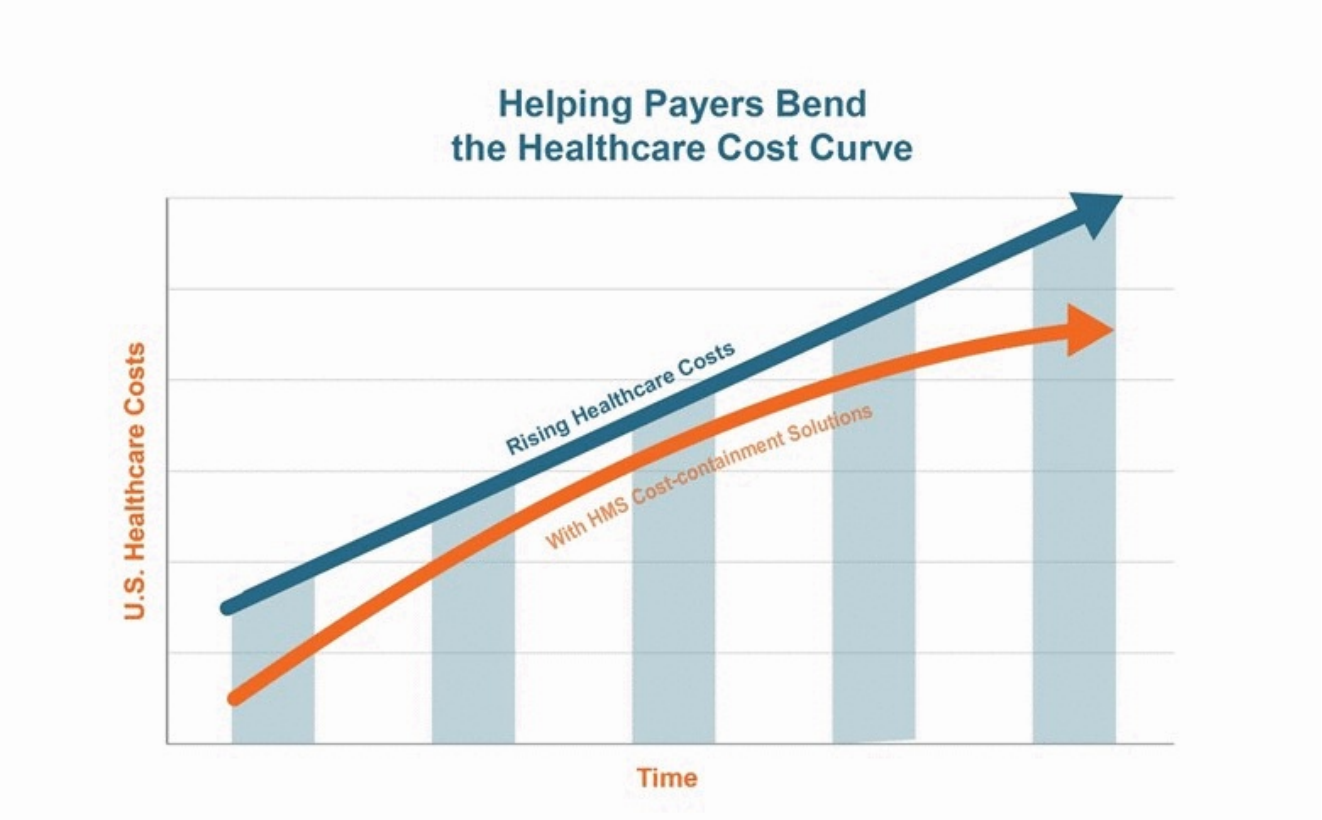
- innovative technology;
- enterprise analytics;
- an extensive insurance eligibility database;
- extensive relationships with customers and other industry stakeholders; and
- an ability to provide customers with actionable intelligence to improve clinical outcomes, optimize patient engagement, and better manage costs.

Our competitors range in size from large, diversified national companies, to small, specialized firms. Some of these competitors have significantly greater financial and technical resources, and others have longer operating histories and greater name recognition than we do in certain markets. Within our payment accuracy portfolio of products and services, we compete primarily with large business outsourcing and technology firms, claims processors and PBMs, clearinghouses, healthcare consulting firms, and other vendors who provide some or all of these solutions to payers. In addition, we frequently work with customers who may elect to perform some or all of their cost avoidance and recovery functions in-house. Within the population health management sector, we compete primarily with vendors who provide care management, consumer engagement, and related technology services. Companies with whom we compete across our offerings include:

- Accenture plc
- Cotiviti Corporation
- EXL Service Holdings, Inc.
- LexisNexis
- Performant Financial Corporation
- CaseNet LLC
- DXC Technology Company
- Experian Health
- MedHok, Inc.
- Welltok, Inc.
- Change Healthcare
- Equian, LLC
- IBM Watson Health
- Optum (subsidiary of UnitedHealthGroup)
- ZeOmega LLC

Business Strategy

We believe that the steadily increasing enrollment and rising expenditures for Medicare and Medicaid, with most new enrollees entering managed care plans; an aging U.S. population with an increasing concentration of individuals with high cost chronic conditions and often co-morbidities; and the overall complexity of the healthcare claims payment system in the U.S. all combine to create substantial growth opportunities for the suite of cost containment solutions we offer.



We also believe these factors present growth opportunities for our TPM services. We are focused on growing our business over the course of 2019 and beyond, both organically and inorganically, by leveraging existing key assets (e.g., our data, analytics, in-house expertise, and distribution channel) and pursuing a number of strategic objectives or initiatives, including:

- *Expanding the scope of our relationship with existing customers* – by selling additional solutions and services, including those designed to improve member engagement and improve clinical outcomes.
- *Adding new customers* – by marketing to commercial health plans, including Medicaid managed care and Medicare Advantage plans, at-risk group and individual health lines of business and ASOs; government healthcare payers, including Medicaid agencies, state employee health benefit plans and CHIPs; at-risk provider organizations and ACOs; and commercial self-insured employers.
- *Introducing new innovative solutions and services* – through internal development initiatives designed to enhance or expand our existing suite of cost containment solutions.
- *Utilizing technology tools to leverage a big data environment* – to create a more nimble operating environment, create operating efficiencies, improve the yield on our existing solution suite and identify new revenue opportunities within our current service delivery models.
- *Promoting automation and innovation to improve the efficiency and effectiveness of our services* – by continuing to implement new technology and process improvements designed to increase recovery yields, increase customer satisfaction and achieve greater operating efficiencies.
- *Prudent deployment of capital* – by investing in internal growth initiatives; selectively investing in capabilities, technologies, and assets to complement our core cost-containment expertise; building care management and care coordination adjacencies to complement the Essette and Eliza acquisitions and our internally developed Elli risk intelligence product; and expanding our data analytics capabilities. Our focus may include acquisitions that represent long-term growth potential, target high-growth areas, are accretive to earnings, enhance our technological capabilities and fill a strategic need in our business portfolio as we seek to provide increasingly comprehensive solutions to our customers. We may also repurchase our shares, pursuant to a two-year $50 million authority granted by our Board of Directors in November 2017, which has a remaining unused authority of approximately $29.9 million.

Item 1A. Risk Factors

Our business is subject to significant risks, including the risks and uncertainties described below. You should carefully consider these risks, as well as the other information in this 2018 Form 10-K, including our Consolidated Financial Statements and the related Notes. The occurrence of any of these risks could adversely affect our business, financial condition, results of operations, and cash flows in a material way.

Risks Relating to Our Company

Our ability to expand our business will be adversely affected if we fail to implement our growth strategy.

The size and scope of our business operations have expanded over the past several years, and we currently intend to continue our growth and expansion into new healthcare areas and markets, however, our growth and expansion strategy carries costs and risks that, if not properly managed, could adversely affect our business. Our future growth will depend on, among other things, our ability to successfully execute our business plans, which includes penetrating new markets, broadening and deepening our customer relationships, identifying and executing future acquisitions and strategic partnerships, and increasing the speed and scale at which we deliver our services, all while remaining competitive. We must also be flexible and responsive to customers' needs and changes in the political, economic and regulatory environment in which we operate. The greater size and complexity of our expanding business may put additional strain on our administrative, operational and financial resources and can make optimal resource allocation more difficult to determine. It is possible that we may not be able to maintain or accelerate our growth. A failure to anticipate or properly address the demands and challenges that our growth strategy and potential diversification may have on our resources and existing infrastructure may result in unanticipated costs and inefficiencies that could negatively impact our ability to execute on our business plans and growth goals, which may have a material adverse effect on our business, financial condition, results of operations and cash flows.

If we fail to innovate and develop new or enhanced solutions and services, or if these solutions and services are not adopted by our customers, it could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Part of our growth strategy depends on our ability to respond to the evolving healthcare landscape with new and enhanced solutions and services that our existing and potential customers are willing to adopt. The development, marketing and implementation of these solutions and services may require that we make substantial financial and resource investments. We face risks that our new or modified solutions and services may not be responsive to customer preferences or industry changes, and that the solution and service development initiatives that we prioritize may not yield the gains that we anticipate, if any. If we are unable to predict market preferences or healthcare industry changes, or if we are unable to develop or adapt solutions and services that are responsive to existing and potential customers' needs, we may fail to expand our business, which could constrain our future revenue growth and materially adversely affect our business, financial condition, results of operations and cash flows.

Our acquisition strategy may subject us to considerable business and financial risk.

Historically, to achieve our strategic goals, we have made a significant number of acquisitions that have expanded the solutions and services we offer, provided a presence in complementary business lines, or expanded our geographic presence and/or customer base. We intend to pursue future acquisitions that will continue to expand and complement our business and to periodically engage in discussions regarding such possible acquisitions. We are subject to risks and uncertainties relating to our ability to identify suitable potential acquisition candidates, to consummate additional acquisitions that will be advantageous to us, and to successfully integrate future acquisitions. Future and potential business acquisitions involve a number of risk factors that could affect our operations, including, but not limited to:

- diversion of management's attention and other resources;
- our ability to successfully and timely integrate operational, accounting and technology functions, policies, processes, systems and controls, and to implement these functions, policies, processes, systems and controls, without incurring substantial expenses, delays, difficulties or other issues;
- our ability to integrate personnel and human resource systems as well as the cultures of the acquired business;
- our ability to retain or replace the key personnel of the acquired business;
- our ability to maintain relationships with the customers of the acquired business;
- our ability to expand and further develop the acquired business;
- our ability to cross-sell our solutions and the solutions of the acquired business to our respective customers;
- customer dissatisfaction or performance problems with the acquired business;
- our ability to comply with regulatory requirements and avoid potential conflicts of interest in markets that we serve;
- the misuse of intellectual property by the personnel of the acquired business;
- our ability to successfully enter into unfamiliar markets or manage new business lines;
- assumption of unanticipated legal or financial liabilities and/or negative publicity related to prior acts by the acquired business;
- we may become subject to litigation or other claims in connection with the acquired business, including claims from terminated employees, customers, former shareholders or third parties;
- we may become significantly leveraged as a result of incurring debt to finance an acquisition;
- the acquired business may not perform as projected which could negatively impact earnings or contingent consideration;
- we may suffer impairment of goodwill and other acquired intangible assets; and
- we may suffer dilution to our earnings per share.

If we fail to adequately address these risks, or to successfully integrate the businesses that we acquire, we may not realize cost efficiencies, synergies or other benefits that we anticipated when selecting our acquisition candidates, and our reputation, business, financial condition, results of operations and cash flows could be materially adversely affected.

We face significant competition for our solutions and services and we expect competition to increase, which could materially adversely affect our business, financial condition, results of operations and cash flows.

The market for healthcare cost containment solutions is intensely competitive, driven by rapidly changing technologies, evolving industry standards and customer demands to become more efficient. Our competitors range in size from large, diversified national companies (some of which have emerged as a result of industry consolidation), to small, specialized firms. Some of our competitors may include current or former subcontractors or teaming partners seeking to establish direct relationships with our customers and provide similar services as the prime contractor, as well as current and prospective customers that elect to perform recovery and cost avoidance functions in-house or to develop in-house capacities for solutions and services that we provide or seek to provide. Consolidation among vendors and healthcare providers, as well as the merging of some of our competitors or formation of business alliances with other competitors, have contributed to the increasingly competitive environment. For example, certain state customers have combined or "bundled" TPL services under large-scale IT procurements, as they shift to implementing modular Medicaid Enterprise Systems. As part of this modular approach, they may select a new or less experienced vendor to provide the TPL module based on preferred relationships or favorable pricing. In addition, companies that have invested in proprietary technology different from our own service offerings, such as front-end analytics, have emerged as new competitors due to the rapidly evolving healthcare landscape. There is also increasing sophistication in the solutions and services that our competitors are developing that may become more efficient or appealing to our customers. In order to remain competitive, we may need to quickly develop and market new and enhanced solutions and services responsive to emerging technologies and changes in the healthcare industry, which may require that we make substantial financial and resource investments.

We may not be able to compete successfully against our existing or future competitors. Some of these competitors have significantly greater financial and technical resources, and others have longer operating histories and greater name recognition than we do in certain markets. They may be able to (i) offer lower prices or negotiate fee reductions on our current solutions and services, (ii) respond more quickly than we can to new and emerging technologies and changing customer requirements, (iii) devote greater resources to the sale of their products and the development and implementation of new and improved systems, solutions and services for customers that we serve, and (iv) pursue various acquisitions that allow them to rapidly amass a wide array of capabilities. We may be forced to lower our pricing, unexpectedly increase or enhance our technological or data capabilities, or modify our solution or service offerings. Notwithstanding any changes we make in response to increased competition, the demand for our solutions and services may decrease as a result of increased competition. A failure to be responsive to our existing and potential customers' needs or the changing industry landscape could hinder our ability to maintain or expand our customer base, hire and retain new employees, pursue new business opportunities, complete future acquisitions and operate our business effectively. Any inability to compete effectively could materially adversely affect our business, financial condition, results of operations and cash flows.

You will not be able to rely on our operating results in any particular period as an indication of our future performance because they are subject to significant fluctuation which may cause the market price of our common stock to decrease significantly.

Our revenue and operating results may fail to match our past or projected performance and could vary significantly from period-to-period as a result of a number of factors, some of which are outside of our control. We have experienced fluctuations in our revenue and operating results in the past and they may vary in the future for reasons that include, but are not limited to:

- fluctuations in sales activity given our sales cycle;
- the length of contract and implementation periods;
- the commencement, completion or termination of contracts during any particular quarter;
- contract costs and expenses, which may be incurred in periods prior to revenue being recognized;
- the timing of period revenue recovery projects and third party payers' claim adjudication;
- the billing and budgeting cycles of our customers;
- the timing of government procurement activities, including when contract awards are announced and the time required to resolve bid protests;
- contract renewal discussions, which may result in delayed payments for services already performed;
- changes in the pricing structure or other significant terms in our contract, or the scope of services we perform;
- technological and operational issues affecting our customers, including delays in payment receipt for previously recognized revenue due to certain customers delayed processing of our findings through their systems, and restrictions on our ability to use or access certain data or a lack of integrity or quality in the data or information we receive from certain data sources;
- adjustments to age/quality of receivables and accruals as a result of factors such as delays involving contract limitations or changes, subcontractor performance deficiencies or managerial decisions not to pursue identified claim revenue from customers;
- the impact of service disruptions or delays in the systems or operations of subcontractors, partners, vendors and other third party providers on which we rely on to deliver a single-source solution or service to our customers;
- changes in applicable laws;

- changes in accounting policies or guidelines concerning the timing of recognition of revenue; and
- regulatory changes or general economic conditions as they affect healthcare providers and payers.

We cannot predict the extent to which future variations could occur due to these or other factors. In addition, occasionally our state and federal customers are requested by third party payers to refund payments that we previously recovered for our customers. If our state and federal customers choose to refund money in response to these requests, regardless of whether an error actually occurred in connection with the payments, we may also be required to return contingent revenue which we were previously paid associated with such refunded payment. Consequently, our operating results are subject to significant fluctuation for any particular quarter, fiscal year, or other period, and may not be indicative of future periods. Our business is also subject to seasonal patterns resulting from increased efforts at year-end by certain customers to generate additional savings, complete compliance obligations and close gaps in care. However, taken as a whole, we do not consider our operations to be seasonal to any material degree. Due to all of these factors, our revenue and operating results are difficult to predict and are subject to significant fluctuation, which may cause the market price of our common stock to decrease significantly.

We face challenges associated with forecasting the revenue under our contracts, and any failure to accurately forecast such revenue could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may not be able to accurately estimate the factors upon which we base our contract pricing, or the costs and timing for implementing and completing our contracts. For a majority of our customer contracts, the payment of our fee is contingent upon the recoveries received by our customers. We also have cost-plus or time-and-materials based contracts with the federal government where our revenue is recognized based on costs incurred plus an estimate of the negotiated fee earned. Our ability to earn a profit on these contracts requires that we accurately estimate the costs involved with these contracts and assess the probability of achieving certain outcomes or milestones within the contracted time period. In addition, we cannot predict with certainty the costs or the period in which implementation or contracts may be completed when we introduce new solutions into the marketplace. For our coordination of benefits and payment integrity services, we may face a long implementation period with a new customer or a new contract with an existing customer, making it difficult to reliably forecast revenue under those contracts. If we do not accurately estimate the costs and timing for completing projects, or if we encounter increased or unexpected costs, delays, failures, liabilities or risks, including those outside of our control, our contracts could prove unprofitable for us or yield lower profit margins than anticipated. Although we believe that we have recorded adequate provisions in our financial statements for losses on our fixed price and cost-plus contracts where applicable, as required under U.S. GAAP, our contract loss provisions may not be adequate to cover all actual future losses.

System interruptions or failures could expose us to liability and harm our business.

Our data and operation centers are essential to our business and our operations depend on our ability to maintain and protect our information systems. We attempt to mitigate the potential adverse effects of a disruption, relocation or change in operating environment; however, the situations we plan for and the amount of insurance coverage that we maintain may not be adequate in every case. Despite systems redundancy and security measures, our systems and operations are vulnerable to damage or interruption from, among other sources:

- power loss, transmission cable cuts and telecommunications failures;
- fire, flood, earthquake and other natural disasters;
- hardware failures or software defects;
- operator error;
- cyber security breaches; and
- physical break-ins, sabotage, intentional acts of vandalism, terrorist attacks and other events beyond our control.

In addition, while there are backup systems in many of our facilities, an extended outage of utility or network services supplied by third party IT vendors may delay or disrupt the delivery or performance of the services we provide for our customers. We also utilize third-party cloud service providers to help us efficiently scale certain cloud-based solutions. If we or our cloud service providers encounter a lengthy business interruption, or in the event our business continuity plans and business interruption insurance coverage are not adequate or fail to compensate us on a timely basis, we could suffer operational disruptions, disputes with customers, civil or criminal penalties, regulatory problems, increases in administrative expenses, loss of our ability to produce timely and accurate financial and other reports, damage to our reputation or customer relationships or other adverse consequences, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our systems and networks and those of third parties on which we rely may be subject to cyber security breaches and other disruptions that could compromise our information and harm our business.

In the ordinary course of our business, we rely heavily upon our technology systems and networks, as well as on those of third-party providers, to process, transmit, maintain, store and host the confidential, proprietary and sensitive information and data we receive from our customers and other data suppliers, including private insurance plans and financial institutions. In addition, subcontractors, teaming partners or other third-party vendors may receive or utilize this information on our behalf in support of the services we perform for our customers. The secure processing and maintenance of this information is critical to our operations and business strategy. Although we have spent significant resources to implement security and privacy programs and controls, train our workforce and augment our security measures with the implementation of new technologies and processes, our information technology and infrastructure, and those of third parties on which we rely, could continue to be subject to computer hacking or phishing efforts, acts of vandalism or theft, introduction of malware, computer viruses or other malicious codes, employee error or malfeasance issues, catastrophes, unforeseen events or other cyber-attacks. We may be unable to implement adequate preventive measures to protect against such compromises in the future or to effectively adapt our security measures to evolving security risks. As a result, our technology systems, including our data and our customers' data, could be accessed improperly, made unavailable, improperly modified, corrupted or otherwise breached or compromised, or we could suffer system disruptions, shutdowns and denials of service. Similarly, we could be materially adversely affected by the loss of proprietary, trade secret or confidential technical and financial data if our internal networks are compromised. The occurrence of any of these events could harm the market perception of the effectiveness of our security measures, lead to reputational damage or the loss of our customers' confidence in our solutions, negatively affect our ability to attract new customers, cause existing customers to terminate or not renew their existing contracts with us, or deter them from using our solutions or services in the future, all of which could reduce our revenue, increase our expenses and expose us to potential liability under privacy, security or other applicable laws and regulations. We could also be forced to expend significant resources in response to a security breach, including investigating the cause of the breach, repairing system damage, remediating vulnerabilities in our security procedures, increasing cyber security protection costs by deploying additional personnel and protection technologies, paying regulatory fines and penalties imposed by government regulatory agencies, and damages and other substantial costs associated with litigation, indemnification obligations as well as increased cybersecurity insurance premiums, and undertaking additional remediation efforts such as credit monitoring, all of which could increase our expenses, divert the attention of our management and key personnel away from our business operations and materially adversely affect our business, financial condition, results of operations and cash flows.

Any failure to maintain effective information processing systems and the integrity of the data in, and operations of, those systems could materially adversely affect our business, financial condition, results of operations and cash flows.

Our ability to conduct our operations and accurately report our financial results depends on the integrity of the data in our information systems and the processes performed by those systems. As a result of the services we provide, we process a number of complex transactions that require us to access, store, retrieve, manipulate, manage and transmit the information and data of our customers' and external third parties, as well as our own data. Although we have invested a great deal of time and resources in developing systems, processes and controls that protect the integrity of the data, such measures cannot provide absolute security. It is possible that failures or errors in hardware and software, including those in third-party technology, or technical deficiencies in our systems could result in data loss or corruption, or cause the data that we collect, utilize or disseminate to be incomplete or contain inaccuracies that our customers regard as significant. In addition, these information systems and applications require continual maintenance, upgrading and enhancement to meet our operational needs, satisfy customer requests and handle our expansion and growth. Despite our testing and quality control measures, we cannot be certain that errors or system deficiencies will be found and that remediation can be done in a timeframe that is acceptable to our customers, or that customer relationships will not be impaired by the occurrence of errors or the need for remediation. In addition, implementation of upgrades and enhancements may cost more, take longer or require more testing than originally expected. Situations may also arise in which the accuracy of our data analysis or the content and quality of our work product is central to the disposition of claims, controversies or litigation between our customers and third parties that would require us to allocate significant resources to fulfilling our contractual obligations to provide our customers with full and complete access to records, analysis and back-up documentation of our work. Assuring our capacity to fulfill these obligations as well as actually fulfilling them could impose significant burdens on our infrastructure for data storage, maintenance and processing, and require us to incur increased costs to supplement our personnel, data storage and computing resources, which could materially and negatively impact other business operations.

If we are unable to protect our proprietary technology, information, processes, know-how, and other intellectual property and intellectual property rights, or become subject to claims of infringing or misappropriating the intellectual property of third parties, the value of our solutions and services may be diminished and our business may be materially adversely affected.

Our success as a company depends in part upon our ability to protect our core technology and intellectual property. Our expanding operations and efforts to develop new solutions and services also make protection of our intellectual property more critical. We seek to protect our intellectual property and other proprietary information through a combination of patent, trademark, copyright, trade secret and unfair competition laws, confidentiality agreements and invention assignment agreements with employees, consultants and other third parties, as well as through the terms of our agreements with customers and vendors, and other security measures. However, the steps we have taken to deter misappropriation of intellectual property may be insufficient to protect our proprietary information. We may not always be successful at obtaining government registrations for our patents, trademarks, or copyrights that we seek to register. Third parties may also attempt to misuse our company name or trademarks to engage in improper or illegal conduct such as cyber-squatting or other cybercrimes using our marks, and we may not always be successful at quickly obtaining relief from agencies tasked with enforcing parties' rights, or stopping such conduct before harm to third parties occurs. Similarly, misappropriation of our other intellectual property by third parties, or any disclosure or dissemination of our confidential and proprietary trade secrets, business intelligence, queries, algorithms and other similar information by any means, could undermine any competitive advantage we currently derive or may derive from that intellectual property. For example, our current or former employees, consultants or other third parties may unintentionally or willfully disclose our trade secrets, know-how or other confidential and proprietary information to competitors. Competitors have also attempted to use state and/or federal open records laws (such as the federal Freedom of Information Act and analogous state laws) to obtain our proposal responses and other documents we provide to our government customers. We cannot be certain that our efforts to protect the confidential and proprietary trade secret information or intellectual property in these proposals or other documents will always be successful, due to the many factors underlying the various state and federal decisions to release information in response to open records requests (even in spite of our objections and efforts to protect such information). In addition, there remains the possibility that others will independently develop competing technologies that may be equivalent or superior to ours. If our efforts to protect our intellectual property and other proprietary rights are inadequate to prevent unauthorized use or appropriation by third parties or our employees, the value of our brand and other intangible assets may be diminished and others may be able to more effectively compete with our business by offering solutions or concepts that are substantially similar to ours, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

In addition, third parties may claim that we are infringing upon or misappropriating their intellectual property, or assert other legal challenges to our intellectual property. Our exposure to risks related to the use of intellectual property may also increase as a result of acquisitions because third parties may make infringement and similar or related claims after we have acquired technology. Any of these situations could cause us to expend significant time and resources and to incur substantial costs associated with litigation or legal proceedings that may be necessary to defend ourselves or to enforce our intellectual property rights, in which we may not ultimately prevail, and could result in our being prevented from furnishing certain solutions and services.

Our business could be materially adversely affected if we fail to maintain a high level of customer retention, if our customers elect to reduce the scope of our contracts or terminate them before their scheduled expiration dates or if we fail to meet performance standards under our customer contracts.

We historically have derived and expect to continue to generate a significant portion of our revenue from a limited number of large customers at the federal and state level. Our contracts with these customers are subject to periodic renewal and some permit them to terminate their contracts on short notice, with or without cause. If a customer is dissatisfied with the quality of our work or if we fail to meet performance standards under our contracts, or if our solutions, technical infrastructure or services do not comply with the provisions of our contractual agreements or applicable regulatory requirements, customers might seek to reduce the scope of the services we perform or prematurely terminate their agreements with us, or we could incur additional costs that may impair the profitability of a contract and damage our ability to obtain additional work from that customer, or other current or prospective customers. For example, some of our contracts contain liquidated damages provisions and financial penalties related to performance failures, which if triggered, could materially adversely affect our reputation, business, financial condition, results of operations and cash flows. We also may be required to disclose such liquidated damages or other financial penalties assessed against us in connection with future bids for services with other customers.

In addition, government customers are subject to financial pressures or pressure from stakeholders that may cause them to terminate contracts for our services that may be regarded as non-essential or to redefine or reduce the scope of our contracts by, for example, significantly reducing the volume of data that we are permitted to audit or renewing the contract at lower performance fee levels. Despite our right to prompt and full payment under the terms of our contracts, we could face challenges in obtaining timely or full payments for our properly provided services from our customers. If there is a substantial reduction in the scope of our services under, or a termination of, any of our key contracts with our major customers, or if we are exposed to significant costs, liabilities or negative publicity, our ability to compete for new contracts with current or prospective customer could be damaged and our business, financial condition, reputation, results of operations and cash flows could be materially adversely affected.

We depend on many different entities to supply information and an inability to successfully manage our relationships with a number of these suppliers may harm the quality and availability of our solutions and services.

We obtain the data used in our solutions and services from many sources, including commercial health insurance plans, financial institutions, managed care organizations, government entities and non-government entities. From time to time, challenges arise in managing and maintaining our relationships with data sources that are not our customers and that furnish information to us pursuant to a combination of voluntary cooperation and legal obligations under laws and regulations that are often subject to differing interpretations. If a number of our information sources become unable or unwilling to provide us with certain data under terms and conditions of receipt, processing or use that are acceptable to us and our customers, or if laws and regulations for use and protection of this data changes in a way that disincentivizes our suppliers, or imposes unacceptable or unreasonable conditions, costs, or risks on us, we may not be able to obtain new or favorable agreements with alternative data suppliers. In addition, our ability to normalize and fully utilize the information we receive from various data sources to enhance and improve current services for our customers is an important component of our growth strategy. Although we believe that we have the legal and contractual rights necessary to normalize and use the data we have obtained from these sources for potential or contemplated solution and service offerings, we cannot provide assurance that these entities will permit the use of their data for these purposes. If we lose a number of our data sources or our access to their data, and fail to identify and reach the requisite agreements with suitable alternative suppliers or to successfully integrate their data into our solutions and services, or if there is a lack of accuracy or integrity in the data that current or future suppliers provide, we could experience service disruptions, increased costs, reduced quality of our solutions and services, or performance penalties under our customer contracts, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may rely on subcontractors and other third party providers to provide customers with a single-source solution or service or we may serve as a subcontractor to a third party prime contractor. If these parties fail to satisfy their obligations to us or if we are unable to maintain these relationships, our business, financial condition, results of operations and cash flows could be materially adversely affected.

In some areas of our business we may engage subcontractors, teaming partners, vendors or other third party providers to provide our customers with a single-source solution for a broader range of service needs. These third parties include software vendors, utility and network providers, cloud service providers and other information technology service providers and solution partners. Our ability to deliver and implement solutions and serve our customers effectively depends on these third parties meeting our service standards in both timeliness and quality, and in certain instances, on our ability to obtain customer approval for the use of these third party subcontractors. While we believe that we perform appropriate due diligence on these third parties and take adequate measures to ensure that they comply with the appropriate laws and regulations, we cannot guarantee that they will comply with the terms set forth in their agreements with us. Performance deficiencies or misconduct by subcontractors, teaming partners, vendors or other third party providers may be perceived as inadequacies in our solutions or services or cause us to fail to fulfill our contractual obligations to our customers, which could materially adversely affect our customer relationships and reputation, result in termination of a customer contract, and subject us to a dispute with our customer. In addition, if our third party service providers terminate or refuse to renew their relationships with us or offer their products to us in the future on less advantageous terms, we may not be able to perform or deliver solutions or services for existing customers as expected.

Similarly, we are and may in the future be engaged as a subcontractor to a third party prime contractor. Subcontracting arrangements where we are not the prime contractor pose unique risks to us because we do not have control over the customer relationship, and our ability to generate revenue under such subcontracts is dependent on the prime contractor, its performance and relationship with the customer, and its relationship with us. We cannot be certain that the prime contractor will provide adequate and timely services to the customer, comply with the terms of its prime contract with the customer or its subcontract agreement with us, or that it will construe its contractual rights and obligations in a reasonable way, act appropriately in dealing with us or customers, and remain in compliance with the relevant laws, rules or regulations. Any failure of the prime contractor to adequately perform its obligations under the prime contractor to comply with applicable laws, rules and regulations could materially adversely affect our reputation and subject us to a dispute with the prime contractor or the customer. In the event a prime contract is terminated, whether for non-performance by the prime contractor or otherwise, our subcontract will similarly terminate, and the resulting contract loss could materially adversely affect our business, financial condition, results of operations and cash flows.

We obtain a portion of our business through competitive bidding in response to government requests for proposals. Reprocurements and future contracts may not be awarded through this process on the same level or our contract awards may be challenged by interested parties which could materially adversely affect our business, financial condition, results of operations and cash flows.

In order to market our solutions and compete for contracts with existing and potential state and federal customers, we are often required to respond to government-issued RFPs. These responses typically require us to assemble and submit a large volume of information within a rigid timetable, and to accurately estimate our cost structure for servicing the proposed contract, the time required to establish operations and the likely terms of proposals submitted by our competitors. We may also be required to disclose the occurrence of certain negative events suffered by our business, such as customer disputes, a government inquiry or an adverse judgment or settlement in litigation or a legal proceeding, which could impair our ability to win the contract at issue or have a material adverse effect on our reputation in the industry.

Even if we win these contracts, we may fail to secure favorable contract terms and conditions, or a government's determination to award us the contract may be challenged by an interested party. Under the state and federal laws and regulations governing procurements of goods and services, challenges and award protests may be filed even if there are no valid legal grounds on which to base the protest. The filing of such challenges could potentially delay the start or implementation of the contract if the government agency determines to withhold a contract award or suspend contract performance while the protest is being considered, or to take corrective action on its own, such as soliciting new bids or terminating the contract award or current procurement. In the event of irregularities, we perceive or learn of in the award or bidding process, we also may be forced to file protests in response to RFP awards to other bidders. Resolution of a protest, even in our favor, could force us to expend considerable funds in disputing the potential award or to incur additional expenses to maintain our ability to timely start implementation, which may cause our actual results to differ materially and adversely from those anticipated. In addition, if we are unable to win reprocurements or protests of particular contracts, we may be precluded from entering certain customer markets for the term of the contract awarded to another party. Any failure to continue to obtain contracts in response to government RFPs, to design proposals that result in profitable contracts, to win new contracts or re-procure current contracts after they expire or to prevail in protests or challenges of contract awards could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Adverse judgments or settlements in legal proceedings could materially harm our business, financial condition, operating results and cash flows.

We are subject and may be a party to legal proceedings and claims that arise from time to time in the ordinary course of our business, which may include, but are not limited to, those related to, claims brought by our customers in connection with billing and contractual disputes, subcontracts and teaming agreements, protection of confidential information or trade secrets, claims relating to pending, terminated or completed acquisitions or dispositions, adversary proceedings arising from customer bankruptcies, employment of our workforce and immigration requirements or compliance with any of a wide array of state and federal statutes, rules and regulations that pertain to different aspects of our business. We may also be required to initiate expensive litigation or other proceedings to protect our business interests. There is a risk that we will not be successful or otherwise be able to satisfactorily resolve any pending or future litigation. In addition, litigation and other legal claims are subject to inherent uncertainties and management's view of currently pending legal matters may change in the future. Those uncertainties include, but are not limited to, litigation costs and attorneys' fees, unpredictable judicial or jury decisions and the differing laws and judicial proclivities regarding damage awards among the states in which we operate. Resolution may also require that HMS accept some amount of loss or liability in order to avoid customer abrasion, negative marketplace perceptions and other disadvantageous results. Unexpected outcomes in such legal proceedings, or changes in management's evaluation or predictions of the likely outcomes of such proceedings (possibly resulting in changes in established reserves), could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may not be able to deliver our solutions and perform services efficiently if we are unable to attract and retain qualified employees.

Our successful delivery of solutions and services and ability to maintain our productivity and profitability is dependent on our ability to identify, recruit, employ, train and retain skilled personnel. The success of recruitment and retention strategies depend on a number of factors, including the competitive demands for employees having the skills we need and the level of compensation required to hire and retain such employees. Customers or competitors may seek to hire away qualified and seasoned employees, which could reduce our ability to innovate and operate effectively. We may not be able to recruit or maintain the personnel necessary to efficiently operate and support our business in the future, and even if our recruitment and retention strategies are successful, our labor costs may increase significantly. Our inability to hire sufficient personnel on a timely basis without significantly increasing our labor costs could materially adversely affect our business, financial condition, results of operations and cash flows.

Our future success depends, in part, on the continued service of members of our management team.

Our ability to execute on our business plans and future success requires that we attract, develop, motivate and retain experienced and innovative executive officers and senior leaders who have successfully managed, designed, implemented and led government services programs or information technology initiatives, or have relevant experience in other healthcare sectors, including data management and analytics. These individuals are in great demand and are likely to remain a limited resource in our industry. The loss of services of one or more members of our management team could adversely affect our business, financial condition, results of operations and cash flows. In addition, to the extent we lose an executive officer or senior leader, we may incur increased expenses in connection with the hiring, promotion or replacement of these individuals and the transition of leadership and critical knowledge.

Our outstanding indebtedness could materially adversely affect our financial condition and our ability to operate our business, and we may not be able to generate sufficient cash flows to meet our debt service obligations or capital requirements.

As of December 31, 2018, the outstanding principal balance under our Credit Agreement was $240.0 million. Our Credit Agreement provides for a senior secured revolving credit facility in an aggregate principal amount equal to $500 million and is secured, subject to certain customary carve-outs and exceptions, by a first priority lien and security interest in substantially all of our tangible and intangible assets. Our outstanding indebtedness and any additional indebtedness we incur may have important consequences for us, including, without limitation, that:

- we may be required to use a substantial portion of our cash flow to pay the principal of and interest on our indebtedness;
- our indebtedness and leverage may increase our vulnerability to adverse changes in general economic and industry conditions, as well as to competitive pressures;
- our indebtedness may expose us to the risk of increased interest rates because certain of our borrowings are and will be at variable interest rates;
- our ability to obtain additional financing for working capital, capital expenditures, acquisitions and for general corporate and other purposes may be limited;
- our indebtedness and leverage may prevent us from taking advantage of business opportunities as they arise or successfully carrying out our plans to expand our business; and
- our flexibility in planning for, or reacting to, changes in our business and our industry may be limited.

Under the Credit Agreement, we are also required to comply with specified financial and operating covenants, which may limit our ability to operate our business as we otherwise might operate it. The Credit Agreement also contains (i) certain affirmative covenants that impose certain reporting and/or performance obligations on us and our restricted subsidiaries, (ii) certain negative covenants that generally limit, subject to various exceptions, us and our restricted subsidiaries from taking certain actions, including, without limitation, incurring indebtedness, creating liens, engaging in mergers and consolidations, disposing of certain assets or property, making certain investments and acquisitions, entering into certain transactions with affiliates, swap agreements or sale-leasebacks, making certain restricted payments, including dividends and share repurchases, changing our fiscal year or the lines of business that we or our restricted subsidiaries conduct to a material extent, and prepaying certain junior indebtedness, (iii) financial covenants consisting of a maximum consolidated leverage ratio and a minimum interest coverage ratio, and (iv) customary events of default for financings of this type.

Our obligations under the Credit Agreement may be declared due and payable upon the occurrence and during the continuance of an event of default, which includes, without limitation: non-payment of principal or reimbursement obligation when due; non-payment of interest, fees and other amounts for a period of five business days after the due date; material inaccuracies of representations and warranties; failure to perform or observe covenants, conditions or agreements (subject to any applicable grace periods); cross-defaults to certain indebtedness; inability to pay debts; certain acts of bankruptcy or insolvency; certain ERISA events; failure to pay certain material judgments; and a change of control as defined in the Credit Agreement. If not cured, an event of default could result in any amounts outstanding, including any accrued interest and unpaid fees, becoming immediately due and payable, and would give our lenders the right to proceed against the collateral granted to them to secure the debt, which would require us to, among other things, seek additional financing in the debt or equity markets, refinance or restructure all

or a portion of our indebtedness, sell selected assets, and/or reduce or delay planned capital or operating expenditures. Such measures might not be sufficient to enable us to service our debt, and any such financing or refinancing might not be available on economically favorable terms or at all. Our ability to make payments of principal and interest on our outstanding credit facility depends upon our future performance and our ability to generate cash flows. If we are unable to generate sufficient cash flows to meet our debt service obligations or are forced to take additional measures to be able to service our indebtedness, our business, financial condition and results of operations could be materially and adversely affected.

Changes in, or interpretations of, tax rules and regulations may materially adversely affect our effective tax rates.

We are a United States-based company subject to various federal, state, U.S. Territory and local tax laws and regulations in multiple U.S. jurisdictions that govern numerous aspects of our business. As we expand our business, we may perform services for new customers located outside of the United States or in a U.S. Territory, which may subject us to foreign tax laws and regulations that could increase our exposure to additional tax liabilities. Our future effective tax rates could be materially affected by various factors, including changes in tax rates of jurisdictions in which we do business, changes in relevant tax and accounting rules, regulations and interpretations, increases in expenses not deductible for tax purposes, including impairments of goodwill, and changes in the valuation of our deferred tax assets and liabilities. For example, in December 2017, Congress enacted the 2017 Tax Act which, among other things, reduced the U.S. corporate tax rate, modified limitations on certain deductions for executive compensation, placed new limitations on interest deductions, repealed the Section 199 Deduction and certain capital investment deductions, and shifted U.S. taxation of multinational corporations from a tax on worldwide income to a territorial system. Any unanticipated changes in our tax rates could affect our future results of operations.

In addition, we are subject to the continual examination of our income tax returns by the IRS and other tax authorities. We regularly assess the likelihood of outcomes resulting from these examinations to determine the adequacy of our provision for income taxes and have reserved for potential adjustments that may result. The final determination of any of these examinations could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our health insurance coverage and self-insurance reserves may not cover future claims, which could materially adversely affect our business, financial condition, results of operations and cash flows.

We maintain various insurance policies for company employee health, workers' compensation, general liability and property damage. We are self-insured for our health plans, and have purchased a fully-insured stop loss policy to help offset our liability for both individual and aggregate claim costs. We are also responsible for losses up to a certain limit for workers' compensation, general liability and property damage insurance.

For policies under which we are responsible for losses, we record a liability that represents our estimated cost of claims incurred and unpaid as of the balance sheet date. Our estimated liability is not discounted and is based on a number of assumptions and factors, including historical trends, actuarial assumptions and economic conditions, and is closely monitored and adjusted when warranted by changing circumstances. Our prior growth could affect the accuracy of estimates based on historical experience. Should a greater amount of claims occur compared to what was estimated or medical costs increase beyond what was expected, our accrued liabilities might not be sufficient and we may be required to record additional expense. Unanticipated changes may also produce materially different amounts of expense than reported under these programs, which could materially adversely affect our business, financial condition, results of operations and cash flows.

Risks Relating to Our Industry

Our business could be materially adversely affected by changes in the U.S. healthcare environment or in laws relating to healthcare programs and policies, particularly as they relate to the ACA and the Medicare and Medicaid programs.

The healthcare industry in which we operate is subject to changing political, economic and regulatory influences that directly affect the practices and operations of federal, state and commercial healthcare organizations in the United States. When the ACA was passed, its emphasis on program integrity, cost containment and expansion of Medicaid created new opportunities to grow our business and our service offerings. However, certain provisions of the ACA have yet to be implemented and there have been a number of judicial and legal challenges to certain aspects of the ACA. In February 2018, 20 states filed suit in the U.S. District Court for the Northern District of Texas alleging that the ACA is unconstitutional in light of the repeal of the penalties associated with the individual mandate. On December 14, 2018, the Court issued a ruling that the mandate was no longer permissible under Congress's taxing power and was thus unconstitutional. As such, the Court further found that the entire ACA is deemed to be invalid because the individual mandate is "essential" and inseverable from the ACA. Although, a stay and partial final judgment has been issued, ensuring that the ACA remains in full effect for the foreseeable future, we cannot predict the outcome of the litigation that has been filed relating to the constitutionality of the ACA. Additionally, since its adoption into law in 2010, there have been continued efforts by Congress to amend, repeal or replace all or part of the ACA. For example, under the 2017 Tax Act, the "individual mandate" introduced by the ACA was repealed effective January 1, 2019. Congress has introduced several other bills to delay, defund or repeal implementation or amend significant provisions of the ACA, though none of these other bills have passed the House and Senate. There have also been a number of proposed and adopted legislative initiatives and healthcare reform proposals from the federal and state governments. These include (i) measures that would fundamentally change the financial structure of the Medicaid program (currently funded jointly by the states and the U.S. Federal Government), which could result in early termination, reduced scopes or non-renewal of our contracts with certain state government customers, and (ii) changes at the federal level that would reduce reimbursement rates to states, establish new payment models, further limit the Medicare RAC program, or otherwise change the operating environment for our customers and transform the government's involvement in healthcare. In addition to these legislative proposals, the President has taken several steps to limit the functionality of the ACA and advocate for its repeal and replacement since taking office. During 2017, the President signed two executive orders and other directives designed to waive, defer, grant exemptions from or delay

the implementation of certain requirements mandated by the ACA.

Another variable that impacts our business will be how state programs, commercial health plans, private employers and other healthcare payers will respond to changes during this continued period of uncertainty surrounding the ACA. These organizations may react to such changed circumstances and financial pressures by taking actions to ramp up, curtail or defer their retention of cost containment providers like us, which could impact the demand for our solutions and services and our ability to increase or maintain sales of our existing solutions and services. While certain changes may present new opportunities to us, our business, financial condition, results of operations and cash flows could be materially adversely affected if we are unable to adapt our solutions and services to meet changing requirements or expand service delivery into new areas, or if the demand for our solutions and services is reduced as a result of future legislative changes affecting Medicare, Medicaid or other publicly funded or subsidized health programs, or efforts to waive, modify or otherwise change or invalidate the ACA. Although we will continue to evaluate the effect that the ACA and its possible invalidation or repeal and replacement may have on our business, it is difficult to predict the full impact and influence that the ACA and the varying healthcare reform measures may have on the U.S. healthcare industry or policy, and any resulting changes may take time to unfold.

Healthcare spending fluctuations, simplification of the healthcare payment process or other aspects of the healthcare financing system, budgetary pressures and/or programmatic changes diminishing the scope of program benefits, or limiting payment integrity initiatives, could reduce the need for and the price of our solutions and services, which would have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our projections and expectations are premised, in part, upon consistent growth rates in the Medicare and Medicaid programs and government spending on these programs, and the impact on the current healthcare financing system overall and need for our solutions and services within that existing framework. Our continued success as a company is based in large part on offering solutions and services that improve the ability of our customers to identify and recover revenue that would otherwise be lost often as a result of procedural inefficiencies and complexities in the healthcare delivery and payment system. However, the need for our solutions and services, the price customers are willing to pay for them and the scope and profitability of our contracts could be negatively affected by a number of factors, including, but not limited to:

- a lower than projected growth in Medicare and Medicaid program enrollment and expenditures;
- changes in the level of federal government spending due to budgetary or deficit considerations, including the continuance of existing programs, as well as budgetary pressures that may drive changes at the state level;
- unanticipated reductions in the scope of healthcare program benefits (such as, for example, state decisions to eliminate coverage of optional Medicaid populations or services or shifting lives into managed care plans);
- the transition of healthcare beneficiaries from fee-for-service plans to value-based plans;
- modifications in provider billing behavior and habits, often in response to the success of our solutions and services or to changes that reduce healthcare spending;
- the adoption of healthcare plans with significantly higher deductibles;

- customer improvements and enhancements to their internal healthcare claims and billing processes;
- the simplification of the healthcare benefit and payment system through legislative or regulatory changes at the federal or state level (for example, legislative changes impacting the scope of mandatory audits, including limits on the look-back period for review in areas where we conduct audits);
- limits placed on ongoing program integrity initiatives, including the Medicare RAC program and state Medicaid RAC programs (for example, limitations or reductions in the amount of reviewable claims we audit, such as the modified ADR limits and sliding scale policy implemented by CMS for the current Medicare RAC contracts, which have a significant impact on the volumes of claims that Medicare RACs are permitted to review for inpatient providers and reduce their ability to identify overpayments and underpayments); and
- legislative healthcare reforms and developments, including the absence of near-term compliance deadlines effected by the ACA, the possible repeal or modification of the ACA, and other legislative actions to reduce program eligibility or services, or reform Medicaid spending.

The occurrence of any of these events, or other changes to the funding of the Medicare and Medicaid programs or limitations in the scope of program eligibility, benefits, initiatives and healthcare spending that materially reduce our revenue or profitability with such programs may have an adverse effect on our future business, financial condition, results of operations and cash flows.

A failure to comply with the laws and regulations that apply to companies in our industry regarding individual privacy and information security could subject us to legal actions, fines and penalties and negatively impact our reputation and operations.

As a cost containment service provider, we often receive, process, transmit and store sensitive data, including PHI and personally identifiable information of individuals, as well as other financial, confidential and proprietary information belonging to our customers, subcontractors, government agencies, data suppliers and other third parties from whom we obtain information. The use and disclosure of that information is regulated at the federal, state, international and industry levels. For example, we are subject to federal regulation under HIPAA, as amended by HITECH, and the Final Omnibus Privacy, Security, Breach Notification, and Enforcement Rule, as well as various state laws. HIPAA also imposes standards and requirements on our business associates (as defined under HIPAA). We are also obligated by our contractual requirements with customers, which may require that we comply with additional privacy regulations imposed upon certain types of customers, such as the federal Gramm-Leach-Bliley Act and other laws.

Even though we take measures to comply with all applicable regulations and to ensure our business associates and subcontractors comply with these laws, regulations and rules, we have less than complete control over our business associates' and subcontractors' actions and practices. We may be exposed to data breach risk if there is unauthorized access to one of our or our subcontractors' secure facilities, or to third-party enterprise cloud storage and cloud computing application services that we use, or from lost or stolen laptops or other portable media from current or former employee theft of data containing PHI, from computer hacking, malware, computer viruses or other malicious codes, phishing or other cyber-attacks, from misdirected mailings containing PHI, or other forms of administrative or operational error. If we or our subcontractors fail to comply with applicable laws; if unauthorized parties gain physical access to one of our facilities and steal or misuse confidential information; if we erroneously use or disclose data in a way that is inconsistent with our granted rights; or if such information is misdirected, lost or stolen during transmission or transport, we may suffer damage to our reputation, potential loss of existing customers and difficulty attracting new customers. We could also be exposed to, among other things, unfavorable publicity, governmental inquiry and oversight, allegations by our customers that we have not performed our contractual obligations, costs to provide notifications or remediation (such as credit monitoring) to affected individuals, fines or other penalties imposed by government regulatory agencies, or litigation by affected parties and possible financial obligations for damages or indemnification obligations related to the theft or misuse of such information, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

In addition, laws, rules and regulations concerning the protection of personal information are subject to frequent change by legislation, regulatory issuances or administrative interpretation. As regulatory focus on privacy issues continues to increase and these laws and regulations continue to expand and become more complex, these potential risks to our business could intensify. Changes in laws or regulations associated with the enhanced protection of certain types of sensitive data, such as healthcare data or other personally identifiable information, along with increased customer demands for enhanced data security infrastructure, could greatly increase our cost of providing our solutions and services, and may subject us to additional liabilities.

We are subject to extensive government regulation, including government and customer audits and investigations relating to our compliance with the laws and regulations applicable to companies in our industry, and a negative finding or other adverse determination could have a material adverse effect on our reputation, business, financial condition, results of operations and cash flows.

A significant portion of our business is regulated by the federal government and the states in which we operate. The laws and regulations governing our operations are generally intended to benefit and protect individual citizens, including government program beneficiaries, health plan members and their dependents. The federal and state governmental agencies administering these laws and regulations have broad latitude to enforce them. As such, we are subject, on an ongoing basis, to various governmental and customer reviews, audits and investigations to verify our compliance with our contracts and applicable laws and regulations, as well as legal actions and enforcement proceedings. For example, because we receive payments from federal and state governmental agencies, we are subject to laws, such as the Federal Acquisition Regulations, the U.S. Foreign Corrupt Practices Act, federal and state employment, equal opportunity and affirmative action laws, federal and state prompt pay statutes, healthcare fraud, waste and abuse laws and similar legislation. We are also subject to the Federal False Claims Act and similar state statutes, which permit government law enforcement agencies to institute suits against us for violations and, in some cases, to seek double or treble damages, penalties and assessments. In addition, private citizens, acting as whistleblowers, can sue on behalf of the government under the "*qui tam*" provisions of the Federal False Claims Act and similar statutory provisions in many states.

As we expand into new areas of the healthcare industry, we may develop new or enhanced solutions that may further expose us to requirements under additional statutes and legislative schemes that have previously not been relevant to our business, such as the Fair Debt Collection Practices Act and other banking and credit reporting statutes. For example, in connection with our acquisition of Eliza, we became subject to the Telephone Consumer Protection Act of 1991, state and federal audio and telephone recording laws, and other consumer laws and regulations as a result of the member engagement services that we perform. Our increased involvement in population health services and penetration into new markets, such as ACOs, PBMs and commercial self-insured employers, could increase the likelihood and incidence of our being subjected to regulatory scrutiny or legal actions by third parties other than our customers, which may impose significant costs and strain on our resources.

These laws and regulations, along with the terms of our government contracts, regulate how we do business, what services we offer and how we interact with customers, providers, other healthcare payers and the public. If the government discovers improper or illegal activities in the course of audits or investigations, we may be subject to various civil and criminal penalties and administrative sanctions, which may include termination of contracts, forfeiture of profits, suspension of payments, fines and suspensions and debarment from doing business with the government. Similarly, if our customers assert that we have failed to properly perform or comply with our contractual obligations, or if the carriers to which we send billings assert that we have failed to properly comply with applicable federal or state billing rules and regulations, we may be required to provide refunds or make payments to resolve such issues. If we are found to be in violation of any applicable law or regulation, or if we receive an adverse review, audit or investigation from a government agency or customer related to our compliance with such laws or regulations or the terms of our government contracts, any resulting negative publicity, penalties or sanctions could have an adverse effect on our reputation in the industry, impair our ability to compete for new contracts or bid in response to RFPs in one or more jurisdictions, and have a material adverse effect on our business, financial condition, results of operations and cash flows.

Federal and state governments may limit or prohibit outsourcing of certain programs or functions, refuse to grant consents or waivers necessary to permit private entities to perform such work, or impose other limitations on outsourcing or certain vendors that may obstruct cost-effective performance of our contracts.

Federal or state governments could limit or prohibit private contractors like us from operating or performing elements of certain government functions or programs. As a condition of receiving federal funding, state, and local governments may be required to operate such programs with government employees. Under current law, in order to privatize certain functions of government programs, the federal government must grant a consent and/or waiver to the petitioning state or local agency. If the federal government does not grant a necessary consent or waiver, the state or local agency will be unable to outsource that function to a commercial entity. Such a situation could eliminate a contracting opportunity or reduce the value of an existing contract.

Similarly, other state or federal limitations on outsourcing certain types of work to vendors that supplement our workforce could make it more difficult for us to fulfill our contracts in a cost-effective manner. Certain areas of our operations use or involve vendor or subcontractor personnel located outside of the United States, who may (under carefully controlled circumstances) access certain PHI in the course of assisting us with various elements of the services we provide to our customers. The federal government and a number of states have considered laws or issued rules, regulations, and orders that would limit, restrict or wholly prohibit the use of offshore labor in performance of government contracts, or impose sanctions for the use of such resources. Some of our customers have already chosen to contractually limit or restrict our ability to use offshore resources. Intensified restrictions of this type or associated penalties could raise our costs of doing business, expose us to unexpected fines or penalties, increase the prices we must charge to customers to realize a profit and eliminate or significantly reduce the value of existing contracts or potential contract opportunities, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may be precluded from bidding on or performing certain work due to work we currently perform, which could materially adversely affect our business, financial condition, results of operations and cash flows.

Various laws, regulations and administrative policies prohibit companies from performing work for government agencies in capacities that might be viewed to create an actual or perceived conflict of interest. In particular, CMS has stringent conflict of interest rules, which can limit our bidding for specific work for CMS, or for other contracts that might conflict, or be perceived by CMS to conflict, with contractual work for CMS. State governments and managed care organizations also have conflict of interest restrictions that could limit our ability to bid for certain work and impede our overall sales strategy. As we continue to expand and diversify our business operations, the likelihood that customers or potential customers will perceive conflicts of interest between our various subsidiaries, solutions, services, activities and customer relationships may increase. Such conflicts, whether real or perceived, could result in a loss of contracts or additional internal structural barriers that delay operational efficiency. We may also need to divest certain existing businesses or reorganize our current management and personnel structure, as well as our corporate organization and entity structure, in order to qualify for new contract awards or to appropriately mitigate conflicts and otherwise accommodate the increasing complexity of our business. Our failure to devote sufficient care, attention and resources to managing these adjustments may result in technical or administrative errors that could expose us to potential liability or adverse regulatory action. In addition, conflict of interest rules and standards change frequently, and are subject to varying interpretations and varying degrees and consistency of enforcement. We may not be successful in navigating these restrictions. If we are prevented from expanding our business or are unable to effectively implement our strategic initiatives due to real or perceived conflicts of interest, our business, financial condition, results of operations and cash flows could be materially adversely affected.

Risks Related to Our Common Stock

The market price of our common stock may be volatile, and fluctuations in the price of our common stock may materially adversely affect our business, financial condition, results of operations and cash flows and materially adversely affect our shareholders.

The market price of our common stock has fluctuated widely and may continue to do so. During the 52-week period ended December 31, 2018, our common stock traded on the Nasdaq Global Select Market as high as $37.38 per share and as low as $15.06 per share. Our stock price is subject to fluctuation as a result of a variety of factors, including factors beyond our control, such as the risk factors described above and those which are related to:

- quarterly or annual earnings results or those of other companies in our industry;
- changes in estimates of our performance or recommendations by securities analysts or in the operating and stock price performance of other companies that investors deem comparable to our company;
- news reports relating to trends, concerns and other issues in the healthcare industry, including perceptions in the marketplace regarding us and our competitors;
- the financial projections we publicly provide and any changes in or failure to meet those projections;
- future sales of shares of common stock in the public market by our executive officers or directors;
- any changes in the number of our outstanding shares, including as a result of share repurchases;
- actual or proposed changes in federal or state laws affecting the healthcare industry;
- changes in accounting principles;
- the public's response to our press releases, or other public announcements, including our filings with the SEC;
- securities class actions, shareholder lawsuits or other litigation; and
- market conditions in the industry and the economy as a whole.

In addition, the stock market often experiences significant price and volume fluctuations. These broad market fluctuations may materially adversely affect the market price of our common stock regardless of our operating performance. When the market price of a company's stock drops significantly, shareholders may institute securities class action litigation against that company. Any litigation against us could cause us to incur substantial costs, divert the time and attention of our management and other resources or otherwise harm our business.

Because we do not intend to pay dividends, you will benefit from an investment in our common stock only if it appreciates in value.

We have not paid or declared cash dividends on any of our capital stock to date and currently intend to retain our future earnings, if any, to fund the development and continued growth of our business and repurchase shares opportunistically from time to time. As a result, we do not expect to pay any cash dividends in the foreseeable future. The success of your investment in our common stock will likely depend entirely upon any future appreciation. There is no guarantee that our common stock will appreciate in value or even maintain the price at which you purchased your shares.

Certain provisions of our certificate of incorporation and bylaws could discourage unsolicited takeover attempts, which could depress the market price of our common stock.

Our certificate of incorporation authorizes the issuance of up to 5,000,000 shares of "blank check" preferred stock with such designations, rights and preferences as may be determined by our Board of Directors. Accordingly, our Board of Directors is empowered, without shareholder approval, to issue preferred stock with dividend, liquidation, conversion, voting or other rights, that could adversely affect the voting power or other rights of holders of our common stock. In the event of issuance, preferred stock could be utilized, under certain circumstances, as a method of discouraging, delaying, or preventing a change in control. Although we have no present intention to issue any shares of preferred stock, it is possible that we will do so in the future. In addition, our bylaws currently require advance notice of shareholder proposals for business to be conducted at meetings of our shareholders and for nominations of candidates for election to our Board of Directors and provide for Delaware as an exclusive forum for certain disputes with our shareholders, all of which could also have the effect of discouraging a change of control.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters and other material leased properties as of December 31, 2018 are shown in the following table:

Location	Approximate Square Footage	Owned/Leased
Irving, TX (corporate headquarters)	242,260	Owned
Las Vegas, NV (office space)	63,593	Leased
Danvers, MA (office space)	38,868	Leased
New York , NY (office space)	34,759	Leased
Westerville, OH (office space)	25,212	Leased
All other locations (23)	80,759	Leased

All other locations consist principally of office space and also include data centers, which are all located in the United States. The above locations have expiration dates through 2026. A portion of the above Las Vegas, NV and New York, NY office spaces are sub-leased. In general, we believe our facilities are suitable to meet our current and reasonably anticipated future needs. See "Lease Commitments" in Note 15 to the Consolidated Financial Statements in Part II, Item 8 for additional information.

Item 3. Legal Proceedings

The information set forth under the caption "Litigation" in Note 15 to the Consolidated Financial Statements in Part II, Item 8 is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

Market Information

Our common stock is listed on the Nasdaq Global Select Market under the symbol "HMSY".

Holders

As of the close of business on February 15, 2019, there were 252 holders of record of our common stock.

Dividends

We have not paid or declared any cash dividends on our common stock and do not anticipate paying cash dividends in the foreseeable future. Our current intention is to retain future earnings to support the continued growth of our business and possibly for the repurchase of shares from time to time. Our Board of Directors will evaluate various factors, including, without limitation, our future earnings, operating cash flows, financial condition, results of operations and capital requirements in determining whether to pay any cash dividends in the future. In addition, our Credit Agreement generally limits, subject to certain exceptions, our ability to make certain payments or distributions with respect to our capital stock, including cash dividends to our shareholders. These restrictions are described in more detail under the heading "Liquidity and Capital Resources" in Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, and in Note 10 to the Consolidated Financial Statements in Part II, Item 8.

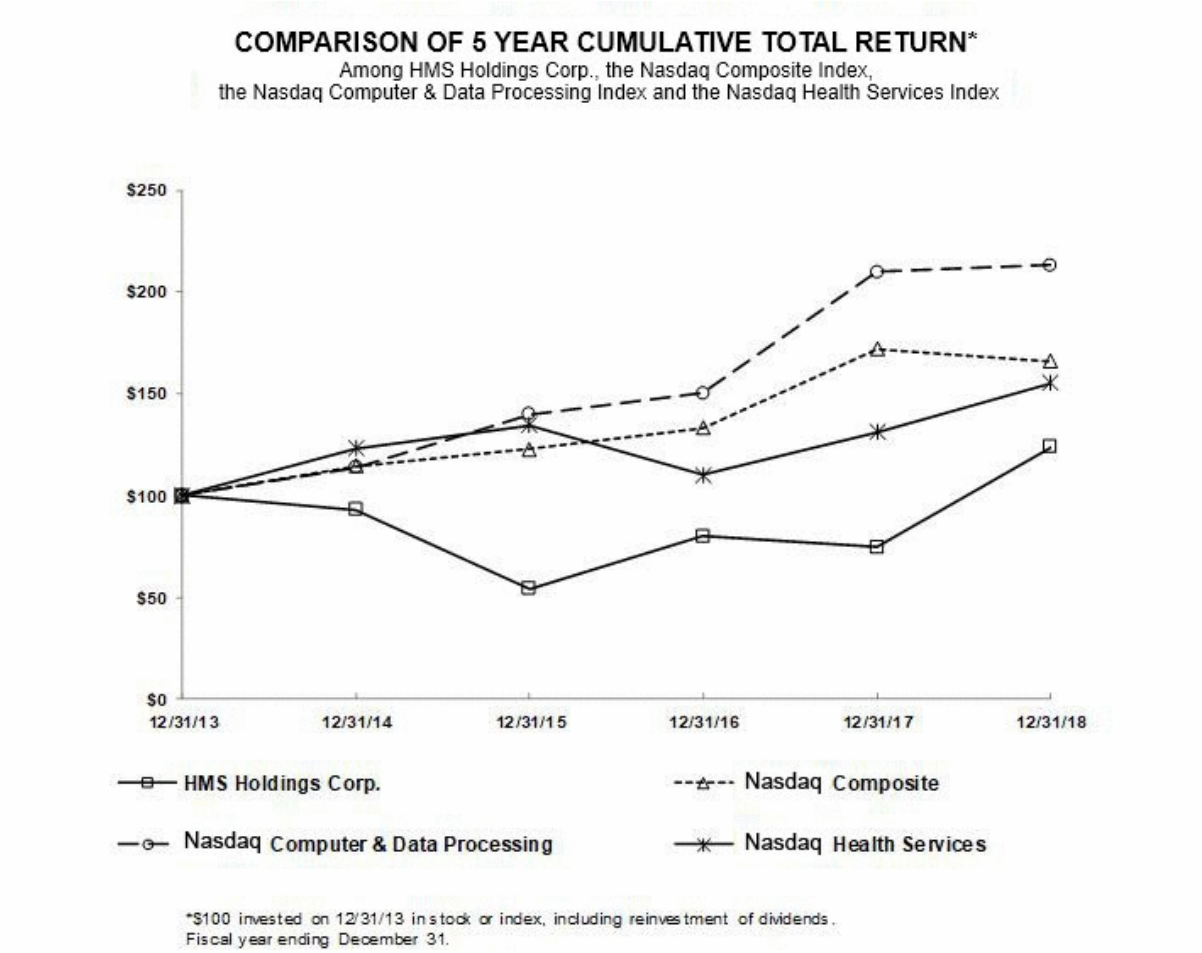
See Part III, Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters for information relating to securities authorized for issuance under our equity compensation plans.

Repurchases of Shares of Common Stock

On November 1, 2017, the Board of Directors of the Company approved a share repurchase program authorizing the Company to repurchase up to $50.0 million of shares of its common stock from time to time on the open market or in privately negotiated or other transactions. We publicly announced the program in November 2017. The repurchase program is authorized for a period of up to two years, and may be suspended or discontinued at any time. In order to facilitate repurchases, the Company may enter into a Rule 10b5-1 plan from time to time, which would permit shares to be repurchased when the Company might otherwise be precluded from doing so under insider trading laws or because of a self-imposed trading blackout period. All repurchases were made under the program and using cash resources. See "Equity" in Note 11 to the Consolidated Financial Statements in Part II, Item 8 for additional information regarding share repurchases. There were no repurchases of shares of common stock in the fourth quarter of 2018.

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Maximum Approximate Dollar Value of Shares That May Yet Be Purchased Under the Program
October 1, 2018 to October 31, 2018	-	$ -	-	$ -
November 1, 2018 to November 30, 2018	-	-	-	-
December 1, 2018 to December 31, 2018	-	-	-	-
Total	**-**	**$ -**	**-**	**$ 29,933,055**

Comparative Stock Performance Graph



The graph below compares the cumulative total shareholder return on our common stock with the cumulative total shareholder returns of the Nasdaq Composite Index, the Nasdaq Computer & Data Processing Index and the Nasdaq Health Services Index assuming an investment of $100 on December 31, 2013 and the reinvestment of dividends through the year ended December 31, 2018.

	12/31/13	12/31/14	12/31/15	12/31/16	12/31/17	12/31/18
HMS Holdings Corp.	$ 100.00	$ 93.13	$ 54.36	$ 80.00	$ 74.67	$ 123.92
NASDAQ Composite	100.00	114.62	122.81	133.19	172.11	165.84
NASDAQ Computer & Data Processing	100.00	113.68	140.03	150.12	209.72	212.97
NASDAQ Health Services	100.00	123.14	134.70	110.22	131.32	155.16

Notwithstanding anything to the contrary set forth in any of our previous or future filings under the Securities Act or the Exchange Act that might incorporate by reference this 2018 Form 10-K or future filings made by us under those statutes, the Comparative Stock Performance Graph is not deemed filed with the SEC, is not deemed soliciting material and shall not be deemed incorporated by reference into any of those prior filings or into any future filings we make under those statutes, except to the extent that we specifically incorporate such information by reference into a previous or future filing, or specifically request that such information be treated as soliciting material, in each case under those statutes.

Item 6. Selected Financial Data

The following table sets forth selected consolidated financial amounts at and for each of the five fiscal years in the period ended December 31, 2018. It should be read in conjunction with Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, and the Consolidated Financial Statements and Notes thereto, in Part II, Item 8 of this 2018 Form 10-K.

Statement of Operations Data

	Years ended December 31,				
(in thousands, except per share amounts)	**2018**	**2017**	**2016**	**2015**	**2014**
Revenue	$ 598,290	$ 521,212	$ 489,720	$ 474,216	$ 443,225
Total operating expenses	535,052	470,781	432,051	426,644	409,021
Operating income	63,238	50,431	57,669	47,572	34,204
Interest expense	(11,310)	(10,871)	(8,519)	(7,812)	(7,931)
Interest income	1,089	295	321	49	57
Income before income taxes	53,017	39,855	49,471	39,809	26,330
Income taxes	(1,972)	(199)	11,835	15,282	12,383
Net income	$ 54,989	$ 40,054	$ 37,636	$ 24,527	$ 13,947
Net Income Per Common Share					
Basic income per common share:					
Net income per common share - basic	$ 0.66	$ 0.48	$ 0.45	$ 0.28	$ 0.16
Diluted income per common share:					
Net income per common share - diluted	$ 0.64	$ 0.47	$ 0.43	$ 0.28	$ 0.16
Weighted average shares:					
Basic	83,625	83,821	84,221	87,881	87,673
Diluted	86,144	85,088	86,987	88,361	88,164

Balance Sheet Data

	Years ended December 31,				
(in thousands)	**2018**	**2017**	**2016**	**2015**	**2014**
Cash and cash equivalents	$ 178,946	$ 83,313	$ 175,999	$ 145,610	$ 133,116
Working capital	$ 328,684	$ 199,967	$ 277,478	$ 240,456	$ 226,271
Total assets	$ 1,078,518	$ 975,160	$ 882,755	$ 850,597	$ 880,988
Revolving credit facility	$ 240,000	$ 240,000	$ 197,796	$ 197,796	$ 197,796
Total shareholders' equity	$ 713,396	$ 606,229	$ 556,610	$ 524,702	$ 533,090

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following Management's Discussion and Analysis is intended to help the reader understand the results of operations and financial condition of HMS. You should read this discussion and analysis in conjunction with the other sections of this 2018 Form 10-K, including the Cautionary Note Regarding Forward-Looking Statements appearing prior to Part I, the information in Part I, Item 1A, and the Consolidated Financial Statements and Notes thereto in Part II, Item 8. The historical results set forth in Part II, Item 6, Item 7 and Item 8 of this 2018 Form 10-K should not be taken as necessarily indicative of our future operations or financial results.

Business Overview

HMS provides a broad range of cost containment solutions to help healthcare payers and at-risk providers reduce costs, improve health outcomes and enhance member experiences. Using industry-leading technology, analytics and engagement solutions, we deliver coordination of benefits, payment integrity and total population management solutions through our operating subsidiaries to move the healthcare system forward for our customers. We are managed and operate as one business segment with a single management team that reports to the Chief Executive Officer.

We serve state Medicaid programs, commercial health plans, federal government health agencies, government and private employers, CHIPs and other healthcare payers. We also serve as a subcontractor for certain business outsourcing and technology firms. As of December 31, 2018, our customer base included the following:

- over 40 state Medicaid programs;
- more than 325 health plans, including 23 of the top 25 health plans nationally (based on membership) in support of their multiple lines of business, including Medicaid managed care, Medicare Advantage and group and individual health;
- over 150 private employers;
- CMS, the Centers for Disease Control and Prevention, and the Department of Veterans Affairs; and
- PBMs, third-party administrators and other risk-bearing entities, including independent practice associations, hospital systems, ACOs and specialty care organizations.

Outlook

We have grown our business both organically, through internal innovation and the development of new solutions and services, as well as by acquisition of businesses whose core services strengthened our overall mission to help our customers contain healthcare costs. Our largest growth during 2018 was with commercial health plan customers and we currently expect this market to present the greatest opportunity for continued growth in the year ahead. In addition to cross-sales of our total population management solutions and other internal growth initiatives in 2019, various factors related to the macro healthcare environment are expected to contribute to our expected growth, including:

- an aging U.S. population with high-cost, chronic conditions and often co-morbidities;
- projected growth in Medicare enrollment from 2018 to 2026 is estimated by CMS to be at 24%, with a projected increase in spending of 83% during this same time period;
- Medicaid expenditures are projected to grow 60% from 2018 to 2026 based on CMS NHE projections;
- government program payment error rates remain high at approximately 9%;
- more than half of the U.S. population is projected by CMS to remain covered by employer-sponsored plans;
- continued support for moving the focus of U.S. reimbursement models away from volume of service to quality outcomes; and
- increased healthcare industry focus on improved population health, enhanced consumer outcomes and experience, and reduced costs.

We plan to drive our future growth by leveraging our expertise to expand solution offerings, attracting new customers and broadening our relationships with current customers through the introduction of new services, audit strategies and claim types. Our goal is to develop and build on existing partnerships with our state, federal and commercial health plan customers to provide services that better address their business needs and promote consumer engagement and satisfaction in the constantly evolving healthcare marketplace. We also expect to continue increasing recovery yields from our current services by enhancing our operating and organizational efficiency and by implementing new technologies that will improve the quality, effectiveness and profitability of our service offerings.

We are subject to a number of significant risks in the operation of our business, including operational, strategic, financial and regulatory risks. These include risks related to legal compliance, financial performance and condition, protection of our information technology networks and systems and intellectual property, and other risks. With respect to cybersecurity, the effective operation of our information technology networks and systems, and the secure processing and maintenance of the confidential, proprietary and sensitive information and data we receive from our customers and other data suppliers are critical to our operations and business strategy. Although we have processes and procedures to attempt to mitigate many of the risks that we face, there can be no assurance that such processes or procedures will be successful. For a discussion of certain risks relating to the Company, see the information under the heading “Part I, Item 1A. Risk Factors.”

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with U.S. GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. We evaluate our estimates and assumptions on an ongoing basis. Our estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Our actual results could differ from these estimates. The accounting policies that we believe to be the most critical to an understanding of our financial condition and results of operations and that require the most complex and subjective management judgments are below:

Revenue Recognition

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
The Company recognizes revenue when our customers realize economic benefits from our services when our services are completed.	Due to the range of solutions and services that HMS provides and the differing fee structures associated with each type of contract, revenue may be recognized in irregular increments. A portion of our revenue is recorded net of an estimate of future revenue adjustments, with an offsetting entry to accounts receivable allowance, based on historical patterns of billing adjustments, length of operating and collection cycle and customer negotiations, behaviors and payment patterns. Changes in these estimates are recorded to revenue in the period of change.	If we were to enter any new contracts with differing fee structures or performance obligations or if we were to change any of the judgments or estimates related to estimated future revenue adjustments, it could cause a material increase or decrease in the amount of revenue we report in a particular period.

Estimated Liability for Appeals

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
Under our contracts with certain commercial health plan customers and our Medicare RAC contracts with CMS, we recognize revenue when HMS claim findings are sent to the Company's customers for offset against future claim payments to providers. These contracts permit providers the right to appeal HMS claim findings and to pursue additional appeals if the initial appeal is found in favor of HMS's customer. The total estimated liability for appeals balance was $21.7 million and $30.8 million as of December 31, 2018 and December 31, 2017, respectively. The Company's original Medicare RAC contract with CMS expired on January 31, 2018.	The appeal process established under the Medicare RAC contract with CMS includes five levels of appeals and resolution of appeals can take substantial time to resolve. HMS records (i) a liability for findings which have been adjudicated in favor of providers and (ii) an estimated liability based on the amount of revenue that is subject to appeals and which is probable of being adjudicated in favor of providers following their successful appeal. Our estimated liability is based on the Company's historical experience. As a result of the original Medicare RAC contract expiration, the Company's contractual obligation with respect to any appeals resolved in favor of providers subsequent to the expiration date have ceased and therefore the Company released its estimated return obligation liability and increased revenue by $8.4 million during the first quarter of 2018.	To the extent the amount to be returned to providers following a successful appeal exceeds or is less than the amount recorded, revenue in the applicable period would be reduced or increased by such amount. Any future changes to any of our customer contracts, including modifications to Medicare RAC contracts, may require us to apply different assumptions that could materially affect both the Company's revenue and estimated liability for appeals in future periods.

Business Combinations

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
We record assets acquired and liabilities assumed in a business combination based upon their acquisition date fair values. Goodwill is the excess of acquisition costs over the fair values of assets and liabilities of acquired businesses. During the measurement period, which is up to one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings.	In most instances there is not a readily defined or listed market price for individual assets and liabilities acquired in connection with a business, including intangible assets. We determine fair value through various valuation techniques including discounted cash flow models, quoted market values and third party independent appraisals, as considered necessary. Significant assumptions used in those techniques include, but are not limited to, growth rates, discount rates, customer attrition rates, expected levels of revenues, earnings, cash flows and tax rates.	The use of different valuation techniques and assumptions are highly subjective and inherently uncertain and, as a result, actual results may differ materially from estimates.

Impairment of Goodwill

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
Goodwill is subject to a periodic assessment for impairment. We assess goodwill for impairment on an annual basis as of June 30th of each year or more frequently if an event occurs or changes in circumstances would more likely than not reduce the fair value of a reporting unit below its carrying amount. Assessment of goodwill impairment is at the HMS Holdings Corp. entity level as we operate as a single reporting unit. The Company's carrying amount of goodwill was $487.6 million as of December 31, 2018.	We have the option to perform a qualitative or quantitative assessment to determine if impairment is more likely than not to have occurred. The Company completed the annual impairment test as of June 30, 2018 electing to perform the quantitative assessment of which the first step is to compare the fair value of the reporting unit with its carrying value, including goodwill. In calculating the fair value of the reporting unit, the Company utilized a weighting across three commonly accepted valuation approaches: an income approach, a guideline public company approach, and a merger and acquisition approach. The income approach to determining fair value computes projections of the cash flows that the reporting unit is expected to generate converted into a present value equivalent through discounting. Significant assumptions in the income approach include income projections, a discount rate and a terminal growth value which are all level 3 inputs. The income projections include assumptions for revenue and expense growth which are based on internally developed business plans and largely reflect recent historical revenue and expense trends. The discount rate was based on a risk free rate plus a beta adjusted equity risk premium and specific company risk premium. The terminal growth value is Company specific and was determined analyzing inputs such as historical inflation and the GDP growth rate. The guideline public company approach and merger and acquisition approach are based on pricing multiples observed for similar publicly traded companies or similar market companies that were sold.	The results of the annual impairment assessment provide that the fair value of the reporting unit was significantly in excess of the Company's carrying value, including goodwill; therefore, no impairment was indicated. If actual results are not consistent with our estimates or assumptions, the Company may be exposed to an impairment charge that could materially adversely impact our consolidated financial position and results of operations. There were no impairment charges related to goodwill during the years ended December 31, 2018, 2017, or 2016.

Impairment of Long-Lived and Intangible Assets

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
Long-lived assets, including property and equipment and intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. When indicators exist, recoverability of assets is measured by a comparison of the carrying value of the asset group to the estimated undiscounted future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized and charged to earnings is measured by the amount by which the carrying value of the asset group exceeds the fair value of the assets.	We use significant judgment in assessing events or changes in circumstances which indicate that the carrying amount of the asset may not be recoverable.	The Company's carrying amount of long-lived assets, including property and equipment and intangible assets was $161.6 million as of December 31, 2018. The Company did not recognize any impairment charges related to long-lived and intangible assets during the years ended December 31, 2018, 2017 or 2016. However, if actual results are not consistent with our estimates or assumptions, we may be exposed to an impairment charge that could materially adversely impact our consolidated financial position and results of operations.

Valuation of Stock-Based Compensation

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
The determination of the fair value of the options on the grant date using the Black-Scholes pricing model and/or the Monte Carlo Simulation is affected by the Company's stock price, as well as assumptions regarding a number of complex and subjective variables. Certain key variables include: the Company's expected stock price volatility over the expected term of the awards; a risk-free interest rate; and any expected dividends. The fair value of all awards also includes an estimate of expected forfeitures.	We estimate stock price volatility based on the historical volatility of the Company's common stock and estimate the expected term of the awards based on the Company's historical option exercises for similar types of stock option awards. The assumed risk-free interest rate is based on the yield on the measurement date of a zero-coupon U.S. Treasury bond with a maturity period equal to the option's expected term. The Company does not anticipate paying any cash dividends in the foreseeable future and therefore, uses an expected dividend yield of zero in the option valuation models. Forfeitures are estimated based on historical experience.	If we were to change any of these judgments or estimates, it could cause a material increase or decrease in the amount of stock compensation expense we report in a particular period. For example, if actual forfeitures vary from estimates, a difference in compensation expense will be recognized in the period the actual forfeitures occur.

Income Taxes

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
Income taxes are accounted for under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. This method also requires the recognition of future tax benefits for net operating loss carry-forwards.	Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized as income or expense in the period that includes the enactment date. A valuation allowance is provided against deferred tax assets to the extent their realization is not more likely than not. Uncertain income tax positions are accounted for by prescribing a minimum recognition threshold that a tax position is required to meet before being recognized in the financial statements. We make adjustments to these reserves in accordance with the income tax accounting guidance when facts and circumstances change, such as the closing of a tax audit or the refinement of an estimate.	To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made, and could have a material impact on our financial condition and operating results. Although the Company believes that it has adequately reserved for uncertain tax positions (including interest and penalties), it can provide no assurance that the final tax outcome of these matters will not be materially different.

Contingencies

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
From time to time, we are involved in legal proceedings in the ordinary course of business. We assess the likelihood of any adverse judgments or outcomes to these contingencies as well as potential ranges or probable losses and establish reserves accordingly.	We record accruals for outstanding legal matters when we believe it is probable that a loss will be incurred and the amount can be reasonably estimated. Significant judgment is required to determine both probability and the estimated amount. We review these provisions at least quarterly and adjust the provisions to reflect the impact of negotiations, settlements, rulings, advice of legal counsel and updated information.	Litigation is inherently unpredictable and is subject to significant uncertainties, some of which are beyond the Company's control. The amount of reserves required may change in future periods due to new developments in each matter or changes in approach to a matter such as a change in settlement strategy which could have a material impact on our financial condition and operating results.

For further information on these critical accounting policies and all other significant accounting policies refer to the discussion under "Business and Summary of Significant Accounting Policies" in our Note 1 to the Consolidated Financial Statements in Part II, Item 8.

Results of Operations

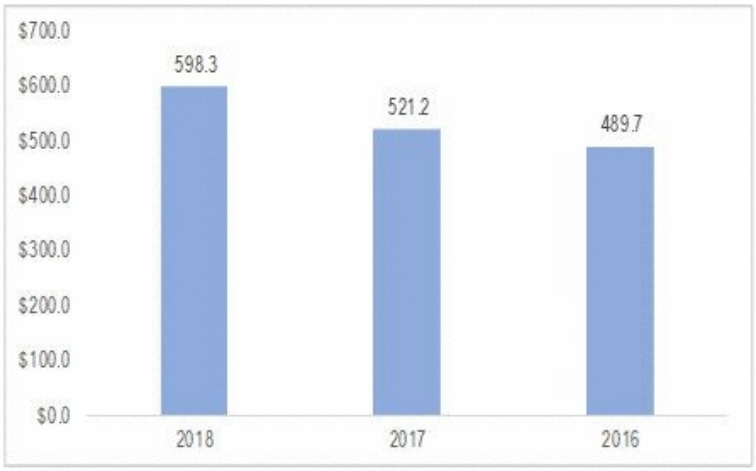
2018 Highlights

- Revenue growth of 14.8%
- Operating income growth of 25.4%
- Cash flow from operations of $96.5 million
- Repurchased approximately 384,000 shares of common stock for $6.0 million
- Net income growth of 37.2%

Comparison of 2018 to 2017 and 2017 to 2016

dollars in millions	Year Ended December 31,			$ Change	% Change	$ Change	% Change
	2018	2017	2016	2018 vs 2017		2017 vs 2016	
Revenue	$ 598.3	$ 521.2	$ 489.7	$ 77.1	14.8%	$ 31.5	6.4%
Cost of Services :							
Compensation	224.9	202.0	189.3	22.9	11.3	12.7	6.7
Information technology	53.4	45.7	37.3	7.7	16.8	8.4	22.5
Occupancy	16.0	17.2	14.0	(1.2)	(7.0)	3.2	22.9
Direct project costs	42.9	41.4	46.3	1.5	3.6	(4.9)	(10.6)
Other operating costs	31.4	28.4	27.8	3.0	10.6	0.6	2.2
Amortization of acquisition related software and intangible assets	33.0	30.4	28.0	2.6	8.6	2.4	8.6
Total Cost of Services	401.6	365.1	342.7	36.5	10.0	22.4	6.5
Selling, general and administrative expenses	113.5	105.7	89.4	7.8	7.4	16.3	18.2
Settlement expense	20.0	-	-	20.0	100.0	-	-
Total Operating Expenses	535.1	470.8	432.1	64.3	13.7	38.7	9.0
Operating Income	63.2	50.4	57.6	12.8	25.4	(7.2)	(12.5)
Interest expense	(11.3)	(10.8)	(8.5)	(0.5)	4.6	(2.3)	27.2
Interest income	1.1	0.3	0.3	0.8	266.7	0.0	0.3
Income before income taxes	53.0	39.9	49.4	13.1	32.8	(9.5)	(19.2)
Income taxes	(2.0)	(0.2)	11.8	(1.8)	900.0	(12.0)	(101.7)
Net Income	$ 55.0	$ 40.1	$ 37.6	$ 14.9	37.2%	$ 2.5	6.6%

Revenue



Revenue in Millions

2018 vs. 2017

During the year ended December 31, 2018, revenue was $598.3 million, an increase of $77.1 million or 14.8% compared to $521.2 million for the year ended December 31, 2017.

- By solution, which consists of coordination of benefits and analytical services, and included in analytical services are our payment integrity and total population management solutions:
  - Coordination of benefits product revenue increased $14.4 million or 3.8% which was attributable to yield improvements and the addition of Medicaid enrollees which entered our customer eligibility files in 2018.
  - Payment integrity revenue increased $39.7 million or 38.0% which was attributable to expanded commercial health plan scopes, including the addition of health plans to current contracts and yield improvements. Within payment integrity, Medicare RAC revenue increased $17.8 million which includes an $8.4 million reserve release during the first quarter of 2018 as compared to prior year.
  - Total population management revenue increased $23.0 million or 67.4% of which $21.4 million is due to Eliza (acquired in April 2017). Additionally, Essette revenue increased $1.6 million as compared to prior year.

- By market:
  - Commercial health plan market revenue increased $54.0 million or 20.1% which includes increases of $21.4 million from Eliza (acquired in April 2017) as compared to the prior year and $1.6 million from Essette as compared to prior year. The increases are due to expanded commercial health plan scopes, including the addition of health plans to current contracts and yield improvements.
  - State government market revenue increased $6.9 million or 3.0%, which was attributable to expanded scopes and yield improvements.
  - Federal government market and other revenue increased $16.2 million or 64.8% which includes an $8.4 million Medicare RAC reserve release.

2017 vs. 2016

During the year ended December 31, 2017, revenue was $521.2 million, an increase of $31.5 million or 6.4% compared to $489.7 million for the year ended December 31, 2016.

- By solution, which consists of coordination of benefits and analytical services, and included in analytical services are our payment integrity and total population management solutions:
  - Coordination of benefits service revenue increased $29.0 million or 8.2% which was attributable to yield improvements and the addition of Medicaid enrollees which entered our customer eligibility files in 2017.
  - Payment integrity revenue decreased $30.7 million or 22.8% which was attributable to a $14.7 million decrease in Medicare RAC revenue because the Medicare RAC Region D program ceased generating revenue in late 2016, as expected, and a $16.1 million decrease due to various contract completions and expirations.
  - Total population management revenue increased $33.3 million or 3746.8% almost all of which is due to the Eliza acquisition in April 2017.

- By market:
  - Commercial health plan market revenue increased $39.0 million or 17.0% which was attributable to Eliza contributing revenue of $30.4 million since its acquisition in April 2017, Essette increasing revenue $2.9 million as compared to prior year and expanded commercial health plan scopes, including the addition of health plans to current contracts and yield improvements.
  - State government market revenue increased by $7.9 million or 3.6%, which was attributable to expanded scopes and yield improvements.
  - Federal government market and other revenue decreased $15.4 million, which was primarily attributable to a reduction of Medicare RAC revenue because the Medicare RAC D Region D program ceased generating new claims for active auditing in 2016, as expected.

Cost of Services

Cost of Services in millions

2018 vs. 2017

During the year ended December 31, 2018, total cost of services was $401.6 million, an increase of $36.5 million or 10.0% compared to $365.1 million for the year ended December 31, 2017. This change resulted primarily from increases in compensation expense of $22.9 million, information technology expense of $7.7 million, other operating costs of $3.0 million and amortization of intangibles expense of $2.6 million.

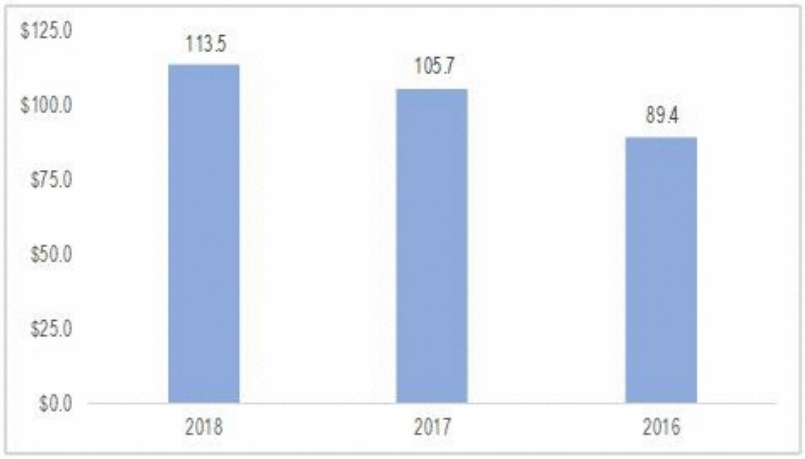
- The increase in total cost of services relating to Eliza (acquired in April 2017) represented $14.4 million of the increase.
- Excluding Eliza, total cost of services increased by $22.1 million which was primarily related to increases in compensation expenses of $17.0 million related to the overall performance of the Company and information technology expenses of $4.2 million.

2017 vs. 2016

During the year ended December 31, 2017, total cost of services was $365.1 million, an increase of $22.4 million or 6.5% compared to $342.7 million for the year ended December 31, 2016. This change resulted primarily from increases in compensation expense of $12.7 million, information technology expense of $8.4 million, and amortization of intangibles expense of $2.4 million.

- The Eliza acquisition and the related compensation, data processing, occupancy and amortization of intangibles expenses incurred since its acquisition in April 2017 represented $23.4 million of the increase.
- Excluding Eliza, total cost of services decreased by $1.0 million which was primarily related to a reduction in direct project costs partially offset by increases in data processing and compensation expenses.

Selling, General and Administrative Expenses



SG&A in millions

2018 vs. 2017

During the year ended December 31, 2018, SG&A expense was $113.5 million, an increase of $7.8 million or 7.4% compared to $105.7 million for the year ended December 31, 2017.

- Eliza (acquired in April 2017) represented $1.9 million of the increase.
- Excluding Eliza, expenses increased by $5.9 million primarily related to increased variable compensation expense due to the overall performance of the Company.

2017 vs. 2016

During the year ended December 31, 2017, SG&A expense was $105.7 million, an increase of $16.3 million or 18.2% compared to $89.4 million for the year ended December 31, 2016.

- The Eliza acquisition and related transaction fees and other SG&A expenses incurred since its acquisition in April 2017 represented $8.7 million of the increase.
- Excluding Eliza, stock compensation expense also increased by $7.3 million primarily due to stock compensation expense for retirement eligible employees.

Income Taxes

2018 vs. 2017

During the year ended December 31, 2018, we recorded an income tax benefit of ($2.0) million, an increased benefit of $1.8 million compared to an income tax benefit of ($0.2) million for the year ended December 31, 2017.

- On December 22, 2017, the 2017 Tax Act was signed into law and includes provisions reducing the federal tax rate for years beginning in 2018 from 35% to 21%.
- Our effective tax rate was (3.7%) for the year ended December 31, 2018 compared to an effective tax rate of (0.5%) for the year ended December 31, 2017. The low 2018 effective tax rate is primarily due to favorable tax benefits related to current year credits, equity compensation, subsidiary basis write off, prior year state tax apportionment changes, uncertain tax position releases, and acquisition adjustments.
- Our normalized effective tax rate of 25.8% for 2018 decreased from our normalized effective tax rate of 36.1% for 2017 primarily due to a lower federal tax rate. The normalized effective tax rate excludes prior years' expense and benefit adjustments recognized in the respective fiscal year.

2017 vs. 2016

During the year ended December 31, 2017, we recorded an income tax benefit of ($0.2) million, a decrease of $12.0 million compared to the year ended December 31, 2016.

- Our effective tax rate was (0.5%) for the year ended December 31, 2017 compared to an effective tax rate of (23.9%) for the year ended December 31, 2016. The decrease is primarily due to the revaluation of our deferred tax liabilities based on the reduced federal tax rate described above.
- Our normalized effective tax rate of 36.1% for 2017 is comparable to our normalized effective tax rate of 36.2% for 2016. The normalized effective tax rate excludes prior years expense and benefit adjustments recognized in the respective fiscal year.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Liquidity and Capital Resources

The following tables should be read in conjunction with the Consolidated Financial Statements and Notes thereto, in Part II, Item 8 of this 2018 Form 10-K.

Our cash and cash equivalents, working capital and available borrowings under our credit facility (based upon the borrowing base and financial covenants in our Credit Agreement) were as follows *(in thousands)*:

	Years ended December 31,	
	2018	2017
Cash and cash equivalents	$ 178,946	$ 83,313
Working capital	$ 328,684	$ 199,967
Available borrowings under credit facility	$ 253,500	$ 254,600

A summary of our cash flows was as follows *(in thousands)*:

	Years ended December 31,		
	2018	2017	2016
Net cash provided by operating activities	$ 96,457	$ 86,464	$ 88,639
Net cash used in investing activities	(30,413)	(204,364)	(39,201)
Net cash provided by/(used in) financing activities	29,589	25,214	(19,049)
Net increase / (decrease) in cash and cash equivalents	$ 95,633	$ (92,686)	$ 30,389

Our cash and cash equivalents and working capital increased as of December 31, 2018 as compared to December 31, 2017, primarily as a result of the cash generated by our operating activities as discussed below.

Our principal source of cash has been our cash flow from operations and our $500 million five-year revolving credit facility. Other sources of cash include proceeds from exercise of stock options and tax benefits associated with stock option exercises. The primary uses of cash are capital investments, compensation expenses, data processing, direct project costs, SG&A expenses and acquisitions. We may also use available cash to repurchase shares of our common stock.

We believe that expected cash flows from operations, available cash and cash equivalents, and funds available under our revolving credit facility will be sufficient to meet our liquidity requirements for the following year, which include:

- the working capital requirements of our operations;
- investments in our business;
- business development activities;
- repurchases of common stock; and
- repayment of our revolving credit facility.

Any projections of future earnings and cash flows are subject to substantial uncertainty. We may need to access debt and equity markets in the future if unforeseen costs or opportunities arise, to meet working capital requirements, fund acquisitions or repay our indebtedness under the Credit Agreement. If we need to obtain new debt or equity financing in the future, the terms and availability of such financing may be impacted by economic and financial market conditions as well as our financial condition and results of operations at the time we seek additional financing.

Cash Flows from Operating Activities

Net cash provided by operating activities for the year ended December 31, 2018 was $96.5 million, a $10.0 million increase from net cash provided by operating activities of $86.5 million for the year ended December 31, 2017. The increase was primarily due to a $14.9 million increase in net income and increases in reconciling items of $14.3 million as compared to prior year. These increases were offset by decreases in operating assets and liabilities of approximately $19.2 million.

Net cash provided by operating activities for the year ended December 31, 2017 was $86.5 million, a $2.1 million decrease from net cash provided by operating activities of $88.6 million for the year ended December 31, 2016. The decrease was primarily due to a decrease in deferred income taxes of $13.0 million related to our revaluation of the Company's deferred tax balances from the federal tax rate of 35% to 21% under the 2017 Tax Act, offset by an increase in stock based compensation expense of $10.9 million primarily related to retirement eligible employees. The decrease was also impacted by changes in operating assets and liabilities and offset by increases in net income, and depreciation and amortization expenses.

Our DSO calculation can be derived by dividing total net accounts receivable at the end of period, by the daily average of the current quarter's annualized revenue. For the year ended December 31, 2018, revenue was $598.3 million, an increase of $77.1 million compared to revenue of $521.2 million for the year ended December 31, 2017. DSO increased by 4 days to 119 days as of December 31, 2018, as compared to 115 days as of December 31, 2017. The change was due to timing delays in certain clients processing our findings through their systems. We do not currently anticipate collection issues with our accounts receivable, however, nor do we currently expect that any extended collections will materially impact our liquidity.

The majority of our customer relationships have been in place for several years. Our future operating cash flows could be adversely affected by a decrease in a demand for our services, delayed payments from customers or if one or more contracts with our largest customers is terminated or not renewed.

Cash Flows from Investing Activities

Net cash used in investing activities for the year ended December 31, 2018 was $30.4 million, a $174.0 million decrease compared to net cash used in investing activities of $204.4 million for the year ended December 31, 2017. This decrease was primarily due to the use of approximately $171.3 million for the Eliza acquisition in April 2017. Purchases of property and equipment and investment in capitalized software also decreased by $2.7 million year over year.

Net cash used in investing activities for the year ended December 31, 2017 was $204.4 million, a $165.2 million increase compared to net cash used in investing activities of $39.2 million for the year ended December 31, 2016. This increase was primarily due to the use of approximately $171.3 million for the Eliza acquisition in April 2017 as compared to the use of approximately $20.7 million for the Essette acquisition in September 2016. Purchases of property and equipment and investment in capitalized software also increased by $12.0 million year over year.

We currently expect to incur capital expenditures of $35-$40 million during the year ended December 31, 2019.

Cash Flows from Financing Activities

Net cash provided by financing activities for the year ended December 31, 2018 was $29.6 million, a $4.4 million increase from net cash provided by financing activities of $25.2 million for the year ended December 31, 2017. This increase was primarily attributable to an increase of $36.0 million of proceeds from exercise of stock options over prior year and an $8.2 million decrease in repurchases of common stock as compared to prior year. Additionally, there was a $39.8 million decrease in proceeds from our credit facility net of deferred financing cost payments.

Net cash provided by financing activities for the year ended December 31, 2017 was $25.2 million, a $44.2 million increase from net cash used in financing activities of $19.0 million for the year ended December 31, 2016. This increase was primarily attributable to $42.2 million of proceeds from additional borrowings under our amended credit facility.

Share Repurchase Program

During the year ended December 31, 2018, we repurchased 0.4 million shares of our common stock for approximately $6.0 million using cash resources. See the discussion under "Repurchases of Shares of Common Stock" under Part II, Item 5 and "Equity" in Note 11 to the Consolidated Financial Statements under Part II, Item 8 for additional information regarding share repurchases.

Credit Agreement

In May 2013, we entered into the Credit Agreement with certain lenders and Citibank, N.A. as administrative agent. The Credit Agreement originally provided for an initial $500 million five-year revolving credit facility maturing on May 3, 2018. On December 19, 2017, we entered into an amendment to the Credit Agreement that, among other things, provided for an extension of the maturity date of our then-existing senior secured revolving credit facility to December 19, 2022, which includes a $50 million sublimit for the issuance of letters of credit and a $25 million sublimit for swingline loans. In addition, the Credit Agreement includes an accordion feature that permits us to increase the revolving credit facility up to the sum of (a) the greater of $120 million and 100% of Consolidated EBITDA (as defined in the Credit Agreement) and (b) additional amounts so long as our first lien leverage ratio (as defined in the Credit Agreement) on a pro forma basis is not greater than 3.00:1.00, in each case subject to obtaining commitments from lenders therefor and meeting certain other conditions.

The obligations and amounts due under the Credit Agreement are secured by a first security priority interest in all or substantially all of our tangible and intangible assets and our material 100% owned subsidiaries' assets. The Credit Agreement contains customary representations and warranties, affirmative and negative covenants, including financial covenants, and events of default.

As of December 31, 2018, the outstanding principal balance under our revolving credit facility was $240.0 million.

As part of a contractual agreement with a customer, the Company has an outstanding irrevocable letter of credit for $6.5 million, which is issued against our revolving credit facility and expires June 30, 2019.

As of December 31, 2018, we were in compliance with all terms of the Credit Agreement.

See Note 10 to the Consolidated Financial Statements in Part II, Item 8 for additional information regarding our Credit Agreement.

Contractual Obligations

The following table represents the scheduled maturities of our contractual cash obligations and other commitments:

	Payments Due by Period (*in thousands*)				
Contractual Obligations [1]	Total	Less than 1 year	1 - 3 years	3 -5 years	More than 5 years
Operating leases [2]	$ 22,654	$ 5,778	$ 9,162	$ 4,767	$ 2,947
Revolving credit facility [3]	240,000	-	-	240,000	-
Interest expense [4]	41,687	10,494	21,016	10,177	-
Commitment fee [5]	2,610	651	1,320	639	-
Capital leases [6]	8	8	-	-	-
Letter of Credit fee [7]	49	49	-	-	-
Purchase obligations and commitments [8]	26,966	10,180	13,970	2,816	-
Total	$ 333,974	$ 27,160	$ 45,468	$ 258,399	$ 2,947

(1) The Company has excluded long-term unrecognized tax benefits, net of interest and penalties, of $4.8 million from the amounts presented as the timing of these obligations is uncertain.

(2) Represents the future minimum lease payments under non-cancelable operating leases.

(3) Represents scheduled repayments of principal on the revolving credit facility under the terms of our Credit Agreement. See Note 10 to the Consolidated Financial Statements in Part II, Item 8 for additional information regarding the Credit Agreement.

(4) Represents estimates of amounts due on the revolving credit facility based on the interest rate as of December 31, 2018 and on scheduled repayments of principal. See Note 10 to the Consolidated Financial Statements in Part II, Item 8 for additional information regarding the Credit Agreement.

(5) Represents the commitment fee due on the revolving credit facility. See Note 10 to the Consolidated Financial Statements in Part II, Item 8 for additional information regarding the Credit Agreement.

(6) Represents the future minimum lease payments under capital leases.

(7) Represents the fees for the letter of credit issued against the revolving credit facility. See Note 10 to the Consolidated Financial Statements in Part II, Item 8 for additional information regarding the Credit Agreement.

(8) Represents future purchases related to outstanding purchase orders and supplier requisitions.

Recently Issued Accounting Pronouncements

The information set forth under the caption “Summary of Significant Accounting Policies” in Note 1 to the Consolidated Financial Statements in Part II, Item 8 is incorporated herein by reference.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

At December 31, 2018, we were not a party to any derivative financial instruments. We conduct all of our business in U.S. currency and hence do not have direct foreign currency risk. We are exposed to changes in interest rates, primarily with respect to our revolving credit facility under our Credit Agreement. If the effective interest rate for all of our variable rate debt were to increase by 100 basis points (1%), our annual interest expense would increase by a maximum of $2.4 million based on our debt balances outstanding at December 31, 2018. Further, we currently invest substantially all of our excess cash in short-term investments, primarily money market accounts, where returns effectively reflect current interest rates. As a result, market interest rate changes may impact our interest income or expense. The impact will depend on variables such as the magnitude of rate changes and the level of borrowings or excess cash balances. We do not consider this risk to be material. We manage such risk by continuing to evaluate the best investment rates available for short-term, high quality investments.

Item 8. Consolidated Financial Statements and Supplementary Data

The information required by Item 8 is found under Item 15 of this 2018 Form 10-K.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

We are responsible for maintaining disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) that are designed to ensure that information required to be disclosed in our reports filed under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures

As required by Rule 13a-15(b) under the Exchange Act, management, with the participation of our Chief Executive Officer and Chief Financial Officer, performed an evaluation of the effectiveness of our disclosure controls and procedures as of December 31, 2018. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by the 2018 Form 10-K.

(b) Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting and for the assessment of the effectiveness of internal control over financial reporting. As defined by Rule 13a-15(f) under the Exchange Act, internal control over financial reporting is a process designed by, or under the supervision of our Chief Executive Officer and our Chief Financial Officer and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the consolidated financial statements for external purposes in accordance with U.S. GAAP.

Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the consolidated financial statements in accordance with generally accepted accounting principles and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the consolidated financial statements.

In connection with the preparation of our annual consolidated financial statements, management has undertaken an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2018, based on criteria established in the Internal Control-Integrated Framework issued by COSO. Management's assessment included an evaluation of the design of our internal control over financial reporting and testing of the operational effectiveness of those controls. Based on that assessment, we believe that the Company's internal control over financial reporting was effective based on those criteria as of December 31, 2018.

Our independent registered public accounting firm, Grant Thornton LLP, audited our consolidated financial statements and has issued an attestation report on the effectiveness of our internal control over financial reporting as of December 31, 2018, a copy of which is included with this 2018 Form 10-K.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

(c) Changes in Internal Control Over Financial Reporting

There have been no changes to the Company's internal control over financial reporting during the quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item 10 is incorporated herein by reference to the applicable disclosure found in our definitive proxy statement to be filed with the SEC pursuant to Regulation 14A under the Exchange Act in connection with HMS Holdings Corp.'s 2019 Annual Meeting of Shareholders under the captions "*Proposal One: Election of Class II Directors,*" "*Executive Officers,*" "*Section 16(a) Beneficial Ownership Reporting Compliance*," "*Director Nomination Process*," "*Additional Information—Shareholder Proposals and Director Nominations for 2020 Annual Meeting,*" and "*Board Committees and Related Matters*."

Our Board of Directors has adopted a Code of Conduct applicable to all of our directors, officers and employees, including all employees, officers, directors, contractors, contingent workers and business affiliates of HMS subsidiaries. The Code of Conduct is publicly available on our website under the "Investors—Corporate Governance" tab at http://investor.hms.com/corporate-governance.cfm and can also be obtained free of charge by sending a written request to our Corporate Secretary. To the extent permissible under the Nasdaq Marketplace Rules, we intend to disclose amendments to our Code of Conduct, as well as waivers of the provisions thereof, that relate to our principal executive officer, principal financial officer, principal accounting officer, controller or persons performing similar functions on the Company's website under the "Investors—Corporate Governance" tab at http://investor.hms.com/corporate-governance.cfm.

Item 11. Executive Compensation

The information required by this Item 11 is incorporated herein by reference to the applicable disclosure found in our definitive proxy statement to be filed with the SEC pursuant to Regulation 14A under the Exchange Act in connection with HMS Holdings Corp.'s 2019 Annual Meeting of Shareholders under the captions "*Executive Compensation,*" "*Director Compensation,*" *and "Compensation Committee Interlocks and Insider Participation.*"

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters

Except as provided below, the information required by this Item 12 is incorporated herein by reference to the applicable disclosure found in our definitive proxy statement to be filed with the SEC pursuant to Regulation 14A under the Exchange Act in connection with HMS Holdings Corp.'s 2019 Annual Meeting of Shareholders under the caption "*Ownership of HMS Common Stock.*"

Equity Compensation Plan Information

The following table summarizes information about our equity compensation plans as of December 31, 2018. For additional information about our equity compensation plans see the discussion set forth under the caption "Stock-Based Compensation" in Note 13 to the Consolidated Financial Statements in Part II, Item 8.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by shareholders	5,825,734(1)	$ 17.07	4,758,398
Equity compensation plans not approved by shareholders	19,004(2)	$ 12.00	—
Total	5,844,738		

(1) This includes stock options and restricted stock units granted under our 2006 Stock Plan and 2016 Omnibus Plan.

(2) This includes stock options granted under the 2011 HDI Plan, which was assumed in connection with our acquisition of HDI and approved by the Compensation Committee of our Board.

Item 13. Certain Relationships and Related Transactions and Director Independence

The information required by this Item 13 is incorporated herein by reference to the applicable disclosure found in our definitive proxy statement to be filed with the SEC pursuant to Regulation 14A under the Exchange Act in connection with HMS Holdings Corp.'s 2019 Annual Meeting of Shareholders under the captions "*Certain Relationships and Related Transactions*" and "*Director Independence*."

Item 14. Principal Accounting Fees and Services

The information required by this Item 14 is incorporated herein by reference to the applicable disclosure from the proposal captioned "*Ratification of the Selection of Independent Registered Public Accounting Firm*" found in our definitive proxy statement to be filed with the SEC pursuant to Regulation 14A under the Exchange Act in connection with HMS Holdings Corp.'s 2019 Annual Meeting of Shareholders.

PART IV

Item 15. Exhibits and Financial Statement Schedules

1. *Financial Statements.*

The financial statements are listed in the Index to Consolidated Financial Statements on page 52.

2. *Financial Statement Schedules.*

Financial Statement Schedule II-Valuation and Qualifying Accounts is set forth on page 82. All other financial statement schedules have been omitted as they are either not required, not applicable or the information is otherwise included.

3. *Exhibits.*

The Exhibits include agreements to which the Company is a party or has a beneficial interest. The agreements have been filed to provide investors with information regarding their respective terms. The agreements are not intended to provide any other actual information about the Company or its business or operations. In particular, the assertions embodied in any representations, warranties, and covenants contained in the agreements may be subject to qualifications with respect to knowledge and materiality different from those applicable to investors and may be qualified by information in confidential disclosure schedules not included with the exhibits. These disclosure schedules may contain information that modifies, qualifies and creates exceptions to the representations, warranties and covenants set forth in the agreements. Moreover, certain representations, warranties, and covenants in the agreements may have been used for the purpose of allocating risk between parties, rather than establishing matters as facts. In addition, information concerning the subject matter of the representations, warranties and covenants may have changed after the date of the respective agreement, which subsequent information may or may not be fully reflected in the Company's public disclosures. Accordingly, investors should not rely on the representations, warranties and covenants in the agreements as characterizations of the actual state of facts about the Company or its business or operations on the date hereof.

Where an exhibit is filed by incorporation by reference to a previously filed registration statement or report, such registration statement or report is identified after the description of the exhibit.

Exhibit Number	Description
2.1	Agreement and Plan of Merger, dated December 16, 2002, among Health Management Systems, Inc., HMS Holdings Corp. and HMS Acquisition Corp. (incorporated by reference to Exhibit A to the Company's Prospectus and Proxy Statement (Reg No. 333-100521) as filed with the SEC on January 24, 2003)
2.2	Agreement and Plan of Merger, dated July 17, 2013, by and between HMS Holdings Corp., a Delaware corporation, and HMS Holdings Corp., a New York corporation (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K/12g-3 (File No. 000-50194) as filed with the SEC on July 23, 2013)
2.3	Agreement and Plan of Merger, dated March 10, 2017, by and among HMS Holdings Corp., Echo Acquisition Sub, Inc., Eliza Holding Corp., and Parthenon Investors III, L.P., solely in its capacity as the representative for equity holders of Eliza Holding Corp. (incorporated by reference to Exhibit 2.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on June 6, 2017)
3.1	Conformed copy of Certificate of Incorporation of HMS Holdings Corp., as amended through May 23, 2018 (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on August 6, 2018)

Exhibit Number	Description
3.2	Second Amended and Restated Bylaws of HMS Holdings Corp. dated May 23, 2018 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on May 25, 2018)
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K/12g-3 (File No. 000-50194) as filed with the SEC on July 23, 2013)
10.1.1	HMS Holdings Corp. Fourth Amended and Restated 2006 Stock Plan (incorporated by reference to Exhibit 99.2 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on July 12, 2011)†
10.1.2	Amendment No. 1 to the HMS Holdings Corp. Fourth Amended and Restated 2006 Stock Plan (incorporated by reference to Exhibit 10.6 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2012)†
10.1.3	Form of 2012 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.20 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2013)†
10.1.4	Form of 2012 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2013)†
10.1.5	Form of 2013 Executive Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.24 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2013)†
10.1.6	Form of 2013 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 12, 2014)†
10.1.7	Form of 2013 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 12, 2014)†
10.1.8	Form of March 2014 Executive Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 12, 2014)†
10.1.9	Form of November 2014 Executive Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 10, 2014)†
10.1.10	Form of 2014 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.26 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 2, 2015)†
10.1.11	Form of 2014 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.28 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 2, 2015)†
10.1.12	Form of March 2015 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 11, 2015)†
10.1.13	Form of March 2015 Executive Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 11, 2015)†

Exhibit Number	Description
10.1.14	Form of 2015 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.21 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2016)†
10.1.15	Form of 2015 Director Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2016)†
10.1.16	Form of November 2015 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2016)†
10.1.17	Form of 2016 Executive and Senior Vice President Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 10, 2016)†
10.1.18	Form of 2016 Executive and Senior Vice President Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 10, 2016)†
10.2.1	HMS Holdings Corp. 2016 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on June 27, 2016)†
10.2.2	Form of Non-Qualified Stock Option Award Agreement for Employees under the 2016 Omnibus Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 9, 2016)†
10.2.3	Form of Restricted Stock Unit Award Agreement for Employees under the 2016 Omnibus Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 9, 2016)†
10.2.4	Form of Non-Qualified Stock Option Award Agreement for Non-Employee Directors under the 2016 Omnibus Plan (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 9, 2016)†
10.2.5	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors under the 2016 Omnibus Plan (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 9, 2016)†
10.3.1	Executive Employment Agreement, dated March 1, 2013, by and between William C. Lucia and HMS Holdings Corp. (incorporated by reference to Exhibit 10.29 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2013)†
10.3.2	Letter of Amendment to Executive Employment Agreement, dated April 30, 2013, by and between William C. Lucia and HMS Holdings Corp. (incorporated by reference to Exhibit 10.1 to Amendment No. 1 to the Company's Annual Report on Form 10-K/A (File No. 000-50194) as filed with the SEC on April 30, 2013)†

Exhibit Number	Description
10.3.3	Second Amendment to Executive Employment Agreement, dated January 20, 2015, by and between HMS Holdings Corp. and William C. Lucia (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on January 23, 2015)†
10.3.4	Third Amendment to Executive Employment Agreement, dated February 21, 2018, by and between William C. Lucia and HMS Holdings Corp. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on February 23, 2018)†
10.4	Amended and Restated Employment Agreement, dated April 2, 2018, by and between Jeffrey S. Sherman and HMS Holdings Corp. (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 7, 2018)†
10.5	Amended and Restated Employment Agreement, dated March 29, 2018, by and between Meredith W. Bjorck and HMS Holdings Corp. (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 7, 2018)†
10.6	Amended and Restated Employment Agreement, dated March 29, 2018, by and between Douglas M. Williams, Jr. and HMS Holdings Corp. (incorporated by reference to Exhibit 10.5 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 7, 2018)†
10.7	Amended and Restated Employment Agreement, dated April 2, 2018, by and between Emmet O' Gara and HMS Holdings Corp.†
10.8	Amended and Restated Employment Agreement, dated April 2, 2018, by and between Semone Neuman and HMS Holdings Corp. (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 7, 2018)†
10.9	Separation, Waiver and General Release Agreement, dated January 9, 2019, by and between Semone Neuman and HMS Holdings Corp.†
10.10	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on August 6, 2018)†
10.11	HMS Holdings Corp. Director Deferred Compensation Plan, as amended through June 29, 2016 (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on August 9, 2016)†
10.12	HMS Holdings Corp. Annual Incentive Compensation Plan as amended and restated (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on June 27, 2016)†
10.13.1	Amended and Restated Credit Agreement, dated May 3, 2013, as amended by Amendment No. 1 to Amended and Restated Credit Agreement dated as of March 8, 2017, and as further amended by Amendment No. 2 to Amended and Restated Credit Agreement, dated as of December 19, 2017, by and among HMS Holdings Corp., the Guarantors party thereto, the Lenders party thereto and Citibank, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on December 21, 2017)
10.13.2	Amended and Restated Security Agreement, dated December 19, 2017, by and among HMS Holdings Corp., the Subsidiary Securing Parties party thereto and Citibank, N.A., as Collateral Agent (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on December 21, 2017)
10.14	Settlement Agreement, dated June 27, 2018, by and among Dennis Demetre, Lori Lynn Lewis Demetre, John Alfred Lewis, Christopher Brandon Lewis, and HMS Holdings Corp. (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on August 6, 2018)

Exhibit Number	Description
21.1	HMS Holdings Corp. List of Subsidiaries
23.1	Consent of Grant Thornton LLP
23.2	Consent of KPMG LLP
31.1	Rule 13a-14(a)/15d-14(a) Certification of the Principal Executive Officer of HMS Holdings Corp., as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Rule 13a-14(a)/15d-14(a) Certification of the Principal Financial Officer of HMS Holdings Corp., as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Section 1350 Certification of the Principal Executive Officer of HMS Holdings Corp., as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*
32.2	Section 1350 Certification of the Principal Financial Officer of HMS Holdings Corp., as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

---

† Indicates a management contract or compensatory plan, contract or arrangement

* The certifications attached hereto as Exhibit 32.1 and Exhibit 32.2 are furnished with this 2018 Form 10-K and shall not be deemed "filed" by the Company for purposes of Section 18 of the Exchange Act

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized on February 25, 2019.

HMS Holdings Corp.

/s/ William C. Lucia
William C. Lucia
Chairman of the Board, President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on February 25, 2019.

Signature	Title
/s/ William C. Lucia William C. Lucia	Director, Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)
/s/ Jeffrey S. Sherman Jeffrey S. Sherman	Executive Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer)
/s/ Greg D. Aunan Greg D. Aunan	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)
/s/ Robert Becker Robert Becker	Director
/s/ Craig R. Callen Craig R. Callen	Director
/s/ William F. Miller III William F. Miller III	Director
/s/ Ellen A. Rudnick Ellen A. Rudnick	Director
/s/ Bart M. Schwartz Bart M. Schwartz	Director
/s/ Richard H. Stowe Richard H. Stowe	Director
/s/ Cora M. Tellez Cora M. Tellez	Director

HMS HOLDINGS CORP. AND SUBSIDIARIES
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders
HMS Holdings Corp.

Opinion on the financial statements
We have audited the accompanying consolidated balance sheets of HMS Holdings Corp. (a Delaware corporation) and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of income, changes in shareholders' equity, and cash flows for each of the two years in the period ended December 31, 2018, and the related notes and financial statement schedule included under Item 15 (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), and our report dated February 25, 2019 expressed an unqualified opinion.

Basis for opinion
These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ GRANT THORNTON LLP

We have served as the Company's auditor since 2017.

Dallas, Texas
February 25, 2019

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
HMS Holdings Corp.:

We have audited the accompanying consolidated balance sheet of HMS Holdings Corp. and subsidiaries as of December 31, 2016, and the related consolidated statements of income, shareholders' equity, and cash flows for the year ended December 31, 2016. In connection with our audit of the consolidated financial statements, we also have audited financial statement schedule II as it relates to the year ended December 31, 2016. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedule based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of HMS Holdings Corp. and subsidiaries as of December 31, 2016, and the results of their operations and their cash flows for the year ended December 31, 2016, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the related financial statement schedule as it relates to the year ended December 31, 2016, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ KPMG, LLP

Dallas, Texas
June 6, 2017

Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders
HMS Holdings Corp.

Opinion on internal control over financial reporting
We have audited the internal control over financial reporting of HMS Holdings Corp. (a Delaware corporation) and subsidiaries (the "Company") as of December 31, 2018, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements of the Company as of and for the year ended December 31, 2018, and our report dated February 25, 2019 expressed an unqualified opinion on those financial statements.

Basis for opinion
The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and limitations of internal control over financial reporting
A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ GRANT THORNTON LLP

Dallas, Texas
February 25, 2019

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share amounts)

	December 31, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 178,946	$ 83,313
Accounts receivable, net of allowance of $13,683 and $14,799, at December 31, 2018 and December 31, 2017, respectively	206,772	189,460
Prepaid expenses	19,970	16,589
Income tax receivable	18,817	1,892
Deferred financing costs, net	564	564
Other current assets	240	836
Total current assets	425,309	292,654
Property and equipment, net	94,435	98,581
Goodwill	487,617	487,617
Intangible assets, net	67,140	91,482
Deferred financing costs, net	1,673	2,237
Other assets	2,344	2,589
Total assets	$ 1,078,518	$ 975,160
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable, accrued expenses and other liabilities	$ 74,902	$ 61,900
Estimated liability for appeals	21,723	30,787
Total current liabilities	96,625	92,687
Long-term liabilities:		
Revolving credit facility	240,000	240,000
Net deferred tax liabilities	18,485	21,989
Deferred rent	4,118	4,852
Other liabilities	5,894	9,403
Total long-term liabilities	268,497	276,244
Total liabilities	365,122	368,931
Commitments and contingencies		
Shareholders' equity:		
Preferred stock -- $0.01 par value; 5,000,000 shares authorized; none issued	—	—
Common stock -- $0.01 par value; 175,000,000 shares authorized; 98,924,501 shares issued and 85,261,664 shares outstanding at December 31, 2018; 96,536,251 shares issued and 83,256,858 shares outstanding at December 31, 2017	989	965
Capital in excess of par value	425,748	368,721
Retained earnings	422,235	366,164
Treasury stock, at cost: 13,663,194 shares at December 31, 2018 and 13,279,393 shares at December 31, 2017	(135,576)	(129,621)
Total shareholders' equity	713,396	606,229
Total liabilities and shareholders' equity	$ 1,078,518	$ 975,160

See accompanying notes to the consolidated financial statements.

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
(in thousands, except per share amounts)

	Year Ended December 31,		
	2018	2017	2016
Revenue	$ 598,290	$ 521,212	$ 489,720
Cost of services:			
Compensation	224,893	202,049	189,271
Information technology	53,428	45,723	37,337
Occupancy	15,968	17,190	14,000
Direct project expenses	42,908	41,347	46,254
Other operating expenses	31,438	28,425	27,778
Amortization of acquisition related software and intangible assets	32,975	30,393	28,030
Total cost of services	401,610	365,127	342,670
Selling, general and administrative expenses	113,442	105,654	89,381
Settlement expense	20,000	-	-
Total operating expenses	535,052	470,781	432,051
Operating income	63,238	50,431	57,669
Interest expense	(11,310)	(10,871)	(8,519)
Interest income	1,089	295	321
Income before income taxes	53,017	39,855	49,471
Income taxes	(1,972)	(199)	11,835
Net Income	$ 54,989	$ 40,054	$ 37,636
Basic income per common share:			
Net income per common share -- basic	$ 0.66	$ 0.48	$ 0.45
Diluted income per common share:			
Net income per common share -- diluted	$ 0.64	$ 0.47	$ 0.43
Weighted average shares:			
Basic	83,625	83,821	84,221
Diluted	86,144	85,088	86,987

See accompanying notes to the consolidated financial statements

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(in thousands, except share and per share amounts)

	Common Stock				Treasury Stock		
	# of Shares Issued	Par Value	Capital in Excess of Par Value	Retained Earnings	# of Shares	Amount	Total Shareholders' Equity
Balance at January 1, 2016	95,263,461	$ 952	$330,290	$ 288,474	11,273,746	$ (95,014)	$ 524,702
Net income	-	-	-	37,636	-	-	37,636
Stock-based compensation expense	-	-	13,277	-	-	-	13,277
Purchase of treasury stock	-	-	-	-	1,140,332	(20,470)	(20,470)
Exercise of stock options	510,512	5	2,935	-	-	-	2,940
Vesting of restricted stock awards and units, net of shares withheld for employee tax	192,879	2	(1,477)	-	-	-	(1,475)
Balance at December 31, 2016	95,966,852	$ 959	345,025	$ 326,110	12,414,078	$(115,484)	$ 556,610
Net income	-	-	-	40,054	-	-	40,054
Stock-based compensation expense	-	-	24,143	-	-	-	24,143
Purchase of treasury stock	-	-	-	-	865,315	(14,137)	(14,137)
Exercise of stock options	172,326	2	2,718	-	-	-	2,720
Vesting of restricted stock awards and units, net of shares withheld for employee tax	397,073	4	(3,165)	-	-	-	(3,161)
Balance at December 31, 2017	96,536,251	$ 965	$368,721	$ 366,164	13,279,393	$(129,621)	$ 606,229
Adoption of accounting standard (Note 1 and 2)	-	-	-	1,082	-	-	1,082
Net income	-	-	-	54,989	-	-	54,989
Stock-based compensation expense	-	-	21,507		-	-	21,507
Purchase of treasury stock	-	-	-	-	383,801	(5,955)	(5,955)
Exercise of stock options	2,017,442	20	38,342	-	-	-	38,362
Vesting of restricted stock units, net of shares withheld for employee tax	370,808	4	(2,822)	-	-	-	(2,818)
Balance at December 31, 2018	98,924,501	$ 989	$425,748	$ 422,235	13,663,194	$(135,576)	$ 713,396

See accompanying notes to the consolidated financial statements.

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Years Ended December 31,		
	2018	2017	2016
Operating activities:			
Net income	$ 54,989	$ 40,054	$ 37,636
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization of property, equipment and software	33,254	27,515	24,882
Amortization of intangible assets	24,342	22,555	20,164
Amortization of deferred financing costs	564	2,258	2,083
Stock-based compensation expense	21,507	24,143	13,277
Deferred income taxes	(3,504)	(20,409)	(7,368)
(Gain) / Loss on disposal of assets	-	209	(948)
Change in fair value of contingent consideration	(35)	(2,865)	-
Release of estimated liability for appeals	(8,436)	-	-
Changes in operating assets and liabilities:			
Accounts receivable	(17,312)	(6,976)	(3,554)
Prepaid expenses	(3,381)	(1,463)	(2,399)
Other current assets	596	165	2,066
Other assets	245	124	234
Income taxes receivable / (payable)	(16,925)	1,462	(7,227)
Accounts payable, accrued expenses and other liabilities	11,181	(340)	12,116
Estimated liability for appeals	(628)	32	(2,323)
Net cash provided by operating activities	96,457	86,464	88,639
Investing activities:			
Acquisition of a business, net of cash acquired	-	(171,321)	(20,678)
Proceeds from sale of cost basis investment	-	-	2,496
Purchases of property and equipment	(11,264)	(17,318)	(13,703)
Investment in capitalized software	(19,149)	(15,725)	(7,316)
Net cash used in investing activities	(30,413)	(204,364)	(39,201)
Financing activities:			
Proceeds from credit facility	-	42,204	-
Payments for deferred financing costs	-	(2,269)	-
Proceeds from exercise of stock options	38,362	2,720	2,940
Payments of tax withholdings on behalf of employees for net-share settlements	(2,818)	(3,161)	(1,475)
Payments on capital lease obligations	-	(143)	(44)
Purchases of treasury stock	(5,955)	(14,137)	(20,470)
Net cash provided by/(used in) financing activities	29,589	25,214	(19,049)
Net increase/(decrease) in cash and cash equivalents	95,633	(92,686)	30,389
Cash and Cash Equivalents			
Cash and cash equivalents at beginning of year	83,313	175,999	145,610
Cash and cash equivalents at end of period	$ 178,946	$ 83,313	$ 175,999
Supplemental disclosure of cash flow information:			
Cash paid for income taxes, net of refunds	$ 22,225	$ 17,995	$ 20,326
Cash paid for interest	$ 10,326	$ 9,944	$ 6,196
Supplemental disclosure of non-cash activities:			
Change in balance of accrued property and equipment purchases	$ 1,305	$ 51	$ 684

See accompanying notes to the consolidated financial statements.

HMS HOLDINGS CORP. AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. Business and Summary of Significant Accounting Policies

(a) Business

HMS is an industry-leading provider of cost containment solutions in the healthcare marketplace. We use healthcare technology, analytics and engagement solutions, to deliver coordination of benefits, payment integrity, population risk analytics, and care management and consumer engagement solutions to help payers reduce costs, improve healthcare outcomes and enhance member experiences. We provide coordination of benefits services to government and commercial healthcare payers to ensure that the correct party pays the claim. Our payment integrity services promote accuracy by fighting fraud, waste and abuse, and our total population management solutions provide risk-bearing organizations with reliable intelligence across their member populations to identify risks and improve patient engagement and outcomes. Together these various services help move the healthcare system forward for our customers. We currently operate as one business segment with a single management team that reports to the Chief Executive Officer.

(b) Summary of Significant Accounting Policies

For certain accounting topics, the description of the accounting policy may be found in the related Note.

(i) Principles of Consolidation

The consolidated financial statements include the Company's accounts and transactions and those of the Company's wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

(ii) Use of Estimates

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(iii) Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less to be cash equivalents. Cash equivalents consist of deposits that are readily convertible into cash.

(iv) Concentration of Credit Risk

The Company's policy is to limit credit exposure by placing cash in accounts which are exposed to minimal interest rate and credit risk. HMS maintains cash and cash equivalents in cash depository accounts with large financial institutions with a minimum credit rating of A1/P1 or better, as defined by Standard and Poor's. The balance at these institutions generally exceeds the maximum balance insured by the Federal Deposit Insurance Corporation of up to $250,000 per entity. HMS has not experienced any losses in cash and cash equivalents and believes these cash and cash equivalents do not expose the Company to any significant credit risk.

The Company is subject to potential credit risk related to changes in economic conditions within the healthcare market. However, HMS believes that the billing and collection policies are adequate to minimize the potential credit risk. The Company performs ongoing credit evaluations of customers and generally does not require collateral.

(v) Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation is provided over the estimated useful lives of the assets utilizing the straight-line method. HMS amortizes leasehold improvements on a straight-line basis over the shorter of (i) the term of the lease or (ii) the estimated useful life of the improvement. Equipment leased under capital leases is depreciated over the shorter of (i) the term of the lease or (ii) the estimated useful life of the equipment. Capitalized software costs relate to software that is acquired or developed for internal use while in the application development stage. All other costs to develop software for internal use, either in the preliminary project stage or post-implementation stage, are expensed as incurred. Amortization of capitalized software is calculated on a straight-line basis over the expected economic life. Land is not depreciated.

Estimated useful lives are as follows:

Property and Equipment	Useful Life (in years)		
Equipment	2	to	5
Leasehold improvements	5	to	10
Furniture and fixtures		5	
Capitalized software	3	to	10
Building and building improvements		up to 39	

Property and equipment is reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. When indicators exist, recoverability of assets is measured by a comparison of the carrying value of the asset group to the estimated undiscounted future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized and charged to earnings is measured by the amount by which the carrying value of the asset group exceeds the fair value of the assets. The Company did not recognize any impairment charges related to property and equipment during the years ended December 31, 2018, 2017 or 2016.

(vi) Intangible assets

The Company records assets acquired and liabilities assumed in a business combination based upon their acquisition date fair values. In most instances there is not a readily defined or listed market price for individual assets and liabilities acquired in connection with a business, including intangible assets. The Company determines fair value through various valuation techniques including discounted cash flow models, quoted market values and third party independent appraisals, as considered necessary. Significant assumptions used in those techniques include, but are not limited to, growth rates, discount rates, customer attrition rates, expected levels of revenues, earnings, cash flows and tax rates. The use of different valuation techniques and assumptions are highly subjective and inherently uncertain and, as a result, actual results may differ materially from estimates.

All of the Company's intangible assets are subject to amortization and are amortized using the straight-line method over their estimated period of benefit. Estimated useful lives are as follows:

Intangible Assets	Useful Life (in years)		
Customer relationships	7	to	15
Restrictive covenants	1	to	3
Trade names	1.5	to	7
Intellectual property	4	to	6

Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. When indicators exist, recoverability of assets is measured by a comparison of the carrying value of the asset group to the estimated undiscounted future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized and charged to earnings is measured by the amount by which the carrying value of the asset group exceeds the fair value of the assets. The Company did not recognize any impairment charges related to intangible assets during the years ended December 31, 2018, 2017 or 2016.

(vii) Goodwill

Goodwill is the excess of acquisition costs over the fair values of assets and liabilities of acquired businesses. During the measurement period, which is up to one year from the acquisition date, the Company may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings.

Goodwill is subject to a periodic assessment for impairment. The Company assesses goodwill for impairment on an annual basis as of June 30th of each year or more frequently if an event occurs or changes in circumstances would more likely than not reduce the fair value of a reporting unit below its carrying amount. Assessment of goodwill impairment is at the HMS Holdings Corp. entity level as the Company operates as a single reporting unit. We have the option to perform a qualitative or quantitative assessment to determine if impairment is more likely than not to have occurred. The Company completed the annual impairment test as of June 30, 2018 electing to perform the quantitative assessment of which the first step is to compare the fair value of the reporting unit with its carrying value, including goodwill. In calculating the fair value of the reporting unit, the Company utilized a weighting across three commonly accepted valuation approaches: an income approach, a guideline public company approach, and a merger and acquisition approach. The income approach to determining fair value computes projections of the cash flows that the reporting unit is expected to generate converted into a present value equivalent through discounting. Significant assumptions in the income approach include income projections, a discount rate and a terminal growth value which are all level 3 inputs. The income projections include assumptions for revenue and expense growth which are based on internally developed business plans and largely reflect recent historical revenue and expense trends. The discount rate was based on a risk free rate plus a beta adjusted equity risk premium and specific company risk premium. The terminal growth value is Company specific and was determined analyzing inputs such as historical inflation and the GDP growth rate. The guideline public company approach and merger and acquisition approach are based on pricing multiples observed for similar publicly traded companies or similar market companies that were sold. The results of the annual impairment assessment provide that the fair value of the reporting unit was significantly in excess of the Company's carrying value, including goodwill; therefore, no impairment was indicated. There were no impairment charges related to goodwill during the years ended December 31, 2018, 2017 or 2016. There were no changes in the carrying amount of goodwill for the year ended December 31, 2018.

(viii) Income Taxes

Income taxes are accounted for under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. This method also requires the recognition of future tax benefits for net operating loss carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized as income or expense in the period that includes the enactment date. A valuation allowance is provided against deferred tax assets to the extent their realization is not more likely than not. Uncertain income tax positions are accounted for by prescribing a minimum recognition threshold that a tax position is required to meet before being recognized in the financial statements. Although the Company believes that it has adequately reserved for uncertain tax positions (including interest and penalties), it can provide no assurance that the final tax outcome of these matters will not be materially different. The Company makes adjustments to these reserves in accordance with the income tax accounting guidance when facts and circumstances change, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made, and could have a material impact on our financial condition and operating results.

(ix) Expense Classifications

HMS cost of services is presented in the categories set forth below. Each category within cost of services excludes expenses relating to SG&A functions, which are presented separately as a component of total operating costs. A description of the primary expenses included in each category is as follows:

Cost of Services:

- *Compensation:* Salary, fringe benefits, bonus and stock-based compensation.
- *Information technology:* Hardware, software and data communication costs.
- *Occupancy:* Rent, utilities, depreciation, office equipment and repair and maintenance costs.
- *Direct project expense:* Variable costs incurred from third party providers that are directly associated with specific revenue generating projects and employee travel expenses.
- *Other operating expenses:* Professional fees, temporary staffing, travel and entertainment, insurance and local and property tax costs.
- *Amortization of acquisition related software and intangible assets:* Amortization of the cost of acquisition related software and intangible assets.

SG&A:

- Expenses related to general management, marketing and administrative activities.

(x) Estimating Valuation Allowances and Accrued Liabilities

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenue and expenses during the reported period. In particular, management must make estimates of the probability of collecting accounts receivable. When evaluating the adequacy of the accounts receivable allowance, management reviews the accounts receivable based on an analysis of historical revenue adjustments, bad debts, customer concentrations, customer credit-worthiness, current economic trends and changes in customer payment terms. As of December 31, 2018 and 2017, the accounts receivable balance was $206.8 million and $189.5 million, net of allowance of $13.7 million and $14.8 million, respectively.

(xi) Stock-Based Compensation

Long-Term Incentive Award Plans

The Company grants stock options and restricted stock units ("equity awards") to HMS employees and non-employee directors under the 2016 Omnibus Plan, as approved by the Company's shareholders on June 23, 2016. The 2016 Omnibus Plan replaced and superseded the Company's 2006 Stock Plan and 2011 HDI Plan. As of December 31, 2018, the number of securities remaining available for future issuance under equity compensation plans, excluding securities to be issued upon exercise of outstanding options and vesting of restricted stock units, is 4,758,398 shares. All of the Company's employees as well as HMS non-employee directors are eligible to participate in the 2016 Omnibus Plan. Awards granted under the 2016 Omnibus Plan generally vest over one to four years. The exercise price of stock options granted under the 2016 Omnibus Plan may not be less than the fair market value of a share of stock on the grant date, as measured by the closing price of the Company's common stock on the Nasdaq Global Select Market and the term of a stock option may not exceed ten years. Prior to 2018, the Company granted two types of equity awards: 1) equity awards with service conditions and 2) equity awards with market and service conditions. The market condition is based on the Company's common stock price during the applicable measurement period. In 2018, the Company only issued equity awards with service conditions.

Stock-Based Compensation Expense

The Company recognizes stock-based compensation expense equal to the grant date fair value of the award on a straight-line basis over the requisite service period.

The fair value of each option grant with only service-based conditions is estimated using the Black-Scholes pricing model. The fair value of each option grant with market and service-based conditions is estimated using a Monte Carlo simulation model. The fair value of each restricted stock unit is calculated based on the closing sale price of the Company's common stock on the grant date.

The determination of the fair value of the options on the grant date using the Black-Scholes pricing model and/or the Monte Carlo simulation model is affected by the Company's stock price, as well as assumptions regarding a number of complex and subjective variables. Certain key variables include: the Company's expected stock price volatility over the expected term of the awards; a risk-free interest rate; and any expected dividends. The Company estimates stock price volatility based on the historical volatility of the Company's common stock and estimates the expected term of the awards based on the Company's historical option exercises for similar types of stock option awards. The assumed risk-free interest rate is based on the yield on the measurement date of a zero-coupon U.S. Treasury bond with a maturity period equal to the option's expected term. The Company does not anticipate paying any cash dividends in the foreseeable future and therefore, uses an expected dividend yield of zero in the option valuation models. The fair value of all awards also includes an estimate of expected forfeitures. Forfeitures are estimated based on historical experience. If actual forfeitures vary from estimates, a difference in compensation expense will be recognized in the period the actual forfeitures occur. Upon the exercise of stock options or the vesting of restricted stock units, the resulting excess tax benefits or deficiencies, if any, are recognized as income tax expense or benefit.

(xii) Fair Value of Financial Instruments

Financial instruments are categorized into a three-level fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). If the inputs used to measure fair value fall within different levels of the hierarchy, the category level is based on the lowest priority level input that is significant to the fair value measurement of the instrument. In the event the fair value is not readily available or determinable, the financial instrument is carried at cost and referred to as a cost method investment. The fair value hierarchy is as follows:

- *Level 1:* Observable inputs such as quoted prices in active markets;
- *Level 2*: Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and
- *Level 3:* Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

(xiii)Leases

HMS accounts for lease agreements as either operating or capital leases, depending on certain defined criteria. Lease costs are amortized on a straight-line basis without regard to deferred payment terms, such as rent holidays, that defer the commencement date of required payments. Additionally, incentives such as tenant improvement allowances, are capitalized and are treated as a reduction of rental expense over the term of the lease agreement.

(xiv) Recent Accounting Guidance

Recently Adopted Accounting Guidance

In May 2014, the FASB issued ASU 2014-09, *Revenue from Contracts with Customers* (Topic 606) ("ASU 2014-09"), which is the new comprehensive revenue recognition standard that supersedes all existing revenue recognition guidance under U.S. GAAP. The Company adopted ASU 2014-09 on January 1, 2018 using the modified retrospective method and the Company recognized the cumulative effect of initially applying the new revenue standard as an adjustment to the opening balance of retained earnings. The financial information for comparative prior periods has not been restated and continues to be reported under the accounting standards in effect for those periods. The effect of adopting ASU 2014-09 in the current annual reporting period as compared with the guidance that was in effect before the change is immaterial. The Company's internal control framework did not materially change, but existing internal controls were modified due to certain changes to business processes and systems to support the new revenue recognition standard as necessary. The Company continues to expect the impact of the adoption of the new standard to be immaterial to its net income and its internal control framework on an ongoing basis.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation – Stock Compensation* (Topic 718): *Improvements to Employee Share-Based Payment Accounting*, ("ASU 2016-09") that changes the accounting for certain aspects of share-based payments to employees. The new guidance requires excess tax benefits and tax deficiencies to be recorded in the income statement when stock awards vest or are settled. In addition, cash flows related to excess tax benefits will no longer be separately classified as a financing activity apart from other income tax cash flows. The standard also allows companies to repurchase more of an employee's vesting shares for tax withholding purposes without triggering liability accounting, clarifies that all cash payments made to tax authorities on an employee's behalf for withheld shares should be presented as a financing activity on the cash flows statement and provides an accounting policy election to account for forfeitures as they occur. ASU 2016-09 is effective for annual reporting periods beginning after December 15, 2016, including interim periods within such annual reporting periods with early adoption permitted. The Company elected to early adopt the new guidance in the fourth quarter of fiscal year 2016 which requires us to reflect any adjustments as of January 1, 2016, the beginning of the annual period that includes the interim period of adoption. The primary impact of adoption was the recognition of excess tax benefits in the provision for income taxes rather than paid-in capital for all periods in fiscal year 2016. Additional amendments to the accounting for income taxes and minimum statutory withholding tax requirements had no impact to retained earnings as of January 1, 2016, where the cumulative effect of these changes are required to be recorded. The Company elected to continue to estimate forfeitures expected to occur to determine the amount of compensation cost to be recognized in each period. Adoption of the new standard resulted in the recognition of net excess tax benefits in the provision for income taxes rather than paid-in capital of $1.9 million for the year ended December 31, 2016. The presentation requirements for cash flows related to employee taxes paid for withheld shares had no impact to any of the 2016 periods presented on the consolidated statements of cash flow since such cash flows have historically been presented as a financing activity.

In August 2016, the FASB issued ASU No. 2016-15, *Statements of Cash Flows* (Topic 230): *Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"). ASU 2016-15 clarifies where certain cash receipts and cash payments are presented and classified in the statement of cash flows. The amendments are effective for annual reporting periods beginning after December 15, 2017, and for interim reporting periods within such annual periods. The Company adopted this guidance on January 1, 2018. The adoption of this guidance did not have a material effect on the Company's consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations* (Topic 805) – *Clarifying the Definition of a Business* ("ASU 2017-01"). ASU 2017-01 finalizes previous proposals regarding shareholder concerns that the definition of a business is applied too broadly. The guidance assists entities with evaluating whether transactions should be accounted for as acquisitions of assets or of businesses. The amendments are effective for annual periods beginning after December 15, 2017, including interim periods within those periods. The Company adopted this guidance on January 1, 2018. The adoption of this guidance did not have a material effect on the Company's consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, *Compensation – Stock Compensation* (Topic 718): *Scope of Modification Accounting*, ("ASU 2017-09"). ASU 2017-09 requires entities to apply modification accounting to changes made to a share-based payment award. The new guidance specifies that entities will apply modification accounting to changes to a share-based payment award only if any of the following are not the same immediately before and after the change: 1) The award's fair value (or calculated value or intrinsic value, if those measurement methods are used), 2) the award's vesting conditions, and 3) the award's classification as an equity or liability instrument. ASU 2017-09 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within such annual periods, with early adoption permitted. The Company adopted this guidance on January 1, 2018. The adoption of this guidance did not have a material effect on the Company's consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, *Goodwill and Other* (Topic 350): *Simplifying the Test for Goodwill Impairment* ("ASU 2017-04"). This amendment simplifies the manner in which an entity is required to test for goodwill impairment by eliminating Step 2 from the goodwill impairment test. Step 2 measures goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. The amendment simplifies this approach by having the entity (1) perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount, and (2) recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, with the understanding that the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The Company elected to early adopt the new guidance in the fourth quarter of fiscal year 2018. The adoption of this guidance did not have a material effect on the Company's consolidated financial statements.

On August 17, 2018 the SEC issued SEC Final Rule Release No. 33-10532, *Disclosure Update and Simplification* ("Final Rule"). The Final Rule amends certain disclosure requirements to facilitate the disclosure of information to investors and simplify compliance without significantly altering the total mix of information provided to investors. The Final Rule was effective for public entities that are SEC filers on November 5, 2018. The adoption of this guidance did not have a material effect on the Company's consolidated financial statements.

Recent Accounting Guidance Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842) ("ASU 2016-02"). ASU 2016-02 will require most lessees to recognize a majority of the company's leases on the balance sheet, which will increase reported assets and liabilities. ASU 2016-02 was subsequently amended by ASU No. 2018-01, Land Easement Practical Expedient for Transition to Topic 842; ASU No. 2018-10, Codification Improvements to Topic 842, Leases; and ASU No. 2018-11, Targeted Improvements. The new standard establishes a right-of-use model (ROU) that requires a lessee to recognize a ROU asset and lease liability on the balance sheet for all leases with a term longer than 12 months. Leases will be classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the income statement. ASU 2016-02 is effective for annual reporting periods beginning after December 15, 2018 including interim periods within such annual reporting periods with early adoption permitted. The Company has not early adopted this guidance, and therefore is adopting this guidance on January 1, 2019 and will use the effective date as our date of initial application. Consequently, financial information will not be updated and the disclosures required under the new standard will not be provided for dates and periods prior to the date of adoption. The Company developed a preliminary implementation plan and reviewed historical lease agreements in order to quantify the impact of adoption. Based upon the preliminary implementation plan, the Company expects the adoption of ASU 2016-02 will have a material impact on the consolidated balance sheet due to the recognition of the ROU assets and lease liabilities. The adoption of ASU 2016-02 is not expected to have a material impact on the consolidated statement of income or consolidated statement of cash flow. However, the Company continues to perform the necessary reviews and other implementation considerations, including an evaluation of the incremental borrowing rate, in order to appropriately quantify the changes. While we continue to assess all of the effects of adoption, we currently believe the most significant effects relate to (1) the recognition of new ROU assets and lease liabilities on our balance sheet for our real estate operating leases and (2) financial statement disclosures. We do not expect a significant change in our leasing activities between now and adoption. A range of undiscounted ROU assets and lease liabilities at January 1, 2019 is $28 million to $31 million. We expect to recognize operating lease ROU assets and lease liabilities that reflect the present value of these future payments. The Company plans adopt this guidance using the optional transition method. The new standard also provides practical expedients for an entity's existing and ongoing accounting and we expect to adopt the package of practical expedients as well as the practical expedient to not separate lease and non-lease components of our leases and the short-term lease practical expedient.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments – Credit Losses* ("ASU 2016-13"). ASU 2016-13 introduces the current expected credit losses methodology ("CECL") for estimating allowances for credit losses. ASU 2016-13 applies to all financial instruments carried at amortized cost and off-balance-sheet credit exposures not accounted for as insurance, including loan commitments, standby letters of credit, and financial guarantees. The new accounting standard does not apply to trading assets, loans held for sale, financial assets for which the fair value option has been elected, or loans and receivables between entities under common control. ASU 2016-13 is effective for public entities for fiscal year beginning after December 15, 2019, including interim periods within that fiscal year. Early adoption is permitted. The Company is currently evaluating the impact on the Company's financial statements of adopting this guidance but this guidance is not expected to have a material impact on the Company's financial position, results of operations or internal control framework.

In June 2018, the FASB issued ASU No. 2018-07, *Compensation – Stock Compensation* (Topic 718) – *Improvements to Nonemployee Share Based Payment Accounting*, ("ASU 2018-07"). ASU 2018-07 requires entities to apply similar accounting for share-based payment transactions with non-employees as with share-based payment transactions with employees. ASU 2018-07 is effective for public entities for fiscal year beginning after December 15, 2018, including interim periods within that fiscal year. Early adoption is permitted. The Company is currently evaluating the impact on the Company's financial statements of adopting this guidance but this guidance is not expected to have a material impact on the Company's financial position, results of operations or internal control framework.

2. Revenue

The Company's revenue disaggregated by service for the year ended December 31, 2018 is as follows (*in thousands*):

Coordination of Benefits	$ 397,095
Payment Integrity	144,063
Total Population Management	57,132
Total	$ 598,290

Coordination of benefits revenue is derived from contracts with state governments and Medicaid managed care plans that typically span 1 to 5 years with the option to renew. Types of service contracts could include: (a) the identification of erroneously paid claims; (b) the delivery of verified commercial insurance coverage information; (c) the identification of paid claims where another third party is liable; and (d) the identification and enrollment of Medicaid members who have access to employer insurance. Most of these types of service contracts contain multiple promises, all of which are not distinct within the context of the contract. Therefore, the promises represent a single, distinct performance obligation for the types of services we offer. Revenue derived from these performance obligations is largely based on variable consideration where, based on the number of claims or amount of findings the Company identified, a contingent or fixed transaction price/recovery percentage is allocated to each distinct performance obligation. The Company utilizes the expected value method to estimate the variable consideration related to the transaction price for its service contracts. Key inputs and assumptions in determining variable consideration includes identified pricing and expected recoveries and/or savings. The expected recoveries and/or savings are based on historical experience of information received from our customers. Revenue is primarily recognized at a point in time when our customers realize economic benefits from our services when our services are completed. However, we have a limited number of fixed fee arrangements where revenue is recognized over time as performance obligations are satisfied within one to three years. Generally, coordination of benefit contract payment terms are not standardized within the respective contract; however, payment is typically due on demand and there is a clear and distinct history of customers making consistent payments.

Analytical services consists of payment integrity services and total population management.

Payment integrity services revenue is derived from contracts with federal and state governments, commercial health plans and other at-risk entities that can span several years with the option to renew. Types of service contracts could include: (a) services designed to ensure that healthcare payments are accurate and appropriate; and (b) the identification of over/(under)payments or inaccurate charges based on a review of medical records. Most of these types of service contracts contain multiple promises, all of which are not distinct within the context of the contract. Therefore, the promises represent a single, distinct performance obligation for the types of services we offer. Revenue derived from these performance obligations is largely based on variable consideration where, based on the number of claims or amount of findings the Company identified, a contingent or fixed transaction price/recovery percentage is allocated to each distinct performance obligation. The Company utilizes the expected value method to estimate the variable consideration related to the transaction price for its service contracts. Key inputs and assumptions in determining variable consideration includes identified pricing and expected recoveries and/or savings. The expected recoveries and/or savings are based on historical experience of information received from our customers. Revenue is primarily recognized at a point in time when our customers realize economic benefits from our services when our services are completed. However, we have a limited number of fixed fee arrangements where revenue is recognized over time as performance obligations are satisfied within one to three years. Generally, payment integrity contract payment terms are not standardized within the respective contract; however, payment is typically due on demand and there is a clear and distinct history of customers making consistent payments.

Total population management revenue is derived from contracts with health plans and other risk-bearing entities that can span several years with the option to renew. Types of service contracts could include: (a) programs designed to improve member engagement; and (b) outreach services designed to improve clinical outcomes. Most of these types of service contracts contain multiple promises, all of which are not distinct within the context of the contract. Therefore, the promises represent a single, distinct performance obligation for the types of services we offer. Revenue derived from these services is largely based on consideration associated with prices per order/transfer and PMPM/PMPY fees. The Company believes the output method is a reasonable measure of progress for the satisfaction of our performance obligations, which are satisfied over time, as it provides a faithful depiction of (1) our performance toward complete satisfaction of the performance obligation under the contract and (2) the value transferred to the customer of the services performed under the contract. The Company has elected the right to invoice practical expedient for recognition of revenue related to its performance obligations when the amount we have the right to invoice the customer corresponds directly with the value to the customer. Additionally, certain total population management contracts have distinct performance obligations related to software license and implementation fees which have historically been recognized as revenue ratably over the life of the contract. Lastly, we have a limited number of fixed fee arrangements where revenue is recognized over time as performance obligations are satisfied within one to three years. Upon adoption of ASC 606, revenue for software licenses is recognized at the beginning of the license period when control is transferred as the license is installed and revenue for implementation fees is recognized when control is transferred over time as the implementation is being performed. As the performance obligation is deemed to have been satisfied and control transferred to our customers for software licenses and implementation fees on or before December 31, 2017, the Company recorded a decrease to deferred revenue and an increase to opening retained

earnings of $1.1 million, net of tax, as of January 1, 2018 for the cumulative impact of adopting ASC 606. Generally, total population management contract payment terms are stated within the contract and are due within an explicitly stated time period (e.g., 30, 45, 60 days) from the date of invoice. A portion of the payment received may relate to future performance obligations and will result in an increase to deferred revenue until the obligation has been met.

The Company's revenue disaggregated by market for the year ended December 31, 2018 is as follows (*in thousands*):

Commercial	$ 323,150
State	233,921
Federal	41,219
Total	$ 598,290

A portion of the Company's services are deferred and revenue is recognized at a later time. Deferred revenue was approximately $6.4 million as of December 31, 2017; $1.1 million, net of tax, was recorded as a decrease to deferred revenue as of January 1, 2018 as discussed above; and $5.3 million of this amount was recognized as revenue during the year ended December 31, 2018. Deferred revenue was approximately and $5.6 million as of December 31, 2018. Deferred revenue is included in Accounts payable, accrued expenses and other liabilities in the Consolidated Balance Sheets.

Contract modifications are routine in nature and often done to account for changes in the contract specifications or requirements. In most instances, contract modifications are for services that are not distinct, and, therefore, modifications are accounted for as part of the existing contract. The Company has elected to use the practical expedient to expense the incremental costs of obtaining a contract if the amortization period of the asset that the Company would have otherwise recognized is one year or less.

3. Fair Value of Financial Instruments

Financial instruments (principally cash and cash equivalents, accounts receivable, accounts payable and accrued expenses) are carried at cost, which approximates fair value due to the short-term maturity of these instruments. The Company's long-term credit facility is carried at cost, which due to the variable interest rate associated with the revolving credit facility, cost approximates its fair value. The Company has no Level 1 or Level 2 financial instruments and there were no transfers between Level 1 or Level 2 financial instruments. Included in Other liabilities on the Consolidated Balance Sheet is a contingent consideration liability of $0 and $35 thousand at December 31, 2018 and 2017, respectively, is valued using a Monte Carlo simulation and includes unobservable inputs such as expected levels of revenues and discount rates. The liability was classified as level 3 within the fair value hierarchy. Changes in the unobservable inputs in the fair value measurement of this instrument could result in a significant change in the fair value measurement. There were no sales, settlements, purchases, issuances and/or transfers related to this level 3 instrument in 2018 or 2017. There were no other level 3 instruments.

4. Acquisitions

(a) Eliza Holding Corp.

On April 17, 2017, the Company completed the acquisition of 100% of the outstanding capital stock of Eliza, for a purchase price of $171.6 million funded with available liquidity of approximately 75% cash on hand and 25% from the Company's existing credit line.

The allocation of the purchase price to the fair value of the assets acquired and the liabilities assumed as of April 17, 2017, the effective date of the acquisition, is as follows (*in thousands*):

Cash and cash equivalents	$	435
Accounts receivable		8,902
Prepaid expenses		1,427
Property and equipment		1,146
Intangible assets		76,240
Goodwill		107,754
Other assets		63
Accounts payable		(2,620)
Deferred tax liability		(19,681)
Other liabilities		(2,057)
Total purchase price	**$**	**171,609**

The purchase price allocated to the intangibles acquired was as follows (*in thousands*):

	Useful Life (in years)		
Customer relationships	15	$	56,200
Intellectual property	6		19,600
Trade name	1.5		310
Restrictive covenants	1		130
Fair value of intangibles acquired		**$**	**76,240**

Acquisition costs recorded to selling, general and administrative expenses were as follows (*in thousands*):

Other operating expenses - consulting fees	$	3,515
Other operating expenses - legal fees		832
Other operating expenses - transaction costs		185
Acquisition-related costs	**$**	**4,532**

The financial results of Eliza's operations since April 17, 2017 have been included in the Company's consolidated financial statements. Eliza contributed $51.9 million and $30.4 million in revenue to HMS results of operations in the years ended December 31, 2018 and 2017, respectively.

(b) *Essette*

On September 2, 2016, the Company acquired the outstanding capital stock of Essette for a purchase price of $24.2 million funded by cash on hand. The immaterial results of Essette's operations since September 2, 2016 have been included in the Company's consolidated financial statements.

5. Property and Equipment

Property and equipment consisted of the following (*in thousands*):

	December 31, 2018	December 31, 2017
Equipment	$ 95,350	$ 106,768
Leasehold improvements	7,547	8,357
Building	8,624	8,624
Building improvements	14,825	14,546
Land	2,769	2,769
Furniture and fixtures	9,404	10,352
Capitalized software	131,819	125,655
	270,338	277,071
Less: accumulated depreciation and amortization	(175,903)	(178,490)
Property and equipment, net	$ 94,435	$ 98,581

	December 31, 2018	2017	2016
Depreciation and amortization expenses related to property and equipment	$ 33,254	$ 27,515	$ 24,882

6. Intangible Assets

Intangible assets consisted of the following (*in thousands*):

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Amortization Period in Years
December 31, 2018				
Customer relationships	$ 156,790	$ (104,740)	$ 52,050	12.8
Trade names	16,246	(16,215)	31	0.7
Intellectual property	21,700	(6,670)	15,030	4.1
Restrictive covenants	263	(234)	29	0.7
Total	$ 194,999	$ (127,859)	$ 67,140	

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Amortization Period in Years
December 31, 2017				
Customer relationships	$ 159,290	$ (89,106)	$ 70,184	11.3
Trade names	16,246	(13,916)	2,330	1.0
Intellectual property	21,700	(2,874)	18,826	5.2
Restrictive covenants	263	(121)	142	1.3
Total	$ 197,499	$ (106,017)	$ 91,482	

Amortization expense of intangible assets is expected to approximate the following (*in thousands*):

Year ending December 31,	Amortization
2019	$ 9,195
2020	7,664
2021	7,197
2022	7,197
2023	4,822
Thereafter	31,065
Total	$ 67,140

For the years ended December 31, 2018, 2017 and 2016, amortization expense related to intangible assets was $24.3 million, $22.6 million, and $20.2 million, respectively. In addition, during the year ended December 31, 2018, some of the intangible assets became fully amortized.

7. Accounts Payable, Accrued Expenses and Other Liabilities

Accounts payable, accrued expenses and other liabilities consisted of the following (*in thousands*):

	December 31, 2018	December 31, 2017
Accounts payable, trade	$ 12,394	$ 19,330
Accrued compensation and other	42,833	24,072
Accrued operating expenses	19,675	18,498
Total accounts payable, accrued expenses and other liabilities	$ 74,902	$ 61,900

8. Income Taxes

Income tax expense is as follows (*in thousands*):

	December 31,		
	2018	2017	2016
Current tax expense:			
Federal	$ 2,965	$ 17,008	$ 16,274
State	(1,433)	3,201	2,929
Total current tax expense:	1,532	20,209	19,203
Deferred tax expense (benefit):			
Federal	(2,650)	(19,425)	(7,115)
State	(854)	(983)	(253)
Total deferred tax benefit:	(3,504)	(20,408)	(7,368)
Total income tax expense (benefit)	$ (1,972)	$ (199)	$ 11,835

A reconciliation of the income tax expense calculated using the applicable federal statutory rate to the actual income tax expense is as follows (*in thousands*):

	December 31,					
	2018	%	2017	%	2016	%
Computed at federal statutory rate	$ 11,134	21.0	$ 13,949	35.0	$ 17,315	35.0
State and local tax expense, net of federal benefit	2,367	4.5	2,226	5.6	2,448	5.0
Net permanent deduction and credit tax benefits from current year	(1,143)	(2.2)	(1,513)	(3.8)	(1,509)	(3.1)
Net permanent deduction and credit tax benefits from prior years	-	-	-	-	(6,213)	(12.6)
Net uncertain tax positions excluding current permanent deduction and credit benefits	(3,756)	(7.0)	(373)	(0.9)	-	-
Subsidiary basis write off	(3,423)	(6.5)	-	-	-	-
Equity compensation net tax windfall	(2,890)	(5.5)	-	-	-	-
State tax apportionment changes	(3,737)	(7.0)	-	-	-	-
Disallowed executive compensation	682	1.3	-	-	-	-
Tax Reform - revaluation of deferrals	-	-	(15,130)	(38.0)	-	-
Acquisition adjustments	(1,226)	(2.3)	(1,003)	(2.5)	-	-
Acquisition costs	-	-	697	1.7	203	0.4
Other, net	20	-	948	2.4	(409)	(0.8)
Total income tax expense	$ (1,972)	(3.7)	$ (199)	(0.5)	$ 11,835	23.9

The Company's effective tax rate decreased to (3.7%) for the year ended December 31, 2018 from (0.5%) for the year ended December 31, 2017, primarily from favorable tax benefits relating to current year credits, equity compensation, subsidiary basis write-off, prior year state apportionment changes, uncertain tax position releases and acquisition adjustments. The Company has no adjustments, to any previously recorded provisional amounts, relating to the Tax Cuts and Jobs Act which was enacted on December 22, 2017. During the year ended December 31, 2018 and in conjunction with the Settlement Agreement in Note 15 to the Consolidated Financial Statements, the Company determined that the common stock of its wholly owned subsidiary, Allied Management Group Special Investigation Unit, Inc. was worthless, resulting in the write off of basis for federal income tax purposes.

As a result of an analysis performed during 2016, the Company determined certain activities it performs qualify for (i) R&D Credits provided in IRC Section 41 and (ii) the Section 199 Deduction provided in IRC Section 199. As a result, the Company recognized net tax benefits during the year ended December 31, 2016 of $6.2 million for federal and state R&D Credits and the Section 199 Deduction relating to tax years 2012 through 2015.

Deferred income taxes are recognized for the future tax consequences of temporary differences between the financial statement and tax bases of assets and liabilities. The tax effect of temporary differences that give rise to a significant portion of the deferred tax assets and deferred tax liabilities are as follows *(in thousands*):

	December 31,	
	2018	**2017**
Deferred tax assets:		
Stock-based compensation	$ 9,545	$ 9,980
Goodwill and intangible assets	5,874	6,524
Allowance for doubtful accounts	3,537	3,822
Deferred rent	696	909
Tenant improvements	569	669
Estimated liability for appeals	5,632	7,775
Net operating loss carry-forwards	1,527	3,358
Tax credit carry-forwards	4,076	3,667
Property and equipment	49	256
Accrued expenses and other	7,839	3,615
Total deferred tax assets	39,344	40,575
Deferred tax liabilities:		
Goodwill and intangible assets	43,400	48,186
Section 481(a) adjustment	5,073	7,413
Prepaid expenses	668	624
Capitalized software cost	8,688	6,341
Total deferred tax liabilities	57,829	62,564
Total net deferred tax liabilities	$ 18,485	$ 21,989

Included in Other liabilities on the Consolidated Balance Sheets, are the total amount of unrecognized tax benefits of approximately $4.8 million and $8.2 million as of December 31, 2018 and 2017, respectively, net of the federal benefit for state issues that, if recognized, would favorably affect the Company's future effective tax rate. Also included in Other Liabilities on the Consolidated Balance Sheets, are accrued liabilities for interest expense and penalties related to unrecognized tax benefits of $0.7 million and $0.6 million as of December 31, 2018 and 2017, respectively. HMS includes interest expense and penalties in the provision for income taxes in the Consolidated Statements of Income. The amount of interest expense, net of federal and state income tax benefits, and penalties in the Consolidated Statements of Income for the years ended December 31, 2018, 2017, and 2016 was $0.1 million, $0.02 million and $0.2 million, respectively. The Company believes it is reasonably possible the amount of unrecognized tax benefits may decrease by $1.7 million during 2019, due to the expiration of the statute of limitations in various jurisdictions.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits are as follows (*in thousands*):

	2018	**2017**
Unrecognized tax benefits at January 1	$ 8,234	$ 7,433
Additions for tax positions taken during prior periods	399	599
Additions for tax positions taken during current period including amended prior years	360	1,174
Reductions relating to settlements with taxing authorities	(2,227)	-
Reductions related to the expiration of statutes of limitations	(1,927)	(972)
Unrecognized tax benefits at December 31	$ 4,839	$ 8,234

The Company increased the provision for unrecognized tax benefits by $0.4 million during the year ended December 31, 2018, related to tax benefits recognized for current period R&D Credits. At December 31, 2018, HMS had federal and state pre-tax net operating loss and tax credit carryforwards of approximately $24.3 million and $4.1 million, respectively, which will be available to offset future taxable income. If not used, these net operating loss and tax credit carryforwards will begin to expire in 2020 and 2019, respectively. The Company files income tax returns with the U.S. Federal government and various state, territory, and local jurisdictions. HMS is no longer subject to U.S. Federal income tax examinations for years before 2013. The Company settled an audit by the Internal Revenue Service for years 2013 and 2014 which resulted in immaterial assessments and recognition of prior unrecognized tax benefits. HMS operates in a number of state, territory and local jurisdictions. Accordingly, HMS is subject to state, territory and local income tax examinations based upon the various statutes of limitations in each jurisdiction. Previously recognized Texas refund claims were examined by the state and resulted in a favorable apportionment method change for all open tax years.

9. Estimated Liability for Appeals

Under the Company's contracts with certain commercial health plan customers and its Medicare RAC contracts with CMS (included within the Company's PI services revenue), providers have the right to appeal HMS claim findings and to pursue additional appeals if the initial appeal is found in favor of HMS's customer. The appeal process established under the Medicare RAC contracts with CMS includes five levels of appeals, and resolution of appeals can take substantial time to resolve. HMS records a) an actual return obligation liability for findings which have been previously adjudicated in favor of providers and b) an estimated return obligation liability based on the amount of revenue that is subject to appeals and which are probable of being adjudicated in favor of providers following their successful appeal. The Company's estimate is based on the Company's historical experience. To the extent the amount to be returned to providers following a successful appeal exceeds or is less than the amount recorded, revenue in the applicable period would be reduced or increased by such amount.

A roll-forward of the activity in the estimated liability for appeals is as follows (*in thousands*):

	Original RAC contract	RAC 4 contract	Commercial contracts	Total
Balance at December 31, 2016	$ 28,427	$ -	$ 2,328	$ 30,755
Provision	2,054	-	2,729	4,783
Appeals found in providers favor	(2,665)	-	(2,086)	(4,751)
Balance at December 31, 2017	$ 27,816	$ -	$ 2,971	$ 30,787
Provision	108	20	2,038	2,166
Appeals found in providers favor	(108)	-	(2,686)	(2,794)
Release of estimated liability	(8,436)	-	-	(8,436)
Balance at December 31, 2018	$ 19,380	$ 20	$ 2,323	$ 21,723

The Company's original Medicare RAC contract with CMS expired on January 31, 2018. As a result of the original contract expiration, the Company's contractual obligation with respect to any appeals resolved in favor of providers subsequent to the expiration date have ceased and therefore the Company released its estimated return obligation liability and increased revenue by $8.4 million during the first quarter of 2018.

The Company continues to assess the remaining CMS liability for the original Medicare RAC contract to determine management's best estimate of liability for any findings which have been previously adjudicated prior to the expiration of the contract. Any future changes or modifications to the Medicare RAC contracts or to the Company's commercial customer contracts may require the Company to apply different assumptions that could materially affect both the Company's revenue and estimated liability for appeals in future periods.

10. Credit Agreement

In May 2013, we entered into the Credit Agreement with certain lenders and Citibank, N.A. as administrative agent. The Credit Agreement originally provided for an initial $500 million five-year revolving credit facility maturing on May 3, 2018.

On December 19, 2017, the Company entered into an amendment to the Credit Agreement, which, among other things, extended the maturity of its then existing revolving credit facility by five years to December 2022. The availability of funds under the amended revolving credit facility includes sublimits for (a) up to $50 million for the issuance of letters of credit and (b) up to $25 million for swingline loans. In addition, the Company may increase the commitments under its revolving credit facility and/or add one or more incremental term loan facilities, provided that such incremental facilities do not exceed in the aggregate the sum of (i) the greater of $120 million and 100% of Consolidated EBITDA (as defined in the Credit Agreement) and (ii) an additional amount so long as our first lien leverage ratio (as defined in the Credit Agreement) on a pro forma basis is not greater than 3.00:1.00, subject to obtaining commitments from lenders therefor and meeting certain other conditions.

During the year ended December 31, 2018, no principal payments were made against the Company's then existing revolving credit facility. As of December 31, 2018, the outstanding principal balance under the amended revolving credit facility was $240.0 million.

Borrowings under the Credit Agreement will bear interest at a rate equal to, at the Company's election (except with respect to swingline borrowings, which will accrue interest based only at the base rate), either:

- a base rate determined by reference to the greatest of (a) the prime or base commercial lending rate of the administrative agent as in effect on the relevant date, (b) the federal funds effective rate plus 0.50% and (c) the one-month LIBO Rate plus 1.00%, plus an interest margin ranging from 0.50% to 1.00% based on the Company's consolidated leverage ratio for the applicable period; or

- an adjusted LIBO Rate, equal to the LIBO Rate for the applicable interest period multiplied by the statutory reserve rate (equal to (x) one divided by (y) one minus the aggregate of the maximum reserve percentage (including any marginal, special, emergency or supplemental reserves) established by the Board of Governors of the Federal Reserve System of the United States), plus an interest margin ranging from 1.50% to 2.00% based on the Company's consolidated leverage ratio for the applicable period.

In addition to paying interest on the outstanding principal, the Company is required to pay unused commitment fees on the revolving credit facility during the term of the Credit Agreement ranging from 0.375% to 0.250% per annum based on the Company's consolidated leverage ratio and letter of credit fees equal to 0.125% per annum on the aggregate face amount of each letter of credit, as well as customary agency fees.

The Company's obligations under the Credit Agreement are secured, subject to certain customary carve-outs and exceptions, by a first priority lien and security interest in substantially all tangible and intangible assets of the Company and certain subsidiaries of the Company. The Credit Agreement contains certain restrictive covenants, which affect, among other things, the ability of the Company and its subsidiaries to incur indebtedness, create liens, make investments, sell or otherwise dispose of assets, engage in mergers or consolidations with other entities, and pay dividends or repurchase stock. The Company is also required to comply, on a quarterly basis, with two financial covenants: (i) a minimum interest coverage ratio of 3:00:1:00, and (ii) a maximum consolidated leverage ratio of 4.75:1.00 through December 2019 and 4.25:1.00 from and after January 2020. The consolidated leverage ratio is subject to a step-up to 5.25:1.00 for four full consecutive fiscal quarters following a permitted acquisition or similar investment. As of December 31, 2018, the Company was in compliance with all terms of the Credit Agreement.

Interest expense and the commitment fees on the unused portion of the Company's revolving credit facility are as follows *(in thousands*):

	Years ended December 31,		
	2018	**2017**	**2016**
Interest expense	$ 9,294	$ 7,170	$ 4,837
Commitment fees	1,189	1,359	1,518

The Company deferred $2.3 million of financing fees associated with the amendment. At December 31, 2018 and 2017, the unamortized balance of deferred financing costs was $2.2 million and $2.8 million, respectively. The Company amortized deferred financing costs of $0.6 million, $2.3 million and $2.1 million in the years ended December 31, 2018, 2017 and 2016.

As part of a contractual agreement with a customer, the Company has an outstanding irrevocable letter of credit for $6.5 million, which is issued against its revolving credit facility and expires June 30, 2019.

11. Equity

(a) Share Repurchase

Following are the Company's quarterly repurchases of shares of common stock for fiscal year 2018, all of which were made as part of publicly announced plans or programs:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Program	Maximum Approximate Dollar Value of Shares That May Yet Be Purchased Under the Program
January 1, 2018 to March 31, 2018	383,801	$ 15.50	383,801	$ 29,933,055
April 1, 2018 to June 30, 2018	-	-	-	-
July 1, 2018 to September 30, 2018	-	-	-	-
October 1, 2018 to December 31, 2018	-	-	-	-
Total	**383,801**	**$ 15.50**	**383,801**	**$ 29,933,055**

(b) Preferred Stock

The Company's certificate of incorporation, as amended, authorizes the issuance of up to 5,000,000 shares of "blank check" preferred stock with such designations, rights and preferences as may be determined by the Company's Board of Directors. As of December 31, 2018, no preferred stock had been issued.

12. Employee Benefit Plan

The Company sponsors the 401(k) Plan for eligible employees. Eligible employees must complete 90 days of service in order to enroll in the 401(k) Plan. Participants may make voluntary contributions to the 401(k) Plan of up to 60% of their annual base pre-tax compensation not to exceed the federally determined maximum allowable contribution. In addition, the 401(k) Plan permits the Company to make discretionary contributions. During 2018, HMS matched 100% of the first 4% of pay contributed by each eligible employee and 50% of the next 1% of pay contributed. During 2017 and 2016, HMS matched 100% of the first 3% of pay contributed by each eligible employee and 50% on the next 2% of pay contributed. These matching contributions vest immediately and are not in the form of the Company's common stock.

For the years ended December 31, 2018, 2017 and 2016, HMS contributed $7.3 million, $5.9 million and $4.8 million, respectively, to the 401(k) Plan in the form of matching contributions.

13. Stock-Based Compensation

Stock-Based Compensation Expense

Total stock-based compensation expense in the Company's Consolidated Statements of Income related to the Company's long-term incentive award plans was as follows (*in thousands*):

	Years ended December 31,		
	2018	2017	2016
Cost of services-compensation	$ 7,421	$ 7,354	$ 3,805
Selling, general and administrative	14,086	16,789	9,472
Total	$ 21,507	$ 24,143	$ 13,277

The total tax benefits recognized on stock-based compensation for the years ended December 31, 2018, 2017 and 2016 was $9.1 million, $4.0 million and $4.1 million, respectively.

Stock Options

Stock-based compensation expense related to stock options was approximately $9.6 million, $10.3 million and $6.9 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Presented below is a summary of stock option activity for the year ended December 31, 2018 (*in thousands except for weighted average exercise price and weighted average remaining contractual terms*):

	Number of Options	Weighted Average Exercise Price	Weighted Average-Remaining Contractual Terms	Aggregate-Intrinsic Value
Outstanding balance at December 31, 2017	5,554	$ 17.35		
Granted	1,010	19.58		
Exercised	(2,017)	19.14		
Forfeitures	(114)	17.74		
Expired	(31)	22.34		
Outstanding balance at December 31, 2018	4,402	17.07	5.80	$ 48,339
Expected to vest at December 31, 2018	1,481	$ 18.60	8.22	$ 14,119
Exercisable at December 31, 2018	2,370	$ 15.87	3.83	$ 29,068

As of December 31, 2018 and 2017, the Company had 1,999,069 and 2,372,682, respectively, in unvested options with a weighted-average-grant-date fair value of $7.27 and $6.39, respectively. The weighted-average-grant-date fair value per share of the stock options granted during the years ended December 31, 2018, 2017 and 2016 was $7.52, $7.66 and $5.55, respectively. The weighted-average-grant-date fair value per share of stock options vested during the year ended December 31, 2018 was $6.18. The weighted-average-grant-date fair value per share of the stock options forfeited during the years ended December 31, 2018, 2017 and 2016 was $6.86, $5.24 and $6.26, respectively.

HMS estimated the fair value of each stock option grant on the date of grant using a Black-Scholes option pricing model. Weighted–average assumptions are set forth in the following table:

	Year ended December 31,		
	2018	2017	2016
Expected dividend yield	-	-	-
Risk-free interest rate	2.7%	1.8%	1.2%
Expected volatility	42.4%	44.2%	44.0%
Expected life (years)	6.0	5.0	4.9

HMS estimated the fair value of 2017 and 2016 market condition option grants on the date of grant using a Monte-Carlo simulation model. There were no market condition awards granted in 2018. Assumptions are set forth in the following table:

	Year ended December 31,		
	2018	2017	2016
Expected dividend yield	-	-	-
Risk-free interest rate	-	2.2%	1.6%
Expected volatility	-	52.5%	40.5%
Expected life (years)	-	6.5	4.9

During the years ended December 31, 2018, 2017 and 2016, the Company issued 2,017,442, 172,326 and 510,512 shares, respectively, of the Company's common stock upon the exercise of outstanding stock options and received proceeds of $38.3 million, $2.7 million and $2.9 million, respectively. The total intrinsic value of stock options exercised during the years ended December 31, 2018, 2017 and 2016 was $27.6 million, $0.5 million and $6.3 million, respectively.

As of December 31, 2018, there was approximately $5.5 million of total unrecognized compensation cost related to stock options outstanding, which is expected to be recognized over a weighted average period of 0.9 years.

Restricted Stock Units

Stock-based compensation expense related to restricted stock units was $11.9 million, $13.8 million and $6.4 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Presented below is a summary of restricted stock units activity for the year ended December 31, 2018 (*in thousands, except for weighted average grant date fair value per unit*):

	Number of Units	Weighted Average Grant Date Fair Value per Unit
Outstanding balance at December 31, 2017	1,346	$ 17.65
Granted	766	16.80
Vesting of restricted stock units, net of units withheld for taxes	(371)	17.06
Units withheld for taxes	(163)	17.06
Forfeitures	(90)	17.31
Outstanding balance at December 31, 2018	1,488	$ 17.60

As of December 31, 2018, 1,259,003 restricted stock units remained unvested and there was approximately $9.2 million of unrecognized compensation cost related to restricted stock units, which is expected to be recognized over a weighted average vesting period of 0.87 years. During the years ended December 31, 2018, 2017 and 2016, the Company's vested restricted stock units had a fair value $9.9 million, $9.5 million, and $6.8 million, respectively. The weighted average grant date fair value per share of the restricted stock units vested during the years ended December 31, 2018, 2017 and 2016 was $17.06, $15.39 and $18.64, respectively. The weighted average grant date fair value per share of the restricted stock units forfeited during the years ended December 31, 2018, 2017 and 2016 was $17.31, $15.37 and $16.95, respectively.

14. Earnings per Share

The following table sets forth the computation of basic and diluted earnings per share *(in thousands, except per share amounts)*:

	Years ended December 31,		
	2018	2017	2016
Net income	$ 54,989	$ 40,054	$ 37,636
Weighted average common shares outstanding-basic	83,625	83,821	84,221
Plus: net effect of dilutive stock options and restricted stock units	2,519	1,808	2,766
Weighted average common shares outstanding-diluted	86,144	85,629	86,987
Net income per common share-basic	$ 0.66	$ 0.48	$ 0.45
Net income per common share-diluted	$ 0.64	$ 0.47	$ 0.43

For the years ended December 31, 2018, 2017 and 2016: (i) 804,959, 2,646,100 and 2,070,771 stock options, respectively, and (ii) restricted stock units representing 0, 31,155 and 46,651 shares of common stock, respectively, were not included in the diluted earnings per share calculation because the effect would have been anti-dilutive.

15. Commitments and Contingencies

(a) Lease Commitments

The Company primarily leases office space but also leases information technology equipment and software licenses under operating leases that expire on various dates through 2026. Additionally, the Company has nominal capital leases. Total lease expense, net of office space sublease income for the years ended December 31, 2018, 2017 and 2016 was $3.6 million, $5.1 million and $5.0 million, respectively.

Minimum annual lease payments to be made under operating leases, net of $8.3 million office space sublease payments to be received, for each of the next five years ending December 31 and thereafter are as follows (*in thousands*):

	Operating Lease Payments
2019	$ 5,778
2020	5,420
2021	3,742
2022	2,531
2023	2,236
Thereafter	2,947
Total	$ 22,654

(b) Litigation

In July 2012, Dennis Demetre and Lori Lewis (the "Plaintiffs"), filed an action in the Supreme Court of the State of New York against HMS Holdings Corp., claiming an undetermined amount of damages alleging that various actions by HMS unlawfully deprived the Plaintiffs of the acquisition earn-out portion of the purchase price for Allied Management Group Special Investigation Unit, Inc. ("AMG") under the applicable Stock Purchase Agreement (the "SPA") and that HMS had breached certain contractual provisions under the SPA. The Plaintiffs filed a second amended complaint with two causes of action for breach of contract and one cause of action for breach of implied covenant of good faith and fair dealing. HMS asserted a counterclaim against Plaintiffs for breach of contract based on contractual indemnification costs, including attorneys' fees arising out of the Company's defense of AMG in Kern Health Systems v. AMG, Dennis Demetre and Lori Lewis (the "California Action"), which are recoverable under the SPA. In June 2016, Kern Health Systems and AMG entered into a settlement agreement that resolved all claims in the California Action. In July 2017, the Court issued a decision on the Company's motion for partial summary judgment and granted the motion in part, dismissing one of Plaintiffs' breach of contract causes of action against HMS. On November 3, 2017, following a jury trial, a verdict was returned in favor of the Plaintiffs on a breach of contract claim, and the jury awarded $60 million in damages to the Plaintiffs. On March 14, 2018, the Court held a hearing on the Company's post-trial motion for an order granting it judgment notwithstanding the verdict or, alternatively, setting aside the jury's award of damages. On June 27, 2018, prior to the Court issuing a decision on the motion, the Company entered into a Settlement Agreement (the "Settlement Agreement") with the Plaintiffs, John Alfred Lewis and Christopher Brandon Lewis. Pursuant to the terms of the Settlement Agreement, the Company paid $20 million to resolve all matters in controversy pertaining to the lawsuit. On July 5, 2018, the Court entered an order to

discontinue the lawsuit pursuant to the Stipulation of Discontinuance with Prejudice filed by the parties.

In February 2018, the Company received a Civil Investigative Demand ("CID") from the Texas Attorney General, purporting to investigate possible unspecified violations of the Texas Medicaid Fraud Prevention Act. The Company provided certain documents and information in March 2018 in response to the CID. HMS has not received any further requests for information in connection with this CID.

In September 2018, a former employee filed an action in the New York County Supreme Court entitled Christopher Frey v. Health Management Systems, Inc. alleging retaliation under New York law. The complaint seeks recovery of an unspecified amount of monetary damages, including back pay and other compensatory and equitable relief. The Company has moved to dismiss the complaint and the motion is currently under consideration by the Court. The Company continues to believe that this claim is without merit and intends to vigorously defend this matter.

From time to time, HMS may be subject to investigations, legal proceedings and other disputes arising in the ordinary course of the Company's business, including but not limited to regulatory audits, billing and contractual disputes, employment-related matters and post-closing disputes related to acquisitions. Due to the Company's contractual relationships, including those with federal and state government entities, HMS's operations, billing and business practices are subject to scrutiny and audit by those entities and other multiple agencies and levels of government, as well as to frequent transitions and changes in the personnel responsible for oversight of the Company's contractual performance. HMS may have contractual disputes with its customers arising from differing interpretations of contractual provisions that define the Company's rights, obligations, scope of work or terms of payment, and with associated claims of liability for inaccurate or improper billing for reimbursement of contract fees, or for sanctions or damages for alleged performance deficiencies. Resolution of such disputes may involve litigation or may require that HMS accept some amount of loss or liability in order to avoid customer abrasion, negative marketplace perceptions and other disadvantageous results that could affect the Company's business, financial condition, results of operations and cash flows.

HMS records accruals for outstanding legal matters when it believes it is probable that a loss will be incurred and the amount can be reasonably estimated. The Company evaluates, on a quarterly basis, developments in legal matters that could affect the amount of any accrual and developments that would make a loss contingency both probable and reasonably estimable. If a loss contingency is not both probable and estimable, HMS does not establish an accrued liability.

16. Customer Concentration

(a) Geographic Information

The Company operates within the United States.

(b) Major Customers

For the years ended December 31, 2018, 2017 and 2016 no one individual Company customer accounted for more than 10% of the Company's total revenue.

(c) Concentration of Revenue

The composition of the Company's ten largest customer's changes periodically. For the years ended December 31, 2018, 2017 and 2016, the Company's ten largest customers represented 41.4%, 39.5% and 40.6% of HMS' total revenue, respectively. Excluding those contracts that contain automatic renewal provisions or evergreen terms, the Company's agreements with the ten current largest customers generally expire between 2019 and 2026. In many instances, HMS provides services pursuant to agreements that may be renewed or subject to a competitive reprocurement process. Several of the Company's contracts, including those with some of its largest customers, may be terminated for convenience.

17. Subsequent Events

Annual Grants to Employees

On February 14, 2019, the Compensation Committee of the Board of Directors approved approximately $21.3 million in stock option and restricted stock unit awards to employees. The awards generally will vest over three years and will be issued three business days subsequent to the filing of this 2018 Form 10-K.

In connection with the preparation of our consolidated financial statements, an evaluation of subsequent events was performed through the date of filing and there were no other events that have occurred that would require adjustments to the financial statements or disclosure.

18. Quarterly Financial Data (Unaudited)

The table below summarizes the Company's unaudited quarterly operating results for the last two fiscal years (*in thousands, except per share amounts*):

2018	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year Ended
Revenue	$ 141,425	$ 146,791	$ 154,246	$ 155,828	$ 598,290
Operating income	$ 11,922	$ (763)	$ 24,231	$ 27,848	$ 63,238
Net income	$ 6,391	$ (3,367)	$ 18,574	$ 33,391	$ 54,989
Net income per common share - basic	$ 0.08	$ (0.04)	$ 0.22	$ 0.40	$ 0.66
Net income per common share - diluted	$ 0.07	$ (0.04)	$ 0.22	$ 0.38	$ 0.64

2017	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year Ended
Revenue	$ 113,733	$ 133,313	$ 125,673	$ 148,493	$ 521,212
Operating income	$ 3,943	$ 14,361	$ 12,861	$ 19,266	$ 50,431
Net income	$ 1,442	$ 6,517	$ 6,372	$ 25,723	$ 40,054
Net income per common share - basic	$ 0.02	$ 0.08	$ 0.08	$ 0.30	$ 0.48
Net income per common share - diluted	$ 0.02	$ 0.08	$ 0.07	$ 0.30	$ 0.47

(1) Second quarter 2018 results include the Company's entry into the Settlement Agreement for the payment of $20.0 million, as described in Note 15.

(2) Fourth quarter 2017 results include a non-cash tax benefit of $15.1 million due to the revaluation of the Company's deferred tax balances pursuant to the tax rate reduction included in the 2017 Tax Act.

SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS
For the years ended December 31, 2018, 2017 and 2016

Accounts receivable allowance and Estimated liability for appeals as of December 31, 2018, 2017 and 2016 are as follows:

Accounts receivable allowance *(in thousands)*:

	Balance at Beginning of Year	Provision	Recoveries	Charge-offs	Balance at End of Year
Year ended December 31, 2016	$ 11,464	$ 21,583	$ 108	$ (22,383)	$ 10,772
Year ended December 31, 2017	10,772	20,233	-	(16,206)	14,799
Year ended December 31, 2018	14,799	20,453	-	(21,569)	13,683

Estimated liability for appeals *(in thousands)*:

	Balance at Beginning of Year	Provision	Appeals found in providers favor	Release of estimated liability	Balance at End of Year
Year ended December 31, 2016	$ 12,801	$ 721	$ (2,396)	$ -	$ 11,126
Year ended December 31, 2017	11,126	83	(2,665)	-	8,544
Year ended December 31, 2018	8,544	-	(108)	(8,436)	-

The above chart represents the CMS estimated reserve liability only.

Exhibit 10.7

AMENDED AND RESTATED EXECUTIVE EMPLOYMENT AGREEMENT

THIS AMENDED AND RESTATED EXECUTIVE EMPLOYMENT AGREEMENT (the "***Agreement***") is effective April 2, 2018 (the "***Effective Date***"), and is by and between HMS Holdings Corp., a Delaware corporation ("***HMS***"), and Emmet O'Gara, an individual ("***you***") (and, together with HMS, the "***Parties***") to provide services, as directed, to the entities comprising the "***Company***" (HMS and its respective subsidiaries and affiliates). This Agreement amends, restates and supersedes the Employment Agreement between you and the Company dated January 2, 2018 in its entirety (the "***Prior Agreement***").

WHEREAS, the Company wishes to continue to employ you, and you wish to continue to be employed by the Company.

NOW THEREFORE, in consideration of your acceptance of employment pursuant to the terms set forth in this Agreement, the Parties agree to be bound by the terms contained in this Agreement as follows:

1. ***Engagement.*** As of the Effective Date, HMS will continue to employ you as Executive Vice President, Total Population Management. You acknowledge that the Company organizes itself across multiple entities, and that assigning you to work directly for HMS or for one of its subsidiaries or affiliates will not, in and of itself, breach this Agreement. You will report directly to the Chief Executive Officer, or his or her designee ("***Supervisor***"). You will have the responsibilities, duties, and authorities specified from time to time by your Supervisor, which will generally be commensurate with executives, at a similar level, of entities of similar size and character to the Company. You also agree, if so requested, to serve as an officer and director of subsidiaries of HMS.

2. ***Commitment.*** During the Employment Period (as defined in Section 3 below), you must devote your full working time and attention to the Company. During the Employment Period, you must not engage in any employment, occupation, consulting or other similar activity without your Supervisor's prior written consent; *provided, however,* that you may (i) serve in any capacity with any professional, community, industry, civic (including governmental boards), educational, charitable, or other non-profit organization, (ii) serve on any for-profit entity board, with your Supervisor's prior written consent, and (iii) subject to the Company's conflict of interest policies, make investments in other businesses and manage your and your family's personal investments and legal affairs; *provided* that any such activities described in clauses (i)-(iii) above do not materially interfere with the performance of your duties for the Company and do not otherwise violate this Agreement or any other written agreement between the Company and you. You will perform your services under this Agreement primarily at the Company's offices in Danvers, Massachusetts, or at such place or places as you and the Company may agree. You understand and agree that your employment will require travel from time to time in a manner consistent with Company policy.

3. ***Employment Period.*** The Company hereby agrees to continue to employ you and you hereby accept continued employment with the Company upon the revised terms set forth in this Agreement, for the period commencing on the Effective Date and ending when and as provided in Section 6 (the "***Employment Period***").

4. ***Compensation.***

(a) ***Base Salary.*** You will receive an annual base salary at a monthly rate of $33,333.33, annualizing to $400,000.00 (as may be adjusted under this Agreement, the "***Base Salary***"). The Company will pay your Base Salary periodically in arrears not less frequently than monthly in accordance with the Company's regular payroll practices as in effect from time to time (which currently provide for bi-weekly payments). The Board of Directors of HMS (the "***Board***") or its Compensation Committee (the "***Compensation Committee***") will review your Base Salary periodically and may adjust your Base Salary at that time.

(b) ***Bonus.*** You will be eligible to receive bonus compensation (the "***Bonus***") from the Company in respect of each fiscal year (or portion thereof) during the Employment Period, in each case as the Compensation Committee may determine in its sole discretion on the basis of such performance-based or other criteria as it determines appropriate. The target bonus for your position for 2018 is 65% of Base Salary, which will not be prorated. You must be an employee of the Company at the time bonuses are paid to receive a Bonus. The Compensation Committee will review your target bonus periodically and may adjust your target bonus at that time. The Bonus, if any, will be paid when other executives receive their bonuses under comparable arrangements.

(c) ***Sign-On Bonus.*** Within 30 days after April 1, 2018, you will also receive a special bonus of $50,000.00 (the "Sign-On Bonus"). You agree that you will repay the Sign-On Bonus within 10 days after your employment ends if your employment ends before the first anniversary of the date you receive the Sign-On Bonus because of a termination for Cause, as defined below, or your resignation without Good Reason, as defined below.

5. ***Employee Benefits.***

(a) ***Employee Welfare, Equity Compensation, and Retirement Plans.*** You will, to the extent eligible, be entitled to participate at a level commensurate with your position in all employee equity compensation plans and welfare benefit and retirement plans and programs the Company provides to its executives in accordance with the terms thereof as in effect from time to time. The Company may change or terminate the benefits at any time.

(b) ***Business Expenses.*** Upon submission of appropriate documentation in accordance with Company policies, the Company will promptly pay, or reimburse you for, all reasonable business expenses that you incur in performing your duties under this Agreement, including travel, entertainment, professional dues and subscriptions, as long as such expenses are reimbursable under the Company's policies. Any payments or expenses provided in this Section 5(b) will be paid in accordance with Section 7(c).

(c) ***Paid Time Off.*** You will accrue paid time off (**"*PTO*"**) at the rate of 18 hours per month (annualized to 27 days per year), or such greater number as the Company determines from time to time for its senior executive officers, provided that any accrual caps, carryover from year to year, and payment for accrued and unused PTO upon termination of employment will be subject to the Company's generally applicable policies.

6. Termination of Employment.

(a) ***General.*** Subject in each case to the provisions of this Section 6 and the other provisions of this Agreement relating to the Company's respective rights and obligations upon termination of your employment, nothing in this Agreement interferes with or limits in any way the Company's or your right to terminate your employment at any time, for any reason or no reason, with or without notice, and nothing in this Agreement confers on you any right or obligation to continue in the Company's employ. If your employment ceases for any or no reason, you (or your estate, as applicable) will be entitled to receive (in addition to any compensation and benefits you may be entitled to receive under Section 6(b), (d) or (e) below): (i) any earned but unpaid Base Salary and, to the extent consistent with general Company policy, accrued but unused PTO through and including the date of termination of your employment, to be paid in accordance with the Company's regular payroll practices and with applicable law, but no later than the next regularly scheduled pay period, (ii) unreimbursed business expenses in accordance with the Company's policies for which expenses you have provided appropriate documentation, to be paid in accordance with Section 7(c), and (iii) any amounts or benefits to which you are then entitled under the terms of the benefit plans then sponsored by the Company in accordance with their terms (and not accelerated to the extent acceleration does not satisfy Section 409A of the Internal Revenue Code of 1986, as amended ("***Section 409A***" of the "***Code***")). Notwithstanding any other provision in this Agreement to the contrary, you will be entitled to severance, if any, solely through the terms of this Section 6, unless another Board (or Compensation Committee) approved written agreement between you and the Company expressly provides otherwise.

(b) ***Termination Without Cause or Resignation With Good Reason.*** If, during the Employment Period, the Company terminates your employment without Cause (defined below) or you resign with Good Reason (defined below), in addition to the amounts described in Section 6(a), the Company will pay to you the following, subject to compliance with Section 6(b)(iii):

(i) *Cash Severance*. The Company will pay to you in cash an amount equal to 12 times your monthly Base Salary, paid ratably in equal installments over a 12 month period beginning in the first payroll period following the Release Effective Date (as defined below) (or such later date required by Section 7) in accordance with the Company's standard payroll policies and procedures and in a manner consistent with Section 7;

(ii) *Benefits*. The Company will pay you a lump sum amount equal to 12 times the difference between the monthly COBRA coverage premium for the same type of medical and dental coverage (single, family, or other) in which you are enrolled as of the date your employment ends and your then-monthly employee contribution. This payment will be taxable and subject to withholding. You may use the amount received for any purpose.

(iii) *Release*. To receive any severance benefits provided for under this Agreement or otherwise, you must deliver to the Company a separation agreement and general release of claims in the form the Company provides (releasing all releasable claims other than to payments under Section 6 or outstanding equity and including obligations to cooperate with the Company and reaffirming your obligations under the Restrictive Covenants Agreement (as defined below)), which agreement and release must become irrevocable within 60 days (or such earlier date as the release provides) following the date of your termination of employment. Benefits under Section 6(b)(i) and (ii) will be paid or commence in the first regular payroll beginning after the release becomes effective, subject to any delays required by Section 7; *provided, however*, that if the last day of the 60-day period for an effective release falls in the calendar year following the year of your date of termination, the severance payments will be paid or begin no earlier than January 1 of such subsequent calendar year. The date on which your release of claims becomes effective is the "***Release Effective Date***." You must continue to comply with the Restrictive Covenants Agreement to continue to receive severance benefits.

(c) ***Termination for Cause, Resignation without Good Reason.***

(i) *General*. If, during the Employment Period, the Company terminates your employment for Cause or you resign from your employment (other than for Good Reason), you will be entitled only to the payments described in Section 6(a), unless applicable law otherwise requires payment. You may resign from your employment (other than for Good Reason), at any time, by giving at least 30 days' prior written notice to the Company (the "***Notice Period***"). The Company may choose to respond to such notice of resignation by limiting your access and reducing your duties during the Notice Period, in which event you would remain an employee of the Company through the remainder of the Notice Period and continue to receive your Base Salary, less applicable deductions, and continue vesting under any outstanding equity grants through the end of the Notice Period. You will have no further right to receive any other compensation or benefits after such termination or resignation of employment, except as determined in accordance with the terms of the employee benefit plans or programs of the Company or as required by law.

(ii) *Cause*. For purposes of this Agreement, "***Cause***" means any of the following: your (i) fraud with respect to the Company; (ii) material misrepresentation to any regulatory agency, governmental authority, outside or internal auditors, internal or external Company counsel, or the Board concerning the operation or financial status of the Company; (iii) theft or embezzlement of assets of the Company; (iv) your conviction, or plea of guilty or nolo contendere to any felony (or to a felony charge reduced to a misdemeanor), or, with respect to your employment, to any misdemeanor (other than a traffic violation); (v) material failure to follow the Company's conduct and ethics policies that have been provided or made available to you; (vi) material breach of this Agreement or the Restrictive Covenants Agreement; and/or (vii) continued failure to attempt in good faith to perform your duties as reasonably assigned by your Supervisor at the time. Before terminating your employment for Cause under clauses (v) – (vii) above, the Company will specify in writing to you the nature of the act, omission, refusal, or failure that it deems to constitute Cause and, if the Company reasonably considers the situation to be correctable, give you 30 days after you receive such notice to correct the situation (and thus avoid termination for Cause), unless the Company agrees to further extend the time for correction. You agree that the Company will have discretion exercised in a reasonable manner to determine whether your correction is sufficient. Nothing in this definition prevents the Company from removing you from your position with the Company at any time and for any reason.

(iii) *Good Reason*. For purposes of this Agreement, "***Good Reason***" means, the occurrence, without your prior written consent, of any of the following events: (i) any material diminution in your authority, duties or responsibilities with the Company; (ii) a requirement that you report to an officer other than your then current Supervisor if the result is that your new Supervisor has materially diminished authority, duties, or responsibilities in comparison with your prior supervisor; (iii) a material reduction in your Base Salary; (iv) the Company requiring you to perform your principal services primarily in a geographic area more than 50 miles from the Company's offices in Danvers, Massachusetts (or such other place of primary employment for you at which you have agreed to provide such services); or (v) a material breach by the Company of any material provision of this Agreement. No resignation will be treated as resignation for Good Reason unless (x) you have given written notice to the Company of your intention to terminate your employment for Good Reason, describing the grounds for such action, no later than 90 days after the first occurrence of such circumstances, (y) you have provided the Company with at least 30 days in which to cure the circumstances, and (z) if the Company is not successful in curing the circumstance, you end your employment within 30 days following the cure period in (y). If the Company informs you that it will not treat your resignation as for Good Reason, you may withdraw the resignation and remain employed (provided that you do so before the original notice of resignation becomes effective) or may proceed and dispute the Company's decision.

(d) ***Death or Disability.*** Your employment hereunder will terminate immediately upon your death or Disability. "***Disability***" means the Chief Executive Officer, in consultation with the Chairman of the Compensation Committee or the Board, based upon appropriate medical evidence, determines you have become physically or mentally incapacitated so as to render you incapable of performing your usual and customary duties, with or without a reasonable accommodation, for 180 or more days, whether or not consecutive, during any 12 month period. You are also disabled if you are found to be disabled within the meaning of the Company's long-term disability insurance coverage as then in effect (or would be so found if you applied for the coverage or benefits). Employment termination under this subsection is not covered by Section 6(b) or 6(c), and you or your heirs will receive only the benefits and compensation in Section 6(a) (together, as applicable, with any life or disability insurance payments). Nothing in this Section 6(d) prevents the Company from removing you from your position with the Company or, under Section 6(b) or 6(c), from terminating your employment at any time, subject to compliance with those subsections.

(e) ***Change in Control.*** If, within 24 months following a Change in Control, the Company terminates your employment without Cause or you resign for Good Reason, in addition to the benefits described in Section 6(b)(ii) and subject to the release required under Section 6(b)(iii), you will receive the cash severance described in Section 6(b)(i), paid in a single lump sum on the Release Effective Date in accordance with the Company's standard payroll policies and procedures (or such later date as either Section 6(b)(iii) or 7(a) requires). For purposes of this Agreement, "***Change in Control*"** means:

(i) the acquisition by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934 (the "***Exchange Act***") (a "***Person***") of beneficial ownership of any capital stock of HMS if, after such acquisition, such Person beneficially owns (within the meaning of Rule 13d-3 under the Exchange Act) 50.01% or more of either (x) the then-outstanding shares of common stock of HMS (the "***Outstanding Company Common Stock***") or (y) the combined voting power of the then-outstanding securities of HMS entitled to vote generally in the election of directors (the "***Outstanding Company Voting Securities***"); *provided, however,* that for purposes of this subsection (i) any acquisition directly from the Company will not be a Change in Control, nor will any acquisition by any individual, entity, or group pursuant to a Business Combination (as defined below) that complies with subclauses (x) and (y) of clause (ii) of this definition;

(ii) the consummation of a merger, consolidation, reorganization, recapitalization or share exchange involving HMS or a sale or other disposition of all or substantially all (i.e., in excess of 85%) of the assets of HMS (a "***Business Combination***"), unless, immediately following such Business Combination, each of the following two conditions is satisfied: (x) all or substantially all of the individuals and entities who were the beneficial owners of the Outstanding Company Common Stock and Outstanding Company Voting Securities immediately prior to such Business Combination beneficially own, directly or indirectly, more than 50% of the then-outstanding shares of common stock and the combined voting power of the then- outstanding securities entitled to vote generally in the election of directors, respectively, of the resulting or acquiring corporation in such Business Combination (which shall include a corporation that as a result of such transaction owns HMS or substantially all of HMS's assets either directly or through one or more subsidiaries (such resulting or acquiring corporation is referred to herein as the "***Acquiring Corporation***") in substantially the same proportions as their ownership of the Outstanding Company Common Stock and Outstanding Company Voting Securities, respectively, immediately prior to such Business Combination and (y) no Person beneficially owns, directly or indirectly, 50.01% or more of the then-outstanding shares of common stock of the Acquiring Corporation, or of the combined voting power of the then-outstanding securities of such corporation entitled to vote generally in the election of directors (except to the extent that such ownership existed prior to the Business Combination); or

(iii) a change in the composition of the Board that results, during any one year period, in the Continuing Directors (as defined below) no longer constituting a majority of the Board (or, if applicable, the Board of Directors of a successor corporation to HMS), where the term "***Continuing Director***" means at any date a member of the Board (x) who was a member of the Board on the Effective Date or (y) who was nominated or elected subsequent to such date by at least a majority of the directors who were Continuing Directors at the time of such nomination or election or whose election to the Board was recommended or endorsed by at least a majority of the directors who were Continuing Directors at the time of such nomination or election; *provided, however,* that there shall be excluded from this clause (y) any individual whose initial assumption of office after the Effective Date occurred as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents, by or on behalf of a person other than the Board; *provided* that, where required by Section 409A, the event that occurs is also a "change in the ownership or effective control of a corporation, or a change in the ownership of a substantial portion of the assets of a corporation" as defined in Treasury Reg. § 1.409A-3(i)(5).

(f) ***Further Effect of Termination on Board and Officer Positions.*** If your employment ends for any reason, you agree that you will cease immediately to hold any and all officer or director positions you then have with the Company, absent a contrary direction from the Board (which may include either a request to continue such service or a direction to cease serving upon notice). You hereby irrevocably appoint the Company to be your attorney-in-fact to execute any documents and do anything in your name to effect your ceasing to serve as a director and officer of the Company, should you fail to resign following a request from the Company to do so. You will not be required to sign, and the Company will not sign on your behalf without your consent, documents effecting your ceasing to serve as a director that characterize your cessation of employment differently than the manner in which it is effected through Section 6 above. A written notification signed by a director or duly authorized officer of the Company that any instrument, document, or act falls within the authority conferred by this subsection will be conclusive evidence that it does so. The Company will prepare any documents, pay any filing fees, and bear any other expenses related to this Section 6(f).

7. ***Effect of Section 409A of the Code.***

(a) ***Six Month Delay.*** If and to the extent any portion of any payment, compensation or other benefit provided to you in connection with your employment termination is determined to constitute "nonqualified deferred compensation" within the meaning of Section 409A and you are a specified employee as defined in Section 409A(a)(2)(B)(i), as determined by the Company in accordance with its procedures, by which determination you hereby agree that you are bound, such portion of the payment, compensation or other benefit shall not be paid before the earlier of (i) the expiration of the six month period measured from the date of your "separation from service" (as determined under Section 409A) or (ii) the tenth day following the date of your death following such separation from service (the "***New Payment Date***"). The aggregate of any payments that otherwise would have been paid to you during the period between the date of separation from service and the New Payment Date shall be paid to you in a lump sum in the first payroll period beginning after such New Payment Date, and any remaining payments will be paid on their original schedule.

(b) ***General 409A Principles.*** For purposes of this Agreement, a termination of employment will mean a "separation from service" as defined in Section 409A. For purposes of this Agreement, each amount to be paid or benefit to be provided will be construed as a separate identified payment for purposes of Section 409A, and any payments that are due within the "short term deferral period" as defined in Section 409A or are paid in a manner covered by Treas. Reg. Section 1.409A-1(b)(9)(iii) will not be treated as deferred compensation unless applicable law requires otherwise. Neither the Company nor you will have the right to accelerate or defer the delivery of any such payments or benefits except to the extent specifically permitted or required by Section 409A. This Agreement is intended to comply with the provisions of Section 409A and this Agreement shall, to the extent practicable, be construed in accordance therewith. Terms defined in this Agreement will have the meanings given such terms under Section 409A if and to the extent required to comply with Section 409A. In any event, the Company makes no representations or warranty and will have no liability to you or any other person if any provisions of or payments under this Agreement are determined to constitute deferred compensation subject to Code Section 409A but not to satisfy the conditions of that section.

(c) ***Expense Timing.*** Payments with respect to reimbursements of business expenses will be made in the ordinary course in accordance with the Company's procedures (generally within 45 days after you have submitted appropriate documentation) and, in any case, on or before the last day of the calendar year following the calendar year in which the relevant expense is incurred. The amount of expenses eligible for reimbursement, or in-kind benefits provided, during a calendar year may not affect the expenses eligible for reimbursement, or in-kind benefits to be provided, in any other calendar year. The right to reimbursement or in-kind benefits is not subject to liquidation or exchange for another benefit.

8. ***Restrictive Covenants.*** You have previously signed a Noncompetition, Nonsolicitation, Proprietary and Confidential Information and Developments Agreement (the "***Restrictive Covenants Agreement***"), which addresses your responsibilities to the Company in connection with confidentiality, transfer and protection of intellectual property, noncompetition, nonsolicitation of employees and customers, and nondisparagement. You agree that the Restrictive Covenants Agreement remains in effect and shall survive the termination of this Agreement and termination of your employment with the Company.

9. ***Cooperation.*** Following your separation of employment from the Company, you agree to cooperate with the Company in regard to the transition of the business matters you handled on behalf of the Company. You also agree to reasonably cooperate with the Company and its counsel in the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company which relate in any way to events or occurrences that transpired while you were employed by the Company, subject to your right to initiate communications with, or participate or cooperate in any investigation conducted by, any Federal, State or Local government agency or regulatory authority. Your cooperation in connection with such claims or actions will include, but not be limited to, participating in interviews and discussions with the Company and/or its counsel, meeting with the Company's counsel to prepare for discovery, trial, or any legal proceeding, appearing and preparing for deposition or testimony at trial, and otherwise cooperating with HMS and its legal counsel, as requested. Nothing in this Agreement is to be construed as instructing you to testify in any particular manner, other than truthfully. To the extent possible, the Company will provide you with reasonable advance notice of the request for your cooperation. The Company will reimburse you for all reasonable, pre-approved out-of-pocket costs and expenses (but not including attorneys' fees and costs) that you incur, and compensate you at an hourly rate based on the base salary paid to you at the time of your separation (which is intended to be a fair and reasonable estimate of the total value of your lost time) in connection with your performance of your obligations under this paragraph of the Agreement, to the extent permitted by law.

10. ***Miscellaneous.***

(a) ***Notices.*** All notices required or permitted under this Agreement must be in writing and will be deemed effective upon personal delivery or three business days following deposit in a United States Post Office, by certified mail, postage prepaid, or one business day after it is sent for next-business day delivery via a reputable nationwide overnight courier service in the case of notice to the Company at its then principal headquarters, and in the case of notice to you to the current address on file with the Company. Notice to the Company must include a separate notice to the General Counsel of HMS. Either Party may change the address to which notices are to be delivered by giving notice of such change to the other Party in the manner set forth in this Section 10(a).

(b) ***No Mitigation.*** You are not required to seek other employment or otherwise mitigate the value of any severance benefits contemplated by this Agreement, nor will any such benefits be reduced by any earnings or benefits that you may receive from any other source. Notwithstanding any other provision of this Agreement, any sum or sums paid under this Agreement will be in lieu of any amounts to which you may otherwise be entitled under the terms of any severance plan, policy, program, agreement or other arrangement sponsored by the Company or an affiliate of the Company.

(c) ***Waiver of Jury Trial.*** TO THE EXTENT NOT PROHIBITED BY APPLICABLE LAW THAT CANNOT BE WAIVED, THE PARTIES HEREBY WAIVE, AND COVENANT THAT THEY WILL NOT ASSERT (WHETHER AS PLAINTIFF, DEFENDANT OR OTHERWISE), ANY RIGHT TO TRIAL BY JURY IN ANY ACTION, SUIT OR OTHER PROCEEDING ARISING IN WHOLE OR IN PART UNDER OR IN CONNECTION WITH THIS AGREEMENT OR THE RELEASE IT CONTEMPLATES, WHETHER NOW EXISTING OR HEREAFTER ARISING, AND WHETHER SOUNDING IN CONTRACT, TORT OR OTHERWISE, THE PARTIES AGREE THAT ANY PARTY MAY FILE A COPY OF THIS PARAGRAPH WITH ANY COURT AS WRITTEN EVIDENCE OF THE KNOWING, VOLUNTARY AND BARGAINED-FOR AGREEMENT AMONG THE PARTIES IRREVOCABLY TO WAIVE THEIR RIGHTS TO TRIAL BY JURY IN ANY PROCEEDING WHATSOEVER BETWEEN THEM RELATING TO THIS AGREEMENT OR TO ANY OF THE MATTERS CONTEMPLATED UNDER THIS AGREEMENT, RELATING TO YOUR EMPLOYMENT, OR COVERED BY THE CONTEMPLATED RELEASE.

(d) ***Severability.*** Each provision of this Agreement must be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be prohibited by or invalid under applicable law, such provision will be ineffective only to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement. Moreover, if an arbitrator or a court of competent jurisdiction determines any of the provisions contained in this Agreement to be unenforceable because the provision is excessively broad in scope, whether as to duration, activity, geographic application, subject or otherwise, it will be construed, by limiting or reducing it to the extent legally permitted, so as to be enforceable to the extent compatible with then applicable law to achieve the intent of the Parties.

(e) ***Assignment.*** This Agreement will be binding upon and will inure to the benefit of (i) your heirs, beneficiaries, executors and legal representatives upon your death and (ii) any successor of the Company. Any such successor of the Company will be treated as substituted for the Company under the terms of this Agreement for all purposes. The Company may assign this Agreement without your consent, and such an assignment will not terminate your employment for purposes of triggering your entitlement to severance; *provided, however,* that if such an assignment provides a basis for you to resign for Good Reason after a Change in Control, you may resign for Good Reason, and you will be entitled to severance, if any, subject to the terms of Section 6. You specifically agree that any assignment may include rights under the Restrictive Covenants Agreement without requiring your consent; *provided*, *however*, that an assignment that occurs after the termination of your employment will not expand in any manner the scope of the Restrictive Covenants Agreement. As used herein, "successor" will mean any person, firm, corporation or other business entity that at any time, whether by purchase, merger or otherwise, directly or indirectly acquires all or substantially all of the assets or business of the Company. Any attempted assignment, transfer, conveyance or other disposition of any interest in your rights to receive any form of compensation hereunder will be null and void.

(f) ***No Oral Modification, Waiver, Cancellation or Discharge.*** This Agreement may only be amended, canceled or discharged or any obligations thereunder waived through a writing signed by you and any executive officer of the Company (other than you) duly authorized either by the Board or the Compensation Committee.

(g) ***No Conflict of Interest.*** You confirm that you have fully disclosed to the Company, to the best of your knowledge, all circumstances under which you, your immediate family and other persons who reside in your household have or may have a conflict of interest with the Company. You further agree to fully disclose to the Company any such circumstances that might arise during your employment upon your becoming aware of such circumstances.

(h) ***Other Agreements.*** You hereby represent that your performance of all the terms of this Agreement and the performance of your duties as an employee of the Company does not and will not breach any agreement to keep in confidence proprietary information, knowledge or data acquired by you in confidence or in trust prior to your employment with the Company. You also represent that you are not a party to or subject to any restrictive covenants, legal restrictions, policies, commitments or other agreements in favor of any entity or person that would in any way preclude, inhibit, impair or limit your ability to perform your obligations under this Agreement, including noncompetition agreements or nonsolicitation agreements, and you further represent that your performance of the duties and obligations under this Agreement does not violate the terms of any agreement to which you are a party. You agree that you will not enter into any agreement or commitment or agree to any policy that would prevent or hinder your performance of duties and obligations under this Agreement.

(i) ***Disclosure of this Agreement.*** You acknowledge that the Company may provide persons or entities who may employ or engage you with a copy of the Restrictive Covenants Agreement (or portions thereof) to highlight your continuing obligations to the Company. You also acknowledge that the Company may be obligated to disclose the entire Agreement, or any portion thereof, to satisfy applicable laws and regulations.

(j) ***Survivorship.*** The respective rights and obligations of the Company and you hereunder will survive any termination of your employment to the extent necessary to preserve the intent of such rights and obligations.

(k) ***Withholding.*** The Company will be entitled to withhold, or cause to be withheld, any amount of federal, state, city or other withholding taxes or other amounts either required by law or authorized by you with respect to payments made to you in connection with your employment or the termination of your employment.

(l) ***Company Policies.*** References in this Agreement to Company policies and procedures are to those policies and procedures in effect at the Effective Date, as the Company may amend them from time to time.

(m) ***Governing Law; Dispute Resolution.*** The Parties agree that the enforcement of this Agreement shall be governed by the Federal Arbitration Act ("FAA"), 9 U.S.C. §1 et seq. The laws of the State of Texas and the National Rules (as defined below) shall apply to the interpretation of this Agreement, pursuant to section 2 of the FAA. The laws of the State of Texas shall govern the substantive merits of any legal dispute set forth herein, without regard to conflicts of law provisions. In case of any controversy or claim arising out of or related to this Agreement or relating to your employment or the termination of your employment (including claims relating to employment discrimination), except as expressly excluded herein, each Party agrees to give the other Party notice of an intent to seek arbitration under this Agreement and 10 days to reach a resolution. Should resolution of any controversy or claim not be reached following provision of notice and a reasonable opportunity to cure, then the dispute (including the arbitrability of the dispute itself, and the formation or enforceability of this Agreement) shall be settled by arbitration under the American Arbitration Association's Employment Arbitration Rules and Mediation Procedures (the "***National Rules***"). A single arbitrator shall be selected in accordance with the National Rules. The dispute will be arbitrated in Danvers, Massachusetts, absent mutual agreement of the Parties to another venue. Any claim or controversy not submitted to arbitration in accordance with this Section 10(m) (other than as provided under the Restrictive Covenants Agreement) will be waived, and thereafter no arbitrator, arbitration panel, tribunal, or court will have the power to rule or make any award on any such claim or controversy. In determining a claim or controversy under this Agreement and in making an award, the arbitrator must consider the terms and provisions of this Agreement, as well as all applicable federal, state, or local laws. The award rendered in any arbitration proceeding held under this Section 10(m) shall be final and binding and judgment upon the award may be entered in any court having jurisdiction thereof. The following claims are not covered by this Section 10(m): (1) claims for workers' compensation or unemployment compensation benefits; (2) administrative charges to any federal, state or local equal opportunity or fair employment practices agency; (3) administrative charges to the National Labor Relations Board; (4) agency charges or complaints to exhaust an administrative remedy; or (5) any other charges filed with or communication to a federal, state or local government office, official or agency. Also not covered by this Section 10(m) are claims by the Company or by you for temporary restraining orders, preliminary injunctions or permanent injunctions ("equitable relief") in cases in which such equitable relief would be otherwise authorized by law or pursuant to the Restrictive Covenants Agreement. The Company will be responsible for paying any filing fee of the sponsoring organization and the fees and costs of the arbitrator; provided, however, that if you initiate the claim, you will contribute an amount equal to the filing fee you would have incurred to initiate a claim in the court of general jurisdiction in the State of Texas. Each party will pay for its own costs and attorneys' fees, if any, provided that the arbitrator or court, as applicable, may award reasonable costs and expenses in favor of the prevailing party. The Company and you agree that the decision as to whether a party is the prevailing party in an arbitration, or a legal proceeding that is commenced in connection therewith will be made in the sole discretion of the arbitrator or, if applicable, the court.

Any action, suit or other legal proceeding with respect to equitable relief that is excluded from arbitration above must be commenced only in a court of the State of Texas (or, if appropriate, a federal court located within the State of Texas), and the Company and you each consent to the jurisdiction of such a court. With respect to any such court action, the Parties hereto (a) submit to the personal jurisdiction of such courts; (b) consent to service of process by the means specified under Section 10(a); and (c) waive any other requirement (whether imposed by statute, rule of court, or otherwise) with respect to personal jurisdiction, inconvenient forum, or service of process.

(n) ***Interpretation.*** The parties agree that this Agreement will be construed without regard to any presumption or rule requiring construction or interpretation against the drafting party. References in this Agreement to "include" or "including" should be read as though they said "without limitation" or equivalent forms.

(o) ***Entire Agreement.*** This Agreement and any documents referred to herein, including, but not limited to, the Restrictive Covenants Agreement referenced in Section 8, represent the entire agreement of the Parties and will supersede any and all previous contracts, arrangements or understandings between the Company and you, including, without limitation, the Prior Agreement.

(p) ***Counterparts.*** This Agreement may be executed in counterparts, and all so executed shall constitute one agreement which shall be binding upon all Parties hereto, notwithstanding that all Parties' signatures do not appear on the same page.

[Signatures on Following Page(s)]

IN WITNESS WHEREOF, the Parties have executed this Agreement to be effective as of the Effective Date set forth above.

HMS Holdings Corp.

By: /s/ William C. Lucia 3/29/2018
William C. Lucia Date
Its: Chairman, President and Chief Executive Officer

Emmet O'Gara

/s/ Emmet O'Gara 4/2/2018
Date

Exhibit 10.9

SEPARATION, WAIVER AND GENERAL RELEASE AGREEMENT

This Separation, Waiver and General Release Agreement (referred to herein as "*Agreement*" or *"Release"*) is entered into by and between Semone Neuman (referred to herein as "*You*" or "*Releasor*") and HMS Holdings Corp. For purposes of this Agreement, the term "*Company*" shall refer to HMS Holdings Corp. and its corporate affiliates and their respective direct and indirect subsidiaries and successors and assigns. The Company, together with its past and present parents, subsidiaries, affiliates, shareholders, owners, partners, members, officers, directors, representatives, employees, agents, counsel, successors and assigns, benefit plans, benefit plan trustees and administrators are referred to collectively herein as the "*Releasees.*" You and the Releasees shall be referred to collectively herein as the "*Parties*" and individually as a "*Party.*"

WHEREAS, the Parties previously entered into that certain Amended and Restated Executive Employment Agreement, effective April 2, 2018 (the "*Employment Agreement*"), pursuant to which the Company has employed you as its Executive Vice President, Coordination of Benefits;

WHEREAS, your employment with the Company will end as of March 16, 2019 (the "*Separation Date*"); and

WHEREAS, in accordance with Section 6(b) of the Employment Agreement, the Company desires to offer you this Agreement in exchange for certain agreements, warranties, representations and releases on your part contained in this Agreement;

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Nature of Agreement and Non-Admission of Liability

This is an agreement of settlement and compromise, and by entering into this Agreement none of the Parties agree or concede in any manner whatsoever that they violated any law or statute of any jurisdiction, breached any duty, responsibility or contract, or acted improperly in any manner. It is understood and agreed that nothing in this Agreement shall be interpreted or construed as the admission of any wrongdoing by any or all the Releasees or by any person or entity acting for or on behalf of any or all of the Releasees.

2. End of Releasor's Employment

You agree that, effective as of January 9, 2019, you will resign from your position as Executive Vice President, Coordination of Benefits of the Company and from all other employee, officer, director, manager, and other positions and associations of any kind with the Company; provided, however, that your employment with the Company shall not terminate until the Separation Date. You agree to execute all documents and to take such further steps as may be required to effectuate such resignation(s). You agree that during the period commencing on the Effective Date (as defined in paragraph 14 below) and ending on the Separation Date, you shall assist with the transition of your current duties and responsibilities, to the extent requested by the Company's Chief Executive Officer. The Company shall continue to employ you until the Separation Date, and your salary and all benefits will remain unchanged until such date; provided, however, that you shall no longer have any leadership or decision-making authority or take any actions, execute any documents, or make any representations on behalf of the Company. You agree that your services shall be available to the Company as needed through the Separation Date and will be subject to the same policies, standards of conduct and performance applicable to all officers and managers of the Company. From the date hereof and until the Separation Date, you shall serve as a senior advisor to the Company, and you agree to (a) cooperate fully and provide assistance, at the request of the Company and upon reasonable notice, in the orderly transitioning of your duties and responsibilities to such other persons as the Company shall designate and (b) thoroughly and diligently perform those duties and actions which are necessary or appropriate to cause such orderly transition. You acknowledge and agree that you shall receive no additional compensation for time spent assisting the Company pursuant to this paragraph 2 other than the compensation and benefits provided for in this Agreement. You agree that this Agreement fully supersedes any and all prior agreements relating to your employment with the Company, including, without limitation, the Employment Agreement (other than the Surviving Provisions and other than the Restrictive Covenant Agreement (each as defined below)).

3. No Further Monies are Due to You; Non-Waiver of Certain Rights

Other than the monies to be paid pursuant to paragraph 4, there are no other monies that you claim are owed to you which relate in any way to your employment with the Company. This includes, but is not limited to, salaries, bonuses, commissions, wages, reimbursable business expenses or contributions to employee benefit plans, vacation or severance pay. Nothing herein shall be construed or interpreted in any way to: (a) limit or deny your right to receive any vested employee benefit under a plan of the Company for which you were or are a participant; (b) alter your right to elect continued coverage of benefits pursuant to the Consolidated Omnibus Budget Reconciliation Act of 1985 ("*COBRA*") or any state equivalent law; or (c) limit your ability to seek and/or collect unemployment insurance benefits (assuming you otherwise qualify for such benefits).

4. Consideration

A. Prior to the Separation Date, you shall continue to receive your base salary, less all applicable payroll taxes and withholdings, in accordance with the Company's normal payroll practices, and other benefits as in effect immediately prior to the Effective Date, including, without limitation, continued eligibility to receive a bonus pursuant to the Company's annual bonus plan with respect to the 2018 performance period.

B. Provided that you comply with this Agreement, the Restrictive Covenant Agreement and the Surviving Provisions, do not revoke your signature on this Agreement (as discussed in paragraph 15), and execute the attached Exhibit B on (but not before) the Separation Date, or within seven (7) days following the Separation Date, and do not revoke it, the Company shall (on behalf of the Releasees) provide you with the following consideration after your termination of employment:

(i) The Company will pay you an amount equal to twelve (12) times your monthly base salary (the "*Separation Payment*"), provided you have not secured another position with the Company. The Separation Payment shall be paid to you in bi-weekly payments, beginning on the first full payroll period after the expiration of the revocation period set forth in paragraph 15 of this Agreement. Payments of the Separation Payment will be made on the Company's normal payroll cycle in accordance with the Company's regular payroll practices, and are subject to all statutory deductions required by federal, state and/or local law. Payments will be reported on a tax Form W-2.

(ii) The Company will pay you a lump-sum amount equal to the difference between the COBRA coverage premium for the same type of medical, dental and vision coverage (single, family or other) in which you are enrolled as of the Separation Date and your employee contribution, which represents the amount the Company would allocate for such coverage had your coverage remained active for twelve (12) months. This payment will be made within sixty (60) days of the termination of your employment and will be taxable and subject to withholding for all required federal, state and/or local income and employment taxes. You will be responsible for ensuring the timely payment of your COBRA coverage premiums.

The Company shall have no obligation to pay the amounts or to provide the benefits described in this paragraph 4(B) unless you execute and do not revoke this Agreement and Exhibit B. The amounts payable pursuant to this paragraph 4(B) shall not be treated as compensation under the Company's 401(k) or other retirement plan. You acknowledge and agree that you are not otherwise entitled to the amounts and benefits set forth in this paragraph 4(B).

C. Even if you choose not to sign this Agreement, or if you sign this Agreement and then revoke your signature (as explained below), you will still be paid your regular salary through the Separation Date and your accrued but unused PTO, if any, for the calendar year in which the Separation Date occurs.

5. Return of Company Property

On or before the Separation Date, you shall return to the Company all Company property in your possession, custody or control, including all keys, files, records, equipment (including computer hardware, software, printers, wireless handheld devices, cellular phones, etc.), and Company Confidential Information (as defined in paragraph 10(E)) and have left intact with, or delivered intact to, the Company all electronic Company documents, including those that you developed or helped to develop during your employment, none of which you will retain in any form or medium.

6. Release

In exchange for the consideration provided by the Company under the terms of this Agreement in paragraph 4(B), you irrevocably and unconditionally release and discharge the Releasees jointly and severally, from any and all debts, claims, liabilities, demands and causes of action of every kind, nature and description, in law, or in equity, which against the Releasees, you, your heirs, executors, administrators, successors and assigns ever had, now have or hereafter can, shall or may have for, upon or by reason of any matter, cause or thing whatsoever, from the beginning of time to the date you sign this Agreement. You represent that you have not assigned or otherwise transferred any interest in any claim that is the subject of this Agreement.

This Release covers, without limitation, any claims of harassment and/or discrimination on the basis of sex, sexual orientation, gender identification, pregnancy, disability (including claims concerning a history or record of a disability, predisposing genetic condition, and claims that you were regarded as having a disability), handicap, genetic information, race, color, religion, creed, national origin, ancestry, age, citizenship, ethnic characteristics, marital status or military/veteran status and also includes, no matter how denominated or described, any claims under any federal, Texas, South Carolina (or other state) state or local law, statute, rule, regulation, ordinance or executive order of discrimination and/or retaliation and non-payment of wages, bonuses, commissions or other compensation, including, without limitation, the Age Discrimination in Employment Act of 1967 ("*ADEA*"), Older Workers Benefit Protection Act, Employee Retirement Income Security Act of 1974, Title VII of the Civil Rights Act of 1964, Civil Rights Act of 1866, The Civil Rights Act of 1991, Rehabilitation Act of 1973, Executive Order 11246, Executive Order 11141, Genetic Information Nondiscrimination Act of 2008, Americans with Disabilities Act of 1990 ("*ADA*"), ADA Amendments Act, Family and Medical Leave Act, Occupational Safety and Health Act, Fair Labor Standards Act, Worker Adjustment and Retraining Notification Act, Fair Credit Reporting Act, Texas Labor Code Annotated § 21.001 *et seq*. (Texas civil rights law), Texas Labor Code Annotated § 21.055 *et seq*. (Texas whistleblower protection law), Texas Commission on Human Rights Act, Texas Law on Communicable Diseases, Texas Breast-Feeding Rights and Policies Law, the South Carolina Human Affairs Law, as amended, the South Carolina Payment of Wages Law, as amended, and all other federal, state and local laws, including without any limitation, any claims of wrongful or tortious discharge or termination, breach of contract, breach of the implied covenant of good faith and fair dealing, written or oral, express or implied, breach of promise, public policy, negligence, intentional infliction of emotional distress, negligent infliction of emotional distress, assault, battery, false imprisonment, defamation, libel, slander, invasion of privacy, impairment of economic opportunity, loss of business opportunity, fraud, misrepresentation, and whistleblower activities, and any claim or damage arising out of your employment with and/or separation from the Company (including a claim for retaliation) under any common law theory or any federal, state or local law, statute, rule, regulation, ordinance or executive order not expressly referenced above.

This Release does not apply to any claims or rights that may arise after the date you sign this Release. Excluded from this Release are any claims which cannot be waived by law, including but not limited to, the right to participate in an investigation conducted by certain government agencies. You do, however, waive your right to any monetary recovery from the Company or the Releasees should any agency (*e.g.*, the Equal Employment Opportunity Commission) pursue any claims on your behalf, unless otherwise prohibited by law. You represent and warrant that you have not filed any complaint, charge, or lawsuit against the Company with any government agency or any court.

You agree never to sue the Company or the Releasees in any forum for any claim covered by the above waiver and release language, except that you may bring a claim against the Company under the ADEA to challenge this Release. If you violate this Release by suing the Company or the Releasees, other than under the ADEA or as otherwise set forth above, you shall be liable to the Company and/or the Releasees for their reasonable attorneys' fees and other litigation costs incurred in defending against such a suit. Nothing in this Release is intended to reflect any party's belief that your waiver of claims under ADEA is invalid or unenforceable, it being the interest of the Company and you that such claims are waived.

The Parties intend this Release to be construed and interpreted to the fullest extent permitted by law as a general release. The terms of this Agreement are accepted by you as full and complete resolution, accord and satisfaction of any and all claims, demands or grievances you have made against, and/or could have made against any of the Releasees.

7. Acknowledgements

You acknowledge that you have no knowledge of any violations by the Company of the Health Insurance Portability and Accountability Act of 1996 ("*HIPAA*"), the Fair Debt Collection Practices Act, the civil or criminal provisions of the federal False Claims Act, the Civil Monetary Penalties Statute, Titles XVIII and XIX of the Social Security Act (the Medicare and Medicaid statutes), the Health Care Benefit Program False Statements Statute, the Health Care Fraud Statute, any and all of the statutory provisions referenced in the Federal Health Care Offense Definitions Statute, or any other federal or state laws relating to negligence, fraud and abuse in health care (collectively, the "*Health Care Laws*"), or the Sarbanes Oxley Act. You have received instruction from the Company on how to report claims or violations under the Health Care Laws and the Sarbanes Oxley Act, and as of the date of executing this Agreement, have no claims to report under the Health Care Laws or the Sarbanes Oxley Act. You further certify that you have not reported to any government authority or other entity any such healthcare compliance concerns, issues, and/or violations or potential violations, which remain unanswered or unresolved. Furthermore, in connection with the foregoing acknowledgements, you have signed the Corporate Compliance Statement - Return of Company Property & Information document, attached to this agreement as Exhibit A, and hereby affirm the representations therein.

8. Non-Waiver or Release of Subsequent Rights or Claims

Nothing contained herein is intended to or shall constitute a waiver or release of any rights or claims that arise after the date you sign this Agreement.

9. Non-Waiver of Rights Under this Agreement

Nothing herein is intended to or constitutes a waiver of any rights the Parties may have under this Agreement.

10. Representations and Warranties

As a material part of this Agreement, you make the following representations and warranties:

A. You have not commenced or asserted an administrative charge or complaint, and you have not commenced or asserted, and shall not commence or assert, any lawsuit, arbitration, claim or legal proceeding, against any or all of the Releasees that is designed to remedy or seek redress for any right or rights waived and/or released by this Agreement.

B. You agree to keep confidential all information relating to this Agreement, including its negotiation, terms and existence. You may communicate or publish any information relating to this Agreement to your immediate family (defined herein as parents, siblings, parents-in-law, spouse, domestic partner or children), legal and financial representatives, and tax preparer. Before such information is disclosed by you to any such person(s), however, you shall advise such person(s) that the information they will receive is to be kept confidential, and such person(s) must agree to maintain the confidentiality of the information they receive.

C. You are not aware of any facts or circumstances suggesting that the Company has engaged in any wrongful or unlawful conduct.

D. Non-Disparagement

You will not make or cause to be made or published any statement, written or oral, directly or indirectly, which is intended to or has the effect of having any negative impact on the Company, its business or reputation in the marketplace or otherwise, subject to your rights in paragraph 10(G).

E. Surviving Provisions; Confidentiality

You acknowledge and agree to honor and abide by your obligations under Section 8, Section 9, and Section 10 of the Employment Agreement (such sections of the Employment Agreement are referred to herein as, the "*Surviving Provisions*", and shall survive the termination of your employment with the Company and the Employment Agreement and shall remain in full force and effect). You further acknowledge that as a condition of your employment with the Company, you previously entered into a Noncompetition, Nonsolicitation, Proprietary and Confidential Information and Developments Agreement (the "*Restrictive Covenant Agreement*"), a copy of which is being provided to you with this Agreement, and the provisions of which are incorporated herein by reference. You agree that the terms of the Restrictive Covenant Agreement and the Surviving Provisions shall continue by their own terms in full force and effect. You agree that the terms of the Restrictive Covenant Agreement and the Surviving Provisions are reasonable and that the consideration set forth in this Agreement shall also be considered additional consideration for your ratification of the Restrictive Covenant Agreement and the Surviving Provisions. In addition, you acknowledge your duty to keep confidential Protected Health Information within the meaning of federal HIPAA regulations, including, but not limited to, any patient-specific information derived from medical or financial records or from electronic data files used in Company's business operations. Under the terms of this Agreement, the restrictive covenants and confidentiality obligations to the Company survive the execution of this Agreement. You acknowledge that your adherence to the terms of the Restrictive Covenant Agreement, the Surviving Provisions, and compliance with your above-referenced obligations to keep confidential Protected Health Information within the meaning of federal HIPAA regulations is important to the Company's business. You agree to familiarize yourself with the provisions of the Restrictive Covenant Agreement, the Surviving Provisions, and the federal HIPAA regulations, as your violation of these confidentiality obligations may subject you to liability.

You further acknowledge and agree that you have a common law duty of confidentiality to the Company that prevents you from using the Company's confidential information during or after employment, except on the Company's behalf. You agree that you will not disclose to any person or entity any Confidential Information relating to the Company or its past or present partners, shareholders, owners, officers, directors or employees. For the purposes of this Agreement, the term Confidential Information shall mean information not in the public domain relating to the Company's past or present clients, business processes or methods, its trade secrets, marketing, promotional, public relations or other plans, or other information involving the Company; the Company's financial, payroll or wage information; or any personal matters of any partner, shareholder, owner, officer, director or employee of the Company.

F. Nothing in this Agreement, including paragraphs 10(A) through 10(E), shall be construed to prevent you (or any of the Releasees) from testifying truthfully, under oath, about any matter, if required to do so in any legal proceeding.

G. Nothing in this Agreement shall be construed to limit your right to initiate communications with, or participate or cooperate in any investigation conducted by, any federal, state or local government agency or regulatory authority, even if the subject matter of the communication or investigation concerns a right, claim or matter waived or released by this Agreement.

H. Nothing in this Agreement prohibits you from reporting possible violations of state or federal law or regulation to any government agency, regulator, or legal authority, or making other disclosures that are protected under the whistleblower provisions of state or federal law or regulation. You are not required to notify the Company that you have made any such reports or disclosures; provided, however, that nothing herein authorizes the disclosure of information you obtained through a communication that was subject to the attorney-client privilege, unless disclosure of the information would otherwise be permitted by an applicable law or rule. Further, pursuant to the Defend Trade Secrets Act: "An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret as defined in the Economic Espionage Act that (A) is made (i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and (ii) solely for the purpose of reporting or investigating a suspected violation of law; or (B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal. An individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual (A) files any document containing the trade secret under seal; and (B) does not disclose the trade secret, except pursuant to court order."

I. Nothing in this Agreement shall be construed to release or waive any claim that may not be released or waived by law.

J. You understand and agree that you shall not after your Separation Date contact or communicate with employees of the Company, other than the Company's Executive Vice President, General Counsel, its Executive Vice President, Chief Administrative & Human Resources Officer, or a member of the Company's Human Resources department, with regard to the subject matter of this Agreement. Nothing herein shall preclude you from discussing in general terms your duties and responsibilities while at the Company.

K. You acknowledge that you have no entitlement to severance pay or any benefit resulting from your termination. You further understand that your receiving the consideration set forth in this Agreement is conditional upon your signing this Agreement. You acknowledge that the Separation Payment to be made to you under this Agreement is in addition to anything of value to which you are already entitled.

11. Cooperation

Following the Separation Date, you agree to cooperate with the Company in regard to the transition of the business matters you handled on behalf of the Company. You also agree to reasonably cooperate with the Company and its counsel in the defense or prosecution of any claims or actions now in existence or which may be brought in the future against or on behalf of the Company which relate in any way to events or occurrences that transpired while you were employed by the Company, subject to your rights in paragraph 10(G) above. Your cooperation in connection with such claims or actions will include, but not be limited to, being available to meet with the Company's counsel to prepare for discovery, trial, or any legal proceeding, and to act as a witness on behalf of the Company at mutually convenient times. The Company will reimburse you for all reasonable, pre-approved out-of-pocket costs and expenses (but not including attorneys' fees and costs) that you incur and compensate you at an hourly rate based on the base salary paid to you at the time of your separation (which is intended to be a fair and reasonable estimate of the total value of your lost time and is not intended to influence or in any way alter the substance of any testimony you may provide) in connection with your performance of your obligations under this paragraph of the Agreement, to the extent permitted by law.

12. Remedy in the Event of a Breach

In the event you breach any portion of this Agreement, you shall immediately, upon written demand, return to the Company all monies paid to you pursuant to this Agreement (except the payment(s) set forth in paragraphs 4(A) and (C)), and the Company shall retain all rights to pursue legal and equitable remedies to: (a) enforce the terms of this Agreement, and/or (b) seek damages for any breach.

13. Additional Representations

By signing this Agreement, you further acknowledge, understand, and agree that by signing this Agreement, you are knowingly and voluntarily agreeing to waive and release, among other claims, any and all claims under the ADEA and the Older Workers Benefit Protection Act you have had or may have against the Company and/or the Releasees. Further, you understand and agree that:

A. You will have a period of twenty-one (21) calendar days from the date you receive this Agreement to review and deliberate whether or not to sign it, any or all of which period you may waive;

B. You are hereby advised to consult with an attorney before executing this Agreement;

C. You have carefully read and understand the terms of this Agreement, and have had a full and fair opportunity to review this Agreement with an attorney of your choice;

D. You have signed this Agreement freely and voluntarily and without fraud, duress or coercion and with full knowledge and understanding of its terms and of its significance and consequences and of the rights relinquished, surrendered, released and discharged hereunder; and

E. The only consideration for signing this Agreement is stated herein, and no other promise, agreement or representation of any kind has been made to you by any person or entity whatsoever to cause you to sign this Agreement.

14. Manner of Acceptance

In order to accept the terms of this Agreement, you must return a signed copy to the Company (at the address set forth in paragraph 16 hereof) by the twenty-first (21st) calendar day after the date you receive this Agreement. In the event a timely acceptance is made, and you do not revoke your signature pursuant to paragraph 15, the Company shall provide the consideration described in paragraph 4(B).

In the event the twenty-first (21st) day falls on a Saturday, Sunday or on a day that the Company's office is closed, your time to accept the terms of this Agreement shall be extended until the next regular business day that the Company's office is open.

If you do not revoke your signature to this Agreement, the eighth (8th) day after your date of acceptance will be the effective date of this Agreement (the "*Effective Date*").

15. Right to Revoke

You may revoke your signature (thereby rescinding your acceptance of the terms of this Agreement) within seven (7) calendar days from the date on which you sign this Agreement. If the seventh (7th) day falls on a Saturday, Sunday or on a day that the Company's office is closed, your time to revoke your signature shall be extended until the next regular business day that the Company's office is open. In the event you wish to revoke your signature, you must give written notice to that effect pursuant to paragraph 16 hereof. If you timely revoke your signature on this Agreement, or if you do not timely sign and return this Agreement to the Company (pursuant to paragraph 14), this Agreement shall be null, void and of no effect, and you shall not be entitled to any of the consideration described in paragraph 4(B).

16. Addresses for Notices

Any notice required pursuant to this Agreement shall be sent via registered mail, return receipt requested, or overnight mail with delivery confirmation to the following addresses:

If to the Company: HMS, 5615 High Point Drive, Irving, Texas 75038, Attention: Tracy South, Human Resources Department.

If to You:

Any Notice sent in accordance with this paragraph shall be deemed effective upon receipt. Notwithstanding anything to the contrary contained herein, at any time after the execution of this Agreement any Party may modify the address(es) (including telephone number(s)) to which it desires notices to be sent by advising the other, in writing as provided in this paragraph. Such modification shall be deemed effective upon receipt.

17. General Legal Matters

A. The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision hereof. In the event any provision of this Agreement is determined by a court of competent jurisdiction to be invalid, unlawful or unenforceable, it shall be severed from the Agreement, and the court shall be permitted to redraft the language so as to conform the severed language to the Parties' intent. If any provision, or portion thereof, of this Agreement is determined to be invalid under applicable statute or rule of law, only such provision, and only to the extent determined to be invalid, shall be deemed omitted from this Agreement, the remainder of which shall remain in full force and effect. In the event the general release provisions of this Agreement are determined to be invalid, you shall immediately execute a modified general release that is valid that shall be effective as of the date this Agreement becomes effective.

B. This Agreement (including the exhibits attached hereto), the Restrictive Covenant Agreement, and the Surviving Provisions reflect the entire agreement among the parties relating to the matters set forth herein and relating to your employment. With the exception of the agreements described in paragraph 10(E) and any Non-Qualified Stock Option/Restricted Stock Unit Agreement that you may have received during your employment, which agreements shall remain in full force and effect in accordance with their respective terms and conditions, any other agreements, understandings, promises or commitments among the Parties are superseded by this Agreement. This Agreement (including the exhibits attached hereto) has been negotiated, drafted and reviewed by the Parties and/or their designated counsel. No language herein shall be construed for or against the interests of any Party on the ground that either Party was the proponent or draftsperson thereof. This Agreement may not be changed unless the change is in writing and signed by you and the Company.

C. This Agreement will be governed by and construed as a sealed instrument under and in accordance with the laws of the State of Texas without regard to conflicts of law provisions. Any action, suit or other legal proceeding that is commenced to resolve any matter arising under or relating to any provision of this Agreement must be commenced only in a court of the State of Texas (or, if appropriate, a federal court located within the State of Texas) and the Company and you each consents to the jurisdiction of such a court. With respect to any such court action, the Company and you (a) submit to the personal jurisdiction of such courts; (b) consent to service of process by the means specified under paragraph 16; and (c) waive any other requirement (whether imposed by statute, rule of court, or otherwise) with respect to personal jurisdiction, inconvenient forum, or service of process. ***THE COMPANY AND YOU EACH HEREBY IRREVOCABLY WAIVES ANY RIGHT TO A TRIAL BY JURY IN ANY ACTION, SUIT OR OTHER LEGAL PROCEEDING ARISING UNDER OR RELATING TO ANY PROVISION OF THIS AGREEMENT.***

D. Paragraph headings used in this Agreement are for informational purposes only and shall not be construed or interpreted as part of this Agreement. Usage of the singular shall include the plural and vice versa. Use of male pronouns shall be read to include the female and vice versa.

E. This Agreement is intended to comply with Section 409A of the Internal Revenue Code of 1986, as amended (the "*Code*"), if and to the extent applicable, and will be interpreted and applied in a manner consistent with that intention. Toward that end, unless permitted sooner by Section 409A of the Code, severance amounts otherwise payable within six (6) months after termination of employment will be deferred until and become payable on the first (1st) day of the seventh (7th) month following termination of employment. Further, to the extent Section 409A of the Code is applicable, the phrase "termination of employment" shall have the same meaning as a "separation from service" as defined in Section 409A of the Code and its accompanying regulations. Notwithstanding any provision of this Agreement, to the extent required by Section 409A, if the time period in which this Agreement may be signed and revoked spans two (2) taxable years, the Separation Payments shall be made or commence in the latter year.

F. This Agreement can be executed in any number of counterparts, each of which shall be effective only upon delivery and thereafter shall be deemed an original, and all of which shall be taken to be one and the same instrument for the same effect as if all Parties hereto had signed the same signature page. A facsimile or e-mail copy of any Party's signature shall be deemed as legally binding as the original signature.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

I hereby provide this Separation, Waiver and General Release Agreement as of the date set forth below and acknowledge that my execution of this Separation, Waiver and General Release Agreement is in further consideration of the separation benefits that I acknowledge I would not be entitled to if I did not sign it. I intend this Separation, Waiver and General Release Agreement to become a binding agreement between the Company and me if I do not revoke my acceptance within seven (7) days of the date set forth next to my signature below.

RELEASOR:

/s/ Semone Neuman
Semone Neuman

January 9, 2019
Date

FOR THE RELEASEES:

/s/ Tracy South
By: Tracy South
Executive Vice President,
Chief Administrative & Human Resources Officer

EXHIBIT A

hms

Corporate Compliance Statement—Return of Property and Information

Upon hire, I pledged that I would return all HMS company property and all confidential information belonging to HMS, its subsidiaries, affiliates and clients, including protected health information (PHI) in my possession, at such time as my employment by, or business relationship with, HMS ended.

I hereby declare and attest that I have returned to the Company all HMS property previously in my possession or to which I had been granted access, including but not limited to computer, computer equipment, software and peripherals, electronic devices, electronic and paper files, and documents (in paper or electronic form). I also declare and attest that I have returned all confidential information belonging to HMS, its subsidiaries, affiliates and clients, including PHI and/or other confidential information pertaining to individuals or to the Company or its business, along with any and all copies thereof.

I hereby agree not to use, publish, or otherwise disclose any sensitive HMS data or processes, which HMS is obligated to maintain in confidence under applicable law or contract provision. I further attest that I have not maintained any proprietary, sensitive, or protected health information in any medium on my personal electronic devices.

I acknowledge that my authorization to access or possess HMS company property and any PHI or other confidential personal information obtained, used, maintained, or stored in connection with business activities of the Company ceased with the termination of employment by, or business relationship with, HMS.

Further, with respect to confidential medical or health information:

1. I understand that unauthorized disclosure of that information in violation of state or federal law, including but not limited to the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and regulations promulgated to implement that statute, may result in civil or criminal penalties.

2. I acknowledge that in receiving, storing, processing, using, or taking any other action with respect to that information, I have been and remain fully bound by federal and state laws and regulations concerning the confidentiality of medical and financial records, including but not limited to applicable federal regulations governing the Medicare and Medicaid programs (42 C.F.R . §§ 431.300 - 431.307; 42 C.F.R. §§ 401.101 - 401.152, and 42 C.F.R § 482.24), the HIPAA Privacy Rule (45 C.F.R. Parts 160 and 164) and applicable state laws and regulations protecting the confidentiality of confidential information.

Finally, I affirm that there are no privacy, compliance or security issues of which I am aware that have not been reported to the respective Chief Compliance Officer and/or Chief Security Officer.

I declare under penalty of perjury that the foregoing is true and correct.

Semone Neuman	/s/ Semone Neuman
Employee or Consultant Name	Employee or Consultant Signature
January 9, 2019	
Date of Attestation	Date of Termination

EXHIBIT B

Waiver and General Release Agreement

This Waiver and General Release Agreement ("*Release*"), entered into by and between Semone Neuman (referred to herein as "*You" or "Releasor"*) and HMS Holdings Corp. For purposes of this Release, the term "*Company*" shall refer to HMS Holdings Corp and its corporate affiliates and their respective direct and indirect subsidiaries and successors and assigns. Terms used in this Release with initial capital letters that are not otherwise defined herein shall have the meanings ascribed to such terms in the Separation, Waiver and General Release Agreement, dated _____ ___, 2019, by and between you and the Company (the "*Agreement*"). The Company, together with its past and present parents, subsidiaries, affiliates, shareholders, owners, partners, members, officers, directors, representatives, employees, agents, counsel, successors and assigns, benefit plans, benefit plan trustees and administrators are referred to collectively herein as the "*Releasees.*" You and the Releasees shall be referred to collectively herein as the "*Parties*" and individually as a "*Party.*"

WHEREAS, you and the Company are parties to the Agreement; and

WHEREAS, paragraph 4(B) of the Agreement provides that you will be entitled to certain payments and benefits if you sign a release of claims agreement;

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. Nature of Agreement and Non-Admission of Liability

This is an agreement of settlement and compromise, and by entering into this Release none of the Parties agree or concede in any manner whatsoever that they violated any law or statute of any jurisdiction, breached any duty, responsibility or contract, or acted improperly in any manner. It is understood and agreed that nothing in this Release shall be interpreted or construed as the admission of any wrongdoing by any or all the Releasees or by any person or entity acting for or on behalf of any or all of the Releasees.

2. Release

In exchange for the consideration provided by the Company under the terms of the Agreement in paragraph 4(B), you irrevocably and unconditionally release and discharge the Releasees jointly and severally, from any and all debts, claims, liabilities, demands and causes of action of every kind, nature and description, in law, or in equity, which against the Releasees, you, your heirs, executors, administrators, successors and assigns ever had, now have or hereafter can, shall or may have for, upon or by reason of any matter, cause or thing whatsoever, from the beginning of time to the date you sign this Release. You represent that you have not assigned or otherwise transferred any interest in any claim that is the subject of this Release.

This Release covers, without limitation, any claims of harassment and/or discrimination on the basis of sex, sexual orientation, gender identification, pregnancy, disability (including claims concerning a history or record of a disability, predisposing genetic condition, and claims that you were regarded as having a disability), handicap, genetic information, race, color, religion, creed, national origin, ancestry, age, citizenship, ethnic characteristics, marital status or military/veteran status and also includes, no matter how denominated or described, any claims under any federal, Texas, South Carolina (or other state) state or local law, statute, rule, regulation, ordinance or executive order of discrimination and/or retaliation and non-payment of wages, bonuses, commissions or other compensation, including, without limitation, the Age Discrimination in Employment Act of 1967 ("*ADEA*"), Older Workers Benefit Protection Act, Employee Retirement Income Security Act of 1974, Title VII of the Civil Rights Act of 1964, Civil Rights Act of 1866, The Civil Rights Act of 1991, Rehabilitation Act of 1973, Executive Order 11246, Executive Order 11141, Genetic Information Nondiscrimination Act of 2008, Americans with Disabilities Act of 1990 ("*ADA*"), ADA Amendments Act, Family and Medical Leave Act, Occupational Safety and Health Act, Fair Labor Standards Act, Worker Adjustment and Retraining Notification Act, Fair Credit Reporting Act, Texas Labor Code Annotated § 21.001 *et seq*. (Texas civil rights law), Texas Labor Code Annotated § 21.055 *et seq*. (Texas whistleblower protection law), Texas Commission on Human Rights Act, Texas Law on Communicable Diseases, Texas Breast-Feeding Rights and Policies Law, the South Carolina Human Affairs Law, as amended, the South Carolina Payment of Wages Law, as amended, and all other federal, state and local laws, and including without any limitation, any claims of wrongful or tortious discharge or termination, breach of contract, breach of the implied covenant of good faith and fair dealing, written or oral, express or implied, breach of promise, public policy, negligence, intentional infliction of emotional distress, negligent infliction of emotional distress, assault, battery, false imprisonment, defamation, libel, slander, invasion of privacy, impairment of economic opportunity, loss of business opportunity, fraud, misrepresentation, and whistleblower activities, and any claim or damage arising out of your employment with and/or separation from the Company (including a claim for retaliation) under any common law theory or any federal, state or local law, statute, rule, regulation, ordinance or executive order not expressly referenced above.

This Release does not apply to any claims or rights that may arise after the date you sign this Release. Excluded from this Release are any claims which cannot be waived by law, including but not limited to, the right to participate in an investigation conducted by certain government agencies. You do, however, waive your right to any monetary recovery from the Company or the Releasees should any agency (*e.g.*, the Equal Employment Opportunity Commission) pursue any claims on your behalf, unless otherwise prohibited by law. You represent and warrant that you have not filed any complaint, charge, or lawsuit against the Company with any government agency or any court.

You agree never to sue the Company or the Releasees in any forum for any claim covered by the above waiver and release language, except that you may bring a claim against the Company under the ADEA to challenge this Release. If you violate this Release by suing the Company or the Releasees, other than under the ADEA or as otherwise set forth above, you shall be liable to the Company and/or the Releasees for their reasonable attorneys' fees and other litigation costs incurred in defending against such a suit. Nothing in this Release is intended to reflect any party's belief that your waiver of claims under ADEA is invalid or unenforceable, it being the interest of the Company and you that such claims are waived.

The Parties intend this Release to be construed and interpreted to the fullest extent permitted by law as a general release. The terms of this Release are accepted by you as full and complete resolution, accord and satisfaction of any and all claims, demands or grievances you have made against, and/or could have made against any of the Releasees.

3. Acknowledgements

You acknowledge that you have no knowledge of any violations by the Company of the Health Insurance Portability and Accountability Act of 1996 ("*HIPAA*"), the Fair Debt Collection Practices Act, the civil or criminal provisions of the federal False Claims Act, the Civil Monetary Penalties Statute, Titles XVIII and XIX of the Social Security Act (the Medicare and Medicaid statutes), the Health Care Benefit Program False Statements Statute, the Health Care Fraud Statute, any and all of the statutory provisions referenced in the Federal Health Care Offense Definitions Statute, or any other federal or state laws relating to negligence, fraud and abuse in health care (collectively, the "*Health Care Laws*"), or the Sarbanes Oxley Act. You have received instruction from the Company on how to report claims or violations under the Health Care Laws and the Sarbanes Oxley Act, and as of the date of executing this Release, have no claims to report under the Health Care Laws or the Sarbanes Oxley Act. You further certify that you have not reported to any government authority or other entity any such healthcare compliance concerns, issues, and/or violations or potential violations, which remain unanswered or unresolved. Furthermore, in connection with the foregoing acknowledgements, you have signed the Corporate Compliance Statement - Return of Company Property & Information document, attached to the Agreement as Exhibit A, and hereby reaffirm the representations therein.

4. Non-Waiver or Release of Subsequent Rights or Claims

Nothing contained herein is intended to or shall constitute a waiver or release of any rights or claims that arise after the date you sign this Release.

5. Non-Waiver of Rights Under this Release

Nothing herein is intended to or constitutes a waiver of any rights the Parties may have under this Release.

6. Representations and Warranties

As a material part of this Release, you make the following representations and warranties:

A. You have not commenced or asserted an administrative charge or complaint, and you have not commenced or asserted, and shall not commence or assert, any lawsuit, arbitration, claim or legal proceeding, against any or all of the Releasees that is designed to remedy or seek redress for any right or rights waived and/or released by this Release.

B. You agree to keep confidential all information relating to this Release, including its negotiation, terms and existence. You may communicate or publish any information relating to this Release to your immediate family (defined herein as parents, siblings, parents-in-law, spouse, domestic partner or children), legal and financial representatives, and tax preparer. Before such information is disclosed by you to any such person(s), however, you shall advise such person(s) that the information they will receive is to be kept confidential, and such person(s) must agree to maintain the confidentiality of the information they receive.

C. You are not aware of any facts or circumstances suggesting that the Company has engaged in any wrongful or unlawful conduct.

7. Remedy in the Event of a Breach

In the event you breach any portion of this Release, you shall immediately, upon written demand, return to the Company all monies paid to you pursuant to paragraph 4(B) of the Agreement, and the Company shall retain all rights to pursue legal and equitable remedies to: (a) enforce the terms of this Release, and/or (b) seek damages for any breach.

8. Additional Representations

By signing this Release, you further acknowledge, understand, and agree that by signing this Release, you are knowingly and voluntarily agreeing to waive and release, among other claims, any and all claims under the ADEA and the Older Workers Benefit Protection Act you have had or may have against the Company and/or the Releasees. Further, you understand and agree that:

A. You may not sign this Release until after the close of business on the Separation Date;

B. You are hereby advised to consult with an attorney before executing this Release;

C. You have carefully read and understand the terms of this Release, and have had a full and fair opportunity to review this Release with an attorney of your choice;

D. You have signed this Release freely and voluntarily and without fraud, duress or coercion and with full knowledge and understanding of its terms and of its significance and consequences and of the rights relinquished, surrendered, released and discharged hereunder; and

E. The only consideration for signing this Release is stated herein, and no other promise, agreement or representation of any kind has been made to you by any person or entity whatsoever to cause you to sign this Release.

9. Manner of Acceptance

In order to accept the terms of this Release, you must return a signed copy to the Company (at the address set forth in paragraph 11 hereof) on or within seven (7) calendar days after the Separation Date (provided that you may not sign this Release until after the close of business on the Separation Date). In the event a timely acceptance is made, and you do not revoke your signature pursuant to paragraph 10, the Company shall provide the consideration described in paragraph 4(B) of the Agreement.

In the event the seventh (7^{th}) day falls on a Saturday, Sunday or on a day that the Company's office is closed, your time to accept the terms of this Release shall be extended until the next regular business day that the Company's office is open.

If you do not revoke your signature to this Release, the eighth (8^{th}) day after your date of acceptance will be the effective date of this Release.

10. Right to Revoke

You may revoke your signature (thereby rescinding your acceptance of the terms of this Release) within seven (7) calendar days from the date on which you sign this Release. If the seventh (7^{th}) day falls on a Saturday, Sunday or on a day that the Company's office is closed, your time to revoke your signature shall be extended until the next regular business day that the Company's office is open. In the event you wish to revoke your signature, you must give written notice to that effect pursuant to paragraph 11 hereof. If you timely revoke your signature on this Release, or if you do not timely sign and return this Release to the Company (pursuant to paragraph 9), this Release shall be null, void and of no effect, and you shall not be entitled to any of the consideration described in paragraph 4(B) of the Agreement.

11. Addresses for Notices

Any notice required pursuant to this Release shall be sent via registered mail, return receipt requested, or overnight mail with delivery confirmation to the following addresses:

If to the Company: HMS, 5615 High Point Drive, Irving, Texas 75038, Attention: Tracy South, Human Resources Department.

If to You:

Any Notice sent in accordance with this paragraph shall be deemed effective upon receipt. Notwithstanding anything to the contrary contained herein, at any time after the execution of this Release any Party may modify the address(es) (including telephone number(s)) to which it desires notices to be sent by advising the other, in writing as provided in this paragraph. Such modification shall be deemed effective upon receipt.

12. General Legal Matters

A. The invalidity or unenforceability of any provision of this Release shall not affect the validity or enforceability of any other provision hereof. In the event any provision of this Release is determined by a court of competent jurisdiction to be invalid, unlawful or unenforceable, it shall be severed from the Release, and the court shall be permitted to redraft the language so as to conform the severed language to the Parties' intent. If any provision, or portion thereof, of this Release is determined to be invalid under applicable statute or rule of law, only such provision, and only to the extent determined to be invalid, shall be deemed omitted from this Release, the remainder of which shall remain in full force and effect. In the event the general release provisions of this Release are determined to be invalid, you shall immediately execute a modified general release that is valid that shall be effective as of the date this Release becomes effective.

B. This Release, together with the Agreement, reflects the entire agreement among the parties relating to the matters set forth herein and relating to your employment. With the exception of the Agreement, the agreements described in paragraph 10(E) of the Agreement and any Non-Qualified Stock Option/Restricted Stock Unit Agreement that you may have received during your employment, which agreements shall remain in full force and effect in accordance with their respective terms and conditions, any other agreements, understandings, promises or commitments among the Parties are superseded by this Release. This Release, together with the Agreement, has been negotiated, drafted and reviewed by the Parties and/or their designated counsel. No language herein shall be construed for or against the interests of any Party on the ground that either Party was the proponent or draftsperson thereof. This Release may not be changed unless the change is in writing and signed by you and the Company.

C. This Release will be governed by and construed as a sealed instrument under and in accordance with the laws of the State of Texas without regard to conflicts of law provisions. Any action, suit or other legal proceeding that is commenced to resolve any matter arising under or relating to any provision of this Release must be commenced only in a court of the State of Texas (or, if appropriate, a federal court located within the State of Texas) and the Company and you each consents to the jurisdiction of such a court. With respect to any such court action, the Company and you (a) submit to the personal jurisdiction of such courts; (b) consent to service of process by the means specified under paragraph 11; and (c) waive any other requirement (whether imposed by statute, rule of court, or otherwise) with respect to personal jurisdiction, inconvenient forum, or service of process. ***THE COMPANY AND YOU EACH HEREBY IRREVOCABLY WAIVES ANY RIGHT TO A TRIAL BY JURY IN ANY ACTION, SUIT OR OTHER LEGAL PROCEEDING ARISING UNDER OR RELATING TO ANY PROVISION OF THIS RELEASE.***

D. Paragraph headings used in this Release are for informational purposes only and shall not be construed or interpreted as part of this Release. Usage of the singular shall include the plural and vice versa. Use of male pronouns shall be read to include the female and vice versa.

E. This Release is intended to comply with Section 409A of the Internal Revenue Code of 1986, as amended (the "*Code*"), if and to the extent applicable, and will be interpreted and applied in a manner consistent with that intention. Toward that end, unless permitted sooner by Section 409A of the Code, severance amounts otherwise payable within six (6) months after termination of employment will be deferred until and become payable on the first (1st) day of the seventh (7th) month following termination of employment. Further, to the extent Section 409A of the Code is applicable, the phrase "termination of employment" shall have the same meaning as a "separation from service" as defined in Section 409A of the Code and its accompanying regulations. Notwithstanding any provision of this Release, to the extent required by Section 409A, if the time period in which this Release may be signed and revoked spans two (2) taxable years, the Separation Payments shall be made or commence in the latter year.

F. This Release can be executed in any number of counterparts, each of which shall be effective only upon delivery and thereafter shall be deemed an original, and all of which shall be taken to be one and the same instrument for the same effect as if all Parties hereto had signed the same signature page. A facsimile or e-mail copy of any Party's signature shall be deemed as legally binding as the original signature.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

I hereby provide this Waiver and General Release Agreement as of the date set forth below and acknowledge that my execution of this Waiver and General Release Agreement is in further consideration of the separation benefits that I acknowledge I would not be entitled to if I did not sign it. I intend this Waiver and General Release Agreement to become a binding agreement between the Company and me if I do not revoke my acceptance within seven (7) days of the date set forth next to my signature below.

RELEASOR:

Semone Neuman

Date

FOR THE RELEASEES:

By: Tracy South
Executive Vice President,
Chief Administrative & Human Resources Officer

Exhibit 21.1

HMS HOLDINGS CORP.
LIST OF SUBSIDIARIES

Name of Subsidiary	State or Other Jurisdiction of Incorporation or Organization
HealthDataInsights, Inc.	Nevada
Health Management Systems, Inc.	New York
Permedion, Inc.(1)	New York
HMS Care Analytics, Inc.	Delaware
Essette, Inc.(2)	Colorado
Eliza Holding Corp.(2)	Delaware
Eliza Corporation(3)	Delaware
ElizaLive, Inc.(4)	Delaware
IntegriGuard, LLC (DBA – HMS Federal)	Delaware
Reimbursement Services Group Inc.	New York

(1) Wholly-owned by Health Management Systems, Inc.
(2) Wholly-owned by HMS Care Analytics, Inc.
(3) Wholly-owned by Eliza Holding Corp.
(4) Wholly-owned by Eliza Corporation

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our reports dated February 25, 2019, with respect to the consolidated financial statements and internal control over financial reporting included in the Annual Report of HMS Holdings Corp. on Form 10-K for the year ended December 31, 2018. We consent to the incorporation by reference of said reports in the Registration Statements of HMS Holdings Corp. on Forms S-8 (File No. 333-161415, 333-149836, 333-139025, 333-178752, 333-183361, and 333-212319).

/s/ Grant Thornton, LLP

Dallas, Texas
February 25, 2019

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

The Board of Directors
HMS Holdings Corp.:

We consent to the incorporation by reference in the registration statements (No. 333-161415, 333-149836, 333-139025, 333-178752, 333-183361, and 333-212319) on Form S-8 of HMS Holdings Corp. of our report dated June 6, 2017, with respect to the consolidated balance sheet of HMS Holdings Corp. as of December 31, 2016, and the related consolidated statements of income, stockholders' equity, and cash flows for the year ended December 31, 2016, and the related financial statement schedule, which report appears in the December 31, 2018 annual report on Form 10-K of HMS Holdings Corp.

/s/ KPMG, LLP

Dallas, Texas
February 25, 2019

Exhibit 31.1

CERTIFICATION

I, William C. Lucia, certify that:

1. I have reviewed this Annual Report on Form 10-K of HMS Holdings Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d- 15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 25, 2019

/s/ William C. Lucia
William C. Lucia
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, Jeffrey S. Sherman, certify that:

1. I have reviewed this Annual Report on Form 10-K of HMS Holdings Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d- 15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 25, 2019

/s/ Jeffrey S. Sherman
Jeffrey S. Sherman
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of HMS Holdings Corp. (the "Company") on Form 10-K for the fiscal year ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, William C. Lucia, Chief Executive Officer of the Company, hereby certify, to the best of my knowledge, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ William C. Lucia
William C. Lucia
Chief Executive Officer
(Principal Executive Officer)

February 25, 2019

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350 AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of HMS Holdings Corp. (the "Company") on Form 10-K for the fiscal year ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeffrey S. Sherman, Chief Financial Officer of the Company, hereby certify, to the best of my knowledge, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Jeffrey S. Sherman
Jeffrey S. Sherman
Chief Financial Officer
(Principal Financial Officer)

February 25, 2019

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2017
Or
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to
Commission File Number 000-50194

HMS HOLDINGS CORP.

(Exact name of registrant as specified in its charter)

Delaware	**11-3656261**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
5615 High Point Drive, Irving, TX	**75038**
(Address of principal executive offices)	(Zip Code)

(Registrant's telephone number, including area code)
(214) 453-3000

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Name of each exchange on which registered**
Common Stock $0.01 par value	**The Nasdaq Stock Market LLC (Nasdaq Global Select Market)**

Securities registered pursuant to section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒	Accelerated filer ☐	Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act) Yes ☐ No ☒

The aggregate market value of the registrant's common stock held by non-affiliates as of June 30, 2017, the last business day of the registrant's most recently completed second quarter was $1.5 billion based on the last reported sale price of the registrant's common stock on the Nasdaq Global Select Market on that date. Solely for purposes of this disclosure, shares of common stock held by executive officers, directors and persons who hold 10% or more of the outstanding shares of common stock of the registrant as of such date have been excluded because such persons may be deemed to be affiliates. This determination is not necessarily a conclusive determination for any other purposes.

There were 82,891,340 shares of common stock outstanding as of February 16, 2018.

Documents Incorporated by Reference

Unless provided in an amendment to this Annual Report on Form 10-K, the information required by Part III is incorporated by reference to the registrant's 2018 proxy statement, to the extent stated herein. Such proxy statement or amendment will be filed with the SEC within 120 days of the registrant's fiscal year ended December 31, 2017.

HMS HOLDINGS CORP. AND SUBSIDIARIES
ANNUAL REPORT ON FORM 10-K
TABLE OF CONTENTS

Glossary of Terms and Abbreviations

2017 Form 10-K	HMS Holdings Corp. Annual Report on Form 10-K for the year ended December 31, 2017
ACA	Patient Protections and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010
ACO	Accountable Care Organization
ADR	Additional Documentation Request
ASC	Accounting Standards Codification
ASO	Administrative Service Only
ASU	Accounting Standards Update
CHIP	Children's Health Insurance Program
CMS	Centers for Medicare & Medicaid Services
CMS NHE	CMS National Health Expenditures
COSO	Committee of Sponsoring Organizations of the Treadway Commission
Credit Agreement	The Amended and Restated Credit Agreement dated as of May 3, 2013, as amended by Amendment No. 1 to Amended and Restated Credit Agreement dated as of March 8, 2017, and as further amended by Amendment No. 2 to Amended and Restated Credit Agreement, dated as of December 19, 2017, by and among HMS Holdings Corp., the Guarantors party thereto, the Lenders party thereto and Citibank, N.A. as Administrative Agent
DRA	Deficit Reduction Act of 2005
DSO	Days Sales Outstanding
ERISA	Employment Retirement Income Security Act of 1974
Exchange Act	Securities Exchange Act of 1934, as amended
FASB	Financial Accounting Standards Board
HIPAA	Health Insurance Portability and Accountability Act of 1996
HITECH	Health Information Technology for Economic and Clinical Health
IRC	Internal Revenue Code
IRS	U.S Internal Revenue Service
LIBOR	Intercontinental Exchange London Interbank Offered Rate
MCO	Managed care organization
MMIS	Medicaid Management Information Systems
PBM	Pharmacy Benefit Manager
PHI	Protected health information
PI	Payment Integrity
R&D Credit	U.S. Research and Experimentation Tax Credit pursuant to IRC Section 41
RAC	Recovery Audit Contractor
RFP	Request for proposal
SEC	U.S. Securities and Exchange Commission
Securities Act	Securities Act of 1933, as amended
Section 199 Deduction	U.S. Production Activities Deduction pursuant to IRC Section 199
SG&A	Selling, general and administrative
TPL	Third-party liability
U.S. GAAP	United States Generally Accepted Accounting Principles
VHA	Veterans Health Administration
2011 HDI Plan	HDI Holdings, Inc. Amended 2011 Stock Option and Stock Issuance Plan
2006 Stock Plan	HMS Holdings Corp. Fourth Amended and Restated 2006 Stock Plan, as amended by Amendment No. 1 to the HMS Holdings Corp. Fourth Amended and Restated 2006 Stock Plan dated as of February 16, 2012
2016 Omnibus Plan	HMS Holdings Corp. 2016 Omnibus Incentive Plan
2011 HDI Plan	HDI Holdings, Inc. Amended 2011 Stock Option and Stock Issuance Plan
2017 Tax Act	Tax Cuts and Jobs Act of 2017
401(k) Plan	HMS Holdings Corp. 401(k) Plan

Cautionary Note Regarding Forward-Looking Statements

For purposes of this 2017 Form 10-K, the terms "HMS," "Company," "we, "us, and "our" refer to HMS Holdings Corp. and its consolidated subsidiaries unless the context clearly indicates otherwise. Included in this 2017 Form 10-K are "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. From time to time, we also provide forward-looking statements in other materials we release to the public, as well as oral forward-looking statements. Such statements relate to our current expectations, projections and assumptions about our business, the economy and future events or conditions. They do not relate strictly to historical or current facts.

We have tried to identify forward-looking statements by using words such as "aim," "anticipate," "believe," "estimate," "expect," "forecast," "future," "intend," "likely," "may," "plan," "project," "seek," "strategy," "target," "will," "would," "could," "should," and similar expressions and references to guidance, although some forward-looking statements may be expressed differently. These statements include, among other things, information concerning our future growth, business strategy, strategic or operational initiatives, our future operating or financial performance, our ability to invest in and utilize our data and analytics capabilities to expand our capabilities, the benefits and synergies to be obtained from completed and future acquisitions, the future performance of companies we have acquired, the future effect of different accounting determinations or remediation activities, the sufficiency of our sources of funding for working capital, capital expenditures, acquisitions, stock repurchases, debt repayments and other matters, our future expenses, interest rates, tax rates and financial results, the impact of changes to U.S. healthcare legislation or healthcare spending affecting Medicare, Medicaid or other publicly funded or subsidized health programs, and other statements regarding our possible future actions, business plans, objectives and prospects.

Forward-looking statements are not guarantees and involve risks, uncertainties and assumptions that are difficult to predict. Actual results may differ materially from past results and from those indicated by such forward-looking statements if known or unknown risks or uncertainties materialize, or if underlying assumptions prove inaccurate. These risks and uncertainties include, among other things:

- *our ability to execute our business plans or growth strategy;*
- *our ability to innovate, develop or implement new or enhanced solutions or services;*
- *the nature of investment and acquisition opportunities we are pursuing, and the successful execution of such investments and acquisitions;*
- *our ability to successfully integrate acquired businesses and realize synergies;*
- *variations in our results of operations;*
- *our ability to accurately forecast the revenue under our contracts and solutions;*
- *our ability to protect our systems from damage, interruption or breach, and to maintain effective information and technology systems and networks;*
- *our ability to protect our intellectual property rights, proprietary technology, information processes and know-how;*
- *significant competition for our solutions and services;*
- *our failure to maintain a high level of customer retention or the unexpected reduction in scope or termination of key contracts with major customers;*
- *customer dissatisfaction, our non-compliance with contractual provisions or regulatory requirements;*
- *our failure to meet performance standards triggering significant costs or liabilities under our contracts;*
- *our inability to manage our relationships with information and data sources and suppliers;*
- *reliance on subcontractors and other third party providers and parties to perform services;*
- *our ability to continue to secure contracts and favorable contract terms through the competitive bidding process;*
- *pending or threatened litigation;*
- *unfavorable outcomes in legal proceedings;*
- *our success in attracting qualified employees and members of our management team;*
- *our ability to generate sufficient cash to cover our interest and principal payments under our credit facility, or to borrow or use credit;*
- *unexpected changes in tax laws, regulations or guidance and unexpected changes in our effective tax rate;*
- *unanticipated increases in the number or amount of claims for which we are self-insured;*

- *our ability to develop, implement and maintain effective internal control over financial reporting;*
- *changes in the U.S. healthcare environment or healthcare financing system, including regulatory, budgetary or political actions that affect healthcare spending or the practices and operations of healthcare organizations;*
- *our failure to comply with applicable laws and regulations governing individual privacy and information security or to protect such information from theft and misuse;*
- *our ability to comply with current and future legal and regulatory requirements;*
- *negative results of government or customer reviews, audits or investigations;*
- *state or federal limitations related to outsourcing or certain government programs or functions;*
- *restrictions on bidding or performing certain work due to perceived conflicts of interests;*
- *the market price of our common stock and lack of dividend payments; and*
- *anti-takeover provisions in our corporate governance documents.*

These and other risks are discussed under the headings "Part I, Item 1. Business," "Part I, Item 1A. Risk Factors," "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Part II, Item 7A. Quantitative and Qualitative Disclosures about Market Risk" of this 2017 Form 10-K and in other documents we file with the SEC.

Any forward-looking statements made by us in this 2017 Form 10-K speak only as of the date on which they are made. We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law. We caution readers not to place undue reliance upon any of these forward-looking statements. You are advised, however, to consult any further disclosures we make on related subjects in our Form 10-Q and Form 8-K reports and our other filings with the SEC.

Market and Industry Data

This 2017 Form 10-K contains market, industry and government data and forecasts that have been obtained from publicly available information, various industry publications and other published industry sources. We have not independently verified the information and cannot make any representation as to the accuracy or completeness of such information. None of the reports and other materials of third party sources referred to in this 2017 Form 10-K were prepared for use in, or in connection with, this report.

Trademarks and Tradenames

We have a number of registered trademarks, including HMS®, as well as the corresponding HMS + logo design mark, HMS IntegritySource®, Eliza® and Essette®. These and other trademarks of ours appearing in this report are our property. Solely for convenience, trademarks and trade names of ours referred to in this 2017 Form 10-K may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the right of the applicable licensor to these trademarks and trade names. This report contains additional trade names and trademarks of other companies. We do not intend our use or display of other companies' trade names or trademarks to imply an endorsement or sponsorship of us by such companies, or any relationship with any of these companies.

PART I

Item 1. Business

Founded in 1974, HMS is a leading provider of cost containment solutions in the U.S. healthcare marketplace. We use innovative technology, extensive data services and powerful analytics, to deliver coordination of benefits, payment integrity and care management and consumer engagement solutions to help healthcare payers improve financial performance and clinical outcomes. We provide coordination of benefits services to government and commercial healthcare payers and sponsors to ensure that the responsible party pays healthcare claims. Our payment integrity services ensure healthcare claims billed are accurate and appropriate, and our care management and consumer engagement technology helps risk-bearing organizations to better engage with and manage the care delivered to their members. Together these various services help customers recover erroneously paid amounts from liable third parties; prevent future improper payments; reduce fraud, waste and abuse; better manage the care their members receive; engage healthcare consumers to improve clinical outcomes while increasing member satisfaction and retention; and achieve regulatory compliance. We currently operate as one business segment with a single management team that reports to the Chief Executive Officer.

HMS began its operations as Health Management Systems, Inc., which became our wholly owned subsidiary in March 2003 when we assumed its business in connection with the adoption of a holding company structure. In recent years HMS has grown both organically and through targeted acquisitions of businesses that helped expand our product suite, including IntegriGuard, LLC (2009), HealthDataInsights, Inc.("HDI") (2011), Essette, Inc. ("Essette") (2016), Eliza Holding Corp. ("Eliza") (2017) and others. The acquisitions of Essette and Eliza significantly expanded the breadth of solutions we offer entities taking risk, creating a new care management and consumer engagement vertical for HMS.

We were originally incorporated in the State of New York in October 2002 and reincorporated in the State of Delaware in July 2013. Our principal executive offices are located at 5615 High Point Drive, Irving, Texas 75038, and our telephone number is (214) 453-3000. As of December 31, 2017, we had approximately 2,500 employees. Additional information about HMS is available on our website at www.hms.com.

Copies of our recent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and Proxy Statements, as well as amendments to these reports or statements, are available free of charge on our website through the Investor Relations page, as soon as reasonably practicable after we electronically file them with, or furnish them to, the SEC. These materials, as well as similar materials for SEC registrants, may be obtained directly from the SEC through their website at http://www.sec.gov. You may also read and copy materials we furnish to or file with the SEC at the SEC's Public Reference Room at 100 F Street NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330.

The content of any website referred to in this 2017 Form 10-K is not incorporated by reference into this filing unless expressly noted. References to the URLs for these websites are intended to be inactive textual references only.

Our Solutions

Our services are applicable to federal, state and commercial health plans and other healthcare entities taking payment risk. Our coordination of benefits and payment integrity services are designed to address errors across the payment continuum, beginning with an individual's enrollment in a program before any medical service is rendered, to pre-payment review of a claim by a payer, through recovery where identification of an improper payment is made via audit. Our services address a wide spectrum of payment errors, including eligibility and coordination of benefits errors, the identification and investigation of potential fraud, and determinations that claim amounts paid were improper and our services extend to most claim types. Our care management and consumer engagement services also assist customers in managing quality, risk, cost and compliance across all lines of business. As a result of these services, customers received billions of dollars in cash recoveries in 2017, and saved billions more through the prevention of erroneous payments, improved clinical outcomes for their members, and reduced enrollment turnover.

In general, our range of products and services include the following:

COB SERVICES

Coordination of Benefits

Our coordination of benefits services are provided primarily for state governments and Medicaid managed care plans and draw principally upon proprietary information management and data mining techniques designed to ensure that the correct party pays a healthcare claim. We offer cost avoidance services, which include providing validated insurance coverage information that is used by payers to coordinate benefits properly for future claims. With validated insurance information, Medicaid payers can avoid unnecessary costs by ensuring that they pay only after all other insurance coverage available has been exhausted, thereby complying with federal regulations that require Medicaid to be the payer of last resort. Nevertheless, due to a variety of factors, some Medicaid claims are paid even when there is a known responsible third party. Our government-sponsored program customers rely on us to identify those claims that were paid in error and recover these payments from the liable third party. Further, we also provide services to assist customers in identifying other third-party insurance and recovering medical expenses where a member is involved in a casualty or tort incident. Lastly, for Medicaid agencies exclusively, we provide estate recovery services to identify and recover Medicaid expenditures from the estates of deceased Medicaid members in accordance with state policies. For the years ended December 31, 2017, 2016 and 2015, our coordination of benefit services represented 73.4%, 72.2% and 71.2% of our total revenue, respectively.

ANALYTICAL SERVICES

Payment Integrity

Our payment integrity services are designed to ensure that healthcare payments are accurate and appropriate. These services are applicable to all customers that HMS serves, including federal and state governments, commercial health plans and other at-risk entities. Our solutions are designed to verify that medical services are utilized, billed and paid appropriately. We combine data analytics, clinical expertise and proprietary algorithms and technology to identify improper payments on both a pre-payment and post-payment basis; identify and recover overpayments/underpayments; detect and prevent fraud, waste and abuse; and identify process improvements. For the years ended December 31, 2017, 2016 and 2015, our payment integrity services represented 20.0%, 27.6% and 28.8% of our total revenue, respectively.

Care Management and Consumer Engagement

Our care management and consumer engagement solutions help our customers manage the care delivered to their members with a focus on improving clinical outcomes and patient engagement. We offer a broad foundation of technology and service solutions to support a health engagement management framework, which enable health plans and other risk-bearing entities to better manage costs and clinical outcomes and improve their member experience. Our care management and consumer engagement vertical leverages HMS data and analytics with a combination of Essette and Eliza solutions currently aimed at care management, risk management and member engagement in order to provide customers with a tailored, integrated platform that addresses core healthcare industry challenges on an enterprise scale. For the years ended December 31, 2017 and 2016, our care management and consumer engagement services represented 6.6% and 0.2%, of our total revenue, respectively.

Intellectual Property

Our ability to develop and maintain the proprietary aspects of our technology and operate without infringing the proprietary rights of others are important to our business and competitive position. We establish and protect our proprietary technology and intellectual property through a combination of patents, patent applications, trademarks, copyrights, domain names, and trade secrets, including know-how, confidentiality and invention assignment agreements, security measures, non-disclosure agreements with third parties, and other contractual rights.

We own a number of patents and trademarks that are important to HMS. As of December 31, 2017, our patent portfolio is comprised of approximately 50 domestic and international patents, and we are currently pursuing numerous patent applications in the United States and around the world. We have a number of registered trademarks, including HMS®, and the corresponding HMS + logo design mark, HMS IntegritySource®, Eliza®, Essette® and other registered and common law trademarks. We also hold copyrights relating to certain aspects of our products and services. While we consider all of these proprietary rights important in the operation of our business, we do not believe any one individual technology is essential to our business.

Customers

We provide our solutions to customers across a broad range of entities within the healthcare industry, including health plans, state agencies, federal programs, private employers and other at-risk providers. For the years ended December 31, 2017, 2016 and 2015, our total revenue was $521.2 million, $489.7 million and $474.2 million, respectively. No single customer accounted for 10% or more of our total revenue during any period presented.

The composition of our 10 largest customers changes periodically. For the years ended December 31, 2017, 2016 and 2015, our 10 largest customers represented 39.5%, 40.6% and 44.0% of our total revenue, respectively. The current terms of our agreements with these customers have expiration dates ranging between 2018 and 2023. Several of our contracts, including those with some of our largest customers, may be terminated for convenience. The early termination of a contract with one of our significant customers may have an adverse effect on our financial condition, results of operations and cash flows.

We provide products and services under contracts (or subcontracts) that contain various revenue structures, including contingent revenue and to a lesser extent fixed-fee arrangements. Many of our state government contracts have terms ranging from three to five years, including renewal terms at the option of the customer. In many instances, we provide our services pursuant to agreements that are subject to periodic reprocurements. Because we provide our services pursuant to agreements that are open to competition from various businesses in the U.S. healthcare insurance benefit cost containment arena, we cannot provide assurance that our contracts, including those with our largest customers, will not be terminated for convenience, awarded to other parties, or renewed. Additionally, we cannot provide assurance that our contracts, if renewed, will have the same fee structures or otherwise be on satisfactory terms.

Industry Trends and Opportunities

U.S. healthcare expenditures continue to escalate and consume a large proportion of the U.S. GDP, presenting challenges for payers who wish to contain and reduce costs while also promoting quality healthcare outcomes. These aims are the same across all at-risk entities, including commercial health plans and government healthcare programs, such as Medicaid and Medicare.

Within the commercial market, health plans sell policies directly to individuals (on the open market or via health insurance exchanges), contract with employers to underwrite their employees' care, or contract with self-insured employers to oversee benefit administration to their employees. This market also includes a growing number of risk bearing provider-sponsored plans that operate and market health plan benefits. According to CMS NHE projections, private health insurance covered approximately 200.1 million individuals at a cost of $1.2 trillion in 2017.

Several commercial health plans also offer government-sponsored lines of business, including partnering with Medicare, Medicaid and CHIP to oversee care delivery for beneficiaries enrolled in those programs. Government managed care grew out of pressures to contain the growth of state and federal program spending and to address general concerns about healthcare access. In most states, managed care is currently the predominant delivery system for Medicaid. As of July 2017, all states except three had some form of managed care in place, including the District of Columbia. Among the 39 Medicaid programs (38 states plus the District of Columbia) with comprehensive risk-based MCOs, 29 states reported that 75% or more of their Medicaid beneficiaries were enrolled in MCOs as of July 1, 2017. More states continue to carve-out complex populations as well as behavioral health services into MCO contracts. Of the 32 Medicaid programs (31 states plus the District of Columbia) that opted to expand Medicaid eligibility levels pursuant to the ACA, 27 states were using MCOs to cover newly eligible adults as of July, 2017. Of those 27 states, 24 states covered more than 75% of beneficiaries in this group through risk-based managed care. It is unclear at this time how, if at all, efforts in Congress to "repeal and replace" the ACA could affect any of the state expansions or potential future growth of Medicaid lives and expenditures. As Congress continues to debate proposals to repeal major portions of the ACA, including the ACA's Marketplace and Medicaid coverage expansions, as well as other proposals to fundamentally restructure Medicaid's financing structure, the implications of these proposals remain unclear.

Similarly, managed care health plans also continue to assume risk for Medicare lives, with the Kaiser Family Foundation estimating that 33% of all Medicare beneficiaries, or 19.0 million lives, were enrolled in a Medicare Advantage Plan in 2017. HMS also continues to serve government-sponsored agencies' legacy fee-for-service programs at the state and federal level. These plans are generally reliant on and susceptible to the government appropriations process that determines their budget and governs the number of beneficiaries they serve.

According to the CMS NHE projections, Medicare programs in 2017 covered approximately 57.7 million people at a cost of approximately $718.7 billion and Medicaid/CHIP covered approximately 79.9 million people, costing approximately $604.1 billion. Altogether, it is projected that the government programs we serve covered approximately 137.6 million people at a total cost of approximately $1.32 trillion in 2017.

CMS projects Medicaid spending and enrollment will grow 6.0% and 1.7%, respectively in 2018 over 2017. CHIP spending is expected to grow 6.7% in 2018 over 2017, and CHIP enrollment is expected to increase 3.5% in 2018 over 2017. As commercial and government health plans continue to focus on strategies to contain costs across their different lines of business, we will continue to focus on serving them and meeting their evolving needs. Regardless of the program, coordinating benefits among a growing number of healthcare payers and ensuring that claims are paid appropriately represents an enormous challenge for our customers and an ongoing opportunity for us.

Regulatory Environment

The market for cost containment solutions is large and growing, driven by increasing healthcare costs and payment complexities. For 2018, Medicare and Medicaid are projected to pay approximately 45.3% of the nation's healthcare expenditures and serve over 140.7 million beneficiaries. Many of these beneficiaries are enrolled in managed care plans, which have the responsibility for both patient care and claim adjudications. Since 1985, we have provided state Medicaid agencies with services to identify third parties with primary liability for Medicaid claims, and since 2005, we have provided similar services to Medicaid managed care plans.

In 2006, Congress enacted the DRA and created the Medicaid Integrity Program under the Social Security Act to increase the government's capacity to prevent, detect and address fraud, waste and abuse in the Medicaid program. Later that year, Congress passed the Tax Relief and Health Care Act of 2006, which established the Medicare RAC program. HDI was awarded one of the first contracts under the program. In October 2016, CMS made a new round of awards and we again were awarded a region. These measures, at both the federal and state level, have strengthened our ability to identify and recover erroneous payments on behalf of our customers.

The ACA was signed into law in 2010. It included many provisions impacting healthcare delivery and payment programs, including employer-sponsored health coverage, expansion of the Medicaid program, health insurance exchanges with premium subsidies, and payment integrity efforts. In 2017, Congress considered the revision or repeal of some or all of the ACA. Options that have been considered include issuing block grants or establishing per capita caps for state Medicaid populations, and looking at program design alternatives for future enrollment criteria. We will monitor ACA-related changes as they develop and assess their potential impact, as well as any opportunities they may present for our customers and for us.

Competition

The U.S. healthcare insurance benefit cost containment marketplace is a dynamic industry with a range of businesses currently able to offer cost containment services, both directly or indirectly (through subcontracting), to some or all of the various healthcare payers. In addition, with improvements in technology and the growth in healthcare spending, new businesses are incentivized to enter this marketplace. Many healthcare payers also have the ability to perform some or all of these cost containment services themselves and choose to exercise that option. Competition is therefore robust as customers have many alternatives available to them in their effort to contain healthcare costs.

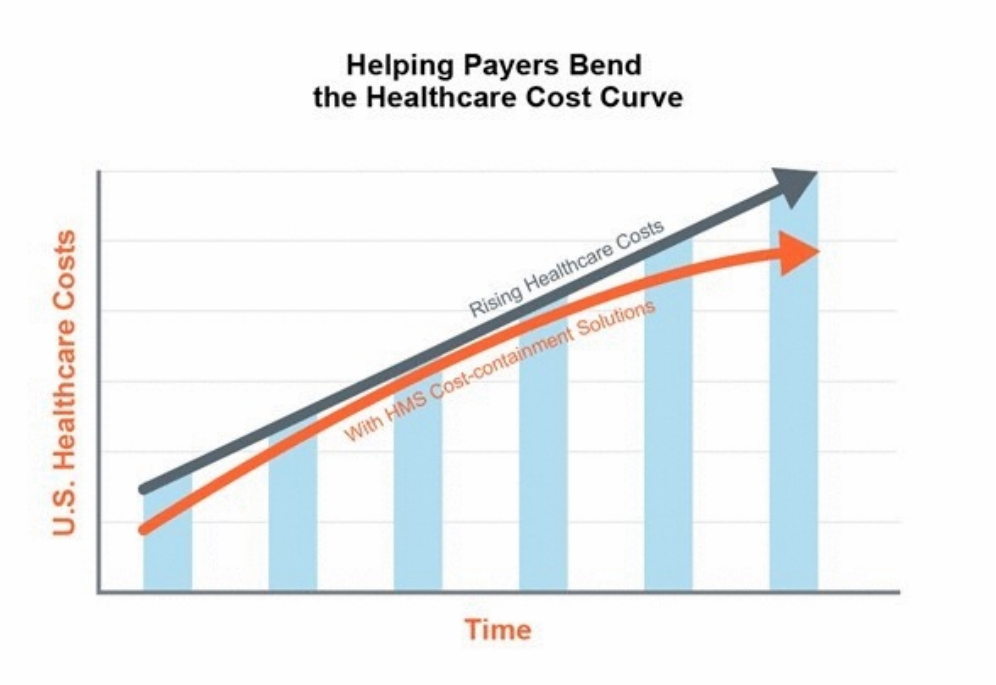
We compete based on a variety of factors, including our ability to perform a wide range of coordination of benefits and payment integrity related functions; proven results to maximize recoveries and cost avoidance; our in-depth government healthcare program experience; clinical staff expertise; extensive insurance eligibility database; proprietary systems and processes; existing relationships with various customers and other industry stakeholders; and our ability to provide customers with actionable intelligence to improve clinical outcomes and patient engagement.

Within our core coordination of benefits services, we compete primarily with large business outsourcing and technology firms, claims processors and PBMs, clearinghouses, healthcare consulting firms, smaller regional vendors and other TPL service providers. In addition, we frequently work with customers who may elect to perform some or all of their recovery and cost avoidance functions in-house. The competitive environment for payment integrity services includes some of the same companies that provide coordination of benefits services. Within the care management and risk analytics sector, we compete primarily with vendors who provide these and other population health management technology services. Companies with whom we compete across our product offerings include:

- Accenture
- CaseNet
- Change Healthcare
- Cognizant/TriZetto Healthcare Products
- Cotiviti Corporation
- Equian, LLC
- Experian Health
- Optum
- IBM Watson Health
- Inovalon
- LexisNexis
- MedHok
- DXC Technology Solutions
- Performant Financial Corp.
- SCIO Health Analytics
- Verscend Technologies, Inc.
- Welltok
- Conduent
- ZeOmega

Business Strategy

We believe that the steadily increasing enrollment and rising expenditures for Medicare and Medicaid, with most new enrollees entering managed care plans; an aging U.S. population with an increasing concentration of individuals with high cost chronic conditions and often co-morbidities; and the overall complexity of the healthcare claims payment system in the U.S. all combine to create substantial growth opportunities for the suite of cost containment solutions we offer.



We also believe these factors present growth opportunities for our care management and consumer engagement solutions. We expect to grow our business over the course of 2018 and beyond, both organically and inorganically, by leveraging existing key assets (e.g., our data, analytics, in-house expertise, and distribution channel) and pursuing a number of strategic objectives or initiatives, including:

- *Expanding the scope of our relationship with existing customers* – by selling additional products and services, including those designed to improve member engagement and improve clinical outcomes.
- *Adding new customers* – by marketing to commercial health plans, including Medicaid managed care and Medicare Advantage plans, at-risk group and individual health lines of business and ASO; government healthcare payers, including Medicaid agencies, state employee health benefit plans and CHIP; at-risk provider organizations and ACOs; and commercial employers.
- *Introducing new "homegrown" products and services* – through internal development initiatives designed to enhance or expand our existing suite of cost containment solutions.
- *Utilizing big data* – to create a more nimble operating environment, create operating efficiencies, improve the yield on our existing product suite and identify new revenue opportunities within our current service delivery models.

- *Promoting automation and innovation to improve the efficiency and effectiveness of our services* – by continuing to implement new technology and process improvements designed to increase recovery yields, increase customer satisfaction, and achieve greater operating efficiencies.

- *Building out our new care management and consumer engagement technology platform* – by continuing to grow a broad foundation of technology and service solutions to help customers better manage quality, cost and compliance across all lines of business. Our first steps in this strategy were the acquisition of Essette and Eliza.

- *Prudent deployment of capital* – by investing in internal growth initiatives; selectively investing in capabilities, technologies, and assets to complement our core cost-containment expertise; building care management and care coordination adjacencies to complement the Essette and Eliza acquisitions; and expanding our data analytics capabilities. Our focus may include acquisitions that represent long-term growth potential, target high-growth areas, are accretive to earnings, and fill a strategic need in our business portfolio as we seek to provide increasingly comprehensive solutions to our customers. We may also repurchase our shares, pursuant to a two-year $50 million authority granted by our Board of Directors in November 2017.

Item 1A. Risk Factors

Our business is subject to significant risks, including the risks and uncertainties described below. You should carefully consider these risks, as well as the other information in this 2017 Form 10-K, including our Consolidated Financial Statements and the related Notes. The occurrence of any of these risks could adversely affect our business, financial condition, results of operations, and cash flows in a material way.

Risks Relating to Our Company

Our ability to expand our business will be adversely affected if we fail to implement our growth strategy.

The size and the scope of our business operations have expanded over the past several years, and we currently intend to continue to grow and expand into new areas of the healthcare industry; however, such growth and expansion carries costs and risks that, if not properly managed, could adversely affect our business. Our future growth will depend on, among other things, our ability to successfully execute our business plans, which includes retaining existing customers, attracting new customers and improving our operations, all while remaining competitive. We must also be flexible and responsive to our customers' needs and to changes in the political, economic and regulatory environment in which we operate. The greater size and complexity of our expanding business puts additional strain on our administrative, operational and financial resources and can make optimal resource allocation more difficult to determine. We may not be able to maintain or accelerate our growth. A failure to anticipate or properly address the demands and challenges that our growth strategy and potential diversification may have on our resources and existing infrastructure may result in unanticipated costs and inefficiencies and could negatively impact our ability to execute on our business plans and growth goals, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

If we fail to innovate and develop new or enhanced solutions and services, or if these solutions and services are not adopted by our customers, it could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Part of our growth strategy depends on our ability to respond to the evolving healthcare landscape with new and enhanced solutions and services that our existing and potential customers are willing to adopt. The development, marketing and implementation of these solutions and services may require that we make substantial financial and resource investments. We face risks that our new or modified solutions and services may not be responsive to customer preferences or industry changes, and that the solution and service development initiatives that we prioritize may not yield the gains that we anticipate, if any. If we are unable to predict market preferences or healthcare industry changes, or if we are unable to develop or adapt solutions and services that are responsive to existing and potential customers' needs, we may fail to expand our business, which could constrain our future revenue growth and materially adversely affect our business, financial condition, results of operations and cash flows.

Our acquisition strategy may subject us to considerable business and financial risk.

Historically, to achieve our strategic goals, we have made a significant number of acquisitions that have expanded the solutions and services we offer, provided a presence in complementary business lines, or expanded our geographic presence and/or customer base. For example, we acquired IntegriGuard, LLC in September 2009; Verify Solutions, Inc. in December 2009; Allied Management Group-Special Investigation Unit in June 2010; Chapman Kelly, Inc. in August 2010; HDI in December 2011; MedRecovery Management, LLC in December 2012; Essette in September 2016; and Eliza in April 2017.

We intend to pursue future acquisitions that will continue to expand and diversify our business and to periodically engage in discussions regarding such possible acquisitions. We are subject to risks and uncertainties relating to our ability to identify suitable potential acquisition candidates, to consummate additional acquisitions that will be advantageous to us, and to successfully integrate future acquisitions. Future and potential business acquisitions involve a number of risk factors that could affect our operations, including, but not limited to:

- diversion of management's attention and other resources;
- our ability to successfully and timely integrate operational, accounting and technology functions, policies, processes, systems and controls, and to implement these functions, policies, processes, systems and controls, without incurring substantial expenses, delays, difficulties or other issues;
- our ability to integrate personnel and human resource systems as well as the cultures of the acquired business;
- our ability to retain or replace the key personnel of the acquired business;
- our ability to maintain relationships with the customers of the acquired business and further develop the acquired business;
- our ability to cross-sell our solutions and services and the solutions and services of the acquired business to our respective customers;
- customer dissatisfaction or performance problems with the acquired business;
- our ability to comply with regulatory requirements and avoid potential conflicts of interest in markets that we serve;
- the misuse of intellectual property by the personnel of the acquired business;
- our ability to successfully enter into unfamiliar markets;
- assumption of unanticipated legal or financial liabilities and/or negative publicity related to prior acts by the acquired business;
- we may become subject to litigation or other claims in connection with the acquired business, including claims from terminated employees, customers, former shareholders or third parties;
- we may become significantly leveraged as a result of incurring debt to finance an acquisition;
- the acquired business may not perform as projected which could negatively impact earnings or contingent consideration;
- we may suffer impairment of goodwill and other acquired intangible assets; and
- we may suffer dilution to our earnings per share.

If we fail to adequately address these risks, or to successfully integrate the businesses that we acquire, we may not realize cost efficiencies, synergies or other benefits that we anticipated when selecting our acquisition candidates, and our reputation, business, financial condition, results of operations and cash flows could be materially adversely affected.

You will not be able to rely on our operating results in any particular period as an indication of our future performance because they are subject to significant fluctuation which may cause the market price of our common stock to decrease significantly.

Our revenue and operating results may fail to match our past or projected performance and could vary significantly from period-to-period as a result of a number of factors, some of which are outside of our control. We have experienced fluctuations in our revenue and operating results in the past and they may vary in the future for reasons that include, but are not limited to:

- fluctuations in sales activity given our sales cycle;
- the length of contract and implementation periods;
- the commencement, completion or termination of contracts during any particular quarter;
- contract costs and expenses, which may be incurred in periods prior to revenue being recognized;
- the timing of period revenue recovery projects and third party payers' claim adjudication;
- the billing and budgeting cycles of our customers;
- the timing of government procurement activities, including when contract awards are announced and the time required to resolve bid protests;
- contract renewal discussions, which may result in delayed payments for services already performed;
- changes in the pricing structure or other significant terms in our contract, or the scope of services we perform;
- technological and operational issues affecting our customers, including delays in payment receipt for previously recognized revenue due to delays in certain customers processing our findings through their systems, and restrictions on our ability to use or access certain data or a lack of integrity or quality in the data or information we receive from certain data sources;
- adjustments to age/quality of receivables and accruals as a result of factors such as delays involving contract limitations or changes, subcontractor performance deficiencies or internal managerial decisions not to pursue identified claim revenue from customers;

- the impact of service disruptions or delays in the systems or operations of subcontractors, partners, vendors and other third party providers on which we rely on to deliver a single-source solution or service to our customers;
- changes in applicable laws;
- changes in accounting policies or guidelines concerning the timing of recognition of revenue; and
- regulatory changes or general economic conditions as they affect healthcare providers and payers.

We cannot predict the extent to which future variations could occur due to these or other factors. In addition, occasionally our state and federal customers are requested by third party payers to refund payments that we previously recovered for our customers. If our state and federal customers choose to refund money in response to these requests, regardless of whether an error actually occurred in connection with the payments, we may also be required to return contingent revenue which we were previously paid associated with such refunded payment. Consequently, our operating results are subject to significant fluctuation for any particular quarter, fiscal year, or other period, and may not be indicative of future periods. Our business is also subject to seasonal patterns resulting from increased efforts at year-end by certain customers to generate additional savings, complete compliance obligations and close gaps in care. However, taken as a whole, we do not consider our operations to be seasonal to any material degree. Due to all of these factors, our revenue and operating results are difficult to predict and are subject to significant fluctuation, which may cause the market price of our common stock to decrease significantly.

We face challenges associated with forecasting the revenue under our contracts, and any failure to accurately forecast such revenue could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may not be able to accurately estimate the factors upon which we base our contract pricing, or the costs and timing for implementing and completing contracts. For a majority of our customer contracts, the payment of our fee is contingent upon the recoveries received by our customers. We also have cost-plus or time-and-material based contracts with the federal government where our revenue is recognized based on costs incurred plus an estimate of the negotiated fee earned. Our ability to earn a profit on these contracts requires that we accurately estimate the costs involved with these contracts and assess the probability of achieving certain outcomes or milestones within the contracted time period. In addition, we cannot predict with certainty the costs or the period in which implementation or contracts may be completed when we introduce new solutions or services into the marketplace. We may also face a long implementation period with a new customer or a new contract with an existing customer, making it difficult to reliably forecast revenue under those contracts. If we do not accurately estimate the costs and timing for completing projects, or if we encounter increased or unexpected costs, delays, failures, liabilities or risks, including those outside of our control, our contracts could prove unprofitable for us or yield lower profit margins than anticipated. Although we believe that we have recorded adequate provisions in our financial statements for losses on our fixed-price and cost-plus contracts where applicable, as required under U.S. GAAP, our contract loss provisions may not be adequate to cover all actual future losses.

System interruptions or failures could expose us to liability and harm our business.

Our data and operation centers are essential to our business and our operations depend on our ability to maintain and protect our information systems. We attempt to mitigate the potential adverse effects of a disruption, relocation or change in operating environment; however, the situations we plan for and the amount of insurance coverage that we maintain may not be adequate in every case. Despite systems redundancy and security measures, our systems and operations are vulnerable to damage or interruption from, among other sources:

- power loss, transmission cable cuts and telecommunications failures;
- fire, flood, earthquake and other natural disasters;
- hardware failures or software defects;
- operator error;
- cyber security breaches; and
- physical break-ins, sabotage, intentional acts of vandalism, terrorist attacks and other events beyond our control.

In addition, while there are backup systems in many of our operating facilities, an extended outage of utility or network services supplied by third party IT vendors or providers may delay or disrupt the delivery or performance of the solutions and services we provide for our customers. If we encounter a lengthy business interruption, or in the event our business continuity plans and business interruption insurance coverage are not adequate or fail to compensate us on a timely basis, we could suffer operational disruptions, disputes with customers, civil or criminal penalties, regulatory problems, increases in administrative expenses, loss of our ability to produce timely and accurate financial and other reports, damage to our reputation or customer relationships or other adverse consequences, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our systems and networks and those of third parties on which we rely may be subject to cyber security breaches and other disruptions that could compromise our information and harm our business.

In the ordinary course of our business, we rely heavily upon our technology systems and networks, as well as on the products and services of third-party providers, to input, transmit, maintain and communicate the confidential and proprietary data we receive from our customers and other data suppliers (e.g. private insurance plans, financial institutions, etc.). In addition, subcontractors, teaming partners or other third-party vendors may receive or utilize this information on our behalf in support of the services we perform for our customers. The secure processing and maintenance of this information is critical to our operations and business strategy. Although we have spent significant resources to implement security and privacy programs and controls, train our workforce and augment our security measures with the implementation of new technologies and processes, our information technology and infrastructure, and those of third parties on which we rely, have been, and will likely continue to be subject to computer hacking, acts of vandalism or theft, malware, computer viruses or other malicious codes, phishing, employee error or malfeasance, catastrophes, unforeseen events or other cyber-attacks. To date, we have seen no material impact on our business or operations from these attacks, however, we may be unable to implement adequate preventive measures to protect against such compromises in the future or to effectively adapt our security measures to evolving security risks. As a result, our technology systems, including our data and our customers' data, could be accessed improperly, made unavailable, improperly modified, corrupted or otherwise breached or compromised, or we could suffer system disruptions, shutdowns and denials of service. Similarly, we could be materially adversely affected by the loss of proprietary, trade secret or confidential technical and financial data if our internal networks are compromised. The occurrence of any of these events could harm the market perception of the effectiveness of our security measures, lead to reputational damage or the loss of our customers' confidence in our solutions and services, negatively affect our ability to attract new customers, cause existing customers to terminate or not renew our solutions and services, or to deter them from using our solutions or services in the future, all of which could reduce our revenue, increase our expenses and expose us to potential liability under privacy, security or other applicable laws and regulations. We could also be forced to expend significant resources in response to a security breach, including investigating the cause of the breach, repairing system damage, remediating vulnerabilities in our security procedures, increasing cyber security protection costs by deploying additional personnel and protection technologies, paying regulatory fines and litigation costs, and resolving legal claims and regulatory actions, all of which could increase our expenses, divert the attention of our management and key personnel away from our business operations and materially adversely affect our business, financial condition, results of operations and cash flows.

If we are unable to protect our proprietary technology, information, processes, know-how, and other intellectual property and intellectual property rights, or become subject to claims of infringing or misappropriating the intellectual property of third parties, the value of our solutions and services may be diminished and our business may be materially adversely affected.

Our success as a company depends in part upon our ability to protect our core technology and intellectual property. Our expanding operations and efforts to develop new solutions and services also make protection of our intellectual property more critical. We seek to protect our intellectual property and other proprietary information through a combination of patent, trademark, copyright, trade secret and unfair competition laws, confidentiality agreements and invention assignment agreements with employees, consultants and other third parties, as well as through the terms of our agreements with customers and vendors, and other security measures. However, the steps we have taken to deter misappropriation of intellectual property may be insufficient to protect our proprietary information. Misappropriation of our intellectual property by third parties, or any disclosure or dissemination of our confidential and proprietary business intelligence, queries, algorithms and other similar information by any means, could undermine any competitive advantage we currently derive or may derive from that intellectual property. For example, our current or former employees, consultants or other third parties may unintentionally or willfully disclose our trade secrets, know-how or other confidential and proprietary information to competitors. Competitors have also attempted to use state open records and/or federal Freedom of Information Act laws to obtain our proposal responses and other documents we provide to our government customers. We cannot be certain that our efforts to protect the confidential and proprietary trade secret information or intellectual property in these proposals or other documents will always be successful, due to the many factors underlying the various state and federal decisions to release information in response to open records requests (even in spite of our objections and efforts to protect such information). In addition, there remains the possibility that others will independently develop competing technologies that may be equivalent or superior to ours. If our efforts to protect our intellectual property and other proprietary rights are inadequate to prevent unauthorized use or appropriation by third parties or our employees, the value of our brand and other intangible assets may be diminished and others may be able to more effectively compete with our business by offering solutions or concepts that are substantially similar to ours, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

In addition, third parties may claim that we are infringing upon or misappropriating their intellectual property, or assert other legal challenges to our intellectual property. Our exposure to risks related to the use of intellectual property may also increase as a result of acquisitions because third parties may make infringement and similar or related claims after we have acquired technology. Any of these situations could cause us to expend significant time and resources and to incur substantial costs associated with litigation or legal proceedings that may be necessary to defend ourselves or to enforce our intellectual property rights, in which we may not ultimately prevail, and could result in our being prevented from furnishing certain solutions and services.

We face significant competition for our solutions and services and we expect competition to increase, which could materially adversely affect our business, financial condition, results of operations and cash flows.

The market for healthcare cost containment solutions is intensely competitive, driven by rapidly changing technologies, evolving industry standards and customer demands to become more efficient. Our competitors range in size from large, diversified national companies to small, specialized firms, and could include current or former subcontractors or teaming partners seeking to establish direct relationships with our customers in order to perform similar services as the prime contractor, as well as current and prospective customers that elect to perform recovery and cost avoidance functions in-house or to develop in-house capacities for solutions and services that we provide or hope to provide. Consolidation among vendors and healthcare providers, as well as the merging of some of our competitors or formation of business alliances with other competitors, have contributed to the increasingly competitive environment. For example, certain state customers have combined or "bundled" TPL services under large-scale IT procurements, allowing MMIS vendors to partner with less experienced TPL identification vendors based on preferred relationships or favorable pricing. In addition, companies that have invested in proprietary technology different from our own solution and service offerings, such as front-end analytics, have emerged as new competitors due to the rapidly evolving healthcare landscape. There is also increasing sophistication in the solutions and services that our competitors are developing that may become more efficient or appealing to our customers. In order to remain competitive, we may need to quickly develop and market new and enhanced solutions and services responsive to emerging technologies and changes in the healthcare industry, which may require that we make substantial financial and resource investments.

We may not be able to compete successfully against our existing or future competitors. Some of these competitors have significantly greater financial and technical resources, and others have longer operating histories and greater name recognition than we do in certain markets. They may be able to (i) offer lower prices or negotiate fee reductions on our current solutions and services, (ii) respond more quickly than we can to new and emerging technologies and changing customer requirements, (iii) devote greater resources to the sale of their products and the development and implementation of new and improved systems, solutions and services for customers that we serve, and (iv) pursue various acquisitions that allow them to rapidly amass a wide array of capabilities. We may be forced to lower our pricing, unexpectedly increase or enhance our technological or data capabilities, or modify our solution or service offerings. Notwithstanding any changes we make in response to increased competition, the demand for our solutions and services may decrease as a result of increased competition. A failure to be responsive to our existing and potential customers' needs or the changing industry landscape could hinder our ability to maintain or expand our customer base, hire and retain new employees, pursue new business opportunities, complete future acquisitions and operate our business effectively. Any inability to compete effectively could materially adversely affect our business, financial condition, results of operations and cash flows.

Our business could be materially adversely affected if we fail to maintain a high level of customer retention, if our customers elect to reduce the scope of our contracts or terminate them before their scheduled expiration dates or if we fail to meet performance standards under our customer contracts.

We historically have derived and expect to continue to generate a significant portion of our revenue from a limited number of large customers at the federal and state level. Our contracts with these customers are subject to periodic renewal and some permit them to terminate their contracts on short notice, with or without cause. If a customer is dissatisfied with the quality of our work or if we fail to meet performance standards under our contracts, or if our solutions, technical infrastructure or services do not comply with the provisions of our contractual agreements or applicable regulatory requirements, customers might seek to reduce the scope of the services we perform or prematurely terminate their agreements with us, or we could incur additional costs that may impair the profitability of a contract and damage our ability to obtain additional work from that customer, or other current or prospective customers. For example, some of our contracts contain liquidated damages provisions and financial penalties related to performance failures, which if triggered, could materially adversely affect our reputation, business, financial condition, results of operations and cash flows. We also may be required to disclose such liquidated damages or other financial penalties assessed against us in connection with future bids for services with other customers.

In addition, government customers are subject to financial pressures or pressure from stakeholders that may cause them to terminate contracts for our services that may be regarded as non-essential or to redefine or reduce the scope of our contracts by, for example, significantly reducing the volume of data that we are permitted to audit or renewing the contract at lower performance fee levels. Despite our right to prompt and full payment under the terms of our contracts, we could face challenges in obtaining timely or full payments for our properly provided services from our customers. If there is a substantial reduction in the scope of our services under, or a termination of, any of our key contracts with our major customers, or if we are exposed to significant costs, liabilities or negative publicity, our ability to compete for new contracts with current or prospective customer could be damaged and our business, financial condition, reputation, results of operations and cash flows could be materially adversely affected.

Any failure to maintain effective information processing systems and the integrity of the data in, and operations of, those systems could materially adversely affect our business, financial condition, results of operations and cash flows.

Our ability to conduct our operations and accurately report our financial results depends on the integrity of the data in our information systems and the processes performed by those systems. As a result of the services we provide, we process a number of complex transactions that require us to access, store, retrieve, manipulate, manage and transmit our customers' information and data, external data, as well as our own data. Although we have invested a great deal of time and resources in developing systems, processes and controls that protect the integrity of the data, such measures cannot provide absolute security. It is possible that failures or errors in hardware and software, including those in third-party technology, or technical deficiencies in our systems could result in data loss or corruption, or cause the data that we collect, utilize or disseminate to be incomplete or contain inaccuracies that our customers regard as significant. In addition, these information systems and applications require continual maintenance, upgrading and enhancement to meet our operational needs, satisfy customer requests and handle our expansion and growth. Despite our testing and quality control measures, we cannot be certain that errors or system deficiencies will not be found and that remediation can be done in a timeframe that is acceptable to our customers, or that customer relationships will not be impaired by the occurrence of errors or the need for remediation. In addition, implementation of upgrades and enhancements may cost more, take longer or require more testing than originally expected. Situations may also arise in which the accuracy of our data analysis or the content and quality of our work product is central to the disposition of claims, controversies or litigation between our customers and third parties that would require us to allocate significant resources to fulfilling our contractual obligations to provide our customers with full and complete access to records, analysis and back-up documentation of our work. Assuring our capacity to fulfill these obligations as well as actually fulfilling them could impose significant burdens on our infrastructure for data storage, maintenance and processing, and require us to incur increased costs to supplement our personnel, data storage and computing resources, which could materially and negatively impact other business operations.

We depend on many different entities to supply information and an inability to successfully manage our relationships with a number of these suppliers may harm the quality and availability of our solutions and services.

We obtain the data used in our solutions and services from many sources, including commercial health insurance plans, financial institutions, managed care organizations, government entities and non-government entities. From time to time, challenges arise in managing and maintaining our relationships with data sources that are not our customers and that furnish information to us pursuant to a combination of voluntary cooperation and legal obligations under laws and regulations that are often subject to differing interpretation. For example, data suppliers could seek to limit or end our access to and use of their data if they determine that certain uses of data for our customers are not permitted by our agreements, or such suppliers may make errors in compiling, transmitting or accurately characterizing data or have technological limitations that interfere with our receipt or use of the data we rely on them to provide. If a number of our information sources become unable or unwilling to provide us with certain data under terms of use that are acceptable to us and our customers, or if laws and regulations for use and protection of this data changes in a way that disincentivizes our suppliers, or imposes unacceptable or unreasonable conditions or risks on us, we may not be able to obtain new or favorable agreements with alternative data suppliers. In addition, our ability to normalize and fully utilize the information we have received from various data sources in order to enhance and improve current solutions for our customers is an important component of our growth strategy. Although we believe that we have the legal and contractual rights necessary to normalize and use the data we have obtained from these sources for potential or contemplated products and service offerings, we cannot provide assurance that these entities will permit the use of their data for these purposes. If we lose a number of our data sources or access to certain data and are unable to identify and reach the requisite agreements with suitable alternative suppliers or fail to successfully integrate them into our solutions and services, or if there is a lack of accuracy or integrity in the data that current or future suppliers provide, we could experience service disruptions, increased costs, reduced quality of our solutions and services, or performance penalties under our customer contracts, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may rely on subcontractors and other third party providers to provide customers with a single-source solution or service or we may serve as a subcontractor to a third party prime contractor. If these parties fail to satisfy their obligations to us or if we are unable to maintain these relationships, our business, financial condition, results of operations and cash flows could be materially adversely affected.

In some areas of our business we may engage subcontractors, teaming partners, vendors or other third party providers to provide our customers with a single-source solution or service for a broader range of service needs. These third parties include software vendors, utility and network providers and other information technology service providers. Our ability to deliver and implement solutions and serve our customers effectively depends on these third parties meeting our service standards in both timeliness and quality, and in certain instances, on our ability to obtain customer approval for the use of these third party subcontractors. While we believe that we perform appropriate due diligence on these third parties and take adequate measures to ensure that they comply with the appropriate laws and regulations, we cannot guarantee that they will comply with the terms set forth in their agreements with us. Performance deficiencies or misconduct by subcontractors, teaming partners, vendors or other third party providers may be perceived as inadequacies in our solutions or services or cause us to fail to fulfill our contractual obligations to our customers, which could materially adversely affect our customer relationships and reputation, result in termination of a customer contract, and subject us to a dispute with our customer. In addition, if our third party service providers terminate or refuse to renew their relationships with us or offer their products to us in the future on less advantageous terms, we may not be able to perform or deliver solutions or services for existing customers as expected.

Similarly, we are and may in the future be engaged as a subcontractor to a third party prime contractor. Subcontracting arrangements where we are not the prime contractor pose unique risks to us because we do not have control over the customer relationship, and our ability to generate revenue under such subcontracts is dependent on the prime contractor, its performance and relationship with the customer, and its relationship with us. We cannot be certain that the prime contractor will provide adequate and timely services to the customer, comply with the terms of its prime contract with the customer or its subcontract agreement with us, or that it will construe its contractual rights and obligations in a reasonable way, act appropriately in dealing with us or customers, and remain in compliance with the relevant laws, rules or regulations. Any failure of the prime contractor to adequately perform its obligations under the prime contract or to comply with applicable laws, rules and regulations could materially adversely affect our reputation and subject us to a dispute with the prime contractor or the customer. In the event a prime contract is terminated, whether for non-performance by the prime contractor or otherwise, our subcontract will similarly terminate, and the resulting contract loss could materially adversely affect our business, financial condition, results of operations and cash flows.

We obtain a portion of our business through competitive bidding in response to government requests for proposals. Reprocurements and future contracts may not be awarded through this process on the same level or our contract awards may be challenged by interested parties which could materially adversely affect our business, financial condition, results of operations and cash flows.

In order to market our solutions and compete for contracts with existing and potential state and federal customers, we are often required to respond to government-issued RFPs. These RFP responses typically require us to assemble and submit a large volume of information within a rigid timetable, and to accurately estimate our cost structure for servicing the proposed contract, the time required to establish operations and the likely terms of any proposals submitted by our competitors. We may also be required to disclose the occurrence of any negative events suffered by our business, such as customer disputes, a government inquiry or an adverse judgment or settlement in litigation or a legal proceeding, which could impair our ability to win the contract at issue or have a material adverse effect on our reputation in the industry.

Even if we win these contracts, we may fail to secure favorable contract terms and conditions, or a government's determination to award us the contract may be challenged by an interested party. Under the state and federal laws and regulations governing procurements of goods and services, challenges and award protests may be filed even if there are no valid legal grounds on which to base the protest. The filing of such challenges could potentially delay the start or implementation of the contract if the government agency determines to withhold a contract award or suspend contract performance while the protest is being considered, or to take corrective action on its own, such as soliciting new bids or terminating the contract award or current procurement. In the event of irregularities, we perceive or learn of in the award or bidding process, we also may be forced to file protests in response to RFP awards to other bidders. Resolution of a protest, even in our favor, could force us to expend considerable funds in disputing the potential award or to incur additional expenses to maintain our ability to timely start implementation, which may cause our actual results to differ materially and adversely from those anticipated. In addition, if we are unable to win reprocurements or protests of particular contracts, we may be precluded from entering certain customer markets for the term of the contract awarded to another party. Any failure to continue to obtain contracts in response to government RFPs, to design proposals that result in profitable contracts, to win new contracts or re-procure current contracts after they expire or to prevail in protests or challenges of contract awards could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Adverse judgments or settlements in legal proceedings could materially harm our business, financial condition, operating results and cash flows.

We are subject and may be a party to legal proceedings and claims that arise from time to time in the ordinary course of our business, which may include those related to, for example, claims brought by our customers in connection with billing and contractual disputes, subcontracts and teaming agreements, protection of confidential information or trade secrets, claims relating to pending, terminated or completed acquisitions or dispositions, adversary proceedings arising from customer bankruptcies, employment of our workforce and immigration requirements or compliance with any of a wide array of state and federal statutes, rules and regulations that pertain to different aspects of our business. We may also be required to initiate expensive litigation or other proceedings to protect our business interests. There is a risk that we will not be successful or otherwise be able to satisfactorily resolve any pending or future litigation. In addition, litigation and other legal claims are subject to inherent uncertainties and management's view of currently pending legal matters may change in the future. Those uncertainties include, but are not limited to, litigation costs and attorneys' fees, unpredictable judicial or jury decisions and the differing laws and judicial proclivities regarding damage awards among the states in which we operate. Resolution may also require that HMS accept some amount of loss or liability in order to avoid customer abrasion, negative marketplace perceptions and other disadvantageous results. Unexpected outcomes in such legal proceedings, or changes in management's evaluation or predictions of the likely outcomes of such proceedings (possibly resulting in changes in established reserves), could have a material adverse effect on our business, financial condition, results of operations and cash flows.

As previously reported, in November 2017, the Company was the subject of an adverse verdict in a breach of contract claim against the Company arising out of an acquisition in 2010. The adverse verdict resulted in a jury award of $60 million in damages to the plaintiffs. The Company intends to appeal the verdict and believes that strong grounds exist to overturn or greatly reduce the damages awarded by the jury. See the information under "Litigation" in Note 13 to the Consolidated Financial Statements in Part II, Item 8 for further discussion about this proceeding.

We may not be able to deliver our solutions and services efficiently if we are unable to attract and retain qualified employees.

Our successful delivery of solutions and services and ability to maintain our productivity and profitability is dependent on our ability to identify, recruit, employ, train and retain skilled personnel. The success of recruitment and retention strategies depend on a number of factors, including the competitive demands for employees having the skills we need and the level of compensation required to hire and retain such employees. As our business expands and undergoes change, we may also find it difficult to preserve our corporate culture, which could reduce our ability to innovate and operate effectively or result in a loss of experienced personnel. In addition, customers or competitors may hire away our qualified employees. We may not be able to recruit or maintain the personnel necessary to efficiently operate and support our business in the future, and even if our recruitment and retention strategies are successful, our labor costs may increase significantly. Our inability to hire sufficient personnel on a timely basis without significantly increasing our labor costs could materially adversely affect our business, financial condition, results of operations and cash flows.

Our future success depends, in part, on the continued service of members of our management team.

Our ability to execute on our business plans and future success requires that we attract, develop, motivate and retain experienced and innovative executive officers and senior managers who have successfully managed, designed or implemented government services programs or information technology projects, or have relevant experience in other sectors of data management or the healthcare industry. These individuals are in great demand and are likely to remain a limited resource in our industry. The loss of services of one or more members of our management team could adversely affect our business, financial condition, results of operations and cash flows. In addition, to the extent we lose an executive officer or senior manager, we may incur increased expenses in connection with the hiring, promotion or replacement of these individuals and the transition of leadership and critical knowledge.

Our outstanding indebtedness could materially adversely affect our financial condition and our ability to operate our business, and we may not be able to generate sufficient cash flows to meet our debt service obligations or capital requirements.

On December 19, 2017, HMS and certain subsidiaries entered into Amendment No. 2 to Amended and Restated Credit Agreement (the "Amendment"), which amends our existing Credit Agreement. Among other things, the Amendment provides for a senior secured revolving facility in an aggregate principal amount equal to $500 million and extends the maturity date of the revolving facility to December 19, 2022 (the "Amended Revolving Facility"). The Amended Revolving Facility is secured, subject to certain customary carve-outs and exceptions, by a first priority lien and security interest in substantially all of our tangible and intangible assets.

As of December 31, 2017, the outstanding principal balance due under our Credit Agreement was $240.0 million. Our outstanding indebtedness and any additional indebtedness we incur may have important consequences for us, including, without limitation, that:

- we may be required to use a substantial portion of our cash flow to pay the principal of and interest on our indebtedness;
- our indebtedness and leverage may increase our vulnerability to adverse changes in general economic and industry conditions, as well as to competitive pressures;
- our indebtedness may expose us to the risk of increased interest rates because certain of our borrowings are and will be at variable interest rates;
- our ability to obtain additional financing for working capital, capital expenditures, acquisitions and for general corporate and other purposes may be limited;
- our indebtedness and leverage may prevent us from taking advantage of business opportunities as they arise or successfully carrying out our plans to expand our business; and
- our flexibility in planning for, or reacting to, changes in our business and our industry may be limited.

Under the Credit Agreement, we are also required to comply with specified financial and operating covenants, which may limit our ability to operate our business as we otherwise might operate it. The Amended Revolving Facility contains (i) certain affirmative covenants that impose certain reporting and/or performance obligations on us and our restricted subsidiaries, (ii) certain negative covenants that generally limit, subject to various exceptions, us and our restricted subsidiaries from taking certain actions, including, without limitation, incurring indebtedness, creating liens, engaging in mergers and consolidations, disposing of certain assets or property, making certain investments and acquisitions, entering into certain transactions with affiliates, swap agreements or sale-leasebacks, making certain restricted payments, including dividends and share repurchases, changing our fiscal year or the lines of business that we or our restricted subsidiaries conduct to a material extent, and prepaying certain junior indebtedness, (iii) financial covenants consisting of a maximum consolidated leverage ratio and a minimum interest coverage ratio, and (iv) customary events of default for financings of this type.

Our obligations under the Amended Revolving Facility may be declared due and payable upon the occurrence and during the continuance of an event of default, which includes, without limitation: non-payment of principal or reimbursement obligation when due; non-payment of interest, fees and other amounts for a period of five business days after the due date; material inaccuracies of representations and warranties; failure to perform or observe covenants, conditions or agreements (subject to any applicable grace periods); cross-defaults to certain indebtedness; inability to pay debts; certain acts of bankruptcy or insolvency; certain ERISA events; failure to pay certain material judgments; and a change of control as defined in the Credit Agreement. If not cured, an event of default could result in any amounts outstanding, including any accrued interest and unpaid fees, becoming immediately due and payable, and would give our lenders the right to proceed against the collateral granted to them to secure the debt, which would require us to, among other things, seek additional financing in the debt or equity markets, refinance or restructure all or a portion of our indebtedness, sell selected assets, and/or reduce or delay planned capital or operating expenditures. Such measures might not be sufficient to enable us to service our debt, and any such financing or refinancing might not be available on economically favorable terms or at all. Our ability to make payments of principal and interest on our outstanding credit facility depends upon our future performance and our ability to generate cash flows, and if we are unable to generate sufficient cash flows to meet our debt service obligations or are forced to take additional measures to be able to service our indebtedness, our business, financial condition and results of operations could be materially and adversely affected.

Changes in, or interpretations of, tax rules and regulations may materially adversely affect our effective tax rates.

We are a United States-based company subject to various federal, state and local tax laws and regulations in multiple U.S. jurisdictions that govern numerous aspects of our business. As we expand our business, we may perform services for new customers located outside of the United States or in a U.S. Territory, which may subject us to foreign tax laws and regulations that could increase our exposure to additional tax liabilities. Our future effective tax rates could also be materially affected by changes in the tax rates in jurisdictions where our income is earned and taxed, by changes in, or our interpretation of, tax rules and regulations in the jurisdictions in which we do business, by increases in expenses not deductible for tax purposes including impairments of goodwill, by changes in U.S. GAAP or by changes in the valuation of our deferred tax assets and liabilities. The 2017 Tax Act was enacted on December 22, 2017 and is generally effective for tax years beginning after December 31, 2017. The 2017 Tax Act, among other things, includes a reduction to the U.S. corporate tax rate, modifications to the limitations on certain deductions for executive compensation, new limitations on interest deductions, repeal of the section 199 Deduction, and capital investment deductions in certain circumstances, and a shift of the U.S. taxation of multinational corporations from a tax on worldwide income to a territorial system. We are currently in the process of analyzing the effects of this new legislation on our business, and although we believe that the impact of the new legislation might be beneficial to us at this time, the ultimate outcome of the new legislation on our business and financial condition is uncertain. Any unanticipated changes in our tax rates could affect our future results of operations.

In addition, we are subject to the continual examination of our income tax returns by the IRS and other domestic tax authorities. We regularly assess the likelihood of outcomes resulting from these examinations to determine the adequacy of our provision for income taxes and have reserved for potential adjustments that may result. The final determination of any of these examinations could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our health insurance coverage and self-insurance reserves may not cover future claims, which could materially adversely affect our business, financial condition, results of operations and cash flows.

We maintain various insurance policies for company employee health, workers' compensation, general liability and property damage. We are self-insured for our health plans, and have purchased a fully-insured stop loss policy to help offset our liability for both individual and aggregate claim costs. We are also responsible for losses up to a certain limit for workers' compensation, general liability and property damage insurance.

For policies under which we are responsible for losses, we record a liability that represents our estimated cost of claims incurred and unpaid as of the balance sheet date. Our estimated liability is not discounted and is based on a number of assumptions and factors, including historical trends, actuarial assumptions and economic conditions, and is closely monitored and adjusted when warranted by changing circumstances. Our prior growth could affect the accuracy of estimates based on historical experience. Should a greater amount of claims occur compared to what was estimated or medical costs increase beyond what was expected, our accrued liabilities might not be sufficient and we may be required to record additional expense. Unanticipated changes may also produce materially different amounts of expense than reported under these programs, which could materially adversely affect our business, financial condition, results of operations and cash flows.

Although we believe that we have remediated previously identified material weaknesses in our internal control over financial reporting, our financial statements could be materially misstated if we fail to remedy other material weaknesses that we may identify in the future, or if we are unable to develop, implement and maintain effective internal control over financial reporting in future periods.

In connection with management's assessment of our internal control over financial reporting for the December 31, 2016 reporting period, we identified material weaknesses related to the calculation of the estimated liability for appeals balance in connection with our CMS reserve and the valuation of our accounts receivable allowance. As further described under the heading "Changes in Internal Control Over Financial Reporting" in Part II, Item 9A of this 2017 Form 10-K, we have implemented measures to address these material weaknesses and have successfully completed the testing necessary to conclude that the material weaknesses have been remediated.

In future periods, these remedial measures may not operate effectively, or we may fail to design or implement effective controls or to otherwise maintain effective internal control over financial reporting, and additional material weaknesses or significant deficiencies in our internal control over financial reporting may occur or be discovered. As a result, we may fail to meet our future reporting obligations on a timely basis, our financial statements may contain material misstatements or our operating results or financial condition may otherwise be negatively impacted, and we may be subject to litigation and regulatory actions, any of which may cause us to incur substantial costs, adversely affect investor perceptions and potentially result in a decline in the market price of our common stock. In addition, these failures may also cause us to incur substantial additional costs in future periods relating to the implementation of remedial measures or limit our ability to obtain financing under our Credit Agreement, which could adversely impact our business, financial condition, results of operations and cash flows.

Risks Relating to Our Industry

Our business could be materially adversely affected by changes in the U.S. healthcare environment or in laws relating to healthcare programs and policies, particularly as they relate to the ACA and the Medicare and Medicaid programs.

The healthcare industry in which we operate is subject to changing political, economic and regulatory influences that directly affect the practices and operations of federal, state and commercial healthcare organizations in the United States. In March 2010, the ACA was passed, and its emphasis on program integrity and cost containment, along with its expansion of Medicaid, created new opportunities to grow our business and our service offerings. However, some of the provisions of the ACA have yet to be implemented and there have been a number of judicial and legal challenges to certain aspects of the ACA. Since January 2017, the President has signed two executive orders and other directives designed to waive, defer, grant exemptions from or delay the implementation of certain requirements mandated by the ACA. Concurrently, Congress has considered legislation that would repeal or repeal and replace all or part of the ACA. In December 2017, the Tax Act was enacted and signed into law, one part of which repeals the "individual mandate" introduced by the ACA effective January 1, 2019. There have also been a number of proposed and adopted legislative initiatives and healthcare reform proposals from state and federal governments, including, (i) initiatives and proposals that would fundamentally change the financial structure of the Medicaid program (currently funded jointly by the states and the U.S. Federal Government) that could result in early termination or non-renewal of our contracts with certain state government customers, and (ii) initiatives and proposals at the federal level that may reduce reimbursement rates to states, establish new payment models, increase or decrease government involvement in healthcare, decrease the Medicare RAC Program, or otherwise change the operating environment for our customers. Healthcare organizations may react to such changed circumstances and financial pressures by taking actions to ramp up, curtail or defer their retention of cost containment providers like us, which could impact the demand for our solutions and services and our ability to increase or maintain sales of our existing solutions and services. While certain changes may present new opportunities to us, our business, financial condition, results of operations and cash flows could be materially adversely affected if we are unable to adapt our solutions and services to meet changing requirements or expand service delivery into new areas, or if the demand for our solutions and services is reduced as a result of efforts to waive, modify or otherwise change the ACA, in whole or in part, and as a result of other future legislative changes affecting Medicare, Medicaid or other publicly funded or subsidized health programs. Although we will continue to evaluate the effect that the ACA and its possible repeal and replacement may have on our business, it is difficult to predict the full impact and influence that the ACA and the varying healthcare reform measures may have on the U.S. healthcare industry or policy, and any resulting changes may take time to unfold.

Healthcare spending fluctuations, simplification of the healthcare payment process or other aspects of the healthcare financing system, budgetary pressures and/or programmatic changes diminishing the scope of program benefits, or limiting payment integrity initiatives, could reduce the need for and the price of our solutions and services, which would have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our projections and expectations are premised, in part, upon consistent growth rates in the Medicare and Medicaid programs and in government spending on these programs, and in the current healthcare financing system and the need for our solutions and services within that existing framework. Our success as a company is based on offering solutions and services that improve the ability of our customers to identify and recover revenue that would otherwise be lost often as a result of procedural inefficiencies and complexities in the healthcare delivery and payment system. However, the need for our solutions and services, the price customers are willing to pay for them and the scope and profitability of our contracts could be negatively affected by a number of factors, including, but not limited to:

- a lower than projected growth in Medicare and Medicaid programs and expenditures;
- the simplification of the healthcare benefit and payment system through legislative or regulatory changes at the federal or state level (for example, legislative changes impacting the scope of mandatory audits; limiting or reducing the amount of reviewable claims and/or the look-back period for review in areas where we conduct audits);
- changes in the level of federal government spending due to budgetary or deficit considerations, including the continuance of existing programs, as well as budgetary pressures that may drive changes at the state level;
- the transition of healthcare beneficiaries from fee-for-service plans to value-based plans;

- unanticipated reductions in the scope of healthcare program benefits (such as, for example, state decisions to eliminate coverage of optional Medicaid populations or services or shifting lives into managed care plans);
- modifications in provider billing behavior and habits, often in response to the success of our solutions and services or to changes that reduce healthcare spending;
- customer improvements and enhancements to their internal healthcare claims and billing processes;
- the adoption of healthcare plans with significantly higher deductibles;
- limits placed on ongoing program integrity initiatives, including the Medicare RAC program; and
- legislative healthcare reforms and developments, including the absence of near-term compliance deadlines effected by the ACA, the possible repeal or modification of the ACA, and other legislative actions to reduce program eligibility or services, or reform Medicaid spending.

For example, during 2014 and 2015, our recovery audit services under HDI's Medicare RAC contract were limited because of significant delays in procurement activities for the new Medicare RAC contract awards, resulting from, in part, the cancellation of the original and second procurements following the denial of pre-award protests and ongoing litigation regarding certain payment terms proposed by CMS as part of the new Medicare RAC proposals. In response to the delays, CMS allowed the Medicare RAC contractors, including HDI, to perform active recovery auditing through July 2016 and certain limited administrative activities, including collections, related to findings through January 31, 2018.

In October 2016, CMS announced the new Medicare RAC contract awards, including the award of RAC Region 4 to our wholly owned subsidiary. Under the new Medicare RAC contracts, CMS implemented modified ADR limits that reduces the ADR requirement to 0.5%. The modified ADR limits, which CMS first announced in January 2016, is a 75% reduction from the 2.0% ADR limit established for the HDI Medicare RAC contract. In addition, in April 2016, CMS instituted a sliding scale policy adjusting ADR limits based on provider denial rate after three 45-day ADR cycles. In January 2018, CMS further modified this methodology, indicating that underpayments identified by the RAC would be precluded from the sliding scale policy. These changes have significant impact on the volumes of claims that Medicare RACs are permitted to review for inpatient providers and reduces their ability to identify overpayments and underpayments under the new Medicare RAC contracts. HMS is currently waiting for CMS to operationalize the sliding scale under the new Medicare RAC contract, which is expected to increase the current ADR limit to a requirement less than the 2.0% limit that was previously set under the prior contracts.

Further, in connection with our first Medicare RAC contract, CMS announced in 2014 that it would settle with hospitals willing to withdraw inpatient status claims currently pending in the RAC appeals process by offering to pay hospitals 68% for all eligible claims they had billed to Medicare. In June 2015, CMS notified HDI that based on the initial lists of finalized settlements, HDI owed CMS approximately $28.6 million due to adjustments in contingency fees under our existing Medicare RAC contract. HDI previously advised CMS that it disagrees with CMS' interpretation of the contract and that CMS does not have the contractual right, among other things, to require refunding fees already paid. In addition, in September 2016, CMS announced that it would extend an opportunity for another round of settlements for hospitals that were eligible for but did not choose to participate in the 2014 settlement, with CMS offering to pay 66% for all eligible claims they had billed to Medicare. The implication of these settlements related to the claims for which HDI already has been paid remains uncertain.

Although we do not anticipate that our new Medicare RAC contract will represent a significant portion of our business going forward, our Medicare RAC contract still represents a future business opportunity for us. However, there could be a material negative impact on our future revenue to the extent that (i) any final determination of amounts owed by us to CMS under HDI's Medicare RAC contract materially exceeds our accrued reserves for such appeals, (ii) we are required to increase or decrease our contractually required reserves with respect to pending appeals due to changes in appeal performance, changes in data provided to us from other entities in the RAC process, or other related factors, (iii) we are required to repay a portion of prior fees associated with the hospital settlements, (iv) we are unable to obtain full payments for properly provided services, or (v) future fees payable to us by CMS are reduced. The occurrence of any of these events or other changes to the Medicare RAC program that materially reduce our revenue or profitability with such program may have an adverse effect on our future business, financial condition, results of operations and cash flows.

A failure to comply with the laws and regulations that apply to companies in our industry regarding individual privacy and information security could subject us to legal actions, fines and penalties and negatively impact our reputation and operations.

As a service provider, we often receive, process, transmit and store sensitive data, including PHI and personally identifiable information of individuals, as well as other financial, confidential and proprietary information belonging to our customers, subsidiaries, data supplies and other third parties from which we obtain information. The use and disclosure of that information is regulated at the federal, state, international and industry levels and we are also obligated by our contractual requirements with customers. For example, we are subject to federal regulation under HIPAA, as amended by HITECH, and the Final Omnibus Privacy, Security, Breach Notification, and Enforcement Rule, as well as various state laws. HIPAA also imposes standards and requirements on our business associates (as defined under HIPAA).

Even though we take measures to comply with all applicable regulations and to ensure our business associates and subcontractors comply with these laws, regulations and rules, we have less than complete control over our business associates' and subcontractors' actions and practices. We may be exposed to data breach risk if there is unauthorized access to one of our or our subcontractors' secure facilities or from lost or stolen laptops or other portable media from current or former employee theft of data containing PHI, from computer hacking, malware, computer viruses or other malicious codes, phishing or other cyber-attacks, from misdirected mailings containing PHI, or other forms of administrative or operational error. If we or our subcontractors fail to comply with applicable laws; if unauthorized parties gain physical access to one of our facilities and steal or misuse confidential information; if we erroneously use or disclose data in a way that is inconsistent with our granted rights; or if such information is misdirected, lost or stolen during transmission or transport, we may suffer damage to our reputation, potential loss of existing customers and difficulty attracting new customers. We could also be exposed to, among other things, unfavorable publicity, governmental inquiry and oversight, allegations by our customers that we have not performed our contractual obligations, costs to provide notifications to affected individuals, fines or other penalties imposed by government regulatory agencies, or litigation by affected parties and possible financial obligations for damages or indemnification obligations related to the theft or misuse of such information, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

In addition, laws, rules and regulations concerning the protection of personal information are subject to frequent change by legislation, regulatory issuances or administrative interpretation. As regulatory focus on privacy issues continues to increase and these laws and regulations continue to expand and become more complex, these potential risks to our business could intensify. Changes in laws or regulations associated with the enhanced protection of certain types of sensitive data, such as healthcare data or other personally identifiable information, along with increased customer demands for enhanced data security infrastructure, could greatly increase our cost of providing our solutions and services, and may subject us to additional liabilities.

We are subject to extensive government regulation, including government and customer audits and investigations relating to our compliance with the laws and regulations applicable to companies in our industry, and a negative finding or other adverse determination could have a material adverse effect on our reputation, business, financial condition, results of operations and cash flows.

Much of our business is regulated by the federal government and the states in which we operate. The laws and regulations governing our operations are generally intended to benefit and protect individual citizens, including government program beneficiaries, other health plan members and providers, and the federal and state governmental agencies administering these laws and regulations have broad latitude to enforce them. As such, we are subject, on an ongoing basis, to various governmental and customer reviews, audits and investigations to verify our compliance with our contracts and applicable laws and regulations, as well as legal actions and enforcement proceedings. For example, because we receive payments from federal and state governmental agencies, we are subject to laws, such as the Federal Acquisition Regulations, the U.S. Foreign Corrupt Practices Act, federal and state employment, equal opportunity and affirmative action laws, and federal and state prompt pay statutes. We are also subject to the Federal False Claims Act and similar state statutes, which permit government law enforcement agencies to institute suits against us for violations and, in some cases, to seek double or treble damages, penalties and assessments. In addition, private citizens, acting as whistleblowers, can sue on behalf of the government under the "*qui tam*" provisions of the Federal False Claims Act and similar statutory provisions in many states.

As we expand into new areas of the healthcare industry, we may develop new or enhanced solutions that may further expose us to requirements under additional statutes and legislative schemes that have previously not been relevant to our business, such as banking and credit reporting statutes. For example, in connection with our acquisition of Eliza, we became subject to the Telephone Consumer Protection Act of 1991, state and federal audio and telephone recording laws, and other related state and federal laws and regulations as a result of the member engagement services that we perform. Increased involvement in analytic or audit work that can have an impact on the eligibility of individuals for medical coverage or specific benefits, or payments made by our customers to providers, could increase the likelihood and incidence of our being subjected to scrutiny or legal actions by parties other than our customers, based on alleged mistakes or deficiencies in our work, with significant resulting costs and strain on our resources.

These laws and regulations, along with the terms of our government contracts, regulate how we do business, what solutions and services we offer and how we interact with customers, providers, other healthcare payers and the public. If the government discovers improper or illegal activities in the course of audits or investigations, we may be subject to various civil and criminal penalties and administrative sanctions, which may include termination of contracts, forfeiture of profits, suspension of payments, fines and suspensions and debarment from doing business with the government. Similarly, if our customers assert that we have failed to properly perform or comply with our contractual obligations, or if the carriers to which we send billings assert that we have failed to properly comply with applicable federal or state billing rules and regulations, we may be required to provide refunds or make payments to resolve such issues. If we are found to be in violation of any applicable law or regulation, or if we receive an adverse review, audit or investigation from a government agency or customer related to our compliance with such laws or regulations or the terms of our government contracts, any resulting negative publicity, penalties or sanctions could have an adverse effect on our reputation in the industry, impair our ability to compete for new contracts or bid in response to RFPs in one or more jurisdictions and have a material adverse effect on our business, financial condition, results of operations and cash flows.

Federal and state governments may limit or prohibit outsourcing of certain programs or functions, refuse to grant consents or waivers necessary to permit private entities to perform such work, or impose other limitations on outsourcing or certain vendors that may obstruct cost-effective performance of our contracts.

Federal or state governments could limit or prohibit private contractors like us from operating or performing elements of certain government functions or programs. As a condition of receiving federal funding, state, and local governments may be required to operate such programs with government employees. Under current law, in order to privatize certain functions of government programs, the federal government must grant a consent and/or waiver to the petitioning state or local agency. If the federal government does not grant a necessary consent or waiver, the state or local agency will be unable to outsource that function to a commercial entity. Such a situation could eliminate a contracting opportunity or reduce the value of an existing contract.

Similarly, other state or federal limitations on outsourcing certain types of work to vendors that supplement our workforce could make it more difficult for us to fulfill our contracts in a cost-effective manner. Certain areas of our operations use or involve vendor or subcontractor personnel located outside of the United States, who may (under carefully controlled circumstances) access certain PHI in the course of assisting us with various elements of the services we provide to our customers. The federal government and a number of states have considered laws or issued rules, regulations, and orders that would limit, restrict or wholly prohibit the use of offshore labor in performance of government contracts, or impose sanctions for the use of such resources. Some of our customers have already chosen to contractually limit or restrict our ability to use offshore resources. Intensified restrictions of this type or associated penalties could raise our costs of doing business, expose us to unexpected fines or penalties, increase the prices we must charge to customers to realize a profit and eliminate or significantly reduce the value of existing contracts or potential contract opportunities, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may be precluded from bidding on or performing certain work due to work we currently perform, which could materially adversely affect our business, financial condition, results of operations and cash flows.

Various laws, regulations and administrative policies prohibit companies from performing work for government agencies in capacities that might be viewed to create an actual or perceived conflict of interest. In particular, CMS has stringent conflict of interest rules, which can limit our bidding for specific work for CMS, or for other contracts that might conflict, or be perceived by CMS to conflict, with contractual work for CMS. State governments and managed care organizations also have conflict of interest restrictions that could limit our ability to bid for certain work and impede our overall sales strategy. As we continue to expand and diversify our business operations, the likelihood that customers or potential customers will perceive conflicts of interest between our various subsidiaries, solutions, services, activities and customer relationships may increase. Such conflicts, whether real or perceived, could result in a loss of contracts or additional internal structural barriers that delay operational efficiency. We may also need to divest certain existing businesses or reorganize our current management and personnel structure, as well as our corporate organization and entity structure, in order to qualify for new contract awards or to appropriately mitigate conflicts and otherwise accommodate the needs as a company that is expanding in complexity. Our failure to devote sufficient care, attention and resources to managing these adjustments may result in technical or administrative errors that could expose us to potential liability or adverse regulatory action. In addition, conflict of interest rules and standards change frequently, and are subject to varying interpretations and varying degrees and consistency of enforcement. We may not be successful in navigating these restrictions. If we are prevented from expanding our business or are unable to effectively implement our strategic initiatives due to real or perceived conflicts of interest, our business, financial condition, results of operations and cash flows could be materially adversely affected.

Risks Related to Our Common Stock

The market price of our common stock may be volatile, and fluctuations in the price of our common stock may materially adversely affect our business, financial condition, results of operations and cash flows and materially adversely affect our shareholders.

The market price of our common stock has fluctuated widely and may continue to do so. During the 52-week period ended December 31, 2017, our common stock intra-day traded on the Nasdaq Global Select Market as high as $20.90 per share and as low as $11.01 per share. Our stock price is subject to fluctuation as a result of a variety of factors, including factors beyond our control, such as the risk factors described above and those which are related to:

- quarterly or annual earnings results or those of other companies in our industry;
- changes in estimates of our performance or recommendations by securities analysts or in the operating and stock price performance of other companies that investors deem comparable to our company;
- news reports relating to trends, concerns and other issues in the healthcare industry, including perceptions in the marketplace regarding us and our competitors;
- the financial projections we publicly provide and any changes in or failure to meet those projections;
- future sales of shares of common stock in the public market by our executive officers or directors;
- any other changes in the amount of our outstanding shares, including as a result of share repurchases;
- actual or proposed changes in federal or state laws affecting the healthcare industry;
- changes in accounting principles;
- the public's response to our press releases, or other public announcements, including our filings with the SEC;
- securities class actions, shareholder lawsuits or other litigation; and
- market conditions in the industry and the economy as a whole.

In addition, the stock market often experiences significant price and volume fluctuations. These broad market fluctuations may materially adversely affect the market price of our common stock regardless of our operating performance. When the market price of a company's stock drops significantly, shareholders may institute securities class action litigation against that company. Any litigation against us could cause us to incur substantial costs, divert the time and attention of our management and other resources or otherwise harm our business.

Because we do not intend to pay dividends, you will benefit from an investment in our common stock only if it appreciates in value.

We have not paid or declared cash dividends on any of our capital stock to date and currently intend to retain our future earnings, if any, to fund the development and continued growth of our business and repurchase shares opportunistically from time to time. As a result, we do not expect to pay any cash dividends in the foreseeable future. The success of your investment in our common stock will likely depend entirely upon any future appreciation. There is no guarantee that our common stock will appreciate in value or even maintain the price at which you purchased your shares.

Certain provisions of our certificate of incorporation and bylaws could discourage unsolicited takeover attempts, which could depress the market price of our common stock.

Our certificate of incorporation authorizes the issuance of up to 5,000,000 shares of "blank check" preferred stock with such designations, rights and preferences as may be determined by our Board of Directors. Accordingly, our Board of Directors is empowered, without shareholder approval, to issue preferred stock with dividend, liquidation, conversion, voting or other rights, that could adversely affect the voting power or other rights of holders of our common stock. In the event of issuance, preferred stock could be utilized, under certain circumstances, as a method of discouraging, delaying, or preventing a change in control. Although we have no present intention to issue any shares of preferred stock, it is possible that we will do so in the future. In addition, our bylaws currently provide for a classified Board of Directors, require advance notice of shareholder proposals for business to be conducted at meetings of our shareholders and for nominations of candidates for election to our Board of Directors and provide for Delaware as an exclusive forum for certain disputes with our shareholders, all of which could also have the effect of discouraging a change of control.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Location	Approximate Square Footage	Owned/Leased
Irving, TX	242,260	Owned
Las Vegas, NV	63,593	Leased
Westerville, OH	25,212	Leased
Irvine, CA	23,790	Leased
New York , NY	12,259	Leased
Charlestown, MA	13,628	Leased
All Other Locations	77,914	Leased

As of December 31, 2017, we leased approximately 111,000 square feet of office space in 20 other locations throughout the United States, the leases for which have expiration dates through 2024. See "Lease Commitments" in Note 13 to the Consolidated Financial Statements in Part II, Item 8 for additional information. In general, we believe our facilities are suitable to meet our current and reasonably anticipated future needs.

Item 3. Legal Proceedings

The information set forth under the caption "Litigation" in Note 13 to the Consolidated Financial Statements in Part II, Item 8 is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

Market Information

Our common stock is included in the Nasdaq Global Select Market, under the symbol HMSY. The table below summarizes the high and low closing sales prices per share for our common stock for the periods indicated, as reported on the Nasdaq Global Select Market.

Quarter Ended	March 31,	June 30,	September 30,	December 31,
Fiscal Year 2017				
High	$ 20.33	$ 20.68	$ 20.15	$ 20.32
Low	$ 17.76	$ 17.91	$ 17.36	$ 15.55
Fiscal Year 2016				
High	$ 14.42	$ 18.38	$ 23.46	$ 22.03
Low	$ 10.22	$ 13.67	$ 17.44	$ 16.18

Repurchases of Shares of Common Stock

See "Equity' in Note 9 to the Consolidated Financial Statements in Part II, Item 8 for additional information regarding share repurchases. The following are our monthly stock repurchases for the fourth quarter of fiscal year 2017, all of which were made as part of publicly announced plans or programs:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Program[1]	Maximum Approximate Dollar Value of Shares That May Yet Be Purchased Under the Program
October 1, 2017 to October 31, 2017	—	$ —	—	$ —
November 1, 2017 to November 30, 2017	674,813	16.23	674,813	39,044,882
December 1, 2017 to December 31, 2017	190,502	16.61	190,502	35,880,666
October 1, 2017 to December 31, 2017	**865,315**	**$ 16.33**	**865,315**	

(1) On November 1, 2017, the Board of Directors of the Company approved a share repurchase program authorizing the Company to repurchase up to $50.0 million of shares of its common stock from time to time on the open market or in privately negotiated or other transactions. We publicly announced the program in November 2017. The repurchase program is authorized for a period of up to two years, and may be suspended or discontinued at any time. In order to facilitate repurchases, the Company may enter into a Rule 10b5-1 plan from time to time, which would permit shares to be repurchased when the Company might otherwise be precluded from doing so under insider trading laws or because of a self-imposed trading blackout period. All repurchases for the periods presented were made under the program and using cash resources.

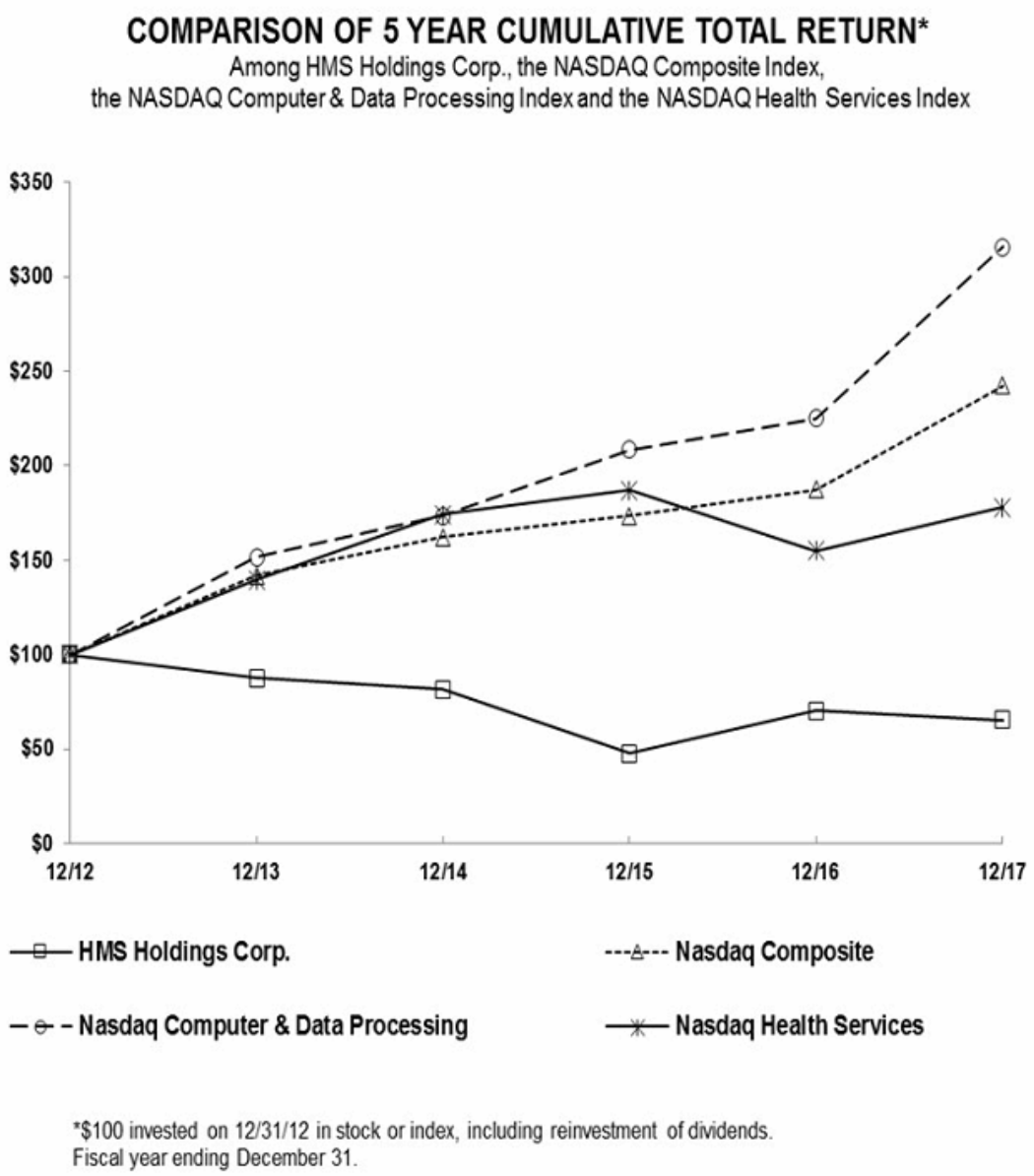
Holders

As of the close of business on February 16, 2018, there were 263 holders of record of our common stock.

Dividends

We have not paid or declared any cash dividends on our common stock and do not anticipate paying cash dividends in the foreseeable future. Our current intention is to retain future earnings to support the continued growth of our business and possibly for the repurchase of shares from time to time. Our Board of Directors will evaluate various factors, including, without limitation, our future earnings, operating cash flows, financial condition, results of operations and capital requirements in determining whether to pay any cash dividends in the future. In addition, our Credit Agreement generally limits, subject to certain exceptions, our ability to make certain payments or distributions with respect to our capital stock, including cash dividends to our shareholders. These restrictions are described in more detail under the headings “Credit Agreement” and “Liquidity and Capital Resources” in Part II, Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations, and in Note 8 to the Consolidated Financial Statements in Part II, Item 8.

Comparative Stock Performance Graph



The graph below compares the cumulative total shareholder return on our common stock with the cumulative total shareholder returns of the Nasdaq Composite Index, the Nasdaq Computer & Data Processing Index and the Nasdaq Health Services Index assuming an investment of $100 on December 31, 2012 and the reinvestment of dividends through the year ended December 31, 2017.

	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16	12/31/17
HMS Holdings Corp.	$ 100.00	$ 87.58	$ 81.56	$ 47.61	$ 70.06	$ 65.39
Nasdaq Composite	$ 100.00	$ 141.63	$ 162.09	$ 173.33	$ 187.19	$ 242.29
Nasdaq Computer & Data Processing	$ 100.00	$ 151.54	$ 173.50	$ 208.25	$ 224.83	$ 315.58
Nasdaq Health Services	$ 100.00	$ 139.64	$ 173.97	$ 187.09	$ 155.05	$ 177.93

Notwithstanding anything to the contrary set forth in any of our previous or future filings under the Securities Act or the Exchange Act that might incorporate by reference this 2017 Form 10-K or future filings made by us under those statutes, the Comparative Stock Performance Graph is not deemed filed with the SEC, is not deemed soliciting material and shall not be deemed incorporated by reference into any of those prior filings or into any future filings we make under those statutes, except to the extent that we specifically incorporate such information by reference into a previous or future filing, or specifically request that

such information be treated as soliciting material, in each case under those statutes.

Item 6. Selected Financial Data

The following table sets forth selected consolidated financial amounts at and for each of the five fiscal years in the period ended December 31, 2017. It should be read in conjunction with Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, and the Consolidated Financial Statements and Notes thereto, in Part II, Item 8 of this 2017 Form 10-K.

Statement of Operations Data

	Years ended December 31,				
(in thousands, except per share amounts)	**2017**	**2016**	**2015**	**2014**	**2013**
Revenue	$ 521,212	$ 489,720	$ 474,216	$ 443,225	$ 491,762
Total operating expenses	470,781	432,051	426,644	409,021	414,584
Operating income	50,431	57,669	47,572	34,204	77,178
Interest expense	(10,871)	(8,519)	(7,812)	(7,931)	(12,460)
Interest income	295	321	49	57	71
Other income, net	—	—	—	—	801
Income before income taxes	39,855	49,471	39,809	26,330	65,590
Income taxes	(199)	11,835	15,282	12,383	25,593
Net income	$ 40,054	$ 37,636	$ 24,527	$ 13,947	$ 39,997
Net Income Per Common Share					
Basic income per common share:					
Net income per common share - basic	$ 0.48	$ 0.45	$ 0.28	$ 0.16	$ 0.46
Diluted income per common share:					
Net income per common share - diluted	$ 0.47	$ 0.43	$ 0.28	$ 0.16	$ 0.45
Weighted average shares:					
Basic	83,821	84,221	87,881	87,673	87,598
Diluted	85,088	86,987	88,361	88,164	88,344

Balance Sheet Data

	Years ended December 31,				
(in thousands)	**2017**	**2016**	**2015**	**2014**	**2013**
Cash and cash equivalents	$ 83,313	$ 175,999	$ 145,610	$ 133,116	$ 93,366
Working capital	$ 199,967	$ 277,478	$ 240,456	$ 226,271	$ 199,069
Total assets	$ 975,160	$ 882,755	$ 850,597	$ 880,988	$ 878,602
Revolving credit facility	$ 240,000	$ 197,796	$ 197,796	$ 197,796	$ 232,796
Total shareholders' equity	$ 606,229	$ 556,610	$ 524,702	$ 533,090	$ 502,439

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following Management's Discussion and Analysis is intended to help the reader understand the results of operations and financial condition of HMS. You should read this discussion and analysis in conjunction with the other sections of this 2017 Form 10-K, including the Cautionary Note Regarding Forward-Looking Statements appearing prior to Part I, the information in Part I, Item 1A, and the Consolidated Financial Statements and Notes thereto in Part II, Item 8. The historical results set forth in Part II, Item 6, Item 7 and Item 8 of this 2017 Form 10-K should not be taken as necessarily indicative of our future operations or financial results.

Business Overview

HMS is a leading provider of cost containment solutions in the U.S. healthcare marketplace. Using innovative technology as well as extensive data services and powerful analytics, we deliver coordination of benefits, payment integrity and care management and consumer engagement solutions through our operating subsidiaries to help healthcare payers improve performance and outcomes. We are managed and operate as one business segment with a single management team that reports to the Chief Executive Officer. Together our various services help our customers recover improper payments; prevent future improper payments; reduce fraud, waste and abuse; better manage the care that members receive; engage healthcare consumers to improve outcomes and increase retention; and achieve regulatory compliance.

We serve state Medicaid programs, commercial health plans, federal government health agencies, government and private employers, CHIPs and other healthcare payers and sponsors. We also serve as a subcontractor for certain business outsourcing and technology firms. As of December 31, 2017, our customer base included the following:

- over 40 state Medicaid programs;
- approximately 325 health plans, including 23 of the top 25 health plans nationally (based on membership) in support of their multiple lines of business, including Medicaid managed care, Medicare Advantage and group and individual health;
- over 225 private employers;
- CMS, the Centers for Disease Control and Prevention, and the Department of Veterans Affairs; and
- PBMs, third-party administrators and other risk-bearing entities, including independent practice associations, hospital systems, ACOs and specialty care organizations.

Outlook

We have grown our business both organically, through internal innovation and the development of new products and services, as well as by acquisition of businesses whose core services strengthened our overall mission to help our customers contain healthcare costs. Our largest growth during 2017 was with commercial health plan customers, both organically and via the acquisition of Eliza, and we currently expect this marketplace to present the greatest opportunity for growth in the year ahead. In addition to cross-sales of care management and consumer engagement solutions and other internal growth initiatives in 2018, various factors related to the macro healthcare environment are expected to contribute to our expected growth, including:

- an aging U.S. population with high-cost, chronic conditions and often co-morbidities.
- projected growth in Medicare enrollment from 2016 to 2025 is estimated by CMS to be at 28%, with a projected increase in spending of 88% during this same time period;
- Medicaid expenditures are projected to grow 64% from 2016 to 2025 based on CMS NHE projections;
- government program payment error rates remain high at approximately 10%;

- more than half of the U.S. population is projected by CMS to remain covered by employer-sponsored plans; and
- increased healthcare industry focus on improved population health, enhanced consumer outcomes and experience, and reduced costs.

We plan to drive our future growth by leveraging our expertise to expand product offerings, attracting new customers and broadening our relationships with current customers through the introduction of new services, audit strategies and claim types. Our goal is to develop and build on existing partnerships with our state, federal and commercial health plan customers to provide services that better address their business needs and promote consumer engagement and satisfaction in the constantly evolving healthcare marketplace. We also expect to continue increasing recovery yields from our current products by enhancing our operating and organizational efficiency and by implementing new big data technologies that will improve the quality and effectiveness of our service offerings.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with U.S. GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. We evaluate our estimates and assumptions on an ongoing basis. Our estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Our actual results could differ from these estimates. The accounting policies that we believe to be the most critical to an understanding of our financial condition and results of operations and that require the most complex and subjective management judgments are below:

Revenue Recognition

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
We provide services under contracts that contain various fee structures, including contingency fee and fixed fee arrangements. Revenue is recognized when a contract exists, services have been provided to the customer, the fee is fixed and determinable, and collectability is reasonably assured. In addition, the Company has a limited number of contracts with the federal government which are generally cost-plus or time and materials based. Revenue on cost-plus contracts is recognized based on costs incurred plus the negotiated fee earned. Revenue on time and materials contracts is recognized based on hours worked and expenses incurred. In addition, some of our contracts may include customer acceptance provisions.	Formal customer sign-off is not always necessary to recognize revenue, provided we objectively demonstrate that the criteria specified in the acceptance provision are satisfied. Due to the range of products and services that HMS provides and the differing fee structures associated with each type of contract, revenue may be recognized in irregular increments. A portion of our revenue is recorded net of an estimate of future revenue adjustments, with an offsetting entry to accounts receivable allowance, based on historical patterns of billing adjustments, length of operating and collection cycle and customer negotiations, behaviors and payment patterns. Changes in these estimates are recorded to revenue in the period of change.	If we were to change any of these judgments or estimates, it could cause a material increase or decrease in the amount of revenue we report in a particular period.

Estimated Liability for Appeals

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
Under our contracts with certain commercial health plan customers and our Medicare RAC contracts with CMS, we recognize revenue when HMS claim findings are sent to the Company's customers for offset against future claim payments to providers. These contracts permit providers the right to appeal HMS claim findings and to pursue additional appeals if the initial appeal is found in favor of HMS's customer. The total estimated liability for appeals balance was $30.8 million as of each of December 31, 2017 and December 31, 2016.	The appeal process established under the Medicare RAC contract with CMS includes five levels of appeals and resolution of appeals can take substantial time to resolve. HMS records (i) a liability for findings which have been adjudicated in favor of providers and (ii) an estimated liability based on the amount of revenue that is subject to appeals and which is probable of being adjudicated in favor of providers following their successful appeal. Our estimate is based on the Company's historical experience.	To the extent the amount to be returned to providers following a successful appeal exceeds or is less than the amount recorded, revenue in the applicable period would be reduced or increased by such amount. Any future changes to any of our customer contract, including modifications to the Medicare RAC contract, may require us to apply different assumptions that could materially affect both the Company's revenue and estimated liability for appeals in future periods.

Business Combinations

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
We record assets acquired and liabilities assumed in a business combination based upon their acquisition date fair values. Goodwill is the excess of acquisition costs over the fair values of assets and liabilities of acquired businesses. During the measurement period, which is up to one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings.	In most instances there is not a readily defined or listed market price for individual assets and liabilities acquired in connection with a business, including intangible assets. We determine fair value through various valuation techniques including discounted cash flow models, quoted market values and third party independent appraisals, as considered necessary. Significant assumptions used in those techniques include, but are not limited to, growth rates, discount rates, customer attrition rates, expected levels of revenues, earnings, cash flows and tax rates.	The use of different valuation techniques and assumptions are highly subjective and inherently uncertain and, as a result, actual results may differ materially from estimates.

Impairment of Goodwill

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
Goodwill is subject to a periodic assessment for impairment. We assess goodwill for impairment on an annual basis as of June 30th of each year or more frequently if an event occurs or changes in circumstances would more likely than not reduce the fair value of a reporting unit below its carrying amount. Assessment of goodwill impairment is at the HMS Holdings Corp. entity level as we operate as a single reporting unit.	We have the option to perform a qualitative assessment to determine if impairment is more likely than not to have occurred. When the optional qualitative assessment of goodwill impairment is performed, significant judgment is required in the assessment of qualitative factors including but not limited to an evaluation of macroeconomic conditions as they relate to our business, industry and market trends, as well as the overall future financial performance of our reporting units and future opportunities in the markets in which they operate. If we can support the conclusion that it is more likely than not that the fair value of a reporting unit is greater than its carrying amount using the optional qualitative assessment, then the Company would not need to perform the two-step impairment test. If the Company cannot support such a conclusion, or the Company does not elect to perform the qualitative assessment, then the first step of the goodwill impairment test is used to identify potential impairment by comparing the fair value of the reporting unit with its carrying amount, including goodwill.	We completed the annual impairment test as of June 30, 2017 using the optional qualitative assessment and determined no impairment existed. The Company's carrying amount of goodwill was $487.6 million as of December 31, 2017. There were no impairment charges related to goodwill during the years ended December 31, 2017, 2016 or 2015. However, if actual results are not consistent with our estimates or assumptions, we may be exposed to an impairment charge that could materially adversely impact our consolidated financial position and results of operations.

Impairment of Long-Lived and Intangible Assets

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
Long-lived assets, including property and equipment and intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. When indicators exist, recoverability of assets is measured by a comparison of the carrying value of the asset group to the estimated undiscounted future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized and charged to earnings is measured by the amount by which the carrying value of the asset group exceeds the fair value of the assets.	We use significant judgment in assessing events or changes in circumstances which indicate that the carrying amount of the asset may not be recoverable.	The Company's carrying amount of Long-lived assets, including property and equipment and intangible assets was $190.1 million as of December 31, 2017. The Company did not recognize any impairment charges related to long-lived and intangible assets during the years ended December 31, 2017, 2016 or 2015. However, if actual results are not consistent with our estimates or assumptions, we may be exposed to an impairment charge that could materially adversely impact our consolidated financial position and results of operations.

Valuation of Stock-Based Compensation

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
The determination of the fair value of the options on the grant date using the Black-Scholes pricing model and/or the Monte Carlo Simulation is affected by the Company's stock price, as well as assumptions regarding a number of complex and subjective variables. Certain key variables include: the Company's expected stock price volatility over the expected term of the awards; a risk-free interest rate; and any expected dividends. The fair value of all awards also includes an estimate of expected forfeitures.	We estimate stock price volatility based on the historical volatility of the Company's common stock and estimate the expected term of the awards based on the Company's historical option exercises for similar types of stock option awards. The assumed risk-free interest rate is based on the yield on the measurement date of a zero-coupon U.S. Treasury bond with a maturity period equal to the option's expected term. The Company does not anticipate paying any cash dividends in the foreseeable future and therefore, uses an expected dividend yield of zero in the option valuation models. Forfeitures are estimated based on historical experience.	If we were to change any of these judgments or estimates, it could cause a material increase or decrease in the amount of stock compensation expense we report in a particular period. For example, if actual forfeitures vary from estimates, a difference in compensation expense will be recognized in the period the actual forfeitures occur.

Income Taxes

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
Income taxes are accounted for under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. This method also requires the recognition of future tax benefits for net operating loss carry-forwards.	Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized as income or expense in the period that includes the enactment date. A valuation allowance is provided against deferred tax assets to the extent their realization is not more likely than not. Uncertain income tax positions are accounted for by prescribing a minimum recognition threshold that a tax position is required to meet before being recognized in the financial statements. We make adjustments to these reserves in accordance with the income tax accounting guidance when facts and circumstances change, such as the closing of a tax audit or the refinement of an estimate.	To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made, and could have a material impact on our financial condition and operating results. Although the Company believes that it has adequately reserved for uncertain tax positions (including interest and penalties), it can provide no assurance that the final tax outcome of these matters will not be materially different.

Contingencies

Description	Judgments and Uncertainties	Effect if Actual Results Differ from Assumptions
From time to time, we are involved in legal proceedings in the ordinary course of business. We assess the likelihood of any adverse judgments or outcomes to these contingencies as well as potential ranges or probable losses and establish reserves accordingly.	We record accruals for outstanding legal matters when we believe it is probable that a loss will be incurred and the amount can be reasonable estimated. Significant judgment is required to determine both probability and the estimated amount. We review these provisions at least quarterly and adjusts the provisions to reflect the impact of negotiations, settlements, rulings, advice of legal counsel and updated information.	Litigation is inherently unpredictable and is subject to significant uncertainties, some of which are beyond the Company's control. The amount of reserves required may change in future periods due to new developments in each matter or changes in approach to a matter such as a change in settlement strategy which could have a material impact on our financial condition and operating results.

For further information on these critical accounting policies and all other significant accounting policies refer to the discussion under "Business and Summary of Significant Accounting Policies" in our Note 1 to the Consolidated Financial Statements in Part II, Item 8.

Results of Operations

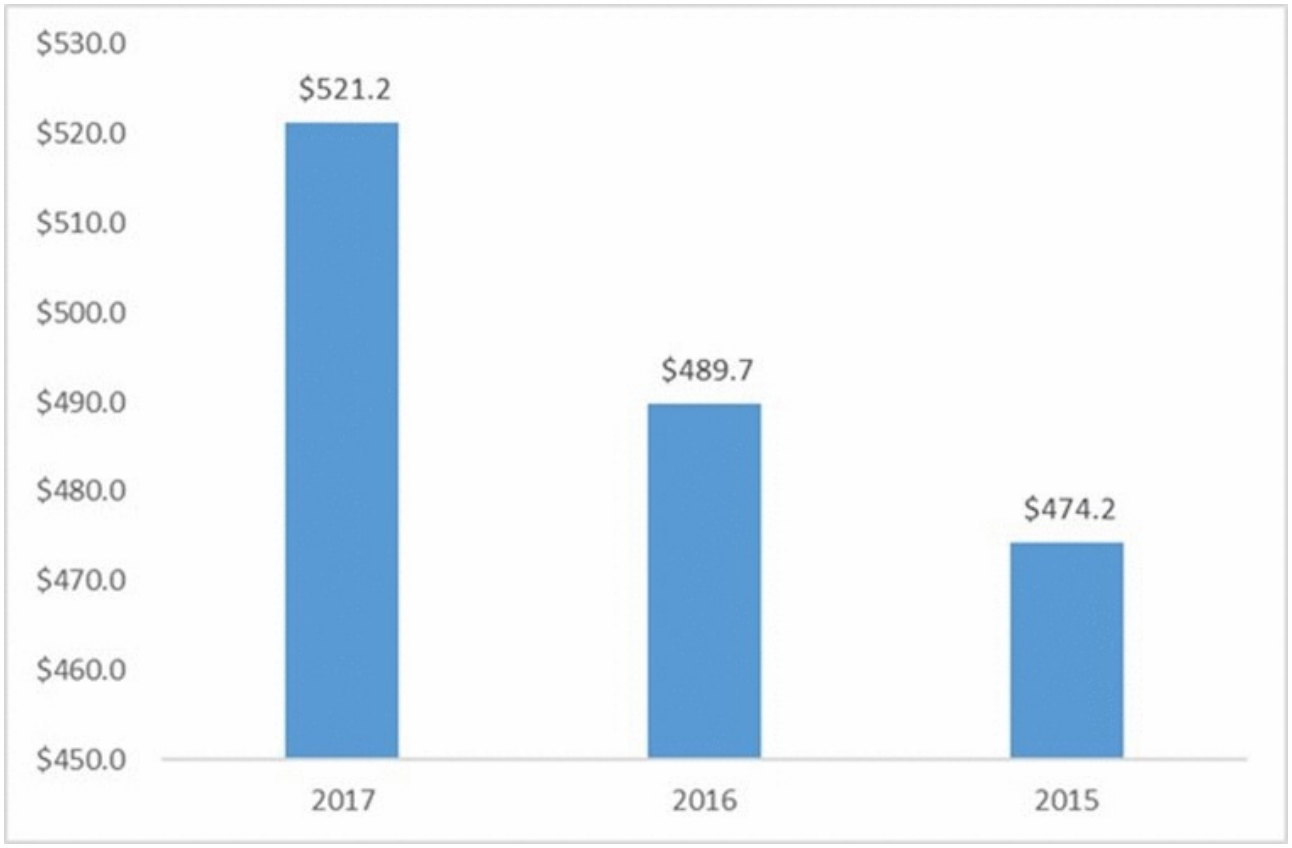
2017 Highlights

- Significantly expanded market penetration with the acquisition of Eliza;
- Amended our existing Credit Agreement; and
- Repurchased approximately 865,000 shares of common stock for $14.1 million.

Comparison of 2017 to 2016 and 2016 to 2015

Dollars in millions	Year ended December 31,			$ Change	% Change	% Change	% Change
	2017	2016	2015	2017 vs 2016		2016 vs 2015	
Revenue	$ 521.2	$ 489.7	$ 474.2	$ 31.5	6.4%	$ 15.5	3.3%
Cost of Services :							
Compensation	202.0	189.3	178.3	12.7	6.7	11.0	6.2
Data Processing	45.7	37.3	40.9	8.4	22.5	(3.6)	(8.8)
Occupancy	17.2	14.0	15.8	3.2	22.9	(1.8)	(11.4)
Direct project costs	41.4	46.3	51.5	(4.9)	(10.6)	(5.2)	(10.1)
Other operating costs	28.4	27.8	28.9	0.6	2.2	(1.1)	(3.8)
Amortization of acquisition related software and intangible assets	30.4	28.0	28.1	2.4	8.6	(0.1)	(0.4)
Total Cost of Services	365.1	342.7	343.5	22.4	6.5	(0.8)	(0.2)
Selling, general and administrative expenses	105.7	89.4	83.1	16.3	18.2	6.3	7.6
Total Operating Expenses	470.8	432.1	426.6	38.7	9.0	5.5	1.3
Operating Income	50.4	57.6	47.6	(7.2)	(12.5)	10.0	21.0
Interest expense	(10.8)	(8.5)	(7.8)	(2.3)	27.1	(0.7)	9.0
Interest income	0.3	0.3	-	-	-	0.3	-
Income before income taxes	39.9	49.4	39.8	(9.5)	(19.2)	9.6	24.1
Income taxes	(0.2)	11.8	15.3	(12.0)	(101.7)	(3.5)	(22.9)
Net Income	$ 40.1	$ 37.6	$ 24.5	$ 2.5	6.6%	$ 13.1	53.5%

Revenue



Revenue in Millions

2017 vs. 2016

During the year ended December 31, 2017, revenue was $521.2 million, an increase of $31.5 million or 6.4% compared to $489.7 million for the year ended December 31, 2016.

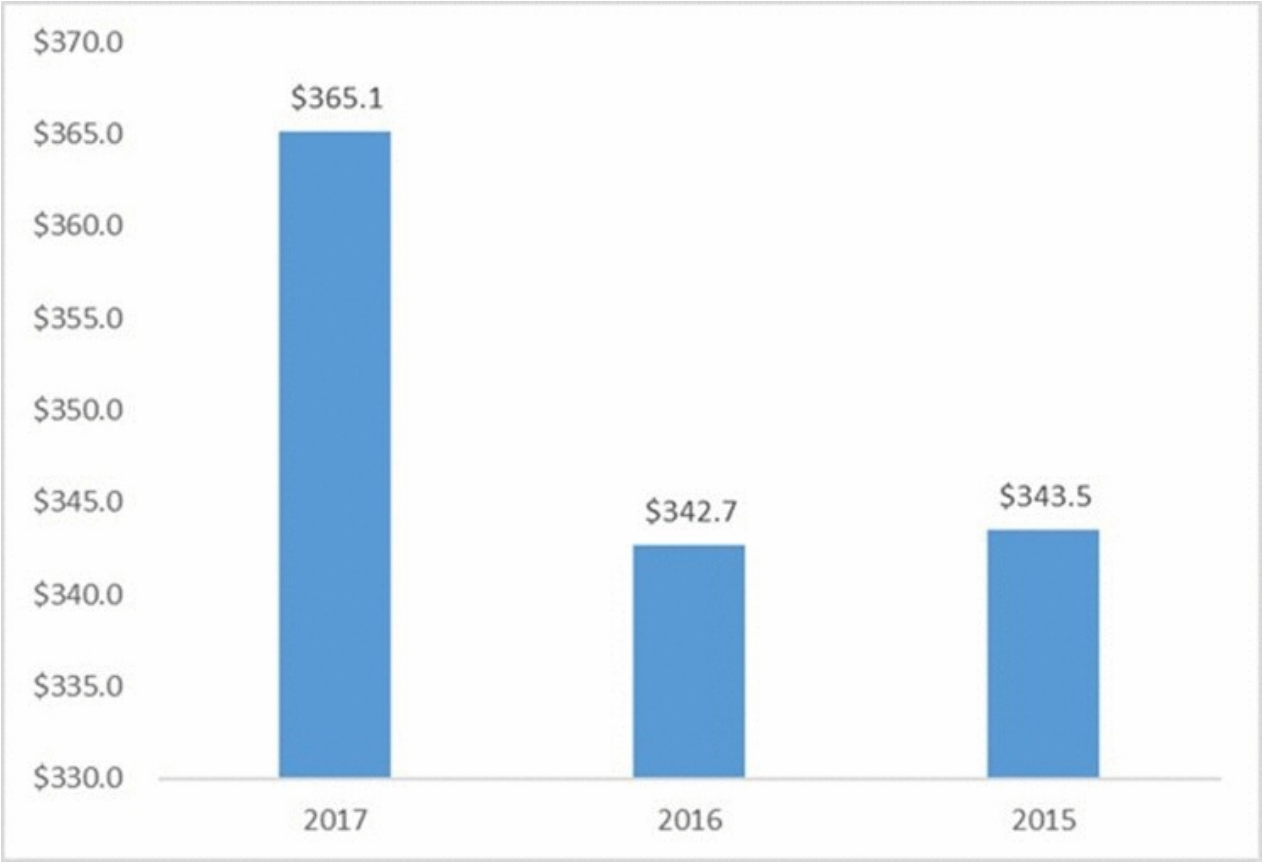
- By product:
  - Coordination of benefits product revenue increased $29.0 million or 8.2% which was attributable to yield improvements and the addition of Medicaid enrollees which entered our customer eligibility files in 2017.
  - Analytical services product revenue increased $2.5 million or 1.9% which was attributable to Eliza contributing revenue of $30.4 million since its acquisition in April 2017 and revenue from Essette increasing $2.9 million as compared to prior year. These increases were offset by decreases totaling $30.8 million comprised of Medicare RAC revenue of $14.7 million because the Medicare RAC D program ceased generating revenue in late 2016, as expected, and program integrity revenue of $16.1 million due to various contract completions and expirations.
- By market:
  - Commercial health plan market revenue increased $39.0 million or 17.0% which was attributable to Eliza contributing revenue of $30.4 million since its acquisition in April 2017, Essette increasing revenue $2.9 million as compared to prior year and expanded commercial health plan scopes, including the addition of health plans to current contracts and yield improvements.
  - State government market revenue grew by $7.9 million or 3.6%, which was attributable to expanded scopes and yield improvements.
  - Federal government market revenue decreased $15.4 million, which was primarily attributable to a reduction of Medicare RAC revenue because the Medicare RAC D program ceased generating revenue in late 2016, as expected.

2016 vs. 2015

During the year ended December 31, 2016, revenue was $489.7 million, an increase of $15.5 million or 3.3% compared to $474.2 million for the year ended December 31, 2015.

- By product:
  - Coordination of benefits product revenue increased $16.2 million or 4.8% which was primarily attributable to an increase in subrogation revenue.
  - Analytical services product revenue decreased $0.7 million or 0.5% which was attributable to decreases in Medicare RAC revenue of $3.4 million, employer services revenue of $1.8 million due to various contract completions and expirations and eligibility services revenue of $0.5 million. These decreases were offset by a $4.1 million increase in our program integrity revenue which was attributable to expanded scopes and yield improvements and $0.9 million of revenue contributed by Essette in 2016 after the date of its acquisition.
- By market:
  - Commercial health plan market revenue increased $27.2 million or 13.4%, which was attributable to expanded scopes, including adding additional health plans to current customer contracts, and yield improvements.
  - State government market revenue decreased $7.0 million or 3.1%, which was attributable to a reduction in revenue from certain customers.
  - Federal government market revenue decreased $4.7 million or 10.3%, which was primarily attributable to a reduction of Medicare RAC activity due to delays in contract reprocurement.

Cost of Services



Cost of Services in millions

2017 vs. 2016

During the year ended December 31, 2017, total cost of services was $365.1 million, an increase of $22.4 million or 6.5% compared to $342.7 million for the year ended December 31, 2016. This change resulted primarily from increases in compensation expense of $12.8 million, data processing expense of $8.4 million, and amortization of intangibles expense of $2.4 million.

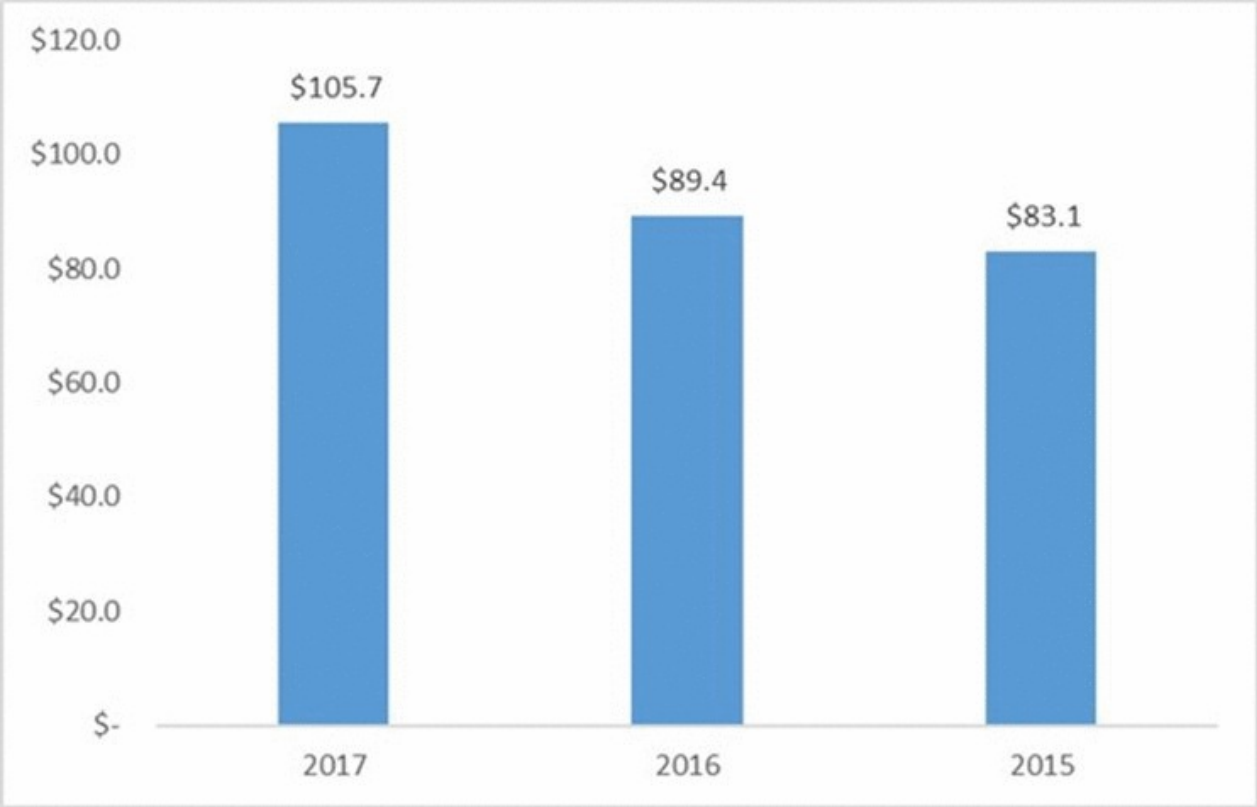
- The Eliza acquisition and the related compensation, data processing, occupancy and amortization of intangibles expenses incurred since the transaction represents $23.4 million of the increase.
- Excluding Eliza, total cost of services decreased by $1.0 million which was primarily related to a reduction in direct project costs partially offset by increases in data processing and compensation expenses.

2016 vs. 2015

During the year ended December 31, 2016, total cost of services was $342.7 million, a decrease of $0.8 million or 0.2% compared to $343.5 million for the year ended December 31, 2015.

- Direct project costs decreased by $5.2 million primarily related to the reduction of Medicare RAC activity.
- Data processing expense decreased by $3.6 million primarily related to a reduction in depreciation expense.
- Occupancy expense decreased by $1.8 million related to the closure of an office in 2015.
- Other operating expenses decreased by $1.1 million related to net decreases of temporary staff, subcontractors and consulting fees.
- Compensation expense increased by $11.1 million related to additional salaries, variable compensation and fringe benefits expenses partially offset by a decrease in stock-based compensation expense.

Selling, General and Administrative expenses



SG&A in millions

2017 vs. 2016

During the year ended December 31, 2017, SG&A expense was $105.7 million, an increase of $16.3 million or 18.2% compared to $89.4 million for the year ended December 31, 2016.

- The Eliza acquisition and related transaction fees and other SG&A expenses incurred since its acquisition represented $8.7 million of the increase.
- Excluding Eliza, stock compensation expense also increased by $7.3 million primarily due to stock compensation expense for retirement eligible employees.

2016 vs. 2015

During the year ended December 31, 2016, SG&A expense was $89.4 million, an increase of $6.3 million or 7.6% compared to $83.1 million for the year ended December 31, 2015.

- Increases totaling $14.1 million were comprised of compensation costs of $6.1 million, consulting expense of $4.0 million, fringe benefits expense of $1.6 million, and other expenses of $2.4 million.
- These increases were partially offset by a $7.8 million reduction in legal fees and settlements.

Income Taxes

2017 vs. 2016

During the year ended December 31, 2017, we recorded an income tax benefit of ($0.2) million, a decrease of $12.0 million compared to the year ended December 31, 2016.

- On December 22, 2017, the 2017 Tax Act was signed into law and includes provisions reducing the federal tax rate for years beginning in 2018 from 35% to 21%.
- Our effective tax rate was (0.5%) for the year ended December 31, 2017 compared to an effective tax rate of 23.9% for the year ended December 31, 2016. The decrease is primarily due to the revaluation of our deferred tax liabilities based on the reduced federal tax rate described above.
- Our normalized effective tax rate of 36.1% for 2017 is comparable to our normalized effective tax rate of 36.2% for 2016.

2016 vs. 2015

During the year ended December 31, 2016, we recorded income tax expense of $11.8 million, a decrease of $3.5 million compared to the year ended December 31, 2015.

- Our effective tax rate decreased from 38.4% to 23.9%, which reflects a $6.2 million tax benefit recognized in the third quarter of 2016 that was related to prior period R&D Credits and Section 199 Deductions.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Credit Agreement

In May 2013, we entered into the Credit Agreement with certain lenders and Citibank, N.A. as administrative agent. The Credit Agreement originally provided for an initial $500 million five-year revolving credit facility maturing on May 3, 2018. The obligations and amounts due under the original revolving credit facility were secured by a first security priority interest in all or substantially all of our and our material 100% owned subsidiaries' assets. The original revolving credit facility contained customary representations and warranties, affirmative and negative covenants, including financial covenants, and events of default.

In March 2017, we amended the Credit Agreement to allow, among other things, an extension of our requirement to furnish to Citibank, N.A., as administrative agent, and the lenders party to the Credit Agreement, copies of financial statements and other information within 90 days of the fiscal year-end to 180 days for the fiscal year-ended December 31, 2016. We furnished the required financial statements, which included our audited consolidated balance sheet and related statements of income, stockholders' equity and cash flows, within the extended time period.

Amended Revolving Facility

On December 19, 2017, we entered into an amendment to the Credit Agreement that, among other things, provides for an extension of the maturity date of our existing senior secured revolving credit facility, which includes a $50 million sublimit for the issuance of letters of credit and a $25 million sublimit for swingline loans. In addition, the Amended Revolving Facility includes an accordion feature that permits us to increase the revolving facility up to the sum of (a) the greater of $120 million and 100% of Consolidated EBITDA (as defined in the Credit Agreement) and (b) additional amounts so long as our first lien leverage ratio (as defined in the Credit Agreement) on a pro forma basis is not greater than 3.00:1.00, in each case subject to obtaining commitments from lenders therefor and meeting certain other conditions. The Amended Revolving Facility will mature on December 19, 2022.

As of December 31, 2017, the outstanding principal balance due on the Amended Revolving Facility was $240.0 million.

Our obligations under the Amended Revolving Facility are secured, subject to certain customary carve-outs and exceptions, by a first priority lien and security interest in substantially all of our tangible and intangible assets and our material restricted subsidiaries'. The Amended Revolving Facility contains customary representations and warranties, affirmative and negative covenants, including financial covenants and restrictions on share repurchases, and events of default applicable to us and our restricted subsidiaries. We are required to comply, on a quarterly basis, with two financial covenants:(i) a minimum interest coverage ratio of 3:00:1:00, and (ii) a maximum consolidated leverage ratio of 4.75:1.00 through December 2019 and 4.25:1.00 from and after January 2020 (in each case, as such ratios are defined in the Credit Agreement). The consolidated leverage ratio is subject to a step-up to 5.25:1.00 for four full consecutive fiscal quarters following a permitted acquisition or similar investment.

Borrowings under the Amended Revolving Facility bear interest at a rate equal to either (a) a base rate plus an interest margin ranging from 0.50% to 1.00% or (b) an adjusted LIBO rate, plus an interest margin ranging from 1.50% to 2.00% based on the Company's consolidated leverage ratio for the applicable period.

We paid lender, legal and other fees of $2.3 million and accrued interest of $1.5 million. Proceeds of the Amended Revolving Facility may be used to provide working capital from time to time for the Company, and for other general corporate purposes and activities permitted by the Credit Agreement.

As of December 31, 2017, we were in compliance with all terms of the Credit Agreement.

As part of a contractual agreement with a customer, the Company has an outstanding irrevocable letter of credit for $5.4 million, which is issued against the Amended Revolving Facility and expires April 26, 2018.

See Note 8 to the Consolidated Financial Statements in Part II, Item 8 for additional information regarding our Credit Agreement.

Liquidity and Capital Resources

The following tables should be read in conjunction with the Consolidated Financial Statements and Notes thereto, in Part II, Item 8 of this 2017 Form 10-K.

Our cash and cash equivalents, working capital and available borrowings under our credit facility (based upon the borrowing base and financial covenants in our Credit Agreement) were as follows:

	Years Ended December 31,	
(In thousands)	**2017**	**2016**
Cash and cash equivalents	$ 83,313	$ 175,999
Working capital	$ 199,967	$ 277,478
Available borrowings under credit facility	$ 254,600	$ 183,881

A summary of our cash flows was as follows:

	Years Ended December 31,		
(In thousands)	**2017**	**2016**	**2015**
Net cash provided by operating activities	$ 86,464	$ 88,639	$ 72,285
Net cash used in investing activities	(204,364)	(39,201)	(11,817)
Net cash provided by / (used in) financing activities	25,214	(19,049)	(47,974)
Net (decrease) / increase in cash and cash equivalents	$ (92,686)	$ 30,389	$ 12,494

Our cash and cash equivalents and working capital were lower as of December 31, 2017 as compared to December 31, 2016, primarily as a result of cash used for our acquisition of Eliza on April 17, 2017. Our available borrowings were higher as of December 31, 2017 as compared to December 31, 2016 as a result of the Amended Revolving Facility as described above.

Our principal source of cash has been our cash flow from operations and our $500 million five-year revolving credit facility. Other sources of cash include proceeds from exercise of stock options and tax benefits associated with stock option exercises. The primary uses of cash are capital investments, compensation expenses, data processing, direct project costs and SG&A expenses and acquisitions. We may also use available cash to repurchase shares of our common stock.

We believe that expected cash flows from operations, available cash and cash equivalents, and funds available under our revolving credit facility will be sufficient to meet our liquidity requirements for the following year, which include:

- the working capital requirements of our operations;
- investments in our business;
- business development activities;
- repurchases of common stock; and
- repayment of our revolving credit facility.

Any projections of future earnings and cash flows are subject to substantial uncertainty. We may need to access debt and equity markets in the future if unforeseen costs or opportunities arise, to meet working capital requirements, fund acquisitions or repay our indebtedness under the Credit Agreement. If we need to obtain new debt or equity financing in the future, the terms and availability of such financing may be impacted by economic and financial market conditions as well as our financial condition and results of operations at the time we seek additional financing.

Cash Flows from Operating Activities

Net cash provided by operating activities for the year ended December 31, 2017 was $86.5 million, a $2.1 million decrease from net cash provided by operating activities of $88.6 million for the year ended December 31, 2016. The decrease was primarily due to a decrease in deferred income taxes of $13.0 million related to our revaluation of the Company's deferred tax balances from the federal tax rate of 35% to 21% under the 2017 Tax Act, offset by an increase in stock based compensation expense $10.9 million primarily related to retirement eligible employees. The decrease was also impacted by changes in operating assets and liabilities and offset by increases in net income, and depreciation and amortization expenses.

Net cash provided by operating activities for the year ended December 31, 2016 was $88.6 million, a $16.3 million increase from net cash provided by operating activities of $72.3 million for the year ended December 31, 2015. The increase was primarily due to an increase in net income as adjusted for non-cash items including decreased stock-based compensation expense and deferred income taxes, as well as an increase in accounts payable and other liabilities.

Net cash provided by operating activities for the year ended December 31, 2015 was $72.3 million, a $28.3 million decrease from net cash provided by operating activities of $100.6 million for the year ended December 31, 2014. This decrease was primarily due to an increase in accounts receivable and a decrease in our net deferred tax liabilities and accounts payable, partially offset by an increase in net income.

Our DSO calculation can be derived by dividing total net accounts receivable at the end of period, by the daily average of the current quarter's annualized revenue. For the year ended December 31, 2017, revenue was $521.2 million, an increase of $31.5 million compared to revenue of $489.7 million for the year ended December 31, 2016. DSO decreased by 9 days to 115 days as of December 31, 2017, as compared to 124 days as of December 31, 2016. The change was due to strong cash collections as well as an increase in revenue in the fourth quarter of the current year as compared to the fourth quarter of the prior year. We do not currently anticipate collection issues with our accounts receivable, however, nor do we currently expect that any extended collections will materially impact our liquidity.

The majority of our customer relationships have been in place for several years. Our future operating cash flows could be adversely affected by a decrease in a demand for our services, delayed payments from customers or if one or more contracts with our largest customers is terminated or not renewed.

Cash Flows from Investing Activities

Net cash used in investing activities for the year ended December 31, 2017 was $204.4 million, a $165.2 million increase compared to net cash used in investing activities of $39.2 million for the year ended December 31, 2016. This increase was primarily due to the use of approximately $171.2 million for the Eliza acquisition in April 2017 as compared to the use of approximately $20.7 million for the Essette acquisition in September 2016. Purchases of property and equipment and investment in capitalized software also increased by $12.0 million year over year.

Net cash used in investing activities for the year ended December 31, 2016 was $39.2 million, a $27.4 million increase compared to net cash used in investing activities of $11.8 million for the year ended December 31, 2015. This increase was primarily due to the use of approximately $20.7 million for the Essette acquisition in September 2016. Purchases of property and equipment and investment in capital software also increased by $9.2 million. These increases were partially offset by the receipt of proceeds from the sale of a cost basis investment of approximately $2.5 million.

Net cash used in investing activities for the year ended December 31, 2015 was $11.8 million, a $14.4 million decrease compared to net cash used in investing activities of $26.2 million for the year ended December 31, 2014. The decrease was primarily related to a $14.1 million decrease in purchase of property and equipment and a $0.3 million decrease in investment in capitalized software.

We currently expect to incur capital expenditures of $33.0 million during the year ended December 31, 2018.

Cash Flows from Financing Activities

Net cash provided by financing activities for the year ended December 31, 2017 was $25.2 million, a $44.2 million increase from net cash used in financing activities of $19.0 million for the year ended December 31, 2016. This increase was primarily attributable to $42.2 million of proceeds from additional borrowings under our amended credit facility.

Net cash used in financing activities for the year ended December 31, 2016 was $19.0 million, a $29.0 million decrease from net cash used in financing activities of $48.0 million for the year ended December 31, 2015. This decrease was primarily attributable to a decrease in share repurchases of $20.5 million as compared to the prior year of $50.0 million.

Net cash used in financing activities for the year ended December 31, 2015 was $48.0 million, a $13.4 million increase from net cash used in financing activities of $34.6 million for the year ended December 31, 2014. This increase was primarily attributable to $50.0 million used in 2015 for share repurchases, partially offset by a $35.0 million reduction in payments toward the principal outstanding on our revolving credit facility.

Share Repurchase Program

During the year ended December 31, 2017, we repurchased 0.9 million shares of our common stock for approximately $14.1 million using cash resources. See the discussion under “Repurchases of Shares of Common Stock” under Part II, Item 5 and “Equity” in Note 9 to the Consolidated Financial Statements under Part II, Item 8 for additional information regarding share repurchases.

Contractual Obligations

The following table represents the scheduled maturities of our contractual cash obligations and other commitments:

	Payments Due by Period (*in thousands*)				
Contractual Obligations [8]	Total	Less than 1 year	1 - 3 years	3 -5 years	More than 5 years
Operating leases [1]	$ 19,938	$ 6,393	$ 8,773	$ 4,772	$ -
Revolving credit facility [2]	240,000	-	-	240,000	-
Interest expense [3]	40,633	8,212	24,636	7,785	-
Commitment fee [4]	4,789	968	2,904	917	-
Capital leases [5]	198	190	8	-	-
Letter of Credit fee [6]	34	34	-	-	-
Purchase obligations and commitments [7]	2,476	2,476	-	-	-
Total	$ 308,068	$ 18,273	$ 36,321	$ 253,474	$ -

(1) Represents the future minimum lease payments under non-cancelable operating leases. In addition to minimum rent, certain leases require the payment for insurance, maintenance and other costs. These additional amounts are not included in the table of contractual obligations as the timing and/or amounts of such payments are unknown.

(2) Represents scheduled repayments of principal on the revolving credit facility under the terms of our Credit Agreement. See Note 8 to the Consolidated Financial Statements in Part II, Item 8 for additional information regarding the Credit Agreement.

(3) Represents estimates of amounts due on revolving credit facility based on the interest rate as of December 31, 2017 and on scheduled repayments of principal. See Note 8 to the Consolidated Financial Statements in Part II, Item 8 for additional information regarding the Credit Agreement.

(4) Represents the commitment fee due on the revolving credit facility. See Note 8 to the Consolidated Financial Statements in Part II, Item 8 for additional information regarding the Credit Agreement.

(5) Represents the future minimum lease payments under capital leases.

(6) Represents the fees for the letter of credit issued against the revolving credit facility. See Note 8 to the Consolidated Financial Statements in Part II, Item 8 for additional information regarding the Credit Agreement.

(7) Represents future purchases related to outstanding purchase orders and supplier requisitions.

(8) The Company has excluded long-term unrecognized tax benefits, net of interest and penalties, of $8.2 million from the amounts presented as the timing of these obligations is uncertain.

Recently Issued Accounting Pronouncements

The information set forth under the caption “Summary of Significant Accounting Policies” in Note 1 to the Consolidated Financial Statements in Part II, Item 8 is incorporated herein by reference.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

At December 31, 2017, we were not a party to any derivative financial instruments. We conduct all of our business in U.S. currency and hence do not have direct foreign currency risk. We are exposed to changes in interest rates, primarily with respect to our revolving credit facility under our Credit Agreement. If the effective interest rate for all of our variable rate debt were to increase by 100 basis points (1%), our annual interest expense would increase by a maximum of $2.4 million based on our debt balances outstanding at December 31, 2017. Further, we currently invest substantially all of our excess cash in short-term investments, primarily money market accounts, where returns effectively reflect current interest rates. As a result, market interest rate changes may impact our interest income or expense. The impact will depend on variables such as the magnitude of rate changes and the level of borrowings or excess cash balances. We do not consider this risk to be material. We manage such risk by continuing to evaluate the best investment rates available for short-term, high quality investments.

Item 8. Consolidated Financial Statements and Supplementary Data

The information required by Item 8 is found on pages 61 to 64 of this 2017 Form 10-K.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

We are responsible for maintaining disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) that are designed to ensure that information required to be disclosed in our reports filed under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures

As required by Rule 13a-15(b) under the Exchange Act, management, with the participation of our Chief Executive Officer and Chief Financial Officer, performed an evaluation of the effectiveness of our disclosure controls and procedures as of December 31, 2017. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by the 2017 Form 10-K.

(b) Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting and for the assessment of the effectiveness of internal control over financial reporting. As defined by Rule 13a-15(f) of the Exchange Act, internal control over financial reporting is a process designed by, or under the supervision of our Chief Executive Officer and our Chief Financial Officer and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the consolidated financial statements for external purposes in accordance with U.S. GAAP.

Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the consolidated financial statements in accordance with generally accepted accounting principles and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the consolidated financial statements.

In connection with the preparation of our annual consolidated financial statements, management has undertaken an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2017, based on criteria established in the Internal Control-Integrated Framework issued by COSO. Management's assessment included an evaluation of the design of our internal control over financial reporting and testing of the operational effectiveness of those controls. Based on that assessment, we believe that the Company's internal control over financial reporting was effective based on those criteria as of December 31, 2017.

On April 17, 2017, we completed our acquisition of Eliza. We are in the process of evaluating the existing controls and procedures of Eliza and integrating Eliza into our internal control over financial reporting. In accordance with SEC Staff guidance permitting a company to exclude an acquired business from management's assessment of the effectiveness of internal control over financial reporting for the year in which the acquisition is completed, we have excluded the Eliza business acquired in 2017 from our assessment of the effectiveness of internal control over financial reporting as of December 31, 2017. Eliza represented twenty percent of the Company's total assets as of December 31, 2017, and six percent of the Company's revenues for the year ended December 31, 2017. The scope of management's assessment of the effectiveness of the design and operation of the Company's disclosure controls and procedures as of December 31, 2017 includes all of the Company's consolidated operations except for those disclosure controls and procedures of Eliza that are subsumed by internal control over financial reporting.

Our independent registered public accounting firm, Grant Thornton LLP, audited our consolidated financial statements and has issued an attestation report on the effectiveness of our internal control over financial reporting as of December 31, 2017, a copy of which appears on page 60 of this filing.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

(c) Changes in Internal Control Over Financial Reporting

During the quarter ended December 31, 2016, management identified material weaknesses in our internal control over financial reporting related to (i) the calculation our estimated liability for appeals associated with our contract with CMS (the "CMS Reserve") and (ii) the valuation of our accounts receivable allowance (the "Allowance"). A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement in our annual or interim financial statements will not be prevented or detected on a timely basis.

As described in Management's Report on Internal Control Over Financial Reporting in Item 9A of our 2016 Form 10-K, management determined that we did not maintain an effective control environment based on lack of established reporting lines and defined authorities and responsibilities for financial reporting at our wholly owned subsidiary, HDI, and did not have an effective risk assessment process on a periodic basis to assess the effects of changes in business operations and turnover of our employees that significantly impact our financial processes and internal control over financial reporting related to (i) our estimated liability for appeals associated with our contract with CMS (the "CMS Reserve") and (ii) the valuation of our accounts receivable allowance (the "Allowance"). As a result, we did not design and implement effective process level control activities, specifically management review controls over the measurement and disclosure of the CMS Reserve and the Allowance and controls over the completeness and accuracy of data used to calculate the CMS Reserve and the Allowance.

To remediate the material weaknesses described above we:

- clarified our risk assessment process in regards to external factors, such as conditions in the Company's industry and environment, and internal factors, such as personnel who may lack the necessary financial reporting competencies, information systems that may fail to accurately capture business transactions, or financial reporting processes that may not be adequately aligned with the requirements in the applicable financial reporting framework;
- restructured and redefined certain individuals' responsibilities in regards to internal control over financial reporting and have added additional full time personnel which we believe will continue to strengthen internal control over financial reporting specifically related to our risk assessment process;
- realigned existing subsidiary and corporate reporting lines which we believe will clarify existing subsidiary authorities and responsibilities for financial reporting and will enhance corporate-level oversight of the subsidiary activities;
- engaged an independent third party professional services firm to assist in enhancing and clarifying process flows and the underlying process level controls around the CMS Reserve and the Allowance;
- implemented additional process level controls surrounding the completeness and accuracy of the underlying data and reports;
- trained personnel with respect to supporting documentation used in process level controls;
- enhanced and clarified existing review control procedures over our models for the CMS Reserve and the Allowance including adding additional specific review criteria utilized; and
- implemented additional layers of review controls specifically over the CMS Reserve and the Allowance, including the review by more experienced personnel.

Management completed testing during the quarter ended December 31, 2017 and determined that the measures described above were effectively designed and demonstrated effective operation for a sufficient period of time to enable the Company to conclude that the material weaknesses have been remediated.

Except as noted above, there have been no changes to the Company's internal control over financial reporting as of December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item 10 is incorporated herein by reference to the applicable disclosure found in our definitive proxy statement to be filed with the SEC pursuant to Regulation 14A under the Exchange Act in connection with HMS Holdings Corp.'s 2018 Annual Meeting of Shareholders under the captions "*Proposal One: Election of Class I Directors,*" "*Executive Officers,*" "*Section 16(a) Beneficial Ownership Reporting Compliance*," "*Director Nomination Process*," "*Additional Information—Shareholder Proposals and Director Nominations for 2019 Annual Meeting,*" and "*Board Committees and Related Matters*."

Our Board of Directors has adopted a Code of Conduct applicable to all of our directors, officers and employees, including all employees, officers, directors, contractors, contingent workers and business affiliates of HMS subsidiaries. The Code of Conduct is publicly available on our website under the "Investors—Corporate Governance" tab at http://investor.hms.com/corporate governance.cfm and can also be obtained free of charge by sending a written request to our Corporate Secretary. To the extent permissible under the Nasdaq Marketplace Rules, we intend to disclose amendments to our Code of Conduct, as well as waivers of the provisions thereof, that relate to our principal executive officer, principal financial officer, principal accounting officer, controller or persons performing similar functions on the Company's website under the "Investors—Corporate Governance" tab at http://investor.hms.com/corporate-governance.cfm.

Item 11. Executive Compensation

The information required by this Item 11 is incorporated herein by reference to the applicable disclosure found in our definitive proxy statement to be filed with the SEC pursuant to Regulation 14A under the Exchange Act in connection with HMS Holdings Corp.'s 2018 Annual Meeting of Shareholders under the captions "*Executive Compensation,*" "*Director Compensation,*" "*Compensation Committee Interlocks and Insider Participation,*" and "*Compensation Committee Report*."

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters

Except as provided below, the information required by this Item 12 is incorporated herein by reference to the applicable disclosure found in our definitive proxy statement to be filed with the SEC pursuant to Regulation 14A under the Exchange Act in connection with HMS Holdings Corp.'s 2018 Annual Meeting of Shareholders under the caption "*Ownership of HMS Common Stock.*"

Equity Compensation Plan Information

The following table summarizes information about our equity compensation plans as of December 31, 2017. For additional information about our equity compensation plans see the discussion set forth under the caption "Stock-Based Compensation" in Note 11 to the Consolidated Financial Statements in Part II, Item 8.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by shareholders	6,869,758(1)	$ 17.42	6,031,544
Equity compensation plans not approved by shareholders	31,300(2)	$ 17.89	—
Total	6,901,058		

(1) This includes stock options and restricted stock units granted under our 2006 Stock Plan and 2016 Omnibus Plan.

(2) This includes stock options granted under the 2011 HDI Plan, which was assumed in connection with our acquisition of HDI and approved by the Compensation Committee of our Board.

Item 13. Certain Relationships and Related Transactions and Director Independence

The information required by this Item 13 is incorporated herein by reference to the applicable disclosure found in our definitive proxy statement to be filed with the SEC pursuant to Regulation 14A under the Exchange Act in connection with HMS Holdings Corp.'s 2018 Annual Meeting of Shareholders under the captions "*Certain Relationships and Related Transactions*" and "*Director Independence*."

Item 14. Principal Accounting Fees and Services

The information required by this Item 14 is incorporated herein by reference to the applicable disclosure from the proposal captioned "*Ratification of the Selection of Independent Registered Public Accounting Firm*" found in our definitive proxy statement to be filed with the SEC pursuant to Regulation 14A under the Exchange Act in connection with HMS Holdings Corp.'s 2018 Annual Meeting of Shareholders.

PART IV

Item 15. Exhibits and Financial Statement Schedules

1. *Financial Statements.*

The financial statements are listed in the Index to Consolidated Financial Statements on page 58.

2. *Financial Statement Schedules.*

Financial Statement Schedule II-Valuation and Qualifying Accounts is set forth on page 88. All other financial statement schedules have been omitted as they are either not required, not applicable or the information is otherwise included.

3. *Exhibits.*

The Exhibits include agreements to which the Company is a party or has a beneficial interest. The agreements have been filed to provide investors with information regarding their respective terms. The agreements are not intended to provide any other actual information about the Company or its business or operations. In particular, the assertions embodied in any representations, warranties, and covenants contained in the agreements may be subject to qualifications with respect to knowledge and materiality different from those applicable to investors and may be qualified by information in confidential disclosure schedules not included with the exhibits. These disclosure schedules may contain information that modifies, qualifies and creates exceptions to the representations, warranties and covenants set forth in the agreements. Moreover, certain representations, warranties, and covenants in the agreements may have been used for the purpose of allocating risk between parties, rather than establishing matters as facts. In addition, information concerning the subject matter of the representations, warranties and covenants may have changed after the date of the respective agreement, which subsequent information may or may not be fully reflected in the Company's public disclosures. Accordingly, investors should not rely on the representations, warranties and covenants in the agreements as characterizations of the actual state of facts about the Company or its business or operations on the date hereof.

Where an exhibit is filed by incorporation by reference to a previously filed registration statement or report, such registration statement or report is identified after the description of the exhibit.

Exhibit Number	Description
2.1	Agreement and Plan of Merger, dated December 16, 2002, among Health Management Systems, Inc., HMS Holdings Corp. and HMS Acquisition Corp. (incorporated by reference to Exhibit A to the Company's Prospectus and Proxy Statement (Reg No. 333-100521) as filed with the SEC on January 24, 2003)
2.2	Agreement and Plan of Merger, dated July 17, 2013, by and between HMS Holdings Corp., a Delaware corporation, and HMS Holdings Corp., a New York corporation (incorporated by reference to Exhibit 2.1 to the Company's Current Report on Form 8-K/12g-3 (File No. 000-50194) as filed with the SEC on July 23, 2013)
2.3	Agreement and Plan of Merger, dated March 10, 2017, by and among HMS Holdings Corp., Echo Acquisition Sub, Inc., Eliza Holding Corp., and Parthenon Investors III, L.P., solely in its capacity as the representative for equity holders of Eliza Holding Corp. (incorporated by reference to Exhibit 2.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on June 6, 2017)
3.1	Conformed copy of Certificate of Incorporation of HMS Holdings Corp., as amended through July 9, 2015 (incorporated by reference to Exhibit 3.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on August 10, 2015)

Exhibit Number	Description
3.2	Amended and Restated Bylaws of HMS Holdings Corp. dated May 4, 2016 (incorporated by reference to Exhibit 3.2 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on May 5, 2016)
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to the Company's Current Report on Form 8-K/12g-3 (File No. 000-50194) as filed with the SEC on July 23, 2013)
10.1.1	HMS Holdings Corp. Fourth Amended and Restated 2006 Stock Plan (incorporated by reference to Exhibit 99.2 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on July 12, 2011)†
10.1.2	Amendment No. 1 to the HMS Holdings Corp. Fourth Amended and Restated 2006 Stock Plan (incorporated by reference to Exhibit 10.6 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2012)†
10.1.3	Form of 2011 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.16 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2012)†
10.1.4	Form of 2011 Employee Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.18 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2012)†
10.1.5	Form of 2012 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.20 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2013)†
10.1.6	Form of 2012 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2013)†
10.1.7	Form of 2013 Executive Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.24 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2013)†
10.1.8	Form of 2013 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 12, 2014)†
10.1.9	Form of 2013 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 12, 2014)†
10.1.10	Form of March 2014 Executive Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 12, 2014)†
10.1.11	Form of November 2014 Executive Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 10, 2014)†
10.1.12	Form of 2014 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.26 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 2, 2015)†
10.1.13	Form of 2014 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.28 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 2, 2015)†

Exhibit Number	Description
10.1.14	Form of March 2015 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 11, 2015)†
10.1.15	Form of March 2015 Executive Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 11, 2015)†
10.1.16	Form of 2015 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.21 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2016)†
10.1.17	Form of 2015 Director Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.22 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2016)†
10.1.18	Form of November 2015 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.23 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2016)†
10.1.19	Form of 2016 Executive and Senior Vice President Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 10, 2016)†
10.1.20	Form of 2016 Executive and Senior Vice President Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 10, 2016)†
10.2.1	HMS Holdings Corp. 2016 Omnibus Incentive Plan (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on June 27, 2016)†
10.2.2	Form of Non-Qualified Stock Option Award Agreement for Employees under the 2016 Omnibus Plan (incorporated by reference to Exhibit 10.1 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 9, 2016)†
10.2.3	Form of Restricted Stock Unit Award Agreement for Employees under the 2016 Omnibus Plan (incorporated by reference to Exhibit 10.2 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 9, 2016)†
10.2.4	Form of Non-Qualified Stock Option Award Agreement for Non-Employee Directors under the 2016 Omnibus Plan (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 9, 2016)†
10.2.5	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors under the 2016 Omnibus Plan (incorporated by reference to Exhibit 10.4 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 9, 2016)†
10.3.1	Executive Employment Agreement, dated March 1, 2013, by and between William C. Lucia and HMS Holdings Corp. (incorporated by reference to Exhibit 10.29 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2013)†
10.3.2	Letter of Amendment to Executive Employment Agreement, dated April 30, 2013, by and between William C. Lucia and HMS Holdings Corp. (incorporated by reference to Exhibit 10.1 to Amendment No. 1 to the Company's Annual Report on Form 10-K/A (File No. 000-50194) as filed with the SEC on April 30, 2013)†

Exhibit Number	Description
10.3.3	Second Amendment to Executive Employment Agreement, dated January 20, 2015, by and between HMS Holdings Corp. and William C. Lucia (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on January 23, 2015)†
10.3.4	Third Amendment to Executive Employment Agreement, dated February 21, 2018, by and between William C. Lucia and HMS Holdings Corp. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on February 23, 2018)†
10.4	Employment Agreement, dated July 28, 2014, by and between Jeffrey S. Sherman and HMS Holdings Corp. (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on September 8, 2014)†
10.5	Employment Agreement, dated May 15, 2012, by and between Cynthia Nustad and HMS Business Services, Inc. (incorporated by reference to Exhibit 10.47 to Amendment No. 1 to the Company's Annual Report on Form 10-K/A (File No. 000-50194) as filed with the SEC on April 30, 2015)†
10.6	Employment Agreement, dated January 16, 2013, by and between Semone Wagner and HMS Holdings Corp. (incorporated by reference to Exhibit 99.1 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 3, 2014)†
10.7	Employment Agreement, dated November 13, 2013, by and between Douglas M. Williams and HMS Holdings Corp. (incorporated by reference to Exhibit 10.33 to the Company's Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2016)†
10.8	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on August 6, 2014)†
10.9	HMS Holdings Corp. Director Deferred Compensation Plan, as amended through June 29, 2016 (incorporated by reference to Exhibit 10.3 to the Company's Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on August 9, 2016)†
10.10	HMS Holdings Corp. Annual Incentive Compensation Plan as amended and restated (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on June 27, 2016)†
10.11.1	Amended and Restated Credit Agreement, dated May 3, 2013, as amended by Amendment No. 1 to Amended and Restated Credit Agreement dated as of March 8, 2017, and as further amended by Amendment No. 2 to Amended and Restated Credit Agreement, dated as of December 19, 2017, by and among HMS Holdings Corp., the Guarantors party thereto, the Lenders party thereto and Citibank, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.2 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on December 21, 2017)
10.11.2	Amendment No. 2 to Amended and Restated Credit Agreement, dated December 19, 2017, by and among HMS Holdings Corp., the other Loan Parties party thereto, Citibank, N.A., as Administrative Agent, the Issuing Bank, the Swingline Lender and the other Lenders party thereto (incorporated by reference to Exhibit 10.1 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on December 21, 2017)
10.11.3	Amended and Restated Security Agreement, dated December 19, 2017, by and among HMS Holdings Corp., the Subsidiary Securing Parties party thereto and Citibank, N.A., as Collateral Agent (incorporated by reference to Exhibit 10.3 to the Company's Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on December 21, 2017)
21.1	HMS Holdings Corp. List of Subsidiaries
23.1	Consent of Grant Thornton LLP
23.2	Consent of KPMG LLP

Exhibit Number	Description
31.1	Rule 13a-14(a)/15d-14(a) Certification of the Principal Executive Officer of HMS Holdings Corp., as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Rule 13a-14(a)/15d-14(a) Certification of the Principal Financial Officer of HMS Holdings Corp., as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Section 1350 Certification of the Principal Executive Officer of HMS Holdings Corp., as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*
32.2	Section 1350 Certification of the Principal Financial Officer of HMS Holdings Corp., as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002*
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

† Indicates a management contract or compensatory plan, contract or arrangement

* The certifications attached hereto as Exhibit 32.1 and Exhibit 32.2 are furnished with this 2017 Form 10-K and shall not be deemed "filed" by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized on February 27, 2018.

HMS Holdings Corp.

/s/ WILLIAM C. LUCIA
William C. Lucia
Chairman of the Board, President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on February 27, 2018.

Signature	Title
/s/ WILLIAM C. LUCIA William C. Lucia	Director, Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)
/s/ JEFFREY S. SHERMAN Jeffrey S. Sherman	Executive Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer)
/s/ GREG D. AUNAN Greg D. Aunan	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)
/s/ ROBERT BECKER Robert Becker	Director
/s/ CRAIG R. CALLEN Craig R. Callen	Director
/s/ ELLEN A. RUDNICK Ellen A. Rudnick	Director
/s/ BART M. SCHWARTZ Bart M. Schwartz	Director
/s/ RICHARD H. STOWE Richard H. Stowe	Director
/s/ CORA M. TELLEZ Cora M. Tellez	Director

HMS HOLDINGS CORP. AND SUBSIDIARIES
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders
HMS Holdings Corp.

Opinion on the financial statements
We have audited the accompanying consolidated balance sheet of HMS Holdings Corp. (a Delaware corporation) and subsidiaries (the "Company") as of December 31, 2017, the related consolidated statements of income, changes in shareholders' equity, and cash flows for the year ended December 31, 2017 and the related notes and schedule (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017, and the results of its operations and its cash flows for the year ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"), and our report dated February 27, 2018 expressed an unmodified opinion.

Basis for opinion
These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ Grant Thornton LLP
Grant Thornton LLP

We have served as the Company's auditor since 2017.

Dallas, Texas
February 27, 2018

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
HMS Holdings Corp.:

We have audited the accompanying consolidated balance sheets of HMS Holdings Corp. and subsidiaries as of December 31, 2016, and the related consolidated statements of income, shareholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2016. In connection with our audits of the consolidated financial statements, we also have audited financial statement schedule II. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of HMS Holdings Corp. and subsidiaries as of December 31, 2016, and the results of their operations and their cash flows for each of the years in the two-year period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ KPMG LLP

KPMG LLP
Dallas, Texas
June 6, 2017

Report of Independent Registered Public Accounting Firm

Board of Directors and Shareholders
HMS Holdings Corp.

Opinion on internal control over financial reporting

We have audited the internal control over financial reporting of HMS Holdings Corp. (a Delaware corporation) and subsidiaries (the "Company") as of December 31, 2017, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in the 2013 *Internal Control—Integrated Framework* issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated financial statements of the Company as of and for the year ended December 31, 2017, and our report dated February 27, 2018 expressed an unqualified opinion on those financial statements.

Basis for opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control and Financial Reporting ("Management's Report"). Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Our audit of, and opinion on, the Company's internal control over financial reporting does not include the internal control over financial reporting of Eliza Holding Corp., a wholly-owned subsidiary, whose financial statements reflect total assets and revenues constituting twenty and six percent, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2017. As indicated in the accompanying Management's Report, Eliza Holding Corp. was acquired during 2017. Management's assertion on the effectiveness of the Company's internal control over financial reporting excluded internal control over financial reporting of Eliza Holding Corp.

Definition and limitations of internal control over financial reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Grant Thornton LLP
Grant Thornton LLP
Dallas, Texas
February 27, 2018

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share amounts)

	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 83,313	$ 175,999
Accounts receivable, net of allowance of $14,799 and $10,772, at December 31, 2017 and 2016, respectively	189,460	173,582
Prepaid expenses	16,589	13,699
Income tax receivable	1,892	3,354
Deferred financing costs, net	564	-
Other current assets	836	1,001
Total current assets	292,654	367,635
Property and equipment, net	98,581	92,167
Goodwill	487,617	379,716
Intangible assets, net	91,482	37,797
Deferred financing costs, net	2,237	2,790
Other assets	2,589	2,650
Total assets	$ 975,160	$ 882,755
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable, accrued expenses and other liabilities	$ 61,900	$ 59,402
Estimated liability for appeals	30,787	30,755
Total current liabilities	92,687	90,157
Long-term liabilities:		
Revolving credit facility	240,000	197,796
Net deferred tax liabilities	21,989	22,717
Deferred rent	4,852	5,427
Other liabilities	9,403	10,048
Total long-term liabilities	276,244	235,988
Total liabilities	368,931	326,145
Commitments and contingencies (Note 13)		
Shareholders' equity:		
Preferred stock -- $0.01 par value; 5,000,000 shares authorized; none issued	-	-
Common stock -- $0.01 par value; 175,000,000 shares authorized; 96,536,251 shares issued and 83,256,858 shares outstanding at December 31, 2017; 95,966,852 shares issued and 83,552,774 shares outstanding at December 31, 2016	965	959
Capital in excess of par value	368,721	345,025
Retained earnings	366,164	326,110
Treasury stock, at cost -- 13,279,393 shares at December 31, 2017 and 12,414,078 shares at December 31, 2016	(129,621)	(115,484)
Total shareholders' equity	606,229	556,610
Total liabilities and shareholders' equity	$ 975,160	$ 882,755

See accompanying notes to the consolidated financial statements.

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
(in thousands, except per share amounts)

	Years Ended December 31,		
	2017	2016	2015
Revenue	$ 521,212	$ 489,720	$ 474,216
Cost of services:			
Compensation	202,049	189,271	178,272
Data processing	45,723	37,337	40,915
Occupancy	17,190	14,000	15,766
Direct project expenses	41,347	46,254	51,527
Other operating expenses	28,425	27,778	28,895
Amortization of acquisition related software and intangible assets	30,393	28,030	28,148
Total cost of services	365,127	342,670	343,523
Selling, general and administrative expenses	105,654	89,381	83,121
Total operating expenses	470,781	432,051	426,644
Operating income	50,431	57,669	47,572
Interest expense	(10,871)	(8,519)	(7,812)
Interest income	295	321	49
Income before income taxes	39,855	49,471	39,809
Income tax expense	(199)	11,835	15,282
Net income	$ 40,054	$ 37,636	$ 24,527
Basic income per common share:			
Net income per common share -- basic	$ 0.48	$ 0.45	$ 0.28
Diluted income per common share:			
Net income per common share -- diluted	$ 0.47	$ 0.43	$ 0.28
Weighted average shares:			
Basic	83,821	84,221	87,881
Diluted	85,088	86,987	88,361

See accompanying notes to the consolidated financial statements

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(in thousands except share and per share amounts)

	Common Stock				Treasury Stock		
	# of Shares Issued	Par Value	Capital in Excess of Par Value	Retained Earnings	# of Shares	Amount	Total Shareholders' Equity
Balance at January 1, 2015	94,511,444	$ 943	$313,214	$ 263,947	6,526,305	$ (45,014)	$ 533,090
Net income	-	-	-	24,527	-	-	24,527
Stock-based compensation expense	-	-	14,297	-	-	-	14,297
Purchase of treasury stock	-	-	-	-	4,747,441	(50,000)	(50,000)
Exercise of stock options	577,559	7	4,180	-	-	-	4,187
Vesting of restricted stock awards and units, net of shares withheld for employee tax	174,458	2	(1,031)	-	-	-	(1,029)
Excess tax benefit from exercise of stock options	-	-	1,569	-	-	-	1,569
Shortfall due to exercise of stock options	-	-	(827)	-	-	-	(827)
Deferred tax asset reversal for unexercised stock options	-	-	(1,112)	-	-	-	(1,112)
Balance at December 31, 2015	95,263,461	$ 952	$330,290	$ 288,474	11,273,746	$ (95,014)	$ 524,702
Net income	-	-	-	37,636	-	-	37,636
Stock-based compensation expense	-	-	13,277	-	-	-	13,277
Purchase of treasury stock	-	-	-	-	1,140,332	(20,470)	(20,470)
Exercise of stock options	510,512	5	2,935	-	-	-	2,940
Vesting of restricted stock awards and units, net of shares withheld for employee tax	192,879	2	(1,477)	-	-	-	(1,475)
Balance at December 31, 2016	95,966,852	959	345,025	326,110	12,414,078	(115,484)	556,610
Net income	-	-	-	40,054	-	-	40,054
Stock-based compensation expense	-	-	24,143	-	-	-	24,143
Purchase of treasury stock	-	-	-	-	865,315	(14,137)	(14,137)
Exercise of stock options	172,326	2	2,718	-	-	-	2,720
Vesting of restricted stock awards and units, net of shares withheld for employee tax	397,073	4	(3,165)	-	-	-	(3,161)
Balance at December 31, 2017	96,536,251	$ 965	$368,721	$ 366,164	13,279,393	$(129,621)	$ 606,229

See accompanying notes to the consolidated financial statements.

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Years ended December 31,		
	2017	2016	2015
Operating activities:			
Net income	$ 40,054	$ 37,636	$ 24,527
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization of property, equipment and software	27,515	24,882	30,328
Amortization of intangible assets	22,555	20,164	20,270
Amortization of deferred financing costs	2,258	2,083	2,084
Stock-based compensation expense	24,143	13,277	14,297
Deferred income taxes	(20,409)	(7,368)	(14,020)
(Gain) / Loss on disposal of assets	209	(948)	84
Change in fair value of contingent consideration	(2,865)	-	-
Changes in operating assets and liabilities, net of the effect of acquisitions:			
Accounts receivable	(6,976)	(3,554)	(12,045)
Prepaid expenses	(1,463)	(2,399)	549
Prepaid income taxes	-	-	6,711
Other current assets	165	2,066	(412)
Other assets	124	234	10
Income taxes receivable / (payable)	1,462	(7,227)	3,873
Accounts payable, accrued expenses, deferred rent and other liabilities	(340)	12,116	(250)
Estimated liability for appeals	32	(2,323)	(3,721)
Net cash provided by operating activities	86,464	88,639	72,285
Investing activities:			
Acquisition of a business, net of cash acquired	(171,321)	(20,678)	-
Proceeds from sale of cost basis investment	-	2,496	-
Purchases of property and equipment	(17,318)	(13,703)	(8,620)
Investment in capitalized software	(15,725)	(7,316)	(3,197)
Net cash used in investing activities	(204,364)	(39,201)	(11,817)
Financing activities:			
Proceeds from credit facility	42,204	-	-
Payments for deferred financing costs	(2,269)	-	-
Proceeds from exercise of stock options	2,720	2,940	4,187
Payments of tax withholdings on behalf of employees for net-share settlement for stock-based compensation	(3,161)	(1,475)	(1,029)
Payments on capital lease obligations	(143)	(44)	(1,132)
Purchases of treasury stock	(14,137)	(20,470)	(50,000)
Net cash provided by / (used in) financing activities	25,214	(19,049)	(47,974)
Net (decrease) / increase in cash and cash equivalents	(92,686)	30,389	12,494
Cash and cash equivalents			
Cash and cash equivalents at beginning of year	175,999	145,610	133,116
Cash and cash equivalents at end of year	$ 83,313	$ 175,999	$ 145,610
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	$ 17,995	$ 20,326	$ 22,878
Cash paid for interest	$ 9,944	$ 6,196	$ 5,694
Supplemental disclosure of noncash activities:			
Change in balance of accrued property and equipment purchases	$ 51	$ 684	$ 729

See accompanying notes to the consolidated financial statements.

HMS HOLDINGS CORP. AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. Business and Summary of Significant Accounting Policies

(a) Business

HMS is a leading provider of cost containment solutions in the U.S. healthcare marketplace. We use innovative technology, extensive data services and powerful analytics to deliver coordination of benefits, payment integrity and care management and consumer engagement solutions to help healthcare payers improve financial performance and clinical outcomes. We provide coordination of benefits services to government and commercial healthcare payers and sponsors to ensure that the responsible party pays healthcare claims. Our payment integrity services ensure healthcare claims billed are accurate and appropriate, and our care management and consumer engagement technology helps risk-bearing organizations to better engage with and manage the care delivered to their members. Together these various services help customers recover erroneously paid amounts from liable third parties; prevent future improper payments; reduce fraud, waste and abuse; better manage the care their members receive; engage healthcare consumers to improve clinical outcomes while increasing member satisfaction and retention; and achieve regulatory compliance. We currently operate as one business segment with a single management team that reports to the Chief Executive Officer.

(b) Summary of Significant Accounting Policies

(i) Principles of Consolidation

The consolidated financial statements include the Company's accounts and transactions and those of the Company's wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

(ii) Use of Estimates

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(iii) Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less to be cash equivalents. Cash equivalents consist of deposits that are readily convertible into cash.

(iv) Concentration of Credit Risk

The Company's policy is to limit credit exposure by placing cash in accounts which are exposed to minimal interest rate and credit risk. HMS maintains cash and cash equivalents in cash depository accounts with large financial institutions with a minimum credit rating of A1/P1 or better, as defined by Standard and Poor's. The balance at these institutions generally exceeds the maximum balance insured by the Federal Deposit Insurance Corporation of up to $250,000 per entity. HMS has not experienced any losses in cash and cash equivalents and believes these cash and cash equivalents do not expose the Company to any significant credit risk.

The Company is subject to potential credit risk related to changes in economic conditions within the healthcare market. However, HMS believes that the billing and collection policies are adequate to minimize the potential credit risk. The Company performs ongoing credit evaluations of customers and generally does not require collateral.

(v) Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation is provided over the estimated useful lives of the assets utilizing the straight-line method. HMS amortizes leasehold improvements on a straight-line basis which is typically five to ten years. Equipment leased under capital leases is depreciated over the shorter of (i) the term of the lease and (ii) the estimated useful life of the equipment. Capitalized software costs relate to software that is acquired or developed for internal use while in the application development stage. All other costs to develop software for internal use, either in the preliminary project stage or post-implementation stage, are expensed as incurred. Amortization of capitalized software is calculated on a straight-line basis over the expected economic life. Land is not depreciated.

Estimated useful lives are as follows:

Property and Equipment	Useful Life (in years)		
Equipment	2	to	3
Leasehold improvements	5	to	10
Furniture and fixtures		5	
Capitalized software	3	to	10
Building and building improvements		up to 39.5	

Property and equipment is reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. When indicators exist, recoverability of assets is measured by a comparison of the carrying value of the asset group to the estimated undiscounted future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized and charged to earnings is measured by the amount by which the carrying value of the asset group exceeds the fair value of the assets. The Company did not recognize any impairment charges related to property and equipment during the years ended December 31, 2017, 2016 or 2015.

(vi) Intangible assets

The Company records assets acquired and liabilities assumed in a business combination based upon their acquisition date fair values. In most instances there is not a readily defined or listed market price for individual assets and liabilities acquired in connection with a business, including intangible assets. The Company determines fair value through various valuation techniques including discounted cash flow models, quoted market values and third party independent appraisals, as considered necessary. Significant assumptions used in those techniques include, but are not limited to, growth rates, discount rates, customer attrition rates, expected levels of revenues, earnings, cash flows and tax rates. The use of different valuation techniques and assumptions are highly subjective and inherently uncertain and, as a result, actual results may differ materially from estimates.

All of the Company's intangible assets are subject to amortization and are amortized using the straight-line method over their estimated period of benefit. Estimated useful lives are as follows:

Intangible Assets	Useful Life (in years)		
Customer relationships	5	-	15
Restrictive covenants	1	-	3
Trade names	1.5	-	7
Intellectual property	3	-	5

Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. When indicators exist, recoverability of assets is measured by a comparison of the carrying value of the asset group to the estimated undiscounted future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized and charged to earnings is measured by the amount by which the carrying value of the asset group exceeds the fair value of the assets. The Company did not recognize any impairment charges related to intangible assets during the years ended December 31, 2017, 2016 or 2015.

(vii) Goodwill

Goodwill is the excess of acquisition costs over the fair values of assets and liabilities of acquired businesses. During the measurement period, which is up to one year from the acquisition date, the Company may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings.

Goodwill is subject to a periodic assessment for impairment. The Company assesses goodwill for impairment on an annual basis as of June 30th of each year or more frequently if an event occurs or changes in circumstances would more likely than not reduce the fair value of a reporting unit below its carrying amount. Assessment of goodwill impairment is at the HMS Holdings Corp. entity level as the Company operates as a single reporting unit. The Company has the option to perform a qualitative assessment to determine if impairment is more likely than not to have occurred. When the optional qualitative assessment of goodwill impairment is performed, significant judgment is required in the assessment of qualitative factors including but not limited to an evaluation of macroeconomic conditions as they relate to our business, industry and market trends, as well as the overall future financial performance of our reporting units and future opportunities in the markets in which they operate. If the Company can support the conclusion that it is more likely than not that the fair value of a reporting unit is greater than its carrying amount using the optional qualitative assessment, then the Company would not need to perform the two-step impairment test. If the Company cannot support such a conclusion, or the Company does not elect to perform the qualitative assessment, then the first step of the goodwill impairment test is used to identify potential impairment by comparing the fair value of the reporting unit with its carrying amount, including goodwill. The Company completed the annual impairment test as of June 30, 2017 using the optional qualitative assessment and determined no impairment existed. There were no impairment charges related to goodwill during the years ended December 31, 2017, 2016 or 2015.

(viii) Income Taxes

Income taxes are accounted for under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. This method also requires the recognition of future tax benefits for net operating loss carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized as income or expense in the period that includes the enactment date. A valuation allowance is provided against deferred tax assets to the extent their realization is not more likely than not. Uncertain income tax positions are accounted for by prescribing a minimum recognition threshold that a tax position is required to meet before being recognized in the financial statements. Although the Company believes that it has adequately reserved for uncertain tax positions (including interest and penalties), it can provide no assurance that the final tax outcome of these matters will not be materially different. The Company makes adjustments to these reserves in accordance with the income tax accounting guidance when facts and circumstances change, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made, and could have a material impact on our financial condition and operating results.

(ix) Revenue Recognition

The Company provides services under contracts that contain various fee structures, including contingency fee and fixed fee arrangements. Revenue is recognized when a contract exists, services have been provided to the customer, the fee is fixed and determinable, and collectability is reasonably assured. In addition, the Company has contracts with the federal government which are generally cost-plus or time and material based. Revenue on cost-plus contracts is recognized based on costs incurred plus the negotiated fee earned. Revenue on time and materials contracts is recognized based on hours worked and expenses incurred. In addition, some of the Company's contracts may include customer acceptance provisions. Formal customer sign-off is not always necessary to recognize revenue, provided HMS objectively demonstrates that the criteria specified in the acceptance provision are satisfied. Due to the range of products and services that HMS provides and the differing fee structures associated with each type of contract, revenue may be recognized in irregular increments. A portion of our revenue is recorded net of an estimate of future revenue adjustments, with an offsetting entry to accounts receivable allowance, based on historical patterns of billing adjustments, length of operating and collection cycle and customer negotiations, behaviors and payment patterns. Changes in these estimates are recorded to revenue in the period of change.

(x) Estimated Liability for Appeals

Under the Company's contracts with certain commercial health plan customers and its Medicare RAC contracts with CMS, HMS recognizes revenue when HMS claim findings are sent to the Company's customers for offset against future claim payments to providers. These contracts permit providers the right to appeal HMS claim findings and to pursue additional appeals if the initial appeal is found in favor of HMS's customer. The appeal process established under the Medicare RAC contract with CMS includes five levels of appeals, and resolution of appeals can take substantial time to resolve. HMS records a) a liability for findings which have been adjudicated in favor of providers and b) an estimated liability based on the amount of revenue that is subject to appeals and which are probable of being adjudicated in favor of providers following their successful appeal. The Company's estimate is based on the Company's historical experience.

The total estimated liability for appeals balance of $30.8 million as of December 31, 2017 and December 31, 2016, respectively, includes $19.3 million and $17.3 million, respectively, of Medicare RAC claim findings which have been adjudicated in favor of providers, and $8.5 million and $11.1 million, respectively, of the Company's estimate of the potential amount of Medicare RAC repayments that are probable of being adjudicated in favor of providers following a successful appeal. Additionally, the total estimated liability for appeals balance includes $3.0 million and $2.4 million related to commercial customers claim appeals. The provision included in the estimated liability for appeals is an offset to revenue in the Company's Consolidated Statements of Income.

To the extent the amount to be returned to providers following a successful appeal exceeds or is less than the amount recorded, revenue in the applicable period would be reduced or increased by such amount. Any future changes to any of the Company's customer contracts, including modifications to the Medicare RAC contract, may require the Company to apply different assumptions that could materially affect both the Company's revenue and estimated liability for appeals in future periods.

(xi) Expense Classifications

HMS cost of services is presented in the categories set forth below. Each category within cost of services excludes expenses relating to SG&A functions, which are presented separately as a component of total operating costs. A description of the primary expenses included in each category is as follows:

Cost of Services:

- *Compensation:* Salary, fringe benefits, bonus and stock-based compensation.
- *Data processing:* Hardware, software and data communication costs.
- *Occupancy:* Rent, utilities, depreciation, office equipment and repair and maintenance costs.
- *Direct project expense:* Variable costs incurred from third party providers that are directly associated with specific revenue generating projects and employee travel expenses.
- *Other operating expenses:* Professional fees, temporary staffing, travel and entertainment, insurance and local and property tax costs.
- *Amortization of acquisition related software and intangible assets:* Amortization of the cost of acquisition related software and intangible assets.

SG&A:

- Expenses related to general management, marketing and administrative activities.

(xii) Estimating Valuation Allowances and Accrued Liabilities

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenue and expenses during the reported period. In particular, management must make estimates of the probability of collecting accounts receivable. When evaluating the adequacy of the accounts receivable allowance, management reviews the accounts receivables based on an analysis of historical revenue adjustments, bad debts, customer concentrations, customer credit-worthiness, current economic trends and changes in customer payment terms. As of December 31, 2017 and 2016, the accounts receivable balance was $189.5 million and $173.6 million, net of allowance of $14.8 million and $10.8 million, respectively.

(xiii) Stock-Based Compensation

Long-Term Incentive Award Plans

The Company grants stock options and restricted stock units ("equity awards") to HMS employees and non-employee directors under the 2016 Omnibus Plan, as approved by the Company's shareholders on June 23, 2016. The 2016 Omnibus Plan replaced and superseded the Company's 2006 Stock Plan and 2011 HDI Plan. The number of securities remaining available for future issuance under equity compensation plans, excluding securities to be issued upon exercise of outstanding options and vesting of restricted stock units, is 6,031,554 shares. All of the Company's employees as well as HMS non-employee directors are eligible to participate in the 2016 Omnibus Plan. Awards granted under the 2016 Omnibus Plan generally vest over one to four years. The exercise price of stock options granted under the 2016 Omnibus Plan may not be less than the fair market value of a share of stock on the grant date, as measured by the closing price of the Company's common stock on the Nasdaq Global Select Market and the term of a stock option may not exceed ten years. The Company currently grants two types of equity awards: 1) equity awards with service conditions and 2) equity awards with market and service conditions. The market condition is based on the Company's common stock price during the applicable measurement period.

Stock-Based Compensation Expense

The Company recognizes stock-based compensation expense equal to the grant date fair value of the award on a straight-line basis over the requisite service period.

The fair value of each option grant with only service-based conditions is estimated using the Black-Scholes pricing model. The fair value of each option grant with market and service-based conditions is estimated using a Monte Carlo simulation model. The fair value of each restricted stock unit is calculated based on the closing sale price of the Company's common stock on the grant date.

The determination of the fair value of the options on the grant date using the Black-Scholes pricing model and/or the Monte Carlo simulation model is affected by the Company's stock price, as well as assumptions regarding a number of complex and subjective variables. Certain key variables include: the Company's expected stock price volatility over the expected term of the awards; a risk-free interest rate; and any expected dividends. The Company estimates stock price volatility based on the historical volatility of the Company's common stock and estimates the expected term of the awards based on the Company's historical option exercises for similar types of stock option awards. The assumed risk-free interest rate is based on the yield on the measurement date of a zero-coupon U.S. Treasury bond with a maturity period equal to the option's expected term. The Company does not anticipate paying any cash dividends in the foreseeable future and therefore, uses an expected dividend yield of zero in the option valuation models. The fair value of all awards also includes an estimate of expected forfeitures. Forfeitures are estimated based on historical experience. If actual forfeitures vary from estimates, a difference in compensation expense will be recognized in the period the actual forfeitures occur. Upon the exercise of stock options or the vesting of restricted stock units, the resulting excess tax benefits or deficiencies, if any, are recognized as income tax expense or benefit.

(xiv) Fair Value of Financial Instruments

Financial instruments are categorized into a three-level fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). If the inputs used to measure fair value fall within different levels of the hierarchy, the category level is based on the lowest priority level input that is significant to the fair value measurement of the instrument. In the event the fair value is not readily available or determinable, the financial instrument is carried at cost and referred to as a cost method investment. The fair value hierarchy is as follows:

- *Level 1:* Observable inputs such as quoted prices in active markets;
- *Level 2*: Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and
- *Level 3:* Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

(xv) Leases

HMS accounts for lease agreements as either operating or capital leases, depending on certain defined criteria. Lease costs are amortized on a straight-line basis without regard to deferred payment terms, such as rent holidays, that defer the commencement date of required payments. Additionally, incentives such as tenant improvement allowances, are capitalized and are treated as a reduction of rental expense over the term of the lease agreement.

(xvi) Contingencies

From time to time, HMS is involved in legal proceedings in the ordinary course of business. The Company assesses the likelihood of any adverse judgments or outcomes to these contingencies as well as potential ranges or probable losses and establishes reserves accordingly. HMS records accruals for outstanding legal matters when it believes it is probable that a loss will be incurred and the amount can be reasonable estimated. Significant judgment is required to determine both probability and the estimated amount. HMS reviews these provisions at least quarterly and adjusts the provisions to reflect the impact of negotiations, settlements, rulings, advice of legal counsel and updated information. Litigation is inherently unpredictable and is subject to significant uncertainties, some of which are beyond the Company's control. The amount of reserves required may change in future periods due to new developments in each matter or changes in approach to a matter such as a change in settlement strategy.

(xvii) Recent Accounting Guidance

Recently Adopted Accounting Guidance

In April 2015, the FASB issued ASU No. 2015-05, Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40): Customer's Accounting for Fees Paid in a Cloud Computing Arrangement ("ASU 2015-05"). ASU 2015-05 provides explicit guidance to help companies evaluate the accounting for fees paid by a customer in a cloud computing arrangement and clarifies that if a cloud computing arrangement includes a software license, the customer should account for the license consistent with its accounting for other software licenses. If the arrangement does not include a software license, the customer should account for the arrangement as a service contract. ASU 2015-05 is effective for annual reporting periods beginning after December 15, 2015, including interim periods within such annual reporting periods with early adoption permitted. The adoption of this guidance did not have a material effect on the Company's consolidated financial statements.

In September 2015, the FASB issued ASU No. 2015-16, Simplifying the Accounting for Measurement-Period Adjustments, ("ASU 2015-16"). ASU 2015-16 eliminates the requirement to restate prior period financial statements for business combination measurement period adjustments. ASU 2015-16 requires the cumulative impact of a measurement period adjustment, including the impact of prior periods, be recognized in the reporting period in which the adjustment is identified. The guidance requires an acquirer to present separately on the face of the income statement, or disclose in the notes, the portion of the adjustment recorded in current-period earnings by line item that would have been recorded in previous reporting periods, if the adjustment to the provisional amounts had been recognized as of the acquisition date. ASU 2015-16 is applied prospectively and is effective for public business entities for interim and annual periods beginning after December 15, 2015. The adoption of this guidance did not have a material effect on the Company's consolidated financial statements.

In November 2015, the FASB issued ASU No. 2015-17, Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes ("ASU 2015-17"). ASU 2015-17 simplifies the current presentation of separately classifying deferred tax assets and deferred tax liabilities as current and noncurrent in a classified balance sheet by requiring companies to present them as noncurrent. ASU 2015-17, as amended, is effective for annual reporting periods beginning after December 15, 2016, including interim periods within such annual reporting periods with early adoption permitted. The Company elected to early adopt the new guidance in the fourth quarter of fiscal year 2016. The Company elected to apply the presentation requirements for the balance sheet retrospectively to all periods presented which resulted in a decrease to total current assets and total long term liabilities of $7.5 million at December 31, 2015.

In March 2016, the FASB issued ASU No. 2016-09, Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, ("ASU 2016-09") that changes the accounting for certain aspects of share-based payments to employees. The new guidance requires excess tax benefits and tax deficiencies to be recorded in the income statement when stock awards vest or are settled. In addition, cash flows related to excess tax benefits will no longer be separately classified as a financing activity apart from other income tax cash flows. The standard also allows Companies to repurchase more of an employee's vesting shares for tax withholding purposes without triggering liability accounting, clarifies that all cash payments made to tax authorities on an employee's behalf for withheld shares should be presented as a financing activity on the cash flows statement and provides an accounting policy election to account for forfeitures as they occur. ASU 2016-09 is effective for annual reporting periods beginning after December 15, 2016, including interim periods within such annual reporting periods with early adoption permitted. The Company elected to early adopt the new guidance in the fourth quarter of fiscal year 2016 which requires us to reflect any adjustments as of January 1, 2016, the beginning of the annual period that includes the interim period of adoption. The primary impact of adoption was the recognition of excess tax benefits in the provision for income taxes rather than paid-in capital for all periods in fiscal year 2016. Additional amendments to the accounting for income taxes and minimum statutory withholding tax requirements had no impact to retained earnings as of January 1, 2016, where the cumulative effect of these changes are required to be recorded. The Company elected to continue to estimate forfeitures expected to occur to determine the amount of compensation cost to be recognized in each period. The Company elected to apply the presentation requirements for cash flows related to excess tax benefits retrospectively to all periods presented which resulted in an increase to both net cash from operations and net cash used in financing of $1.6 million for the year ended December 31, 2015. Adoption of the new standard resulted in the recognition of net excess tax benefits in the provision for income taxes rather than paid-in capital of $1.9 million for the year ended December 31, 2016. The presentation requirements for cash flows related to employee taxes paid for withheld shares had no impact to any the 2016 and 2015 periods presented on the consolidated statements of cash flow since such cash flows have historically been presented as a financing activity.

Recent Accounting Guidance Not Yet Adopted

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers (Topic 606) ("ASU 2014-09"), which is the new comprehensive revenue recognition standard that will supersede all existing revenue recognition guidance under U.S. GAAP. The FASB has recently issued several amendments to the standard. ASU 2014-09 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within such annual reporting periods with early adoption permitted. The Company does not plan to early adopt this guidance and therefore will adopt on January 1, 2018. The guidance permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (modified retrospective method). The Company will adopt ASU 2014-09 using the modified retrospective method. The Company, with the assistance of external consultants, developed and followed a formal implementation program, which included analyzing the standard's impact on our contract portfolio, comparing our historical accounting policies and practices to the requirements of the new standard, and identifying differences from applying the requirements of the new standard to our contracts, We also developed transitional internal controls to ensure the adequate implementation of this guidance including, reporting on the progress of the implementation to those in charge of governance on a regular basis during the project's duration. We have completed our assessment and contract review. Based on the analysis, the Company believes the impact of adopting the new guidance is not material to the results of operations; however, adoption of this guidance will require changes to business processes and systems to support the new revenue recognition accounting and additional required disclosures. The Company does not anticipate that our internal control framework will materially change, but rather that existing internal controls will be modified and augmented as necessary.

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842) ("ASU 2016-02"). ASU 2016-02 will require most lessees to recognize a majority of the company's leases on the balance sheet, which will increase reported assets and liabilities. ASU 2016-02 is effective for annual reporting periods beginning after December 15, 2018 including interim periods within such annual reporting periods with early adoption permitted. The Company has not early adopted this guidance and is currently evaluating the impact on the Company's consolidated financial statements of adopting this guidance. The Company does not expect this guidance to have a material impact to the Company's results of operations.

In August 2016, the FASB issued ASU No. 2016-15, Statements of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments ("ASU 2016-15"). ASU 2016-15 clarifies where certain cash receipts and cash payments are presented and classified in the statement of cash flows. The amendments are effective for annual reporting periods beginning after December 15, 2017, and for interim reporting periods within such annual periods. The adoption of this guidance is not expected to have a material effect on the Company's consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-01, Business Combinations (Topic 805) – Clarifying the Definition of a Business ("ASU 2017-01"). ASU 2017-01 finalizes previous proposals regarding shareholder concerns that the definition of a business is applied too broadly. The guidance assists entities with evaluating whether transactions should be accounted for as acquisitions of assets or of businesses. The amendments are effective for annual periods beginning after December 15, 2017, including interim periods within those periods. The adoption of this guidance is not expected to have a material effect on the Company's consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment ("ASU 2017-04"). This amendment simplifies the manner in which an entity is required to test for goodwill impairment by eliminating Step 2 from the goodwill impairment test. Step 2 measures goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. The amendment simplifies this approach by having the entity (1) perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount, and (2) recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, with the understanding that the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The amendment is effective in fiscal years beginning after December 15, 2019. Early adoption is permitted for all entities for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company does not expect this guidance to have a material impact to the Company's financial position or results of operations.

In May 2017, the FASB issued ASU No. 2017-09, Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting, ("ASU 2017-09"). ASU 2017-09 requires entities to apply modification accounting to changes made to a share-based payment award. The new guidance specifies that entities will apply modification accounting to changes to a share-based payment award only if any of the following are not the same immediately before and after the change: 1) The award's fair value (or calculated value or intrinsic value, if those measurement methods are used), 2) the award's vesting conditions, and 3) the award's classification as an equity or liability instrument. ASU 2017-09 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within such annual periods, with early adoption permitted. The Company does not plan to early adopt this guidance and therefore will adopt on January 1, 2018. The Company does not expect this guidance to have a material impact to the Company's financial position or results of operations.

2. Fair Value of Financial Instruments

Financial instruments (principally cash and cash equivalents, accounts receivable, accounts payable and accrued expenses) are carried at cost, which approximates fair value due to the short-term maturity of these instruments. The Company's long-term credit facility is carried at cost, which due to the variable interest rate associated with the revolving credit facility, cost approximates its fair value. The Company has no Level 1 or Level 2 financial instruments and there were no transfers between Level 1 or Level 2 financial instruments. Included in Other liabilities on the Consolidated Balance Sheets at December 31, 2017 is a $35,000 contingent consideration liability classified as Level 3. The liability is valued using a Monte Carlo simulation and includes unobservable inputs such as expected levels of revenues and discount rates. Changes in the unobservable inputs in the fair value measurement of this instrument could result in a significant change in the fair value measurement.

The following table summarizes the changes in fair value for all financial instruments measured at fair value on a recurring basis using significant unobservable inputs (Level 3) (in thousands):

Beginning balance as of January 1, 2016		-
Sales		-
Settlements		-
Purchases		-
Issuances		2,900
Net (gains)/losses included in selling, general and administrative expenses		-
Transfers into Level 3		-
Transfers out of Level 3		-
Ending balance as of December 31, 2016	$	2,900
Sales		-
Settlements		-
Purchases		-
Issuances		-
Net (gains)/losses included in selling, general and administrative expenses		(2,865)
Transfers into Level 3		-
Transfers out of Level 3		-
Ending balance as of December 31, 2017	$	35

3. Acquisitions

(a) Eliza Holding Corp.

On April 17, 2017, the Company completed the acquisition of 100% of the outstanding capital stock of Eliza, for a preliminary purchase price of $171.6 million funded with available liquidity of approximately 75% cash on hand and 25% from the Company's existing credit line. Eliza is a cloud based technology platform which provides comprehensive and personalized health engagement solutions designed to improve clinical outcomes and reduce costs. Eliza reaches and engages members through a proprietary, scalable technology solution that leverages a multi-channel communications platform incorporating consumer and proprietary data sources, analytics, and behavior-driven program design to help clients achieve desired outcomes.

The purchase price was subject to certain post-closing purchase price adjustments and the initial purchase price allocation as of the date of acquisition was based on a preliminary valuation. Estimates and assumptions for which the Company is still obtaining or evaluating information are subject to change up to one year from the acquisition date as additional information becomes available and adjustments may require a change in the amounts allocated to goodwill during the periods in which the adjustments are determined. The intangible assets are valued using various methods which requires several judgments, including growth rates, discount rates, customer attrition rates, and expected levels of revenues, earnings, cash flows and tax rates. The intangible assets are amortized over their estimated useful lives on a straight-line basis and are not expected to be deductible for taxable purposes. As such, the Company recorded a net deferred tax liability which is comprised of deferred tax liabilities recognized in connection with the acquired intangible assets partially offset by deferred tax assets associated with acquired net operating loss carryforwards and credits. Goodwill was determined based on the difference between the purchase price and the fair values of the tangible and intangible assets acquired. Goodwill recognized from the acquisition was a result of synergies to be realized from future revenue growth is not deductible for tax purposes, has an indefinite useful life and will be included in the Company's annual impairment testing or between annual tests if an indicator of impairment exists.

During the third and fourth quarters of fiscal 2017, the Company made adjustments to the preliminary purchase price allocation which resulted in an increase of $8.9 million to the fair value of acquired intangible assets, a decrease of $1.8 million to the fair value of the acquired tangible assets, an increase of $3.6 million to the deferred tax liability associated with the acquired intangible assets and a decrease of $3.5 million to goodwill. The Company also changed the estimated useful life of the acquired customer relationships intangible asset from 36 years to 15 years. The updated allocation of the purchase price to the fair value of the assets acquired and the liabilities assumed as of April 17, 2017, the effective date of the acquisition, is as follows *(in thousands)*:

Cash and cash equivalents	$	435
Accounts receivable		8,902
Prepaid expenses		1,427
Property and equipment		1,146
Intangible assets		76,240
Goodwill		107,754
Other assets		63
Accounts payable		(2,620)
Deferred tax liability		(19,681)
Other liabilities		(2,057)
Total purchase price	**$**	**171,609**

The purchase price allocated to the intangibles acquired was as follows *(in thousands):*

	Useful Life (in years)		
Customer relationships	15	$	56,200
Intellectual property	6		19,600
Trade name	1.5		310
Restrictive covenants	1		130
Fair value of intangibles acquired		**$**	**76,240**

Acquisition costs recorded to selling, general and administrative expenses were as follows *(in thousands)*:

Other operating expenses - consulting fees	$	3,515
Other operating expenses - legal fees		832
Other operating expenses - transaction costs		185
Acquisition-related costs	**$**	**4,532**

The financial results of Eliza have been included in the Company's consolidated financial statements since the date of acquisition. Eliza contributed approximately $30.4 million in revenue to HMS results of operations from the date of acquisition through December 31, 2017.

(b) Essette

On September 2, 2016, the Company acquired the outstanding capital stock of Essette, a care management technology company which helps risk-bearing organizations manage the care delivered to their members, for aggregate consideration of $24.2 million, which is primarily comprised of cash payments of $21.3 million. To fund the purchase price, the Company utilized cash on hand. The purchase price was subject to adjustment based upon the final amount of adjusted working capital of Essette at closing.

The Company allocated the purchase price, net of cash acquired, to a) at their acquisition date fair values, the following tangible assets: net deferred tax assets of $0.9 million and other net assets of $0.9 million and b) at their acquisition date fair values, the following amortizing intangible assets: intellectual property of $2.1 million, customer relationships of $1.3 million, restrictive covenants of $0.1 million, and trade name of $0.1 million. Goodwill of $18.2 million represents the excess purchase price over the net identifiable tangible and intangible assets. The intangible assets are valued using various methods which requires several judgments, including growth rates, discount rates, customer attrition rates, and expected levels of revenues, earnings, cash flows and tax rates. The intangible assets are amortized over their estimated useful lives on a straight-line basis and are not expected to be deductible for tax purposes. The goodwill recognized from the acquisition was a result of expected synergies to be realized from future revenue growth, is not expected to be deductible for tax purposes, has an indefinite useful life and will be included in the Company's annual impairment testing. Contingent consideration, up to an aggregate maximum of $12.0 million, will be payable in calendar years 2017, 2018, or 2019, respectively, should Essette achieve certain revenue targets as defined in the stock purchase agreement. The contingent consideration is valued using a method which requires several judgments but primarily include discount rates and expected levels of revenues. In the fourth quarter 2016, purchase accounting adjustments included a $1.1 million increase to total transaction consideration and to goodwill, a $0.7 million increase to other net assets, and a $0.2 million increase in the customer relationship intangible. In the second quarter of 2017, the Company recorded a final working capital adjustment of $147,000 to goodwill.

The immaterial results of Essette's operations since September 2, 2016 have been included in the Company's consolidated financial statements.

As a result of the Eliza acquisition and subsequent adjustment related to Essette, the changes in the carrying amount of goodwill were as follows *(in thousands)*:

Balance at December 31, 2017	$	487,617
Eliza acquisition		107,754
Essette adjustment		147
Balance at December 31, 2016	$	379,716
Essette acquisition		18,248
Balance at December 30, 2015	$	361,468

4. Property and Equipment

Property and equipment consisted of the following (*in thousands*):

	December 31,	
	2017	**2016**
Equipment	$ 106,768	$ 94,345
Leasehold improvements	8,357	8,637
Building	8,624	8,624
Building improvements	14,546	12,671
Land	2,769	2,769
Furniture and fixtures	10,352	10,728
Capitalized software	125,655	110,696
	277,071	248,470
Less: accumulated depreciation and amortization	(178,490)	(156,303)
Property and equipment, net	$ 98,581	$ 92,167

	December 31,		
(in thousands)	**2017**	**2016**	**2015**
Depreciation and amortization expense related to property and equipment	$ 27,515	$ 24,882	$ 30,328

5. Intangible Assets

Intangible assets consisted of the following (*in thousands*):

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Amortization Period (in years)
December 31, 2017				
Customer relationships	$ 159,290	$ (89,106)	$ 70,184	11.3
Trade names	16,246	(13,916)	2,330	1
Intellectual property	21,700	(2,874)	18,826	5.2
Restrictive covenants	263	(121)	142	1.3
Total	$ 197,499	$ (106,017)	$ 91,482	18.6

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Weighted Average Amortization Period (in years)
December 31, 2016				
Customer relationships	$ 103,090	$ (71,914)	$ 31,176	11.3
Trade names	15,936	(11,393)	4,543	1
Intellectual property	2,100	(140)	1,960	5.2
Restrictive covenants	133	(15)	118	1.3
Total	$ 121,259	$ (83,462)	$ 37,797	18.6

Amortization expense of intangible assets is expected to approximate the following (*in thousands*):

Year ending December 31,	
2018	$ 23,858
2019	9,258
2020	7,804
2021	7,477
2022	7,197
Thereafter	35,888
Total	$ 91,482

For the years ended December 31, 2017, 2016 and 2015, amortization expense related to intangible assets was $22.6 million, $20.2 million and $20.3 million, respectively.

6. Accounts Payable, Accrued Expenses and Other Liabilities

Accounts payable, accrued expenses and other liabilities consisted of the following (*in thousands*):

	December 31, 2017	December 31, 2016
Accounts payable, trade	$ 19,330	$ 13,847
Accrued compensation and other	24,072	28,507
Accrued operating expenses	18,498	17,048
Total accounts payable, accrued expenses and other liabilities	$ 61,900	$ 59,402

7. Income Taxes

Income tax expense is as follows (*in thousands*):

	December 31,		
	2017	2016	2015
Current tax expense:			
Federal	$ 17,008	$ 16,274	$ 25,852
State	3,201	2,929	3,450
Total current tax expense:	20,209	19,203	29,302
Deferred tax expense (benefit):			
Federal	(19,425)	(7,115)	(12,571)
State	(983)	(253)	(1,449)
Total deferred tax benefit:	(20,408)	(7,368)	(14,020)
Total income tax expense	$ (199)	$ 11,835	$ 15,282

A reconciliation of the income tax expense calculated using the applicable federal statutory rate to the actual income tax expense is as follows (*in thousands*):

	December 31,					
	2017	%	2016	%	2015	%
Computed at federal statutory rate	$ 13,949	35.0	$ 17,315	35.0	$ 13,934	35.0
State and local tax expense, net of federal benefit	2,226	5.6	2,448	5.0	1,038	2.6
Net permanent deduction and credit tax benefits from prior years	-	-	(6,213)	(12.6)	-	-
Net permanent deduction and credit tax benefits from current year	(1,513)	(3.8)	(1,509)	(3.1)	-	-
Tax Reform - Revaluation of Deferrals	(15,130)	(38.0)	-	-	-	-
Acquisition adjustments	(1,003)	(2.5)	-	-	-	-
Acquisition costs	697	1.7	203	0.4	-	-
Other, net	575	1.5	(409)	(0.8)	310	0.8
Total income tax expense	$ (199)	(0.5)	$ 11,835	23.9	$ 15,282	38.4

The Company's effective tax rate decreased to (0.5%) for the year ended December 31, 2017 from 23.9% for the year ended December 31, 2016, primarily due to the revaluation of the Company's deferred tax balances from the federal tax rate reduction of 35% to 21% under the 2017 Tax Act which was signed into law on December 22, 2017. The net benefits for the 2017 Tax Act as recorded as provisional amounts as of December 31, 2017, represent the Company's best estimate using information available to the Company as of February 27, 2018. The Company anticipates U.S. regulatory agencies will issue further regulations over the next year which may alter this estimate. The Company is still evaluating, among other things, the application of limitations for executive compensation related to contracts existing prior to November 2, 2017. The Company will refine its estimates to incorporate new or better information as it comes available through the filing date of its 2017 U.S. income tax returns in the fourth quarter of 2018.

As a result of an analysis performed during 2016, the Company determined certain activities it performs qualify for (i) R&D Credits provided in IRC Section 41 and (ii) the Section 199 Deduction provided in IRC Section 199. As a result, the Company recognized net tax benefits during the year ended December 31, 2016 of $6.2 million for federal and state R&D Credits and the Section 199 Deduction relating to tax years 2012 through 2015.

Deferred income taxes are recognized for the future tax consequences of temporary differences between the financial statement and tax bases of assets and liabilities. The tax effect of temporary differences that give rise to a significant portion of the deferred tax assets and deferred tax liabilities are as follows (in thousands):

	December 31,	
	2017	2016
Deferred tax assets:		
Stock-based compensation	$ 9,980	$ 10,373
Goodwill and intangible assets	6,524	10,711
Allowance for doubtful accounts	3,822	4,108
Deferred rent	909	1,120
Tenant improvements	669	1,226
Estimated liability for appeals	7,775	11,596
Net operating loss carry-forwards	3,358	2,141
Tax credit carry-forwards	3,667	-
Property and equipment	256	79
Accrued expenses and other	3,615	7,811
Total deferred tax assets	40,575	49,165
Deferred tax liabilities:		
Goodwill and intangible assets	48,186	52,729
Section 481(a) adjustment	7,413	14,757
Prepaid expenses	624	-
Capitalized software cost	6,341	4,396
Total deferred tax liabilities	62,564	71,882
Total net deferred tax liabilities	$ 21,989	$ 22,717

Included in Other liabilities on the Consolidated Balance Sheets, are the total amount of unrecognized tax benefits of approximately $8.2 million and $7.4 million as of December 31, 2017 and 2016, respectively, net of the federal benefit for state issues that, if recognized, would favorably affect the Company's future effective tax rate. Also included in Other Liabilities on the Consolidated Balance Sheets, are accrued liabilities for interest expense and penalties related to unrecognized tax benefits of $0.6 million at both December 31, 2017 and 2016. HMS includes interest expense and penalties in the provision for income taxes in the Consolidated Statements of Income. The amount of interest expense, net of federal and state income tax benefits, and penalties in the Consolidated Statements of Income for the years ended December 31, 2017, 2016 and 2015 was $0.02 million, $0.2 million and $0.6 million, respectively. The Company believes it is reasonably possible the amount of unrecognized tax benefits may decrease by $1.8 million during 2018, due to the expiration of the statute of limitations in various jurisdictions.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits are as follows *(in thousands)*:

	December 31,	
	2017	2016
Unrecognized tax benefits at January 1	$ 7,433	$ 1,329
Additions for tax positions taken during prior periods	599	763
Additions for tax positions taken during current period including amended prior years	1,174	5,931
Reductions related to the expiration of statutes of limitations	(972)	(590)
Unrecognized tax benefits at December 31	$ 8,234	$ 7,433

The Company increased the provision for unrecognized tax benefits by $1.2 million during the year ended December 31, 2017, related to tax benefits recognized associated with R&D Credits and the Section 199 Deduction for all open tax years.

At December 31, 2017, HMS had federal and state pre-tax net operating loss and tax credit carryforwards of approximately $34.1 million and $3.7 million, respectively, which will be available to offset future taxable income. If not used, these net operating loss and tax credit carryforwards will begin to expire in 2021 and 2019, respectively. The Company files income tax returns with the U.S. Federal government and various state jurisdictions. HMS is no longer subject to U.S. Federal income tax examinations for years before 2012. The Company is currently under audit by the Internal Revenue Service for years 2013 and 2014 and no assessments have been received. HMS operates in a number of state and local jurisdictions. Accordingly, HMS is subject to state and local income tax examinations based upon the various statutes of limitations in each jurisdiction. Previously recognized Texas refund claims are currently being examined by the state. The Company is currently being examined by the State of Illinois and has received preliminary assessments of an immaterial amount which the Company is reviewing.

8. Credit Agreement

On December 19, 2017, the Company entered into an amendment to the Credit Agreement, which, among other things, extended the maturity of its then existing revolving credit facility by five years to December 2022. The availability of funds under the Amended Revolving Facility includes sublimits for (a) up to $50 million for the issuance of letters of credit and (b) up to $25 million for swingline loans. In addition, the Company may increase the commitments under the Amended Revolving Facility and/or add one or more incremental term loan facilities, provided that such incremental facilities do not exceed in the aggregate the sum of (i) the greater of $120 million and 100% of Consolidated EBITDA (as defined in the Credit Agreement) and (ii) an additional amount so long as our first lien leverage ratio (as defined in the Credit Agreement) on a pro forma basis is not greater than 3.00:1.00, subject to obtaining commitments from lenders therefor and meeting certain other conditions.

During the year ended December 31, 2016, no principal payments were made against the Company's then existing revolving credit facility. As of December 31, 2017, the outstanding principal balance due on the Amended Revolving Facility was $240.0 million.

Borrowings under the Amended Revolving Facility will bear interest at a rate equal to, at the Company's election (except with respect to swingline borrowings, which will accrue interest based only at the base rate), either:

- a base rate determined by reference to the greatest of (a) the prime or base commercial lending rate of the administrative agent as in effect on the relevant date, (b) the federal funds effective rate plus 0.50% and (c) the one-month LIBO rate plus 1.00%, plus an interest margin ranging from 0.50% to 1.00% based on the Company's consolidated leverage ratio for the applicable period; or
- an adjusted LIBO rate, equal to the LIBO rate for the applicable interest period multiplied by the statutory reserve rate (equal to (x) one divided by (y) one minus the aggregate of the maximum reserve percentage (including any marginal, special, emergency or supplemental reserves) established by the Board of Governors of the Federal Reserve System of the United States), plus an interest margin ranging from 1.50% to 2.00% based on the Company's consolidated leverage ratio for the applicable period.

In addition to paying interest on the outstanding principal, the Company is required to pay unused commitment fees on the revolving credit facility during the term of the Credit Agreement ranging from 0.375% to 0.250% per annum based on the Company's consolidated leverage ratio and letter of credit fees equal to 0.125% per annum on the aggregate face amount of each letter of credit, as well as customary agency fees.

The Amended Revolving Facility is secured, subject to certain customary carve-outs and exceptions, by a first priority lien and security interest in substantially all tangible and intangible assets of the Company and certain subsidiaries of the Company. The Amended Revolving Facility contains certain restrictive covenants, which affect, among other things, the ability of the Company and its subsidiaries to incur indebtedness, create liens, make investments, sell or otherwise dispose of assets, engage in mergers or consolidations with other entities, and pay dividends or repurchase stock. The Company is also required to comply, on a quarterly basis, with two financial covenants: (i) a minimum interest coverage ratio of 3:00:1:00, and (ii) a maximum consolidated leverage ratio of 4.75:1.00 through December 2019 and 4.25:1.00 from and after January 2020. The consolidated leverage ratio is subject to a step-up to 5.25:1.00 for four full consecutive fiscal quarters following a permitted acquisition or similar investment. As of December 31, 2017, the Company was in compliance with all terms of the Credit Agreement.

Interest expense and the commitment fees on the unused portion of the Company's revolving credit facility are as follows (*in thousands*):

	December 31,		
	2017	2016	2015
Interest expense	$ 7,170	$ 4,837	$ 4,117
Commitment fees	$ 1,359	$ 1,518	$ 1,513

The Company deferred $2.3 million of financing fees associated with the amendment. At December 31, 2017 and 2016, the unamortized balance of deferred financing costs was $2.8 million, in both periods. The Company amortized deferred financing costs of $2.3 million in in the year ended December 31, 2017 and $2.1 million in in the years ended December 31, 2016 and 2015.

As part of a contractual agreement with a customer, the Company has an outstanding irrevocable letter of credit for $5.4 million, which is issued against the Amended Revolving Facility and expires April 26, 2018.

9. Equity

(a) Share Repurchase

On November 1, 2017, the Board of Directors of the Company approved a share repurchase program authorizing the Company to repurchase up to $50.0 million in shares of its common stock from time to time on the open market or in privately negotiated or other transactions. The repurchase program is authorized for a period of up to two years, and may be suspended or discontinued at any time. Repurchased shares will be available for use in connection with reissuance under the Company's stock plans and for other corporate purposes. The timing and amount of any shares repurchased under the program will be determined by the Company's management based on its evaluation of market conditions, share price and other factors. In order to facilitate repurchases, the Company may enter into a Rule 10b5-1 plan from time to time, which would permit shares to be repurchased when the Company might otherwise be precluded from doing so under insider trading laws or because of a self-imposed trading blackout period. All repurchases in fiscal year 2017 were made in the fourth quarter. All repurchases for the periods presented were made under the program and using cash resources.

Following are the Company's monthly stock repurchases for the fourth quarter of fiscal year 2017, all of which were made as part of publicly announced plans or programs:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Program[(1)]	Maximum Approximate Dollar Value of Shares That May Yet Be Purchased Under the Program
October 1, 2017 to October 31, 2017	—	$ —	—	$ —
November 1, 2017 to November 30, 2017	674,813	16.23	674,813	39,044,882
December 1, 2017 to December 31, 2017	190,502	16.61	190,502	35,880,666
October 1, 2017 to December 31, 2017	**865,315**	**$ 16.33**	**865,315**	

(1) Represents shares repurchased through the Company's Share Repurchase Program publicly announced in November 2017.

(b) Preferred Stock

The Company's certificate of incorporation, as amended, authorizes the issuance of up to 5,000,000 shares of "blank check" preferred stock with such designations, rights and preferences as may be determined by the Company's Board of Directors. As of December 31, 2017, no preferred stock had been issued.

10. Employee Benefit Plan

The Company sponsors the 401(k) Plan for eligible employees. Eligible employees must complete 90 days of service in order to enroll in the 401(k) Plan. Participants may make voluntary contributions to the 401(k) Plan of up to 60% of their annual base pre-tax compensation not to exceed the federally determined maximum allowable contribution. In addition, the 401(k) Plan permits the Company to make discretionary contributions. During 2017, 2016 and 2015, HMS matched 100% of the first 3% of pay contributed by each eligible employee and 50% on the next 2% of pay contributed. These matching contributions vest immediately and are not in the form of the Company's common stock.

For the years ended December 31, 2017, 2016 and 2015, HMS contributed $5.9 million, $4.8 million and $4.8 million, respectively, to the 401(k) Plan in the form of matching contributions.

11. Stock-Based Compensation

Stock-Based Compensation Expense

Total stock-based compensation expense in the Company's Consolidated Statements of Income related to the Company's long-term incentive award plans was as follows *(in thousands)*:

	December 31,		
	2017	**2016**	**2015**
Cost of services-compensation	$ 7,354	$ 3,805	$ 6,242
Selling, general and administrative	16,789	9,472	8,055
Total	$ 24,143	$ 13,277	$ 14,297

Stock Options

Stock-based compensation expense related to stock options was approximately $10.3 million, $6.9 million and $6.4 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Presented below is a summary of stock option activity for the year ended December 31, 2017 (*in thousands except for weighted average exercise price and weighted average remaining contractual terms*):

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms	Aggregate Intrinsic Value
Outstanding balance at December 31, 2016	5,191	$ 17.35		
Granted	1,003	18.91		
Exercised	(172)	15.96		
Forfeitures	(146)	16.09		
Expired	(322)	22.34		
Outstanding balance at December 31, 2017	5,554	17.35	5.00	$ 8,274
Expected to vest at December 31, 2017	1,543	16.14	6.64	2,489
Exercisable at December 31, 2017	3,180	$ 18.24	3.77	$ 4,663

As of December 31, 2017 and 2016, the company had 2,372,682 and 3,039,844, respectively, in unvested options with a weighted-average-grant-date fair value of $6.39 and $5.70, respectively. The weighted average grant date fair value per share of the stock options granted during the years ended December 31, 2017, 2016 and 2015 was $7.66, $5.55 and $5.37, respectively. HMS estimated the fair value of each stock option grant on the date of grant using a Black-Scholes option pricing model. Weighted–average assumptions are set forth in the following table:

	December 31,		
	2017	2016	2015
Expected dividend yield	-	-	-
Risk-free interest rate	1.8%	1.2%	1.5%
Expected volatility	44.2%	44.0%	40.6%
Expected life (years)	5.0	4.9	4.9

HMS estimated the fair value of market condition option grants on the date of grant using a Monte-Carlo simulation model. Assumptions are set forth in the following table:

	December 31,		
	2017	2016	2015
Expected dividend yield	-	-	-
Risk-free interest rate	2.2%	1.6%	2.0%
Expected volatility	52.5%	40.5%	39.6%
Expected life (years)	6.5	4.9	4.9

During the years ended December 31, 2017, 2016 and 2015, the Company issued 172,326, 510,512 and 577,559 shares, respectively, of the Company's common stock upon the exercise of outstanding stock options and received proceeds of $2.7 million, $2.9 million and $4.2 million, respectively. The total intrinsic value of stock options exercised during the years ended December 31, 2017, 2016 and 2015 was $0.5 million, $6.3 million and $5.9 million, respectively.

As of December 31, 2017, there was approximately $8.4 million of total unrecognized compensation cost related to stock options outstanding, which is expected to be recognized over a weighted average period of 2.11 years.

The total tax benefits recognized on stock-based compensation for the years ended December 31, 2017, 2016 and 2015 was $4.0 million, $4.1 million and $3.4 million, respectively.

Restricted Stock Units

Stock-based compensation expense related to restricted stock units was $13.8 million, $6.4 million and $7.9 million for the years ended December 31, 2017, 2016 and 2015, respectively.

Presented below is a summary of restricted stock units activity for the year ended December 31, 2017 *(in thousands, except for weighted average grant date fair value per unit):*

	Number of Units	Weighted Average Grant Date Fair Value per Unit
Outstanding balance at December 31, 2016	1,413	$ 16.44
Granted	612	18.86
Vesting of restricted stock units, net of units withheld for taxes	(397)	15.39
Units withheld for taxes	(172)	15.39
Forfeitures	(110)	15.37
Outstanding balance at December 31, 2017	1,346	$ 17.65

As of December 31, 2017, approximately 1,117,245 restricted stock units remained unvested and there was approximately $10.0 million of unrecognized compensation cost related to restricted stock units, which is expected to be recognized over a weighted average vesting period of 0.83 years.

12. Earnings per Share

The following table sets forth the computation of basic and diluted earnings per share *(in thousands, except per share data)*:

	Years ended December 31,		
	2017	2016	2015
Net income	$ 40,054	$ 37,636	$ 24,527
Weighted average common shares outstanding-basic	83,821	84,221	87,881
Plus: net effect of dilutive stock options and restricted stock units	1,267	2,766	480
Weighted average common shares outstanding-diluted	85,088	86,987	88,361
Net income per common share-basic	$ 0.48	$ 0.45	$ 0.28
Net income per common share-diluted	$ 0.47	$ 0.43	$ 0.28

For the years ended December 31, 2017, 2016 and 2015: (i) 2,646,100, 2,070,771 and 3,480,458 stock options, respectively, and (ii) restricted stock units representing 31,155, 46,651 and 305,999 shares of common stock, respectively, were not included in the diluted earnings per share calculation because the effect would have been anti-dilutive.

13. Commitments and Contingencies

(a) Lease Commitments

The Company leases office space, data processing equipment and software licenses under operating leases that expire on various dates through 2024. The lease agreements provide for rent escalations. Lease expense, exclusive of immaterial sublease income, for the years ended December 31, 2017, 2016 and 2015 was $5.1 million, $5.0 million and $5.4 million, respectively.

Minimum annual lease payments to be made under operating leases, net of nominal sublease payments to be received and exclusive nominal capital leases, for each of the next five years ending December 31 and thereafter are as follows (*in thousands*):

	Operating Lease Payments
2018	$ 6,393
2019	3,509
2020	3,183
2021	2,081
2022	1,836
Thereafter	2,936
Total	$ 19,938

(b) Litigation

In July 2012, Dennis Demetre and Lori Lewis (the "Plaintiffs"), filed an action in the Supreme Court of the State of New York against HMS Holdings Corp., claiming an undetermined amount of damages alleging that various actions by HMS unlawfully deprived the Plaintiffs of the acquisition earn-out portion of the purchase price for Allied Management Group Special Investigation Unit ("AMG") under the applicable Stock Purchase Agreement (the "SPA") and that HMS had breached certain contractual provisions under the SPA. The Plaintiffs filed a second amended complaint with two causes of action for breach of contract and one cause of action for breach of implied covenant of good faith and fair dealing. HMS asserted a counterclaim against Plaintiffs for breach of contract based on contractual indemnification costs, including attorneys' fees arising out of the Company's defense of AMG in *Kern Health Systems v. AMG, Dennis Demetre and Lori Lewis* (the "California Action"), which are recoverable under the SPA. In June 2016, Kern Health Systems and AMG entered into a settlement agreement that resolved all claims in the California Action. In July 2017, the Court issued a decision on the Company's motion for partial summary judgment and granted the motion in part, dismissing one of Plaintiffs' breach of contract causes of action against HMS. On November 3, 2017, following a jury trial, a verdict was returned in favor of the Plaintiffs on a breach of contract claim, and the jury awarded $60 million in damages to the Plaintiffs. On November 20, 2017, the Company filed a post-trial motion for an order granting it judgment notwithstanding the verdict or, alternatively, setting aside the jury's award of damages. A hearing on the motion is set for March 2018. The Company continues to believe that strong grounds exist to overturn or greatly reduce the damages awarded by the jury. In light of the Company's belief that the jury award was unsupportable as a matter of law, the Company has not recorded a reserve for this pending litigation. HMS will continue to monitor developments in assessing the probability and measurability of any related loss contingency.

In February 2018, the Company received a Civil Investigative Demand from the Texas Attorney General, purporting to investigate possible unspecified violations of the Texas Medicaid Fraud Prevention Act. HMS intends to cooperate with the investigation.

From time to time, HMS may be subject to investigations, legal proceedings and other disputes arising in the ordinary course of the Company's business, including but not limited to regulatory audits, billing and contractual disputes, employment-related matters and post-closing disputes related to acquisitions. Due to the Company's contractual relationships, including those with federal and state government entities, HMS's operations, billing and business practices are subject to scrutiny and audit by those entities and other multiple agencies and levels of government, as well as to frequent transitions and changes in the personnel responsible for oversight of the Company's contractual performance. HMS may have contractual disputes with its customers arising from differing interpretations of contractual provisions that define the Company's rights, obligations, scope of work or terms of payment, and with associated claims of liability for inaccurate or improper billing for reimbursement of contract fees, or for sanctions or damages for alleged performance deficiencies. Resolution of such disputes may involve litigation or may require that HMS accept some amount of loss or liability in order to avoid customer abrasion, negative marketplace perceptions and other disadvantageous results that could affect the Company's business, financial condition, results of operations and cash flows.

HMS records accruals for outstanding legal matters when it believes it is probable that a loss will be incurred and the amount can be reasonably estimated. The Company evaluates, on a quarterly basis, developments in legal matters that could affect the amount of any accrual and developments that would make a loss contingency both probable and reasonably estimable. If a loss contingency is not both probable and estimable, HMS does not establish an accrued liability.

14. Customer Concentration

(a) Geographic Information

The Company operates within the United States.

(b) Major Customers

For the years ended December 31, 2017, 2016 and 2015 no one individual Company customer accounted for more than 10% of the Company's total revenue.

(c) Concentration of Revenue

The composition of the Company's ten largest customer's changes periodically. For the years ended December 31, 2017, 2016 and 2015, the Company's ten largest customers represented 39.5%, 40.6% and 44.0% of HMS' total revenue, respectively. The Company's agreements with the ten current largest customers expire between 2018 and 2023. In many instances, HMS provides services pursuant to agreements that may be renewed or subject to a competitive reprocurement process. Several of the Company's contracts, including those with some of its largest customers, may be terminated for convenience.

15. Subsequent Events

Annual Grants to Employees

On February 15, 2018, the Compensation Committee of the Board of Directors approved approximately $18.6 million in stock option and restricted stock unit awards to employees. The awards generally will vest over three years and will be issued three business days subsequent to the filing of this 2017 Form 10-K.

In connection with the preparation of our consolidated financial statements, an evaluation of subsequent events was performed through the date of filing and there were no events that have occurred that would require adjustments to the financial statements or disclosure.

16. Quarterly Financial Data (Unaudited)

The table below summarizes the Company's unaudited quarterly operating results for the last two fiscal years (*in thousands, except per share amounts*):

2017	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year Ended
Revenue	$ 113,733	$ 133,313	$ 125,673	$ 148,493	$ 521,212
Operating income	$ 3,943	$ 14,361	$ 12,861	$ 19,266	$ 50,431
Net income	$ 1,442	$ 6,517	$ 6,372	$ 25,723	$ 40,054
Net income per common share - basic	$ 0.02	$ 0.08	$ 0.08	$ 0.30	$ 0.48
Net income per common share - diluted	$ 0.02	$ 0.08	$ 0.07	$ 0.30	$ 0.47

2016	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Year Ended
Revenue	$ 119,763	$ 123,550	$ 124,604	$ 125,590	$ 489,720
Operating income	$ 9,909	$ 16,352	$ 12,650	$ 18,758	$ 57,669
Net income	$ 4,570	$ 9,869	$ 14,046	$ 9,151	$ 37,636
Net income per common share - basic	$ 0.05	$ 0.12	$ 0.17	$ 0.11	$ 0.45
Net income per common share - diluted	$ 0.05	$ 0.11	$ 0.16	$ 0.11	$ 0.43

SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS
For the years ended December 31, 2017, 2016 and 2015

Accounts receivable allowance and Estimated liability for appeals as of December 31, 2017, 2016 and 2015 are as follows:

Accounts receivable allowance *(in thousands)*:

	Balance at Beginning of Year	Provision	Recoveries	Charge-offs	Balance at End of Year
Year ended December 31, 2015	$ 9,359	8,046	(100)	(5,841)	$ 11,464
Year ended December 31, 2016	$ 11,464	21,583	108	(22,383)	$ 10,772
Year ended December 31, 2017	$ 10,772	20,233	-	(16,206)	$ 14,799

Estimated liability for appeals *(in thousands)*:

	Balance at Beginning of Year	Provision	Appeals found in providers favor	Balance at End of Year
Year ended December 31, 2015	$ 19,314	2,610	(9,123)	$ 12,801
Year ended December 31, 2016	$ 12,801	721	(2,396)	$ 11,126
Year ended December 31, 2017	$ 11,126	83	(2,665)	$ 8,544

The above chart represents the CMS estimated reserve liability only.

Exhibit 21.1

HMS HOLDINGS CORP.
LIST OF SUBSIDIARIES

Name of Subsidiary	State or Other Jurisdiction of Incorporation or Organization
Allied Management Group Special Investigations Unit, Inc.	California
HealthDataInsights, Inc.	Nevada
Health Management Systems, Inc.	New York
Permedion, Inc.(1)	New York
HMS Care Analytics, Inc.	Delaware
Essette, Inc.(2)	Colorado
Eliza Holding Corp.(2)	Delaware
Eliza Corporation(3)	Delaware
ElizaLive, Inc.(4)	Delaware
IntegriGuard, LLC (DBA – HMS Federal)	Delaware
Reimbursement Services Group Inc.	New York

(1) Wholly-owned by Health Management Systems, Inc.
(2) Wholly-owned by HMS Care Analytics, Inc.
(3) Wholly-owned by Eliza Holding Corp.
(4) Wholly-owned by Eliza Corporation

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We have issued our reports dated February 27, 2018, with respect to the consolidated financial statements, and internal control over financial reporting included in the Annual Report of HMS Holdings Corp. on Form 10-K for the year ended December 31, 2017. We consent to the incorporation by reference of said reports in the Registration Statements of HMS Holdings Corp. on Forms S-8 (File No. 333-161415, 333-149836, 333-139025, 333-178752, 333-183361, and 333-212319).

/s/ Grant Thornton, LLP

Dallas, Texas
February 27, 2018

Exhibit 23.2

Consent of Independent Registered Public Accounting Firm

The Board of Directors
HMS Holdings Corp.:

We consent to the incorporation by reference in the registration statements (Nos. 333-161415, 333-149836, 333-139025, 333-178752, 333-183361 and 333-212319) on Form S-8 of HMS Holdings Corp. of our report dated June 6, 2017, with respect to the consolidated balance sheet of HMS Holdings Corp. as of December 31, 2016, and the related consolidated statements of income, shareholders' equity, and cash flows for each of the years in the two-year period ended December 31, 2016, and the related financial statement schedule, which report appears in the December 31, 2017 annual report on Form 10-K of HMS Holdings Corp.

/s/ KPMG LLP

Dallas, Texas
February 27, 2018

Exhibit 31.1

Certification

I, William C. Lucia, certify that:

1. I have reviewed this Annual Report on Form 10-K of HMS Holdings Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2018

/s/ William C. Lucia
William C. Lucia
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

Certification

I, Jeffrey S. Sherman, certify that:

1. I have reviewed this Annual Report on Form 10-K of HMS Holdings Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2018

/s/ Jeffrey S. Sherman
Jeffrey S. Sherman
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

Certification Pursuant To 18 U.S.C. Section 1350 As Adopted Pursuant To Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of HMS Holdings Corp. (the "Company") on Form 10-K for the fiscal year ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, William C. Lucia, Chief Executive Officer of the Company, hereby certify, to the best of my knowledge, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ William C. Lucia

William C. Lucia
Chief Executive Officer
(Principal Executive Officer)

February 27, 2018

Exhibit 32.2

Certification Pursuant To 18 U.S.C. Section 1350 As Adopted Pursuant To Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of HMS Holdings Corp. (the "Company") on Form 10-K for the fiscal year ended December 31, 2017 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeffrey S. Sherman, Chief Financial Officer of the Company, hereby certify, to the best of my knowledge, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Jeffrey S. Sherman
Jeffrey S. Sherman
Chief Financial Officer
(Principal Financial Officer)

February 27, 2018

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2016
Or
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to
Commission File Number 000-50194

HMS HOLDINGS CORP.

(Exact name of registrant as specified in its charter)

Delaware	**11-3656261**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
5615 High Point Drive, Irving, TX	**75038**
(Address of principal executive offices)	(Zip Code)

(Registrant's telephone number, including area code)
(214) 453-3000

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Name of each exchange on which registered**
Common Stock $0.01 par value	**The NASDAQ Stock Market LLC (NASDAQ Global Select Market)**

Securities registered pursuant to section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer ☒	Accelerated Filer ☐	Non-Accelerated Filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act) Yes ☐ No ☒

The aggregate market value of the registrant's common stock held by non-affiliates as of June 30, 2016, the last business day of the registrant's most recently completed second quarter was $1.5 billion based on the last reported sale price of the registrant's common stock on the NASDAQ Global Select Market on that date. Solely for purposes of this disclosure, shares of common stock held by executive officers, directors and persons who hold 10% or more of the outstanding shares of common stock of the registrant as of such date have been excluded because such persons may be deemed to be affiliates. This determination is not necessarily a conclusive determination for any other purposes.

There were 83,909,845 shares of common stock outstanding as of May 31, 2017.

Documents Incorporated by Reference

None.

HMS HOLDINGS CORP. AND SUBSIDIARIES
ANNUAL REPORT ON FORM 10-K
TABLE OF CONTENTS

Glossary of Terms and Abbreviations

ACA	Patient Protections and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010
ACO	Accountable Care Organizations
ADR	Additional Documentation Request
ALJ	Administrative Law Judges
ASC	Accounting Standards Codification
ASO	Administrative Service Only
CHIP	Children's Health Insurance Program
CMS	Centers for Medicare & Medicaid Services
CMS NHE Projections	Centers for Medicare & Medicaid Services National Health Expenditures
COSO	Committee of Sponsoring Organizations of the Treadway Commission
DMD	Domestic Manufacturing Deduction
DRA	Deficit Reduction Act of 2005
DSO	Days Sales Outstanding
ERISA	Employment Retirement Income Security Act of 1974
Exchange Act	Securities Exchange Act of 1934, as amended
FASB	Financial Accounting Standards Board
FFS	Fee For Services
HIPAA	Health Insurance Portability and Accountability Act of 1996
HITECH	Health Information Technology for Economic and Clinical Health
IRS	U.S Internal Revenue Service
LIBOR	Intercontinental Exchange London Interbank Offered Rate
Medicare Advantage	Medicaid and Medicare managed care
MMIS	Medicaid Management Information Systems
PBM	Pharmacy Benefit Managers
PHI	Protected health information
PI	Payment Integrity
R&D Credits	Research and Development Tax Credits
RAC	Recovery Audit Contractor
RFI	Request for information
RFP	Request for proposals
SEC	U.S. Securities and Exchange Commission
Securities Act	Securities Act of 1933, as amended
Section 199 Deduction	U.S. Production activities deduction
SG&A	Selling, general and administrative expenses
TPL	Third-party liability
U.S. GAAP	United States Generally Accepted Accounting Principles
VHA	Veterans Health Administration
Credit Agreement	The Credit Agreement dated December 16, 2011 among HMS Holdings Corp., the Guarantor Party thereto, the Lenders party thereto and Citibank, N.A. as Administrative Agent, as amended and restated in its entirety by the Amended and Restated Credit Agreement dated as of May 3, 2013 among HMS Holdings Corp., the Guarantor Party thereto, the Lenders party thereto and Citibank, N. A. as Administrative Agent
2006 Stock Plan	HMS Holdings Corp. Fourth Amended and Restated 2006 Stock Plan
2011 HDI Plan	HDI Holdings, Inc. Amended 2011 Stock Option and Stock Issuance Plan
2016 Omnibus Plan	HMS Holdings Corp. 2016 Omnibus Incentive Plan
401(k) Plan	HMS Holdings Corp. 401(k) Plan

Cautionary Note Regarding Forward-Looking Statements

This Annual Report on Form 10-K of HMS Holdings Corp. (together with its subsidiaries, "HMS," the "Company," "we," "our" or "us") contains "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. From time to time, we also provide forward-looking statements in other materials we release to the public, as well as oral forward-looking statements. Such statements reflect our current expectations, projections and assumptions about our business, the economy and future events or conditions. They do not relate strictly to historical or current facts.

We have tried to identify forward-looking statements by using words such as "aim," "anticipate," "believe," "estimate," "expect," "forecast," "intend," "likely," "may," "plan," "project," "seek," "target," "will," "would," "could," "should," and similar expressions and references to guidance, although some forward-looking statements may be expressed differently. These statements include, among other things, information concerning our possible future actions, business plans, objectives and prospects, our future operating or financial performance, sales efforts and results of current and anticipated services, the benefits and synergies to be obtained from completed and future acquisitions, the future performance of companies we have acquired, sufficiency of our appeals reserves, the future effect of different accounting determinations or remediation activities, our ability to successfully remediate material weaknesses in our internal control over financial reporting, our future expenses, interest rates and financial results, and the impact of changes to U.S. healthcare legislation or healthcare spending affecting Medicare, Medicaid or other publicly funded or subsidized health programs.

Forward-looking statements are not guarantees and involve risks, uncertainties and assumptions that are difficult to predict. Actual results may differ materially from past results and forward-looking statements if known or unknown risks or uncertainties materialize, or if underlying assumptions prove inaccurate. These risks and uncertainties include, among other things,

- *our ability to execute our business plans or growth strategy;*
- *our ability to innovate, develop or implement new or enhanced solutions or services;*
- *the nature of investment and acquisition opportunities we are pursuing, and the successful execution of such investments and acquisitions;*
- *our ability to successfully integrate acquired businesses and realize synergies;*
- *variations in our results of operations;*
- *our ability to accurately forecast the revenue under our contracts and solutions;*
- *our ability to protect our systems from damage, interruption or breach, and to maintain effective information and technology systems and networks;*
- *our ability to protect our intellectual property rights, proprietary technology, information processes, and know-how;*
- *significant competition for our solutions and services;*
- *our failure to maintain a high level of customer retention or the unexpected reduction in scope or termination of key contracts with major customers;*
- *customer dissatisfaction, our non-compliance with contractual provisions or regulatory requirements;*
- *our failure to meet performance standards triggering significant costs or liabilities under our contracts;*
- *our inability to manage our relationships with information and data sources and suppliers;*
- *reliance on sub-contractors and other third party providers and parties to perform services;*
- *our ability to continue to secure contracts and favorable contract terms through the competitive bidding process and to prevail in protests or challenges to contract awards;*
- *pending or threatened litigation;*
- *unfavorable outcomes in legal proceedings;*
- *our success in attracting qualified employees and members of our management team;*
- *our ability to generate sufficient cash to cover our interest and principal payments under our credit facility or to borrow or use credit;*
- *unexpected changes in our effective tax rates;*
- *unanticipated increases in the number or amount of claims for which we are self-insured;*
- *changes in the U.S. healthcare environment or healthcare financing system, including regulatory, budgetary or political actions that affect procurement practices and healthcare spending;*
- *our failure to comply with applicable laws and regulations governing individual privacy and information security or to protect such information from theft and misuse;*

- *negative results of government or customer reviews, audits or investigations;*
- *state or federal limitations related to outsourcing or certain government programs or functions;*
- *restrictions on bidding or performing certain work due to perceived conflicts of interests;*
- *the market price of our common stock and lack of dividend payments; and*
- *anti-takeover provisions in our corporate governance documents.*

These and other risks are discussed under the headings "Part I. Item 1. Business," "Part I. Item 1A, Risk Factors," "Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Part II, Item 7A. Quantitative and Qualitative Disclosures about Market Risk" of this 2016 Form 10-K and in other documents we file with the SEC.

Any forward-looking statements made by us in this 2016 Form 10-K speak only as of the date on which they are made. We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law. We caution readers not to place undue reliance upon any of these forward-looking statements. You are advised, however, to consult any further disclosures we make on related subjects in our Form 10-Q and Form 8-K reports and our other filings with the SEC.

Market and Industry Data

This 2016 Form 10-K contains market, industry and government data and forecasts that have been obtained from publicly available information, various industry publications and other published industry sources. We have not independently verified the information and cannot make any representation as to the accuracy or completeness of such information. None of the reports and other materials of third party sources referred to in this 2016 Form 10-K were prepared for use in, or in connection with, this report.

PART I

Item 1. Business

Founded in 1974, HMS is a leading provider of cost containment solutions in the U.S. healthcare marketplace. We use innovative technology, extensive data services and powerful analytics, to deliver coordination of benefits, payment integrity and health management and engagement solutions to help healthcare payers improve performance and outcomes. We provide coordination of benefits services to government and commercial healthcare payers and sponsors to ensure that the responsible party pays healthcare claims. Our payment integrity services ensure healthcare claims billed are accurate and appropriate; and our care management technology helps risk-bearing organizations manage the care delivered to their members. Together these various services help customers recover amounts from liable third parties; prevent future improper payments; reduce fraud, waste and abuse; better manage the care that members receive; and ensure regulatory compliance.

HMS began its operations as Health Management Systems, Inc., which became our wholly owned subsidiary in March 2003 when we assumed its business in connection with the adoption of a holding company structure. Since then HMS has grown both organically and through targeted acquisitions of businesses that helped expand our product suite, including IntegriGuard, LLC (2009), HealthDataInsights, Inc.("HDI") (2011), Essette, Inc. (2016), Eliza Holding Corp. (2017) and others.

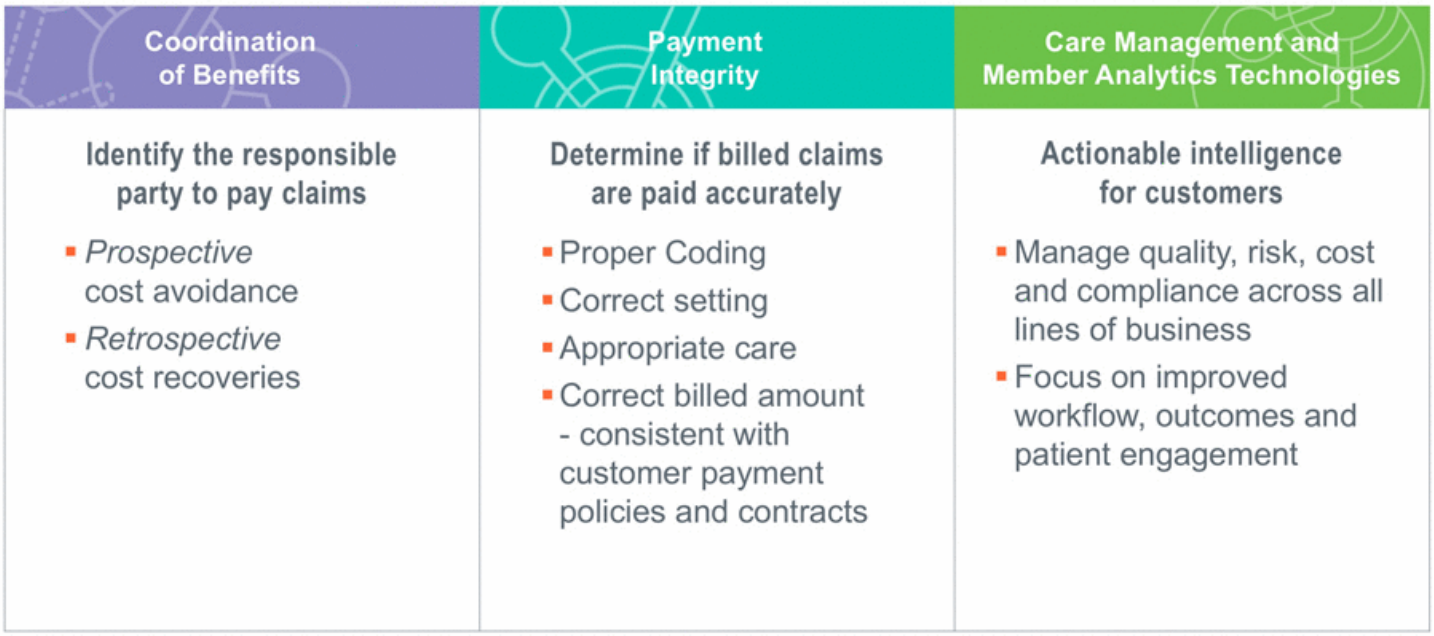
We were originally incorporated in the State of New York in October 2002 and reincorporated in the State of Delaware in July 2013. Our principal executive offices are located 5615 High Point Drive, Irving, Texas 75038 and our telephone number is (214) 453-3000.

We operate as one business segment with a single management team that reports to the Chief Executive Officer.

Our Solutions

Our coordination of benefits services draw principally upon proprietary information management and data mining techniques designed to ensure that the correct party pays a healthcare claim. Our payment integrity services are designed to ensure that healthcare billings and/or payments are accurate and appropriate. As a result of these services, customers received billions of dollars in cash recoveries in 2016, and saved billions more through the prevention of erroneous payments. In addition, our care management solutions help risk-bearing organizations manage the care delivered to their members with a focus on improving outcomes and patient engagement.

Our services are applicable to federal, state and commercial health plans and prevent and address errors across the payment continuum, from an individual's enrollment in a program before any medical service is rendered, to pre-payment review of a claim by a payer, through recovery where discovery of an improper payment is made via audit. Our services address a wide spectrum of payment errors, from eligibility and coordination of benefits errors, to the identification and investigation of potential fraud, and extend to most claim types. Our services also assist customers in managing quality, risk, cost and compliance across all lines of business.



In general, our range of services includes the following:

- *Coordination of benefits services*
  We provide cost avoidance services, which include providing validated insurance coverage information that is used by government-sponsored payers to coordinate benefits properly for future claims. With validated insurance information, Medicaid payers can avoid unnecessary costs by ensuring that they pay only after all other benefits available have been exhausted, thereby complying with federal regulations that require Medicaid to be the payer of last resort. Nevertheless, due to a variety of factors, some Medicaid claims are paid even when there is a known responsible third party. Our government-sponsored program customers rely on us to identify those claims that were paid in error and recover these payments from the liable third party. Further, we also provide services to assist customers in identifying other third-party insurance and recovering medical expenses where a member is involved in a casualty or tort incident. Lastly, for Medicaid agencies exclusively, we provide estate recovery services to identify and recover Medicaid expenditures from the estates of deceased Medicaid members in accordance with state policies. For the years ended December 31, 2016, 2015 and 2014, our coordination of benefits services represented 72.3%, 71.2% and 70.5% of our total revenue, respectively.

- *Payment integrity services*
  Our payment integrity services are applicable to all markets that HMS serves, including the federal and state governments, commercial health plans and other at-risk entities. Our solutions are designed to verify that medical services are utilized, billed and paid appropriately. Our services combine data analytics, clinical expertise and proprietary technology to identify improper payments on both a pre-payment and post-payment basis; identify and recover overpayments/underpayments; detect and prevent fraud, waste and abuse; and identify process improvements. For the years ended December 31, 2016, 2015 and 2014, our payment integrity services represented 24.3%, 24.5% and 24.5% of our total revenue, respectively.

- *Care management and member analytics technologies*
  We offer a web-based care management platform which helps risk-bearing healthcare organizations identify, engage, and manage at-risk patient populations to improve outcomes while managing costs.

Customers

For each of the years ended December 31, 2016, 2015 and 2014 no one individual Company customer accounted for more than 10% of our total revenue.

The composition of our 10 largest customers changes periodically. For the years ended December 31, 2016, 2015 and 2014, our 10 largest customers represented 40.6%, 44.0% and 40.1% of our total revenue, respectively. The current terms of our agreements with these customers have expiration dates ranging between 2017 and 2020. Several of our contracts, including those with some of our largest customers, may be terminated for convenience. The early termination of a contract with one of our significant customers may have an adverse effect on our financial condition, results of operations and cash flows.

We provide products and services under contracts (or sub-contracts) that contain various revenue structures, including contingent revenue and fixed-fee arrangements. Most of our contracts have terms ranging from three to five years, including renewal terms at the option of the customer. In many instances, we provide our services pursuant to agreements that are subject to periodic reprocurements. Because we provide our services pursuant to agreements that are open to competition from various businesses in the U.S. healthcare insurance benefit cost containment marketplace, we cannot provide assurance that our contracts, including those with our largest customers, will not be terminated for convenience, awarded to other parties, or renewed. Additionally, we cannot provide assurance that our contracts, if renewed, will have the same fee structures or otherwise be on satisfactory terms.

Industry Trends and Opportunities

U.S. healthcare expenditures continue to escalate and consume a large proportion of our GDP, presenting challenges for payers who wish to contain and reduce costs while also promoting quality healthcare outcomes. These aims are the same across all at-risk entities, including commercial health plans and government healthcare programs, such as Medicaid and Medicare.

Within the commercial market, health plans sell policies directly to individuals (on the open market or via health insurance exchanges), contract with employers to underwrite their employees' care, or contract with self-insured employers to oversee benefit administration to their employees. This market also includes a growing number of risk bearing provider-sponsored plans that operate and market health plan benefits. According to CMS NHE projections, private health insurance covered 195 million individuals in 2016 at a cost of $1.09 trillion.

Several commercial health plans also offer government-sponsored lines of business, including partnering with Medicare, Medicaid and CHIP to oversee care delivery for beneficiaries enrolled in those programs. Government managed care grew out of pressures to contain the growth of state and federal program spending and to address general concerns about healthcare access. Commercial health plan-related partnerships with government programs include the following:

- Within the Medicaid program, 38 states and the District of Columbia presently contract with managed care organizations to provide care to some or all of their Medicaid beneficiaries. In addition, many states have expanded the use of managed care organizations to new regions or to serve beneficiaries with more complex conditions. Of the 32 states and the District of Columbia that opted to expand Medicaid eligibility levels pursuant to the ACA, all except 5 use Medicaid managed care organizations. The majority of new lives that have entered the Medicaid program as a result of the ACA are enrolled in managed care plans. It is unclear at this time how, if at all, efforts in Congress to "repeal and replace" the ACA could affect any of the state expansions or future growth of Medicaid lives and expenditures.

- Similarly, managed care health plans also continue to assume risk for Medicare lives, with the Kaiser Family Foundation estimating that in 2016, nearly one-third of all Medicare recipients were enrolled in a Medicare Advantage plan.

HMS also continues to serve government-sponsored agencies' legacy fee-for-service programs at the state and federal level. These plans are generally reliant on and susceptible to the government appropriations process that determines their budget and governs the number of beneficiaries they serve.

According to the CMS NHE projections, Medicare programs in 2016 covered approximately 56 million people at a cost of approximately $681 billion and Medicaid/CHIP covered approximately 77 million people, costing approximately $593 billion. Altogether, it is projected that the government programs we serve covered approximately 130 million people at a total cost of approximately $1.3 trillion in 2016. Based on the CMS NHE Projections, Medicare spending is projected to grow 5.8% in 2017 over 2016, and CMS projects Medicaid enrollment will grow by 1.7% in 2017 over 2016. Total Medicaid spending is projected to increase at a rate of 4.8% in 2017 over 2016.

As commercial and government health plans continue to focus on strategies to contain costs across their different lines of business, we will continue to focus on serving them and meeting their evolving needs. Regardless of the program, coordinating benefits among a growing number of healthcare payers and ensuring that claims are paid appropriately represents an enormous challenge for our customers and an ongoing opportunity for us.

Regulatory Environment

The market for cost containment solutions is large and growing, driven by increasing healthcare costs and payment complexities. For 2017, Medicare and Medicaid are projected to pay approximately 45.9% of the nation's healthcare expenditures and serve over 130 million beneficiaries. Many of these beneficiaries are enrolled in managed care plans, which have the responsibility for both patient care and claim adjudications. Since 1985, we have provided state Medicaid agencies with services to identify third parties with primary liability for Medicaid claims, and since 2005, we have provided similar services to Medicaid managed care plans.

In 2006, Congress enacted the DRA and created the Medicaid Integrity Program under the Social Security Act to increase the government's capacity to prevent, detect and address fraud, waste and abuse in the Medicaid program. Later that year, Congress passed the Tax Relief and Health Care Act of 2006, which established the Medicare RAC program. HDI was awarded one of the first contracts under the program. In October 2016, CMS made a new round of awards and we again were awarded a region.

These measures, at both the federal and state level, have strengthened our ability to identify and recover erroneous payments on behalf of our customers.

The ACA was signed into law in 2010. It included many provisions impacting healthcare delivery and payment programs, including employer-sponsored health coverage, expansion of the Medicaid program, health insurance exchanges with premium subsidies, and payment integrity efforts. Following the 2016 Presidential and Congressional elections, some or all of the ACA provisions may be revised or repealed, although the scope and timing of such Congressional efforts are yet to be defined. Options that have been discussed include issuing block grants or establishing per capita caps for state Medicaid populations, and looking at program design alternatives for future enrollment criteria. We will monitor ACA-related changes as they develop and assess their potential impact, as well as any opportunities they may present for our customers and for us.

Competition

The U.S. healthcare insurance benefit cost containment marketplace is a dynamic industry with a range of businesses currently able to offer cost containment services, both directly or indirectly (through sub-contracting), to some or all of the various healthcare payers. In addition, with improvements in technology and the growth in healthcare spending, new businesses are incentivized to enter this marketplace. Many healthcare payers also have the ability to perform some or all of these cost containment services themselves and choose to exercise that option. Competition is therefore robust as customers have many alternatives available to them in their effort to contain healthcare costs.

We compete based on a variety of factors, including our ability to perform a wide range of coordination of benefits and payment integrity related functions; proven results to maximize recoveries and cost avoidance; our in-depth government healthcare program experience; clinical staff expertise; extensive insurance eligibility database; proprietary systems and processes; existing relationships with various customer and other industry shareholders; and our ability to provide customers with actionable intelligence to improve outcomes and patient engagement.

Within our core coordination of benefits services, we compete primarily with large business outsourcing and technology firms, claims processors and PBMs, clearinghouses, healthcare consulting firms, smaller regional vendors and other TPL service providers. In addition, we frequently work with customers who may elect to perform some or all of their recovery and cost avoidance functions in-house. The competitive environment for payment integrity services includes some of the same companies that provide coordination of benefits services. Within the care management and risk analytics sector, we compete primarily with vendors who provide these and other population health management technology services. Companies with whom we compete across our product offerings include:

- ChangeHealthcare
- Cotiviti
- HP
- Optum, Inc.
- Xerox
- Experian Health
- IBM/Truven
- LexisNexis
- Performant Financial Corp.
- SCIO Health Analytics
- Verscend Technologies
- CaseNet
- MedHok
- Trizetto
- ZeOmega

Business Strategy

We believe that the steadily increasing enrollment and rising expenditures for Medicare and Medicaid, with most new enrollees entering managed care plans; an aging U.S. population with an increasing concentration of individuals with high cost chronic conditions; and the overall complexity of the healthcare claims payment system in the U.S. all combine to create substantial growth opportunities for the suite of cost containment solutions which we offer. We also believe that these factors similarly present growth opportunities for our care management solutions. We expect to grow our business over the course of 2017 and beyond, both organically and inorganically, by leveraging existing key assets (e.g., our data, analytics and in-house expertise, and distribution channel) and pursuing a number of strategic objectives or initiatives, including:

- *Expanding the scope of our relationship with existing customers* – by selling additional products and services.
- *Adding new customers* – by marketing to commercial health plans, including Medicaid managed care and Medicare Advantage plans, at-risk group and individual health lines of business and ASO; government healthcare payers, including Medicaid agencies, state employee health benefit plans and CHIP; at-risk provider organizations and ACOs; and commercial employers.
- *Introducing new "homegrown" products and services* – through internal development initiatives designed to enhance or expand our existing suite of cost containment products.
- *Utilizing big data* – to create a more nimble operating environment and to identify new revenue opportunities within our current service delivery models.
- *Promoting automation and innovation to improve the efficiency and effectiveness of our services* – by continuing to implement new technology and process improvements designed to increase recovery yields and increase customer satisfaction.
- *Building out our new health management and member engagement technology platform* – by establishing a broad foundation of technology and service solutions to help customers better manage quality, cost and compliance across all lines of business. Our first step in this strategy was the acquisition of Essette Inc., a care management platform, in September 2016. More recently, we acquired Eliza Holding Corp., which provides comprehensive and personalized outreach and health engagement solutions, in April 2017.

- *Continuing opportunistic growth via acquisition* – by selectively seeking assets to complement our core cost-containment expertise; build care management and care coordination adjacencies to complement the Essette and Eliza acquisitions; and expand our data analytics capabilities. Our focus is on acquisitions that have long-term growth potential; target high-growth areas; are accretive to earnings; and fill a strategic need in our business portfolio as we seek to provide increasingly comprehensive solutions to our customers.

Employees

As of December 31, 2016, we had 2,315 employees, of which 2,287 were full-time. Of our total employees, 253 support SG&A activities.

Intellectual Property

Our ability to develop and maintain the proprietary aspects of our technology and operate without infringing the proprietary rights of others are important to our business and competitive position. We establish and protect our proprietary technology and intellectual property through a combination of patents, patent applications, trademarks, copyrights, domain names, trade secrets, including know-how, confidentiality and invention assignment agreements, security measures, non-disclosure agreements with third parties, and other contractual rights. As a result of acquiring Eliza Holding Corp. on April 17, 2017, we now own a patent portfolio comprised of approximately 55 domestic and international patents and patent applications. We do not believe that any one individual technology is essential to our business.

Available Information

Additional information about HMS is available on our website at www.hms.com. The content on our website, or any website referred to in this Annual Report on Form 10-K, is not incorporated by reference into this Annual Report, unless expressly noted.

Copies of our recent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and Proxy Statements, as well as amendments to these reports or statements, are available free of charge on our website through the Investor Relations page, as soon as reasonably practicable after we electronically file them with, or furnish them to, the SEC. These materials, as well as similar materials for SEC registrants, may be obtained directly from the SEC through their website at www.sec.gov. You may also read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room may be obtained by calling the SEC at 1-800-SEC-0330.

Item 1A. Risk Factors

Our business is subject to significant risks, including the risks and uncertainties described below. You should carefully consider these risks, as well as the other information in this 2016 Form 10-K, including our Consolidated Financial Statements and the related Notes. The occurrence of any of these risks could adversely affect our business, financial condition, results of operations, and cash flows in a material way.

Risks Relating to Our Company

Our ability to expand our business will be adversely affected if we fail to implement our growth strategy.

The size and the scope of our business operations have expanded over the past several years, and we currently intend to continue to grow and expand into new areas within the government and commercial healthcare space; however, such growth and expansion carries costs and risks that, if not properly managed, could adversely affect our business. Our future growth will depend, among other things, on our ability to successfully execute our business plans and continued efforts to improve our operations, all while remaining competitive. We must also be flexible and responsive to our customers' needs and to changes in the political, economic and regulatory environment in which we operate. The greater size and complexity of our expanding business puts additional strain on our administrative, operational and financial resources and can make optimal resource allocation more difficult to determine. We may not be able to maintain or accelerate our growth. A failure to anticipate or properly address the demands and challenges that our growth strategy and potential diversification may have on our resources and existing infrastructure may result in unanticipated costs and inefficiencies and could negatively impact our ability to execute on our business plans and growth goals, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

If we fail to innovate and develop new or enhanced solutions and services, or if these solutions and services are not adopted by our customers, it could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Part of our growth strategy depends on our ability to respond to the evolving healthcare landscape with new and enhanced solutions and services that our existing and potential customers are willing to adopt. The development, marketing and implementation of these solutions and services may require that we make substantial financial and resource investments. We face risks that our new or modified solutions and services may not be responsive to customer preferences or industry changes, and that the solution and service development initiatives that we prioritize may not yield the gains that we anticipate, if any. If we are unable to predict market preferences or healthcare industry changes, or if we are unable to develop or adapt solutions and services that are responsive to existing and potential customers' needs, we may fail to expand our business, which could constrain our future revenue growth and materially adversely affect our business, financial condition, results of operations and cash flows.

Our acquisition strategy may subject us to considerable business and financial risk.

Historically, to achieve our strategic goals, we have made a significant number of acquisitions that have expanded the solutions and services we offer, provided a presence in complementary business lines, or expanded our geographic presence and/or customer base. For example, we acquired IntegriGuard, LLC in September 2009; Verify Solutions, Inc. in December 2009; Allied Management Group-Special Investigation Unit in June 2010; Chapman Kelly, Inc. in August 2010; HDI in December 2011; MedRecovery Management, LLC in December 2012; Essette, Inc. in September 2016; and Eliza Holding Corp. in April 2017.

We intend to pursue future acquisitions that will continue to expand and diversify our business and to periodically engage in discussions regarding such possible acquisitions. We are subject to risks and uncertainties relating to our ability to identify suitable potential acquisition candidates, to consummate additional acquisitions that will be advantageous to us, and to successfully integrate future acquisitions. Future and potential business acquisitions involve a number of risk factors that could affect our operations, including, but not limited to:

- diversion of management's attention and other resources;
- our ability to integrate operational, accounting and technology functions, policies, processes, systems and controls, and to implement these functions, policies, processes, systems and controls, without incurring substantial expenses, delays or other issues;
- our ability to integrate personnel and human resource systems as well as the cultures of the acquired business;
- our ability to retain or replace the key personnel of the acquired business;
- our ability to maintain relationships with the customers of the acquired business and further develop the acquired business;
- our ability to cross-sell our solutions and services and the solutions and services of the acquired business to our respective customers;

- customer dissatisfaction or performance problems with the acquired business;
- our ability to comply with regulatory requirements and avoid potential conflicts of interest in markets that we serve;
- the misuse of intellectual property by the personnel of the acquired business;
- our ability to successfully enter into unfamiliar markets;
- assumption of unanticipated legal or financial liabilities and/or negative publicity related to prior acts by the acquired business;
- we may become subject to litigation or other claims in connection with the acquired business, including claims from terminated employees, customers, former shareholders or third parties;
- we may become significantly leveraged as a result of incurring debt to finance an acquisition;
- we may encounter unanticipated operating, accounting or management difficulties in connection with the acquired business;
- the acquired business may not perform as projected which could negatively impact earnings or contingent consideration;
- we may suffer impairment of goodwill and other acquired intangible assets; and
- we may suffer dilution to our earnings per share.

If we fail to adequately address these risks, or to successfully integrate the businesses that we acquire, we may not realize cost efficiencies, synergies or other benefits that we anticipated when selecting our acquisition candidates, and our reputation, business, financial condition, results of operations and cash flows could be materially adversely affected.

You will not be able to rely on our operating results in any particular period as an indication of our future performance because they are subject to significant fluctuation which may cause the market price of our common stock to decrease significantly.

Our operating results may fail to match our past or projected performance. We have experienced significant variations in our revenue between reporting periods due to the timing of periodic revenue recovery projects, the timing and delays in third party payers' claim adjudication and ultimate payment to our customers where our revenue is contingent upon such collections and delays in receiving payment for our services. Our revenue and operating results have also been impacted from period to period as a result of a number of factors, some of which are outside of our control, including, but not limited to:

- fluctuations in sales activity given our sales cycle;
- the commencement, completion or termination of contracts during any particular quarter;
- expenses related to certain contracts which may be incurred in periods prior to revenue being recognized;
- the timing of government contract awards;
- the time required to resolve bid protests;
- contract renewal discussions, which result in delayed payments for services already performed;
- technological and operational issues affecting our customers, including delays in payment receipt for previously recognized revenue due to delays in certain customers processing our findings through their systems;
- adjustments to age/quality of receivables and accruals as a result of delays involving contract limitations and changes or sub-contractor performance deficiencies or internal managerial decision not to pursue identified claim revenue from customers; and
- regulatory changes or general economic conditions as they affect healthcare providers and payers.

Occasionally our state and federal customers are requested by third party payers to refund payments that we previously recovered for our customers. If our state and federal customers choose to refund money in response to these requests, regardless of whether an error actually occurred in connection with the payments, we may also be required to return contingent revenue which we were previously paid associated with such refunded payments. We also typically face a long implementation period with a new customer or a new contract with an existing customer and may not be able to estimate with certainty the period in which implementation may be completed.

We cannot predict the extent to which future variations could occur due to these or other factors. Although we have experienced some seasonal trends in our operational volume, we do not consider our operations to be seasonal to any material degree. Consequently, our operating results are subject to significant fluctuation for any particular quarter, fiscal year, or other period, and may not be indicative of future periods. Significant fluctuations in our operating results may cause the market price of our common stock to decrease significantly.

We face challenges associated with forecasting the revenue under our contracts and solutions, and any failure to accurately forecast such revenue could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may not be able to accurately estimate the factors upon which we base our contract pricing, or the costs and timing for implementing and completing contracts. For a majority of our customer contracts, the payment of our fee is contingent upon the recoveries received by our customers. We also have cost-plus or time-and-material based contracts with the federal government where our revenue is recognized based on costs incurred plus an estimate of the negotiated fee earned. Our ability to earn a profit on these contracts requires that we accurately estimate the costs involved with these contracts and assess the probability of achieving certain outcomes or milestones within the contracted time period. In addition, we cannot predict with certainty the costs or the period in which implementation or contracts may be completed when we introduce new solutions or services into the marketplace. We may also face a long implementation period with a new customer or a new contract, making it difficult to reliably forecast revenue under those contracts. If we do not accurately estimate the costs and timing for completing projects, or if we encounter increased or unexpected costs, delays, failures, liabilities or risks, including those outside of our control, our contracts could prove unprofitable for us or yield lower profit margins than anticipated. Although we believe that we have recorded adequate provisions in our financial statements for losses on our fixed-price and cost-plus contracts where applicable, as required under U.S. GAAP, our contract loss provisions may not be adequate to cover all actual future losses.

System interruptions or failures could expose us to liability and harm our business.

Our data and operation centers are essential to our business and our operations depend on our ability to maintain and protect our information systems. We attempt to mitigate the potential adverse effects of a disruption, relocation or change in operating environment; however, the situations we plan for and the amount of insurance coverage that we maintain may not be adequate in every case. Despite systems redundancy and security measures, our systems and operations are vulnerable to damage or interruption from, among other sources:

- power loss, transmission cable cuts and telecommunications failures;
- damage or interruption caused by fire, earthquake and other natural disasters;
- software defects;
- cyber security breaches; and
- physical break-ins, sabotage, intentional acts of vandalism, terrorist attacks and other events beyond our control.

In addition, while there are backup systems in many of our operating facilities, an extended outage of utility or network services supplied by third party IT vendors or providers may delay or disrupt the delivery or performance of the solutions and services we provide for our customers. If we encounter a business interruption, or in the event our business continuity plans and business interruption insurance coverage are not adequate or fail to compensate us on a timely basis, we could suffer operational disruptions, disputes with customers, civil or criminal penalties, regulatory problems, increases in administrative expenses, loss of our ability to produce timely and accurate financial and other reports or other adverse consequences, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our systems and networks and those of third parties on which we rely may be subject to cyber security breaches and other disruptions that could compromise our information and harm our business.

In the ordinary course of our business, we rely heavily upon our technology systems and networks to input, maintain and communicate the confidential and proprietary data we receive on behalf of our customers, as well as third-party products and services. In addition, sub-contractors, teaming partners or other third-party vendors may receive or utilize this information on our behalf. The secure processing and maintenance of this information is critical to our operations and business strategy. Our security measures or those of third parties on which we rely could be compromised or breached as a result of computer hacking, acts of vandalism or theft, malware, computer viruses, employee error or malfeasance, catastrophes or other unforeseen events. As a result, our data, customers' data, information technology or infrastructure could be accessed improperly, made unavailable, improperly modified, or corrupted or we could suffer system disruptions, shutdowns and denials of service. The occurrence of any of these events could cause our solutions and services to be perceived as vulnerable, cause our customers to lose confidence in our solutions and services, negatively affect our ability to attract new customers, cause existing customers to terminate or not renew our solutions and services and damage our reputation, all of which could reduce our revenue, increase our expenses and expose us to legal claims and regulatory actions. Similarly, we could be materially adversely affected by the loss of proprietary, trade secret or confidential technical and financial data if our internal networks are compromised. We may be unable to implement adequate preventive measures to protect against such compromises. We could also be forced to expend significant resources in response to a cyber-security breach, including repairing system damage, increasing cyber security protection costs by deploying additional personnel and protection technologies, paying regulatory fines and litigating and resolving legal claims and regulatory actions, all of which could increase our expenses, divert the attention of our management and key personnel away from our business operations and materially adversely affect our results of operations.

If we are unable to protect our proprietary technology, information, processes, know-how, and other intellectual property and intellectual property rights, or become subject to claims of infringing or misappropriating the intellectual property of third parties, the value of our solutions and services may be diminished and our business may be materially adversely affected.

Our success as a company depends in part upon our ability to protect our core technology and intellectual property. Our expanding operations and efforts to develop new solutions and services also make protection of our intellectual property more critical. We seek to protect trade secrets and other proprietary information through confidentiality agreements and invention assignment agreements with employees, consultants and other third parties, as well as through the terms of our agreements with customers and vendors, and other security measures. However, the steps we have taken to deter misappropriation of intellectual property may be insufficient to protect our proprietary information. Misappropriation of our intellectual property by third parties, or any disclosure or dissemination of our confidential and proprietary business intelligence, queries, algorithms and other similar information by any means, could undermine any competitive advantage we currently derive or may derive from that intellectual property. For example, our current or former employees, consultants or other third parties may unintentionally or willfully disclose our trade secrets, know-how or other confidential and proprietary information to competitors. Competitors have also attempted to use state open records and/or federal Freedom of Information Act laws to obtain our proposal responses and other documents we provide to our government customers. We cannot be certain that our efforts to protect the confidential and proprietary trade secret information or intellectual property in these proposals or other documents will always be successful, due to the many factors underlying the various state and federal decisions to release information in response to open records requests (even in spite of our objections and efforts to protection information). On the other hand, third parties may claim that we are infringing upon or misappropriating their intellectual property. Our exposure to risks related to the use of intellectual property may also increase as a result of acquisitions because third parties may make infringement and similar or related claims after we have acquired technology. Any of these situations could cause us to expend significant time and resources and to incur substantial costs associated with litigation or legal proceedings that may be necessary to defend ourselves or to enforce our intellectual property rights, in which we may not ultimately prevail, and could result in our being prevented from furnishing certain solutions and services. If the protection of our proprietary rights is inadequate to prevent unauthorized use or appropriation by third parties or our employees, the value of our brand and other intangible assets may be diminished and others may be able to more effectively compete with our business by offering solutions or concepts that are substantially similar to ours, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We face significant competition for our solutions and services and we expect competition to increase, which could materially adversely affect our business, financial condition, results of operations and cash flows.

The market for healthcare cost containment solutions and services is intensely competitive, driven by rapidly changing technologies, evolving industry standards and customer demands to become more efficient. Our competitors range in size from large, diversified national companies to small, specialized firms, and could include current or former sub-contractors or teaming partners seeking to establish direct relationships with our customers in order to perform similar services as the prime contractor, as well as current and prospective customers that elect to perform recovery and cost avoidance functions in-house or to develop in-house capacities for solutions and services that we provide or hope to provide. Consolidation among vendors and healthcare providers, as well as the merging of some of our competitors or formation of business alliances with other competitors, have contributed to the increasingly competitive environment. For example, certain state customers have combined or “bundled” TPL services under large-scale IT procurements, allowing MMIS vendors to partner with less experienced TPL identification vendors based on preferred relationships or favorable pricing. In addition, companies that have invested in proprietary technology different from our own solution and service offerings, such as front-end analytics, have emerged as new competitors due to the rapidly evolving healthcare landscape. There is also increasing sophistication in the solutions and services that our competitors are developing that may become more efficient or appealing to our customers. In order to remain competitive, we may need to quickly develop and market new and enhanced solutions and services responsive to emerging technologies and changes in the healthcare industry, which may require that we make substantial financial and resource investments.

We may not be able to compete successfully against our existing or future competitors. Some of these competitors have significantly greater financial and technical resources and market recognition than we do. They may be able to (i) offer lower prices or negotiate fee reductions on our current solutions and services, (ii) respond more quickly than we can to new and emerging technologies and changing customer requirements, (iii) devote greater resources to the sale of their solutions and services and the development and implementation of new and improved systems, solutions and services for customers that we serve, and (iv) pursue various acquisitions that allow them to rapidly amass a wide array of capabilities. We may be forced to lower our pricing, unexpectedly increase or enhance our technological or data capabilities, or modify our solution or service offerings. Notwithstanding any changes we make in response to increased competition, the demand for our solutions and services may decrease as a result of increased competition. A failure to be responsive to our existing and potential customers' needs or the changing industry landscape could hinder our ability to maintain or expand our customer base, hire and retain new employees, pursue new business opportunities, complete future acquisitions and operate our business effectively. Any inability to compete effectively could materially adversely affect our business, financial condition, results of operations and cash flows.

Our business could be materially adversely affected if we fail to maintain a high level of customer retention, if our customers elect to reduce the scope of our contracts or terminate them before their scheduled expiration dates or if we fail to meet performance standards under our customer contracts.

We historically have derived and expect to continue to generate a significant portion of our revenue from a limited number of large customers at the federal and state level. Our contracts with these customers are subject to periodic renewal and some permit them to terminate their contracts on short notice, with or without cause. If a customer is dissatisfied with the quality of our work or if we fail to meet performance standards under our contracts, or if our solutions, technical infrastructure or services do not comply with the provisions of our contractual agreements or applicable regulatory requirements, customers might seek to reduce the scope of the services we perform or prematurely terminate their agreements with us, or we could incur additional costs that may impair the profitability of a contract and damage our ability to obtain additional work from that customer, or other current or prospective customers. For example, some of our contracts contain liquidated damages provisions and financial penalties related to performance failures, which if triggered, could materially adversely affect our reputation, business, financial condition, results of operations and cash flows. We also may be required to disclose such liquidated damages or other financial penalties assessed against us in connection with future bids for services with other customers.

In addition, government customers are subject to financial pressures or pressure from stakeholders that may cause them to terminate contracts for our services that may be regarded as non-essential or to redefine or reduce the scope of our contracts by, for example, significantly reducing the volume of data that we are permitted to audit. Despite our right to prompt and full payment under the terms of our contracts, we could face challenges in obtaining timely or full payments for our properly provided services from our customers. If there is a substantial reduction in the scope of our services under, or a termination of, any of our key contracts with our major customers, or if we are exposed to significant costs, liabilities or negative publicity, our ability to compete for new contracts with current or prospective customers could be damaged and our business, financial condition, reputation, results of operations and cash flows could be materially adversely affected.

Any failure to maintain effective information processing systems and the integrity of the data in, and operations of, those systems could materially adversely affect our business, financial condition, results of operations and cash flows.

Our ability to conduct our operations and accurately report our financial results depends on the integrity of the data in our information systems and the processes performed by those systems. These information systems and applications require continual maintenance, upgrading and enhancement to meet our operational needs, satisfy customer requests and handle our expansion and growth. Despite our testing and quality control measures, we cannot be certain that errors or system deficiencies will not be found and that remediation can be done in a timeframe that is acceptable to our customers, or that customer relationships will not be impaired by the occurrence of errors or the need for remediation. In addition, implementation of upgrades and enhancements may cost more, take longer or require more testing than originally expected. Given the large amount of data we collect and manage, it is possible that hardware failures or errors or technical deficiencies in our systems could result in data loss or corruption or cause the information that we collect, utilize or disseminate to be incomplete or contain inaccuracies that our customers regard as significant. Situations may also arise in which the accuracy of our data analysis or the content and quality of our work product is central to the disposition of claims, controversies or litigation between our customers and third parties that would require us to allocate significant resources to fulfilling our contractual obligations to provide our customers with full and complete access to records, analysis and back-up documentation of our work. Assuring our capacity to fulfill these obligations as well as actually fulfilling them could impose significant burdens on our infrastructure for data storage, maintenance and processing, and require us to incur increased costs to supplement our personnel, data storage and computing resources, which could materially and negatively impact other business operations.

We depend on many different entities to supply information and an inability to successfully manage our relationships with a number of these suppliers may harm the quality and availability of our solutions and services.

We obtain the data used in our solutions and services from many sources, including commercial health insurance plans, financial institutions, managed care organizations, government entities and non-government entities. From time to time, challenges arise in managing and maintaining our relationships with data sources that are not our customers and that furnish information to us pursuant to a combination of voluntary cooperation and legal obligations under laws and regulations that are often subject to differing interpretation. For example, data suppliers could seek to limit or end our access to and use of their data if they determine that certain uses of data for our customers are not permitted by our agreements, or such suppliers may make errors in compiling, transmitting or accurately characterizing data or have technological limitations that interfere with our receipt or use of the data we rely on them to provide. If a number of our information sources become unable or unwilling to provide us with certain data under terms of use that are acceptable to us and our customers, or if laws and regulations for use and protection of this data changes in a way that disincentivizes our suppliers, or imposes unacceptable or unreasonable conditions or risks on us, we may not be able to obtain new or favorable agreements with alternative data suppliers. In addition, our ability to normalize and fully utilize the information we have received from various data sources in order to enhance and improve current solutions for our customers is an important component of our growth strategy. Although we believe that we have the legal and contractual rights necessary to normalize and use the data we have obtained from these sources for potential or contemplated solution and service offerings, we cannot provide assurance that these entities will permit the use of their data for these purposes. If we lose a number of our data sources or access to certain data and are unable to identify and reach the requisite agreements with suitable alternative suppliers or fail to successfully integrate them into our solution and service offerings, or if there is a lack of integrity in the data that current or future suppliers provide, we could experience service disruptions, increased costs, reduced quality of our solutions and services, or performance penalties under our customer contracts, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may rely on sub-contractors and other third party providers to provide customers with a single-source solution or service or we may serve as a sub-contractor to a third party prime contractor. If these parties fail to satisfy their obligations to us or if we are unable to maintain these relationships, our business, financial condition, results of operations and cash flows could be materially adversely affected.

In some areas of our business we may engage sub-contractors, teaming partners, vendors or other third party providers to provide our customers with a single-source solution or service for a broader range of service needs. These third parties include software vendors, utility and network providers and other information technology service providers. Our ability to deliver and implement solutions and serve our customers effectively depends on our ability to obtain permissions from our customers, when necessary, to use these third party sub-contractors, or on these third parties meeting our service standards in both timeliness and quality. Similarly, we are and may in the future be engaged as a sub-contractor to a third party prime contractor. Sub-contracting arrangements where we are not the prime contractor pose unique risks to us because we do not have control over the customer relationship, and our ability to generate revenue under such sub-contracts is dependent on the prime contractor, its performance and relationship with the customer, and its relationship with us. While we believe that we perform appropriate due diligence on these parties and take adequate measures to ensure that they comply with the appropriate laws and regulations, we cannot guarantee that they will comply with the terms set forth in their agreements with us or in the case of a prime contractor, their agreement with the customer or that they will provide adequate and timely services, construe their contractual rights and obligations in a reasonable way, act appropriately in dealing with us or customers, and remain in compliance with the relevant laws, rules or regulations. As a result, we may have disputes with these parties arising from these or other matters. Performance deficiencies or misconduct by our prime contractors or sub-contractors may be perceived as inadequacies in our solutions or services or cause us to fail to fulfill our contractual obligations to our customers, which could materially adversely affect our customer relationships and reputation, result in termination of a customer contract or the sub-contractor or partner, and subject us to a dispute with our customer or such third party. In addition, if our third party service providers terminate or refuse to renew their relationships with us or offer their products to us in the future on less advantageous terms, we may not be able to perform or deliver solutions or services for existing customers as expected. Likewise, we could suffer losses in the event a prime contract, under which we serve as a sub-contractor, is terminated, whether for non-performance by the prime contractor or otherwise. Upon any such termination of the prime contract, our sub-contract will similarly terminate, and the resulting contract loss could materially adversely affect our business, financial condition, results of operations and cash flows.

We obtain a significant portion of our business through competitive bidding in response to government requests for proposals. Reprocurements and future contracts may not be awarded through this process on the same level or our contract awards may be challenged by interested parties which could materially adversely affect our business, financial condition, results of operations and cash flows.

In order to market our solutions and services and compete for contracts with existing and potential state and federal customers, we are often required to respond to government-issued RFPs. These RFP responses typically require us to assemble and submit a large volume of information within a rigid timetable, and to accurately estimate our cost structure for servicing the proposed contract, the time required to establish operations and the likely terms of any proposals submitted by our competitors. We may also be required to disclose the occurrence of any negative events suffered by our business, such as customer disputes, a government inquiry or an adverse judgment or settlement in litigation or a legal proceeding, which could impair our ability to win the contract at issue or have a material adverse effect on our reputation in the industry.

Even if we win these contracts, we may fail to secure favorable contract terms and conditions, or a government's determination to award us the contract may be challenged by an interested party. Under the state and federal laws and regulations governing procurements of goods and services, challenges and award protests may be filed even if there are no valid legal grounds on which to base the protest. The filing of such challenges could potentially delay the start or implementation of the contract if the government agency determines to withhold a contract award or suspend contract performance while the protest is being considered, or to take corrective action on its own, such as soliciting new bids or terminating the contract award or current procurement. In the event of irregularities, we perceive or learn of in the award or bidding process, we also may be forced to file protests in response to RFP awards to other bidders. Resolution of a protest, even in our favor, could force us to expend considerable funds in disputing the potential award or to incur additional expenses to maintain our ability to timely start implementation, which may cause our actual results to differ materially and adversely from those anticipated. In addition, if we are unable to win reprocurements or protests of particular contracts, we may be precluded from entering certain customer markets for the term of the contract awarded to another party. Any failure to continue to obtain contracts in response to government RFPs, to design proposals that result in profitable contracts, to win new contracts or re-procure current contracts after they expire or to prevail in protests or challenges of contract awards could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Adverse judgments or settlements in legal proceedings could materially harm our business, financial condition, operating results and cash flows.

We are subject and may be a party to lawsuits and other claims that arise from time to time in the ordinary course of our business, which may include those related to, for example, contracts, sub-contracts, teaming agreements, protection of confidential information or trade secrets, adversary proceedings arising from customer bankruptcies, employment of our workforce and immigration requirements or compliance with any of a wide array of state and federal statutes, rules and regulations that pertain to different aspects of our business. We may also be required to initiate expensive litigation or other proceedings to protect our business interests. There is a risk that we will not be successful or otherwise be able to satisfactorily resolve any pending or future litigation. In addition, litigation and other legal claims are subject to inherent uncertainties and management's view of currently pending legal matters may change in the future. Those uncertainties include, but are not limited to, litigation costs and attorneys' fees, unpredictable judicial or jury decisions and the differing laws and judicial proclivities regarding damage awards among the states in which we operate. Unexpected outcomes in such legal proceedings, or changes in management's evaluation or predictions of the likely outcomes of such proceedings (possibly resulting in changes in established reserves), could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may not be able to deliver our solutions and services efficiently if we are unable to attract and retain qualified employees.

Our successful delivery of services and solutions is dependent upon our ability to recruit, employ, train and retain skilled personnel. Our ability to maintain our productivity and profitability is limited by our ability to attract and retain the skilled personnel necessary to sustain our business and operations. The success of recruitment and retention strategies depend on a number of factors, including the competitive demands for employees having the skills we need and the level of compensation required to hire and retain such employees. As our business expands and undergoes change, we may also find it difficult to preserve our corporate culture, which could reduce our ability to innovate and operate effectively or result in a loss of experienced personnel. In addition, our customers or competitors may hire away our qualified employees. We may not be able to recruit the appropriate personnel or maintain the personnel necessary to efficiently operate and support our business, and even if our recruitment and retention strategies are successful, our labor costs may increase significantly. Our inability to hire sufficient personnel on a timely basis without significantly increasing our labor costs could materially adversely affect our business, financial condition, results of operations and cash flows.

Our future success depends, in part, on the continued service of members of our management team.

Our ability to execute on our business plans and future success requires that we attract, develop, motivate and retain experienced and innovative executive officers and senior managers who have successfully managed, designed or implemented government services programs or information technology projects, or have relevant experience in other sectors of data management or the healthcare industry. These individuals are in great demand and are likely to remain a limited resource in our industry. The loss of services of one or more members of our management team could materially adversely affect our business, financial condition, results of operations and cash flows. In addition, to the extent we lose an executive officer or senior manager, we may incur increased expenses in connection with the hiring, promotion or replacement of these individuals and the transition of leadership and critical knowledge.

Our outstanding indebtedness could materially adversely affect our financial condition and our ability to operate our business, and we may not be able to generate sufficient cash flows to meet our debt service obligations.

As of December 31, 2016, the outstanding principal balance due under our Credit Agreement was $197.8 million. Our outstanding indebtedness and any additional indebtedness we incur may have important consequences for us, including, without limitation, that: (i) we may be required to use a substantial portion of our cash flow to pay the principal of and interest on our indebtedness; (ii) our indebtedness and leverage may increase our vulnerability to adverse changes in general economic and industry conditions, as well as to competitive pressures; (iii) our ability to obtain additional financing for working capital, capital expenditures, acquisitions and for general corporate and other purposes may be limited; and (iv) our flexibility in planning for, or reacting to, changes in our business and our industry may be limited.

In addition, our ability to make payments of principal and interest on our outstanding revolving credit facility depends upon our future performance and our ability to generate cash flows. Under the terms of the Credit Agreement, we are required to comply with specified financial and operating covenants, which may limit our ability to operate our business as we otherwise might operate it. For example, our obligations may be accelerated upon the occurrence of an event of default, including, without limitation, payment defaults, failure to perform affirmative covenants, failure to refrain from actions or omissions prohibited by negative covenants, the inaccuracy of representations or warranties, cross-defaults, bankruptcy and insolvency related defaults, defaults relating to judgments, defaults due to certain ERISA related events and a change of control default. If not cured, an event of default would result in any amounts outstanding, including any accrued interest and unpaid fees, becoming immediately due and payable, which would require us to, among other things: seek additional financing in the debt or equity markets, refinance or restructure all or a portion of our indebtedness, sell selected assets, and/or reduce or delay planned capital or operating expenditures. Such measures might not be sufficient to enable us to service our debt, and any such financing or refinancing might not be available on economically favorable terms or at all. If we are not able to generate sufficient cash flows to meet our debt service obligations or are forced to take additional measures to be able to service our indebtedness, our business, financial condition and results of operations could be materially and adversely affected.

Changes in, or interpretations of, tax rules and regulations may materially adversely affect our effective tax rates.

We are a United States-based company subject to various federal, state and local tax laws and regulations in multiple U.S. jurisdictions that govern numerous aspects of our business. As we expand our business, we may perform services for new customers located outside of the United States or in a U.S. Territory, which may subject us to foreign tax laws and regulations that could increase our exposure to additional tax liabilities. Unanticipated changes in our tax rates could affect our future results of operations. Our future effective tax rates could be unfavorably affected by changes in the tax rates in jurisdictions where our income is earned and taxed, by changes in, or our interpretation of, tax rules and regulations in the jurisdictions in which we do business, by providing services in new jurisdictions, by increases in expenses not deductible for tax purposes including impairments of goodwill, by changes in U.S. GAAP or by changes in the valuation of our deferred tax assets and liabilities. Furthermore, the results of the 2016 elections create uncertainty regarding future potential tax law reform.

In addition, we are subject to the continual examination of our income tax returns by the IRS and other domestic tax authorities. We regularly assess the likelihood of outcomes resulting from these examinations to determine the adequacy of our provision for income taxes and have reserved for potential adjustments that may result. The final determination of any of these examinations could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our health insurance coverage and self-insurance reserves may not cover future claims, which could materially adversely affect our business, financial condition, results of operations and cash flows.

We maintain various insurance policies for company employee health, workers' compensation, general liability and property damage. We are self-insured for our health plans, and have purchased a fully-insured stop loss policy to help offset our liability for both individual and aggregate claim costs. We are also responsible for losses up to a certain limit for workers' compensation, general liability and property damage insurance.

For policies under which we are responsible for losses, we record a liability that represents our estimated cost of claims incurred and unpaid as of the balance sheet date. Our estimated liability is not discounted and is based on a number of assumptions and factors, including historical trends, actuarial assumptions and economic conditions, and is closely monitored and adjusted when warranted by changing circumstances. Our prior growth could affect the accuracy of estimates based on historical experience. Should a greater amount of claims occur compared to what was estimated or medical costs increase beyond what was expected, our accrued liabilities might not be sufficient and we may be required to record additional expense. Unanticipated changes may also produce materially different amounts of expense than reported under these programs, which could materially adversely affect our business, financial condition, results of operations and cash flows.

We identified material weaknesses in our internal control over financial reporting, and if we fail to remedy them or other material weaknesses that we may identify in the future, our financial statements could be materially misstated.

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting, as defined in Rule 13a-15(f) under the Exchange Act. As described in Part II, Item 9A of this Annual Report on Form 10-K, management identified material weaknesses in our internal control over financial reporting as of December 31, 2016 related to the calculation of the estimated liability for appeals balance in connection with our CMS reserve and the valuation of our accounts receivable allowance. These material weaknesses resulted in an immaterial reclassification error in revenue and selling, general and administrative expenses that was corrected prior to issuance of the consolidated financial statements. Until remediated, these material weaknesses could result in misstatements of account balances or disclosures that would result in a material misstatement to the annual or interim consolidated financial statements that will not be prevented or detected on a timely basis.

We are actively revising and supplementing our control environment and our risk assessment process and the design of our process level controls in order to remediate these material weaknesses, including a set of compensating controls in the near term. We are enhancing and revising the design of controls and procedures to ensure the calculations of the CMS reserve and the accounts receivable allowance properly utilize historical information to derive the period-end balances. Additionally, management will be supplementing the review controls over the CMS reserve and the accounts receivable allowance, and controls over the completeness and accuracy of the data used to calculate the balances, with additional levels of review involving senior members of our accounting department and will assess the need for additional remediation steps.

We cannot predict the outcome of our assessment and that of our independent registered public accounting firm in future periods. If our remedial measures are insufficient to address the material weaknesses, or if additional material weaknesses or significant deficiencies in our internal controls are discovered or occur in the future, we may fail to meet our future reporting obligations on a timely basis, our financial statements may contain material misstatements, our operating results or financial condition may be negatively impacted, and we may be subject to litigation and regulatory actions, causing investor perceptions to be adversely affected and potentially resulting in a decline in the market price of our common stock.

Risks Relating to Our Industry

Our business could be materially adversely affected by changes in the U.S. healthcare environment or in laws relating to healthcare programs and policies, particularly as they relate to the ACA and the Medicare and Medicaid programs.

The healthcare industry in the United States is subject to changing political, economic and regulatory influences that may affect the procurement practices and operations of federal, state and commercial healthcare organizations and agencies. The ACA's emphasis on program integrity and cost containment, along with its expansion of Medicaid, created new opportunities to grow our business and our service offerings. However, due to a wide range of factors contributing to uncertainty of the healthcare landscape, including, among other factors, the results of the 2016 elections, Congressional activity to repeal the ACA, and the numerous, varying ACA replace measures that may encompass Medicaid, Medicare and commercial insurance, it is difficult to predict its full impact and influence on future changes to healthcare policy. Policies that fundamentally change the financial structure of the Medicaid program, currently funded jointly by the states and the U.S. Federal Government, could result in early termination or non-renewal of our contracts with certain state government customers. Federal changes may also reduce reimbursement rates to states, establish new payment models, increase or decrease government involvement in healthcare, decrease the Medicare RAC Program, or otherwise change the operating environment for our customers. Healthcare organizations may react to such changed circumstances and financial pressures by taking actions to ramp up, curtail or defer their retention of cost containment providers like us, which could impact the demand for our solutions and services. While certain changes may present new opportunities to us, our business, financial condition, results of operations and cash flows could be materially adversely affected if efforts to waive, modify or otherwise change the ACA, in whole or in part, are successful, if we are unable to adapt our solutions and services to meet changing requirements or expand service delivery into new areas, or if the demand for our solutions and services is reduced.

Healthcare spending fluctuations, simplification of the healthcare payment process or other aspects of the healthcare financing system, budgetary pressures and/or programmatic changes diminishing the scope of program benefits, or limiting payment integrity initiatives, could reduce the need for and the price of our solutions and services, which would have a material adverse effect on our business, financial condition, results of operations and cash flows.

Our projections and expectations are premised, in part, upon consistent growth rates in spending in the Medicare and Medicaid programs, the current healthcare financing system and the need for our solutions and services within that existing framework. Our success as a company is based on offering solutions and services that improve the ability of our customers to identify and recover revenue that would otherwise be lost often as a result of procedural inefficiencies and complexities in that system. However, the need for our solutions and services, the price customers are willing to pay for them or the scope and profitability of our contracts could be negatively affected by a number of factors, including a lower than projected growth in Medicare and Medicaid programs due to developments such as the possible repeal of or modification to the ACA, and any action taken to reduce eligibility or services, or reform Medicaid spending. The absence of near-term compliance deadlines effected by the ACA and other legislation could additionally cause our revenue to decline. There can be no certainty that additional incentives will be created in regard to our solutions and services, or that any legislation or regulations that may be adopted would favorably impact our business.

Modifications in provider billing behavior and habits, often in response to the success of our solutions and services or to changes that reduce healthcare spending, could also reduce the profitability of our contracts and reduce the need for our solutions and services. Compounding this are budgetary pressures that may drive changes at the state level. The demand for our solutions and services could also be impacted by other changes in government healthcare programs or in the level of government spending, such as:

- the simplification of the healthcare benefit and payment system through legislative or regulatory changes at the federal or state level (for example, legislative changes impacting the scope of mandatory audits; limiting or reducing the amount of reviewable claims and/or the look-back period for review in areas where we conduct audits);
- unanticipated reductions in the scope of program benefits (such as, for example, state decisions to eliminate coverage of optional Medicaid populations or services or shifting lives into managed care plans); or
- limits placed on ongoing program integrity initiatives.

For example, during 2014 and 2015, our recovery audit services under HDI's existing Medicare RAC contract were limited because of significant delays in procurement activities for the new Medicare RAC contract awards, resulting from, in part, the cancellation of the original and second procurements following the denial of pre-award protests and ongoing litigation regarding certain payment terms proposed by CMS as part of the new Medicare RAC proposals. In October 2016, CMS announced the new awards, including the award of RAC Region 4 to our wholly owned subsidiary. These new Medicare RAC contracts are currently being implemented and we currently expect that audits will begin in Q2 2017. Our existing Medicare RAC contract ends on January 31, 2018, and we are required to maintain certain reserves related to pending appeals for this contract through at least this date. In addition, CMS has shifted the responsibility for initial medical reviews of short inpatient stays from the Medicare RACs to Quality Improvement Organizations, further restricting the Medicare RACs review to a small subset of claims for potential payment inaccuracies. CMS has also implemented new ADR limits for inpatient providers that reduces the ADR requirement to 0.5% under the new contract, down from the 2.0% ADR requirement under the prior contract. This change significantly impacts the volumes of claims Medicare RACs are permitted to review for inpatient providers and reduces their ability to identify overpayments and underpayments under their Medicare RAC contracts. For the new contract, CMS has continued to maintain the previously established ADR limits for institutional providers, originally established in January 2016, which reduced the ADR requirement to 0.5%. In April 2016, CMS instituted a new policy adjusting ADR limits based on provider denial rate after three (3) 45-day ADR cycles. This change significantly impacts the volumes of claims Medicare RACs are permitted to review for inpatient providers, and reduces their ability to identify overpayments and underpayments under their Medicare RAC contracts in the near term, pending the adjustment of ADR limits based on provider denial rates established following the first three (3) cycles of RAC reviews.

Further, in August 2014, CMS announced it would settle with hospitals willing to withdraw inpatient status claims currently pending in the RAC appeals process by offering to pay hospitals 68% for all eligible claims they had billed to Medicare. In June 2015, CMS notified HDI that based on the initial lists of finalized settlements, HDI owed CMS approximately $28.6 million due to adjustments in contingency fees under our existing Medicare RAC contract. HDI previously advised CMS that it disagrees with CMS' interpretation of the contract and that CMS does not have the contractual right, among other things, to require repayment of fees already paid. The amount ultimately payable to CMS by HDI remains uncertain. In addition, in September 2016, CMS announced that it would extend an opportunity for another round of settlements for hospitals that were eligible for but did not choose to participate in the 2014 settlement, with CMS offering to pay 66% for all eligible claims they had billed to Medicare. We believe this settlement will be processed and evaluated by CMS over the course of 2017, and the number and amount of claims that will be subject to the 2016 settlement remains uncertain. There could be a material negative impact on our future revenue to the extent that (i) any final determination of amounts owed by us to CMS under the current Medicare RAC contract materially exceeds our accrued reserves for such appeals, (ii) we are required to increase or decrease our contractually required reserves with respect to pending appeals due to changes in appeal performance, changes in data provided to us from other entities in the RAC process, or other related factors, (iii) we are required to repay a portion of prior fees associated with the hospital settlement program, (iv) we are unable to obtain full payments for properly provided services, or (v) future fees payable to us by CMS are reduced. Although we do not anticipate our Medicare RAC contract will represent a significant portion of our business going forward, our Medicare RAC contract still represents a future business opportunity for us and any of these factors or other changes to the Medicare RAC program that materially reduce our revenue or profitability with such program could have a material adverse effect on our business, financial condition, results of operations and cash flows.

A failure to comply with the laws and regulations that apply to companies in our industry regarding individual privacy and information security could subject us to legal actions, fines and penalties and negatively impact our reputation and operations.

As a service provider, we often receive, process, transmit and store sensitive data, including PHI and personally identifiable information of individuals, as well as other financial, confidential and proprietary information belonging to our customers, subsidiaries, data supplies and other third parties from which we obtain information. The use and disclosure of that information is regulated at the federal, state, international and industry levels and we are also obligated by our contractual requirements with customers. For example, we are subject to federal regulation under HIPAA, as amended by the HITECH Act, the Final Omnibus Privacy, Security, Breach Notification, and Enforcement Rule, which modified and supplemented many of the standards and regulations under HIPAA and the HITECH Act, and various state laws. HIPAA also imposes standards and requirements on our business associates as defined under HIPAA.

Even though we take measures to comply with all applicable regulations and to ensure our business associates and sub-contractors comply with these laws, regulations and rules, we have less than complete control over our business associates' and sub-contractors' actions and practices. We may be exposed to data breach risk if there is unauthorized access to one of our or our sub-contractors' secure facilities or from lost or stolen laptops, other portable media from current or former employee theft of data containing PHI, from misdirected mailings containing PHI, or other forms of administrative or operational error. If we or our sub-contractors fail to comply with applicable laws; if unauthorized parties gain physical access to one of our facilities and steals or misuses confidential information; if we erroneously use or disclose data in a way that is inconsistent with our granted rights; or if such information is misdirected, lost or stolen during transmission or transport, we may suffer damage to our reputation, potential loss of existing customers and difficulty attracting new customers. We could also be exposed to, among other things, unfavorable publicity, governmental inquiry and oversight, allegations by our customers that we have not performed our contractual obligations, costs to provide notifications to affected individuals, or litigation by affected parties and possible financial obligations for damages or indemnification obligations related to the theft or misuse of such information, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

In addition, laws, rules and regulations concerning the protection of personal information are subject to frequent change by legislation, regulatory issuances or administrative interpretation. As regulatory focus on privacy issues continues to increase and these laws and regulations continue to expand and become more complex, these potential risks to our business could intensify. Changes in laws or regulations associated with the enhanced protection of certain types of sensitive data, such as healthcare data or other personally identifiable information, along with increased customer demands for enhanced data security infrastructure, could greatly increase our cost of providing our solutions and services.

We are subject to extensive government regulation, including government audits and investigations relating to our compliance with the laws and regulations applicable to companies in our industry, and a negative finding or other adverse determination could have a material adverse effect on our reputation, business, financial condition, results of operations and cash flows.

Much of our business is regulated by the federal government and the states in which we operate. The laws and regulations governing our operations are generally intended to benefit and protect individual citizens, including government program beneficiaries, health plan members and providers, rather than shareholders, and the government agencies administering these laws and regulations have broad latitude to enforce them. As such, we are subject, on an ongoing basis, to various governmental reviews, audits and investigations to verify our compliance with our contracts and applicable laws and regulations, as well as legal actions and enforcement proceedings. For example, because we receive payments from federal and state governmental agencies, we are subject to various laws, including the Federal Acquisition Regulations, the Foreign Corrupt Practices Act, federal and state employment, equal opportunity and affirmative action laws, federal and state prompt pay statutes. We are also subject to Federal False Claims Act and similar state statutes, which permit government law enforcement agencies to institute suits against us for violations and, in some cases, to seek double or treble damages, penalties and assessments. In addition, private citizens, acting as whistleblowers, can sue on behalf of the government under the "*qui tam*" provisions of the Federal False Claims Act and similar statutory provisions in many states.

The expansion of our operations into new solutions and services may further expose us to requirements and potential liabilities under additional statutes and legislative schemes that have previously not been relevant to our business, such as banking and credit reporting statutes, that may both increase demands on our resources for compliance activities and subject us to potential penalties for noncompliance with statutory and regulatory standards. Increased involvement in analytic or audit work that can have an impact on the eligibility of individuals for medical coverage or specific benefits, or payments made by our customers to providers, could increase the likelihood and incidence of our being subjected to scrutiny or legal actions by parties other than our customers, based on alleged mistakes or deficiencies in our work, with significant resulting costs and strain on our resources.

These laws and regulations, along with the terms of our government contracts, regulate how we do business, what solutions and services we offer and how we interact with our customers, providers, other healthcare payers and the public. If the government discovers improper or illegal activities in the course of audits or investigations, we may be subject to various civil and criminal penalties and administrative sanctions, which may include termination of contracts, forfeiture of profits, suspension of payments, fines and suspensions and debarment from doing business with the government. Similarly, if our customers assert that we have failed to properly perform or comply with our contractual obligations, or if the carriers to which we send billings assert that we have failed to properly comply with applicable federal or state billing rules and regulations, we may be required to provide refunds or make payments to resolve such issues. The risks to which we are subject, particularly under the Federal False Claims Act and similar state fraud statutes, have also increased in recent years due to legislative changes that have (among other amendments) expanded the definition of a false claim to include, potentially, any unreimbursed overpayment received from, or other monetary debt owed to, a government agency. This subjects us to potential liability for a false claim, for example, where we may be overcharged for services by a sub-contractor and may pass that charge on to a government customer, or where we may have a good faith disagreement with a government agency's view of whether an overpayment has occurred. If we are found to be in violation of any applicable law or regulation, or if we receive an adverse review, audit or investigation, any resulting negative publicity, penalties or sanctions could have an adverse effect on our reputation in the industry, impair our ability to compete for new contracts or bid in response to RFPs in one or more jurisdictions and have a material adverse effect on our business, financial condition, results of operations and cash flows.

Federal and state governments may limit or prohibit outsourcing of certain programs or functions, refuse to grant consents or waivers necessary to permit private entities to perform such work, or impose other limitations on outsourcing or certain vendors that may obstruct cost-effective performance of our contracts.

The federal government or a state could limit or prohibit private contractors like us from operating or performing elements of certain government functions or programs. State or local governments could be required to operate such programs with government employees as a condition of receiving federal funding. Moreover, under current law, in order to privatize certain functions of government programs, the federal government must grant a consent and/or waiver to the petitioning state or local agency. If the federal government does not grant a necessary consent or waiver, the state or local agency will be unable to outsource that function to a commercial entity. Such a situation could eliminate a contracting opportunity or reduce the value of an existing contract.

Similarly, other state or federal limitations on outsourcing certain types of work to vendors that supplement our own workforce could make it more difficult for us to fulfill our contracts in a cost-effective manner. Certain segments of our operations use or involve vendor or sub-contractor personnel located outside of the United States, who may (under carefully controlled circumstances) access certain PHI in the course of assisting us with various elements of the services we provide to our customers. There is, however, increasing pressure from an expanding number of sources to prohibit the use of off-shore labor, particularly on government contracts. The federal government and a number of states have considered laws or issued rules, regulations, and orders that would limit, restrict or wholly prohibit the use of off-shore labor in performance of government contracts, or impose sanctions for the use of such resources. Some of our customers have already chosen to contractually limit or restrict our ability to use off-shore resources. Intensified restrictions of this type or associated penalties could raise our costs of doing business, expose us to unexpected fines or penalties, increase the prices we must charge to customers to realize a profit and eliminate or significantly reduce the value of existing contracts or potential contract opportunities, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

We may be precluded from bidding on or performing certain work due to work we currently perform, which could materially adversely affect our business, financial condition, results of operations and cash flows.

Various laws, regulations and administrative policies prohibit companies from performing work for government agencies in capacities that might be viewed to create an actual or perceived conflict of interest. In particular, CMS has stringent conflict of interest rules, which can limit our bidding for specific work for CMS, or for other contracts that might conflict, or be perceived by CMS to conflict, with contractual work for CMS. State governments and managed care organizations also have conflict of interest restrictions that could limit our ability to bid for certain work and impede our overall sales strategy. As we continue to expand and diversify our business operations, the likelihood that customers or potential customers will perceive conflicts of interest between our various subsidiaries, solutions, services, activities and customer relationships may increase. Such conflicts, whether real or perceived, could result in a loss of contracts or additional internal structural barriers that delay operational efficiency, or may require that we divest ourselves of certain existing businesses or reorganize our current management and personnel structure, as well as our corporate organization and entity structure, in order to qualify for new contract awards or to appropriately mitigate conflicts and otherwise accommodate the needs as a company that is expanding in complexity. Our failure to devote sufficient care, attention and resources to managing these adjustments may result in technical or administrative errors that could expose us to potential liability or adverse regulatory action. In addition, conflict of interest rules and standards change frequently, and are subject to varying interpretations and varying degrees and consistency of enforcement at the federal, state and municipal levels, and we may not be successful in navigating these restrictions. If we are prevented from expanding our business or are unable to effectively implement our strategic initiatives due to real or perceived conflicts of interest, our business, financial condition, results of operations and cash flows could be materially adversely affected.

Risks Related to Our Common Stock

The market price of our common stock may be volatile, and fluctuations in the price of our common stock may materially adversely affect our business, financial condition, results of operations and cash flows and materially adversely affect our shareholders.

The market price of our common stock has fluctuated widely and may continue to do so. During the 52-week period ended May 31, 2017, the closing price of our common stock on the NASDAQ Global Select market ranged from a high of $23.46 per share, to a low of $16.18 per share. Our stock price is subject to fluctuation as a result of a variety of factors, including factors beyond our control including the risk factors described above and those which are related to:

- changes in estimates of our performance or recommendations by securities analysts and operating and stock price performance of other companies that investors deem comparable to our company;
- news reports relating to trends, concerns and other issues in the healthcare industry, including perceptions in the marketplace regarding us and our competitors;
- the financial projections we publicly provide and any changes in or failure to meet those projections;
- future sales of shares of common stock in the public market by our executive officers or directors;
- any other changes in the amount of our outstanding shares, including as a result of share repurchases;
- the public's response to our press releases, or other public announcements, including our filings with the SEC;
- securities class actions, shareholder lawsuits or other litigation; and
- market conditions in the industry and the economy as a whole.

In addition, the stock market often experiences significant price and volume fluctuations. These fluctuations are often unrelated to the operating performance of particular companies. These broad market fluctuations may materially adversely affect the market price of our common stock. When the market price of a company's stock drops significantly, shareholders may institute securities class action litigation against that company. Any litigation against us could cause us to incur substantial costs, divert the time and attention of our management and other resources or otherwise harm our business.

Because we do not intend to pay dividends, you will benefit from an investment in our common stock only if it appreciates in value.

We have paid no cash dividends on any of our capital stock to date and currently intend to retain our future earnings, if any, to fund the development and growth of our business. As a result, we do not expect to pay any cash dividends in the foreseeable future. The success of your investment in our common stock will likely depend entirely upon any future appreciation. There is no guarantee that our common stock will appreciate in value or even maintain the price at which you purchased your shares.

Certain provisions of our certificate of incorporation and bylaws could discourage unsolicited takeover attempts, which could depress the market price of our common stock.

Our certificate of incorporation authorizes the issuance of up to 5,000,000 shares of "blank check" preferred stock with such designations, rights and preferences as may be determined by our Board of Directors. Accordingly, our Board of Directors is empowered, without shareholder approval, to issue preferred stock with dividend, liquidation, conversion, voting or other rights, that could adversely affect the voting power or other rights of holders of our common stock. In the event of issuance, preferred stock could be utilized, under certain circumstances, as a method of discouraging, delaying, or preventing a change in control. Although we have no present intention to issue any shares of preferred stock, it is possible that we will do so in the future. In addition, our bylaws provide for a classified Board of Directors, require advance notice of shareholder proposals for business to be conducted at meetings of our shareholders and for nominations of candidates for election to our Board of Directors and provide for Delaware as an exclusive forum for certain disputes with our shareholders, all of which could also have the effect of discouraging a change of control.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Location	Approximate Square Footage	Owned/Leased
Irving, TX	242,260	Owned
Las Vegas, NV	64,736	Leased
Westerville, OH	25,212	Leased
Irvine, CA	23,790	Leased
New York City, NY	22,500	Leased
Charlestown, MA	13,628	Leased
All Other Locations	77,914	Leased

As of December 31, 2016, we leased approximately 78,000 square feet of office space in 21 other locations throughout the United States, the leases for which have expiration dates starting late 2017 through 2024. See Note 12 - "Commitments and Contingencies" in our Notes to the Consolidated Financial Statements in Item 8. Consolidated Financial Statements and Supplementary Data for additional information regarding our lease commitments. In general, we believe our facilities are suitable to meet our current and reasonably anticipated future needs.

Item 3. Legal Proceedings

The information set forth under the caption "Litigation" in Note 12 of the Notes to the Consolidated Financial Statements included in Part II, Item 8. Consolidated Financial Statements and Supplementary Data is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

Market Information

Our common stock is included in the NASDAQ Global Select Market, under the symbol HMSY. The table below summarizes the high and low sales prices per share for our common stock for the periods indicated, as reported on the NASDAQ Global Select Market.

Quarter Ended	March 31,	June 30,	September 30,	December 31,
Fiscal Year 2016				
High	$ 14.42	$ 18.38	$ 23.46	$ 22.03
Low	$ 10.22	$ 13.67	$ 17.44	$ 16.18
Fiscal Year 2015				
High	$ 21.73	$ 18.18	$ 17.10	$ 13.05
Low	$ 15.32	$ 15.44	$ 8.24	$ 8.64

Repurchases of Shares of Common Stock

See Note 8 – Equity, in our Notes to the Consolidated Financial Statements under Item 8. Consolidated Financial Statements and Supplementary Data for additional information regarding share repurchases. The following are our monthly stock repurchases for the fourth quarter of fiscal year 2016, all of which were made as part of publicly announced plans or programs:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Program[1]	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Program
October 1, 2016 to October 31, 2016	—	$ —	—	$ —
November 1, 2016 to November 30, 2016	570,717	17.61	570,717	15,000,000
December 1, 2016 to December 31, 2016	569,615	18.25	569,615	5,000,000
October 1, 2016 to December 31, 2016	**1,140,332**	**$ 17.93**	**1,140,332**	**$ 5,000,000**

(1) On July 30, 2015, the Company's Board of Directors approved a share repurchase program authorizing the repurchase of up to $75 million of the Company's common stock from time to time on the open market or in privately negotiated transactions, and the Company publicly announced the program in August 2015. The repurchase program is authorized through July 30, 2017, and may be suspended or discontinued at any time. Repurchases may also be made under a Rule 10b5-1 plan. All repurchases for the periods presented were made under the program and using cash resources.

Holders

As of the close of business on May 31, 2017, there were 262 holders of record of our common stock.

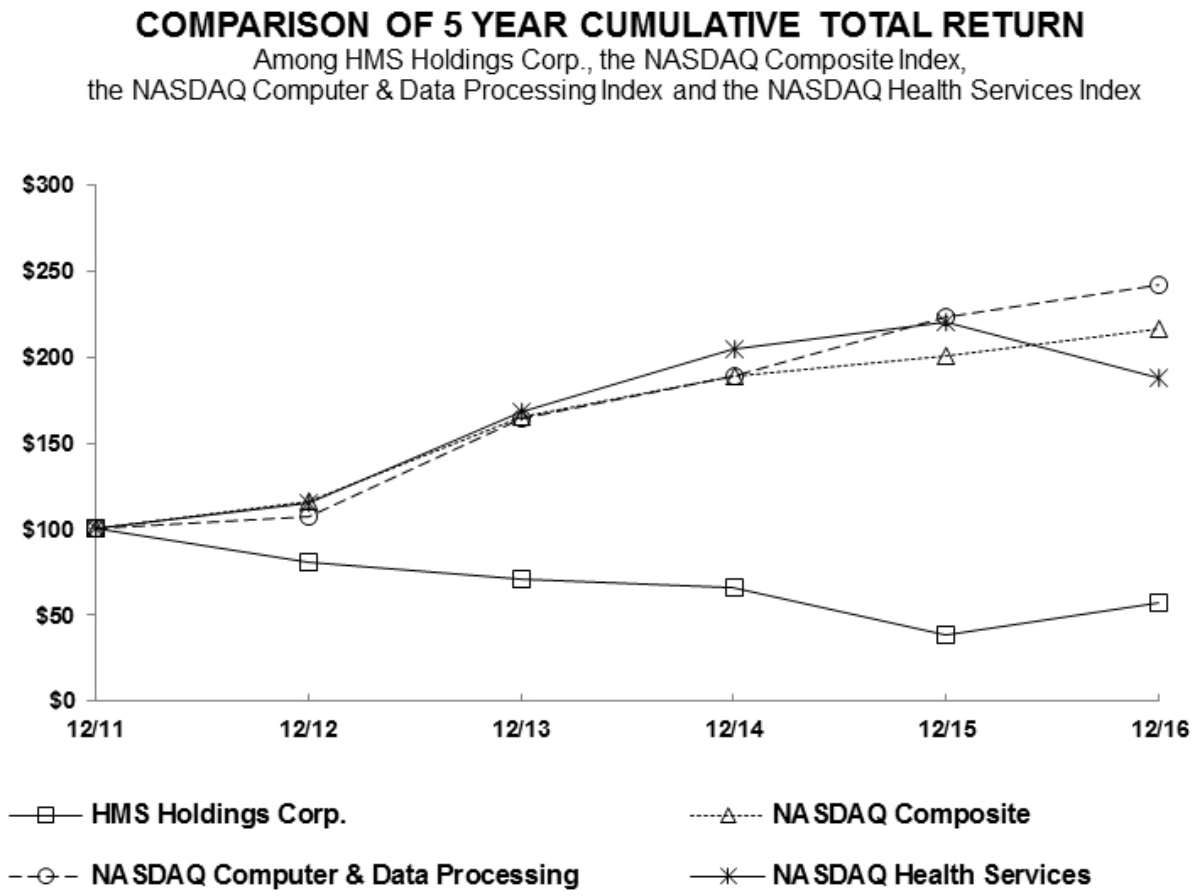
Dividends

We have not paid any cash dividends on our common stock and do not anticipate paying cash dividends in the foreseeable future. Our current intention is to retain earnings to support the future growth of our business.

In addition, our Credit Agreement restricts our ability to make certain payments or distributions with respect to our capital stock, including cash dividends to our shareholders. These restrictions are described in more detail in Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, under "Liquidity and Capital Resources" and in Note 7 – "Credit Agreement", in our Notes to the Consolidated Financial Statements under Item 8. Consolidated Financial Statements and Supplementary Data.

Comparative Stock Performance Graph

The graph below compares the cumulative total shareholder return on our common stock with the cumulative total shareholder returns of the NASDAQ Composite Index, the NASDAQ Computer & Data Processing Index and the NASDAQ Health Services Index assuming an investment of $100 on December 31, 2011 and the reinvestment of dividends through the year ended December 31, 2016.



	12/31/11	12/31/12	12/31/13	12/31/14	12/31/15	12/31/16
HMS Holdings Corp.	$ 100.00	$ 81.05	$ 70.98	$ 66.10	$ 38.59	$ 56.79
NASDAQ Composite	$ 100.00	$ 116.41	$ 165.47	$ 188.69	$ 200.32	$ 216.54
NASDAQ Computer & Data Processing	$ 100.00	$ 107.40	$ 164.63	$ 189.15	$ 223.06	$ 242.34
NASDAQ Health Services	$ 100.00	$ 115.47	$ 167.94	$ 204.39	$ 220.44	$ 188.28

Notwithstanding anything to the contrary set forth in any of our previous or future filings under the Securities Act or the Exchange Act that might incorporate by reference this Annual Report on Form 10-K or future filings made by us under those statutes, the Comparative Stock Performance Graph is not deemed filed with the SEC, is not deemed soliciting material and shall not be deemed incorporated by reference into any of those prior filings or into any future filings we make under those statutes, except to the extent that we specifically incorporate such information by reference into a previous or future filing, or specifically request that such information be treated as soliciting material, in each case under those statutes.

Item 6. Selected Financial Data

The following table sets forth selected consolidated financial amounts at and for each of the five fiscal years in the period ended December 31, 2016. It should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations, included in Item 7 of this Annual Report on Form 10-K and the Consolidated Financial Statements and Supplementary Data thereto, included in Item 8 of this Annual Report.

Statement of Operations Data

	Years ended December 31,				
(in thousands, except per share amounts)	**2016**	**2015**	**2014**	**2013**	**2012**
Revenue	$ 489,720	$ 474,216	$ 443,225	$ 491,762	$ 473,696
Total operating expenses	432,051	426,644	409,021	414,584	374,184
Operating income	57,669	47,572	34,204	77,178	99,512
Interest expense	(8,519)	(7,812)	(7,931)	(12,460)	(16,561)
Interest income	321	49	57	71	12
Other income, net	—	—	—	801	382
Income before income taxes	49,471	39,809	26,330	65,590	83,345
Income taxes	11,835	15,282	12,383	25,593	32,829
Net income	$ 37,636	$ 24,527	$ 13,947	$ 39,997	$ 50,516
Net Income Per Common Share					
Basic income per common share:					
Net income per common share - basic	$ 0.45	$ 0.28	$ 0.16	$ 0.46	$ 0.59
Diluted income per common share:					
Net income per common share - diluted	$ 0.43	$ 0.28	$ 0.16	$ 0.45	$ 0.57
Weighted average shares:					
Basic	84,221	87,881	87,673	87,598	86,204
Diluted	86,987	88,361	88,164	88,344	88,365

Balance Sheet Data

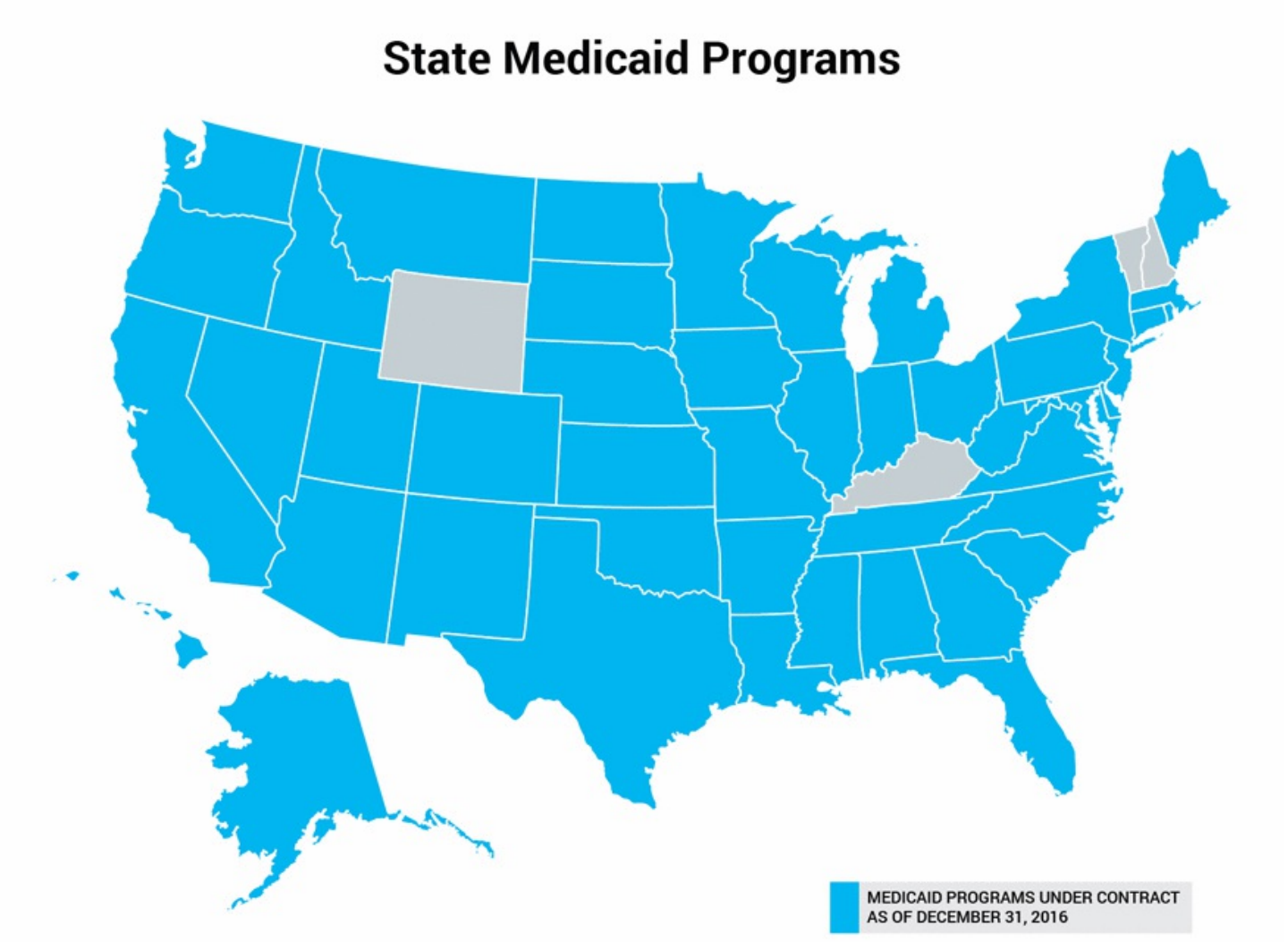
	Years ended December 31,				
(in thousands)	**2016**	**2015**	**2014**	**2013**	**2012**
Cash and cash equivalents	$ 175,999	$ 145,610	$ 133,116	$ 93,366	$ 135,227
Working capital	$ 277,478	$ 240,456	$ 226,271	$ 199,069	$ 205,537
Total assets	$ 882,755	$ 850,597	$ 880,988	$ 878,602	$ 926,052
Revolving credit facility	$ 197,796	$ 197,796	$ 197,796	$ 232,796	$ -
Term loan, less current portion	$ -	$ -	$ -	$ -	$ 297,500
Total shareholders' equity	$ 556,610	$ 524,702	$ 533,090	$ 502,439	$ 462,874

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following Management's Discussion and Analysis is intended to help the reader understand the results of operations and financial condition of HMS Holdings Corp. You should read this discussion and analysis in conjunction with the other sections of this Annual Report on Form 10-K, including the Cautionary Note Regarding Forward-Looking statements appearing prior to Part I, the Risk Factors appearing in Part I, Item 1A, and the Consolidated Financial Statements and Supplemental Data thereto appearing in Part II, Item 8. The historical results set forth in Part II, Item 6, Item 7, and Item 8 of this Annual Report should not be taken as necessarily indicative of our future operations.

Business Overview

HMS is a leading provider of cost containment solutions in the U.S. healthcare marketplace. Using innovative technology as well as extensive data services and powerful analytics, we deliver coordination of benefits, payment integrity and health management and engagement solutions through our operating subsidiaries to help healthcare payers improve performance and outcomes. We are managed and operate as one business segment with a single management team that reports to the Chief Executive Officer. We serve state Medicaid programs, commercial health plans, federal government health agencies, government and private employers, child support agencies, and other healthcare payers and sponsors. Together our various services help our customers recover improper payments; prevent future improper payments; reduce fraud, waste and abuse; better manage the care that members receive; and ensure regulatory compliance.



As of December 31, 2016:

- We serve 46 state Medicaid programs and the District of Columbia, CMS and the VHA;
- We provide services to approximately 255 health plans in support of their multiple lines of business, including Medicaid managed care, Medicare Advantage and group and individual health; and
- We also serve as a sub-contractor for certain business outsourcing and technology firms.

2016 Highlights

- Revenue increased $15.5 million, or 3.3% to $489.7 million
- Operating income increased $10.1 million, or 21.2% to $57.7 million
- Net income increased $13.1 million, or 53.5% to $37.6 million
- Diluted earnings per share increased $0.15 or 53.6% to $0.43 per share
- Shareholders' equity increased $31.9 million, or 6.1% to $556.6 million
- Cash flow from operations increased $16.7 million, or 23.1% to $89.0 million

Outlook

To date, we have grown our business organically through internal innovation and the development of new products and services, as well as by acquisition of businesses whose core services strengthen our overall mission to help our customers contain healthcare costs. Our largest growth during 2016 was with commercial health plan customers and we expect this marketplace to present the greatest opportunity for growth in the year ahead, particularly with the factors related to the macro healthcare environment including:

- Growth of Medicare enrollment, particularly Medicare Advantage plans;
- An aging U.S. population with a growing concentration of individuals with chronic conditions; and
- The continued dominance of employee sponsored health insurance for a majority of working individuals and the demand by large self-insured employers for cost savings.

We plan to drive our future growth by leveraging our expertise to expand product offerings, attracting new customers and broadening our relationships with current customers through the introduction of new services, audit strategies and claim types. Our goal is to develop and build on existing partnerships with our state, federal and commercial health plan customers to provide services that better address their business needs and promote customer satisfaction in the constantly evolving healthcare marketplace, particularly as potentially significant changes to the ACA are considered by Congress. We also expect to continue increasing recovery yields from our current products by enhancing our operating and organizational efficiency and by implementing new technology that will improve the quality and effectiveness of our service offerings.

Critical Accounting Policies

Our consolidated financial statements are prepared in accordance with U.S. GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. We evaluate our estimates and assumptions on an ongoing basis. Our estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Our actual results could differ from these estimates.

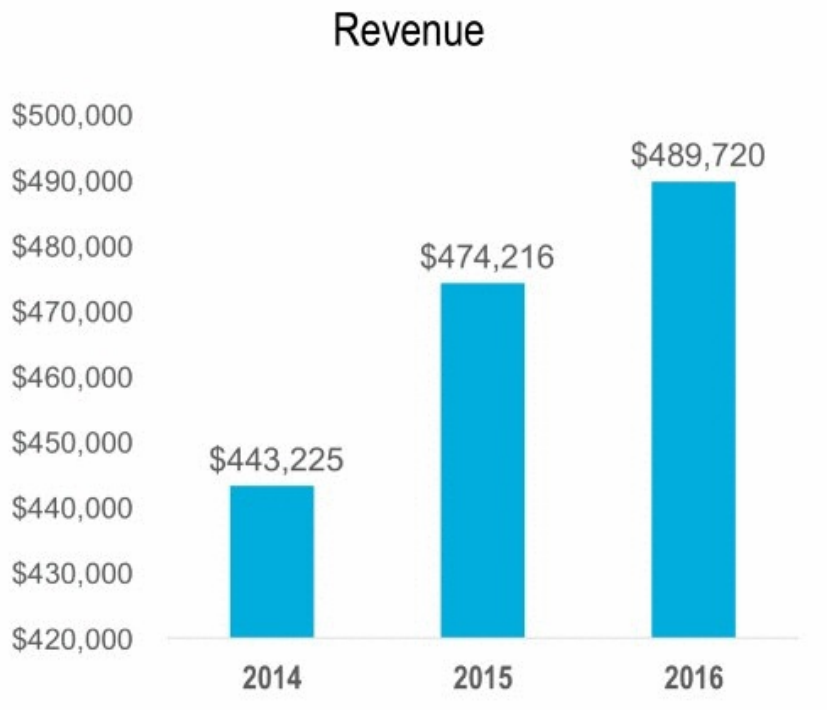
An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, if different estimates reasonably could have been used, or if changes in the estimate that are reasonably possible could materially impact the financial statements. We believe that the assumptions and estimates associated with revenue recognition, estimated liability for appeals, income taxes, share-based compensation, loss contingencies, and goodwill and intangible assets have the greatest potential impact on our consolidated financial statements. Therefore, we consider these to be our critical accounting policies and estimates. For further information on these critical accounting policies and all other significant accounting policies refer to Note 1 – "Business and Summary of Significant Accounting Policies" in our Notes to the Consolidated Financial Statements under Item 8. Consolidated Financial Statements and Supplementary Data.

Results of Operations

Comparison of 2016 to 2015 and 2015 to 2014

	% of Revenue		
Years Ended December 31,	**2016**	**2015**	**2014**
Revenue	100%	100%	100%
Cost of Services:			
Compensation	38.6	37.6	40.9
Data processing	7.6	8.6	8.9
Occupancy	2.9	3.3	3.8
Direct project expenses	9.4	10.9	8.3
Other operating expenses	5.7	6.1	5.6
Amortization of acquisition related software and intangible assets	5.7	5.9	6.5
Total cost of services	70.0	72.4	74.0
Selling, general and administrative expenses	18.3	17.6	18.3
Total operating expenses	88.2	90.0	92.3
Operating income	11.8	10.0	7.7
Interest expense	(1.7)	(1.6)	(1.8)
Interest income	0.1	0.0	0.0
Income before income taxes	10.1	8.4	5.9
Income taxes	2.5	3.2	2.8
Net income	7.6%	5.2%	3.1%

(in thousands)

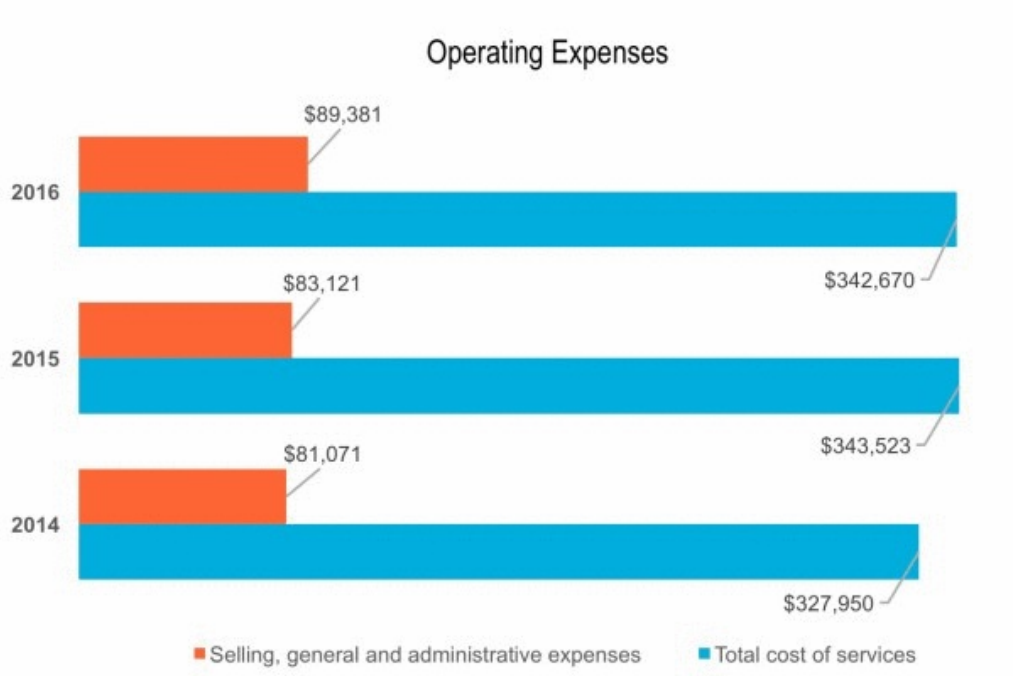


Revenue

2016 vs. 2015
During the year ended December 31, 2016, revenue was $489.7 million, an increase of $15.5 million or 3.3% compared to prior year revenue of $474.2 million. The increase was primarily due to commercial health plan revenue growth of $27.2 million or 13.4% partially offset by decreases in both state government revenue of $7.0 million or 3.1%, and federal government revenue of $4.5 million or 11.7%. The reduction in federal government revenue includes a $3.4 million decrease related to the reduction of Medicare RAC activity.

2015 vs. 2014
During the year ended December 31, 2015, revenue was $474.2 million, an increase of $31.0 million, or 7.0%, compared to prior year revenue of $443.2 million. This increase was primarily due to commercial health plan revenue growth of $32.2 million or 18.8% partially offset by a decrease in federal government revenue of $1.2 million or 3.1%, primarily related to the reduction of Medicare RAC activity.

(In thousands)



Total Cost of Services

Total cost of services consists of compensation, data processing, occupancy, direct project expenses, other operating expenses, and amortization of acquisition related software and intangible assets.

2016 vs. 2015
During the year ended December 31, 2016, total cost of services as a percentage of revenue was 70.0% compared to 72.4% for the year ended December 31, 2015. Total cost of services for the year ended December 31, 2016 was $342.7 million, a decrease of $0.8 million compared to $343.5 million for the year ended December 31, 2015. This change resulted primarily from decreases in direct project costs, data processing costs, occupancy costs and other operating expenses. These decreases were partially offset by increases in compensation expense.

2015 vs. 2014
During the year ended December 31, 2015, total cost of services as a percentage of revenue was 72.4% compared to 74.0% for the year ended December 31, 2014. Total cost of services for the year ended December 31, 2015 was $343.5 million, an increase of $15.5 million compared to $328.0 million for the year ended December 31, 2014. This change resulted primarily from increases in direct project costs and other operating expenses. These increases were partially offset by decreases in compensation expense.

Compensation

Compensation expense is primarily composed of salaries and wages, which include overtime, health benefits, stock option expense, performance awards, commissions, employers share of FICA and fringe benefits.

2016 vs. 2015
During the year ended December 31, 2016, compensation expense as a percentage of revenue was 38.7% compared to 37.6% for the year ended December 31, 2015. Compensation expense for the year ended December 31, 2016 was $189.3 million, an increase of $11.0 million compared to $178.3 million for the year ended December 31, 2015. This change resulted from a $13.1 million total increase in salaries, variable compensation expense, and fringe benefit expense, partially offset by a $2.1 million decrease in stock-based compensation expense. For the year ended December 31, 2016, we averaged 2,030 employees, a 1.1% increase from the year ended December 31, 2015, during which we averaged 2,007 employees.

2015 vs. 2014
During the year ended December 31, 2015, compensation expense as a percentage of revenue was 37.6% compared to 40.9% for the year ended December 31, 2014. Compensation expense for the year ended December 31, 2015 was $178.3 million, a decrease of $3.0 million compared to $181.3 million for the year ended December 31, 2014. This change resulted primarily from a $4.9 million decrease in salary, severance and overtime expense partially offset by a $1.9 million increase in variable compensation expense, stock compensation expense, and fringe benefit expense. For the year ended December 31, 2015, we averaged 2,007 employees, a 7.4% decrease from the year ended December 31, 2014, during which we averaged 2,167 employees.

Data Processing

2016 vs. 2015
During the year ended December 31, 2016, data processing expense as a percentage of revenue was 7.6% compared to 8.6% for the year ended December 31, 2015. Data processing expense for the year ended December 31, 2016 was $37.3 million, a decrease of $3.6 million compared to $40.9 million for the year ended December 31, 2015. This change resulted primarily from a $4.0 million decrease in depreciation expense partially offset by an increase in software expenses.

2015 vs. 2014
During the year ended December 31, 2015, data processing expense as a percentage of revenue was 8.6% compared to 8.9% for the year ended December 31, 2014. Data processing expense for the year ended December 31, 2015 was $40.9 million, an increase of $1.2 million compared to $39.7 million for the year ended December 31, 2014. This change resulted primarily from a $3.0 million total increase in software and data expenses, partially offset by a decrease in depreciation expense.

Occupancy

2016 vs. 2015
During the year ended December 31, 2016, occupancy expense as a percentage of revenue was 2.9% compared to 3.3% for the year ended December 31, 2015. Occupancy expense for the year ended December 31, 2016 was $14.0 million, a decrease of $1.8 million compared to $15.8 million for the year ended December 31, 2015. This decrease was primarily related to the closure of one of our office locations in 2016. Additional savings were realized due to reductions in utilities and equipment rental expense.

2015 vs. 2014

During the year ended December 31, 2015, occupancy expense as a percentage of revenue was 3.3% compared to 3.8% for the year ended December 31, 2014. Occupancy expense for the year ended December 31, 2015 was $15.8 million, a decrease of $1.2 million compared to $17.0 million for the year ended December 31, 2014. This decrease was primarily related to downsizing office space and relocation of our offices in Omaha, Nebraska and Albany, New York. Additional savings were realized after closing several of our smaller field offices in 2014 and 2015.

Direct Project Expenses

2016 vs. 2015

During the year ended December 31, 2016, direct project expense as a percentage of revenue was 9.4% compared to 10.9% for the year ended December 31, 2015. Direct project expense for the year ended December 31, 2016 was $46.3 million, a decrease of $5.2 million compared to $51.5 million for the year ended December 31, 2015. The reduction of Medicare RAC activity resulted in a $3.5 million decrease in sub-contractor fees from the prior year.

2015 vs. 2014

During the year ended December 31, 2015, direct project expense as a percentage of revenue was 10.9% compared to 8.3% for the year ended December 31, 2014. Direct project expense for the year ended December 31, 2015 was $51.5 million, an increase of $14.6 million compared to $36.9 million for the year ended December 31, 2014. This increase was partially due to a $9.6 million increase related to the transition of operational processes to sub-contractors. Additionally, data costs increased by $2.9 million in connection with an increase in the volume of patient charts we reviewed for our commercial health plan customers. The volume increase also resulted in a $1.4 million increase in key punch and data conversion due to the increase in reformatting electronic and hard copy remittance data.

Other Operating Expenses

2016 vs. 2015

During the year ended December 31, 2016, other operating expenses as a percentage of revenue were 5.7% compared to 6.1% for the year ended December 31, 2015. Other operating expenses for the year ended December 31, 2016 were $27.8 million, a decrease of $1.1 million compared to $28.9 million for the year ended December 31, 2015. This decrease primarily resulted from a $2.3 million decrease in temporary staffing and sub-contractor fees, partially offset by a $0.9 million increase in consulting fees.

2015 vs. 2014

During the year ended December 31, 2015, other operating expenses as a percentage of revenue were 6.1% compared to 5.6% for the year ended December 31, 2014. Other operating expenses for the year ended December 31, 2015 were $28.9 million, an increase of $4.3 million compared to $24.6 million for the year ended December 31, 2014. This increase primarily resulted from a $3.6 million increase in temporary staffing and consulting expense.

Amortization of Acquisition Related Software and Intangible Assets

2016 vs. 2015

During the year ended December 31, 2016, amortization of acquisition related software and intangibles as a percentage of revenue was 5.7% compared to 5.9% for the year December 31, 2015. Amortization of acquisition related software and intangible assets for 2016 was $28.0 million, a decrease of $0.1 million compared to $28.1 million for the year ended December 31, 2015. This decrease resulted from intangibles becoming fully amortized in 2016, partially offset by additional expense related to the Essette acquisition.

2015 vs. 2014
During the year ended December 31, 2015, amortization of acquisition related software and intangibles as a percentage of revenue was 5.9% compared to 6.5% for the year December 31, 2014. Amortization of acquisition related software and intangible assets for 2015 was $28.1 million, a decrease of $0.5 million compared to $28.6 million for the year ended December 31, 2014. This decrease resulted from the completion of amortization in 2014 on restrictive covenants for our Verify Solutions, Inc. and MedRecovery Management, LLC acquisitions.

Selling, General and Administrative expenses

2016 vs. 2015
During the year ended December 31, 2016, SG&A expense as a percentage of revenue was 18.3% compared to 17.6% for the year December 31, 2015. SG&A expense for 2016 was $89.4 million, an increase of $6.3 million compared to $83.1 million for the year ended December 31, 2015. Increases totaling $14.1 million were comprised of consulting expense of $4.0 million, fringe benefits expense of $1.6 million, compensation costs of $6.1 million, and other expenses $2.4 million. These increases were partially offset by a $7.8 million reduction in legal fees and settlements. During the year ended December 31, 2016, we averaged 236 employees in the SG&A group, an 8.3% increase over our average of 218 employees in that group during the year ended December 31, 2015.

2015 vs. 2014
During the year ended December 31, 2015, SG&A expense as a percentage of revenue was 17.6% compared to 18.3% for the year December 31, 2014. SG&A expense for 2015 was $83.1 million, an increase of $2.0 million compared to $81.1 million for the year ended December 31, 2014. This increase was primarily due to a $2.8 million increase in salary expense which was partially offset by a $0.9 million decrease in software-related costs. During the year ended December 31, 2015, we averaged 218 employees in the SG&A group, a 1.4% decrease over our average of 221 employees in that group during the year ended December 31, 2014.

Operating Income

2016 vs. 2015
Operating income for the year ended December 31, 2016 was $57.7 million, or 11.8% of revenue, compared to $47.6 million or 10.0% of revenue, for the prior year.

2015 vs. 2014
Operating income for the year ended December 31, 2015 was $47.6 million, or 10.0% of revenue, compared to $34.2 million, or 7.7% of revenue, for the prior year.

Interest Expense

Interest expense represents interest on borrowings under our revolving credit facility, amortization of deferred financing costs, commitment fees for our revolving credit facility and issuance fees for our letter of credit.

2016 vs. 2015
During the year ended December 31, 2016, interest expense was $8.5 million, an increase of $0.7 million compared to the prior year. This increase resulted from an increase on the variable interest rate on our outstanding debt. Amortization of deferred financing costs of $2.1 million in both periods is included within interest expense.

2015 vs. 2014
During the year ended December 31, 2015, interest expense was $7.8 million, a decrease of $0.1 million compared to the prior year. The decrease primarily relates to a reduction in interest on capital leases. Amortization of deferred financing costs of $2.1 million in both periods is included within interest expense.

Income Taxes

2016 vs. 2015
During the year ended December 31, 2016, we recorded income tax expense of $11.8 million, a decrease of $3.5 million compared to the prior year. Net income before taxes of $49.5 million increased $9.7 million year-over-year, while income tax expense decreased $3.5 million. Our effective tax rate decreased from 38.4% to 23.9%, which reflects a $6.2 million tax benefit recognized in the third quarter of 2016 that was related to R&D Credits and Section 199 Deductions. Excluding that tax benefit would result in a normalized effective tax rate of 36.2%. The principal differences between the statutory rate and our effective rate were the R&D Credits, the Section 199 Deduction, other permanent items, unrecognized tax benefits and state taxes.

2015 vs. 2014
During the year ended December 31, 2015, we recorded income tax expense of $15.3 million, an increase of $2.9 million compared to the prior year. Net income before taxes of $39.8 million increased $13.5 million year-over-year. Our effective tax rate decreased from 47.0% to 38.4% primarily due to a change in unitary state apportionments and permanent differences. The principal differences between the statutory rate and our effective rate were state taxes and permanent differences.

Net Income

2016 vs. 2015
During the year ended December 31, 2016, net income was $37.6 million which represents a $13.1 million increase compared to net income of $24.5 million for 2015.

2015 vs. 2014
During the year ended December 31, 2015, net income was $24.5 million which represents a $10.6 million increase compared to net income of $13.9 million for 2014.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Liquidity and Capital Resources

The following tables should be read in conjunction with the Consolidated Financial Statements and Supplementary Data thereto, included in Item 8 of this Annual Report on Form 10-K.

Our cash and cash equivalents, working capital and available borrowings under our credit facility (based upon the borrowing base and financial covenants in our Credit Agreement) were as follows:

	Years Ended December 31,	
(In thousands)	**2016**	**2015**
Cash and cash equivalents	$ 175,999	$ 145,610
Working capital	$ 277,478	$ 240,456
Available borrowings under credit facility	$ 183,913	$ 121,204

A summary of our cash flows is as follows:

(In thousands)	Years Ended December 31, 2016	2015	2014
Net cash provided by operating activities	$ 88,639	$ 72,285	$ 100,556
Net cash used in investing activities	(39,201)	(11,817)	(26,201)
Net cash used in financing activities	(19,049)	(47,974)	(34,605)
Net increase in cash and cash equivalents	$ 30,389	$ 12,494	$ 39,750

Our principal source of cash has been our cash flow from operations and our $500 million five-year revolving credit facility. Other sources of cash include proceeds from exercise of stock options and tax benefits associated with stock option exercises. The primary uses of cash are compensation expenses, data processing, direct project costs and SG&A expenses and acquisitions.

We believe that expected cash flows from operations, available cash and cash equivalents, and funds available under our revolving credit facility will be sufficient to meet our liquidity requirements for the following year, which include:

- the working capital requirements of our operations;
- investments in our business;
- business development activities;
- repurchases of common stock; and
- repayment of our revolving credit facility.

Any projections of future earnings and cash flows are subject to substantial uncertainty. We may need to access debt and equity markets in the future if unforeseen costs or opportunities arise, to fund acquisitions or to repay indebtedness under the Credit Agreement, which matures in May 2018. If we need to obtain new debt or equity financing in the future, the terms and availability of such financing may be impacted by economic and financial market conditions as well as our financial condition and results of operations at the time we seek additional financing.

Cash Flows from Operating Activities

Net cash provided by operating activities for the year ended December 31, 2016 was $89.0 million, a $16.7 million increase from net cash provided by operating activities of $72.3 million for the year ended December 31, 2015. The increase was primarily due to an increases in net income as adjusted for non-cash items including decreased stock-based compensation expense and deferred income taxes, as well as increase in accounts payable and other liabilities.

Net cash provided by operating activities for the year ended December 31, 2015 was $72.3 million, a $28.3 million decrease from net cash provided by operating activities of $100.6 million for the year ended December 31, 2014. This decrease was primarily due to an increase in accounts receivable and a decrease in our net deferred tax liabilities and accounts payable, partially offset by an increase in net income.

Net cash provided by operating activities for the year ended December 31, 2014 was $100.6 million, a $0.6 million decrease from net cash provided by operating activities of $101.2 million for the year ended December 31, 2013. This decrease was driven primarily by a decrease in net income and the net changes in the estimated allowance for unbilled receivables, accounts receivable, accounts payable, accrued expenses and other liabilities and the provision for the accounts receivable allowance.

Our DSO calculation can be derived by dividing total net accounts receivable at the end of period, by the daily average of the current quarter's annualized revenue. For the year ended December 31, 2016, revenue was $489.7 million, an increase of $15.5 million compared to revenue of $474.2 million for the year ended December 31, 2015. DSO increased by 6 days to 124 days as of December 31, 2016, as compared to 118 days as of December 31, 2015. The change was primarily due to delays in invoicing and receipt of payment for previously recognized revenue as a result of timing delays; offset by accelerated cash collections of invoiced balances; and a decrease in various operational issues including missing Explanation of Benefits which delay invoicing.

Higher accounts receivable balances and higher DSOs in future periods would reduce net cash from operating activities in those periods. We do not currently anticipate collection issues with our accounts receivable, however, nor do we currently expect that any extended collections will materially impact our liquidity.

The majority of our customer relationships have been in place for several years. Our future operating cash flows could be adversely affected by a decrease in a demand for our services, delayed payments from customers or if one or more contracts with our largest customers is terminated or not re-awarded.

Cash Flows from Investing Activities

Net cash used in investing activities for the year ended December 31, 2016 was $39.5 million, a $27.7 million increase compared to net cash used in investing activities of $11.8 million for the year ended December 31, 2015. This increase was primarily due to the use of approximately $20.7 million in the Essette acquisition during the third quarter of 2016. Purchases of property and equipment and investment in capital software also increased by $9.2 million. These increases were partially offset by the receipt of proceeds from the sale of a cost basis investment of approximately $2.5 million.

Net cash used in investing activities for the year ended December 31, 2015 was $11.8 million, a $14.4 million decrease compared to net cash used in investing activities of $26.2 million for the year ended December 31, 2014. The decrease was primarily related to a $14.1 million decrease in purchase of property and equipment and a $0.3 million decrease in investment in capitalized software.

Net cash used in investing activities for the year ended December 31, 2014 was $26.2 million, a $0.1 million decrease compared to net cash used in investing activities of $26.3 million for the year ended December 31, 2013. This decrease was primarily related to a $0.5 million decrease in investments in common stock and a $0.1 million decrease in investment in capitalized software, which were offset by a $0.5 million increase in purchases of property and equipment.

We currently expect to incur capital expenditures of $28 million during the year ended December 31, 2017.

Cash Flows from Financing Activities

Net cash used in financing activities for the year ended December 31, 2016 was $19.0 million, a $29.0 million decrease from net cash used in financing activities of $48.0 million for the year ended December 31, 2015. This decrease was primarily attributable to a decrease in share repurchases as compared to the prior year. Approximately $20.5 million was used for share repurchases of 1,140,332 of our shares of common stock at a weighted average price of $17.93 per share pursuant to an authorized share repurchase program as more fully described in Note 8 – “Equity” in our Notes to the Consolidated Financial Statements under Item 8. Consolidated Financial Statements and Supplementary Data.

Net cash used in financing activities for the year ended December 31, 2015 was $48.0 million, a $13.4 million increase from net cash used in financing activities of $34.6 million for the year ended December 31, 2014. This increase was primarily attributable to $50.0 million used in 2015 for share repurchases of 4,747,441 of our shares of common stock at a weighted average price of $10.51 per share pursuant to an authorized share repurchase program, partially offset by a $35.0 million reduction in payments toward the principal outstanding on our revolving credit facility and. No share repurchases were made during the year ended December 31, 2014.

Net cash used in financing activities for the year ended December 31, 2014 was $34.6 million, an $82.2 million decrease from net cash used in financing activities of $116.8 million for the year ended December 31, 2013. This decrease was primarily attributable to a $60.0 million reduction in payments toward the principal outstanding on our revolving credit facility and a $25.0 million reduction for share repurchases. No share repurchases were made for the year ended December 31, 2014.

Credit Agreement

In May 2013, we entered into the Credit Agreement with certain financial institutions and Citibank, N.A. as Administrative Agent. The Credit Agreement has a five-year term, provides for an initial $500 million revolving credit facility, and contains customary representations and warranties, affirmative and negative covenants, including financial covenants, and events of default. Our obligations and any amounts due under the Credit Agreement are guaranteed by our material 100% owned subsidiaries and secured by a security interest in all or substantially all of our and our subsidiaries' physical assets. See Note 7 – "Credit Agreement" in our Notes to the Consolidated Financial Statements under Item 8. Consolidated Financial Statements and Supplementary Data for additional information regarding our Credit Agreement.

As of December 31, 2016, the Company was in compliance with all the terms of the Credit Agreement.

Share Repurchase Program

During the year ended December 31, 2016, we repurchased 1.1 million shares of our common stock for approximately $20.5 million using cash resources. See Note 8 – "Equity" in our Notes to the Consolidated Financial Statements under Item 8. Consolidated Financial Statements and Supplementary Data for additional information regarding share repurchases.

Contractual Obligations

The following table represents the scheduled maturities of our contractual cash obligations and other commitments (*in thousands*):

	Payments Due by Period				
Contractual Obligations [7]	Total	Less than 1 year	1 - 3 years	3 -5 years	More than 5 years
Operating leases [1]	$ 38,568	$ 16,077	$ 10,598	$ 7,041	$ 4,852
Revolving credit facility [2]	197,796	-	197,796	-	-
Interest expense [3]	7,368	5,511	1,857	-	-
Commitment fee [4]	2,028	1,517	511	-	-
Capital leases [5]	4	4	-	-	-
Letter of Credit fee [6]	26	26	-	-	-
Total	$ 245,790	$ 23,135	$ 210,762	$ 7,041	$ 4,852

(1) Represents the future minimum lease payments under non-cancelable operating leases. In addition to minimum rent, certain leases require the payment for insurance, maintenance and other costs. These costs have historically represented approximately 3% to 6% of the minimum rent amount. These additional amounts are not included in the table of contractual obligations as the timing or amounts of such payments are unknown.

(2) Represents scheduled repayments of principal on the revolving credit facility under the terms of our Credit Agreement. See Note 7 - "Credit Agreement" in our Notes to the Consolidated Financial Statements in Item 8. Consolidated Financial Statements and Supplementary Data for additional information regarding the Credit Agreement.

(3) Represents estimates of amounts due on revolving credit facility based on the interest rate as of December 31, 2016 and on scheduled repayments of principal. See Note 7 - "Credit Agreement" in our Notes to the Consolidated Financial Statements in Item 8. Consolidated Financial Statements and Supplementary Data for additional information regarding the Credit Agreement.

(4) Represents the commitment fee due on the revolving credit facility. See Note 7 - "Credit Agreement" in our Notes to the Consolidated Financial Statements in Item 8. Consolidated Financial Statements and Supplementary Data for additional information regarding the Credit Agreement.

(5) Represents the future minimum lease payments under capital leases.

(6) Represents the fees for the letter of credit established against the revolving credit facility. See Note 7 - "Credit Agreement" in our Notes to the Consolidated Financial Statements in Item 8. Consolidated Financial Statements and Supplementary Data for additional information regarding the Credit Agreement.

(7) The Company has excluded long-term unrecognized tax benefits, including interest and penalties, of $7.4 million from the amounts presented as the timing of these obligations is uncertain.

As part of our contractual agreement with a customer, we have an outstanding irrevocable letter of credit for $3.0 million, which we established against our existing revolving credit facility. On May 1, 2017, the expiration date of the letter of credit was extended to April 26, 2018.

Recently Issued Accounting Pronouncements

The information set forth under the caption "Summary of Significant Accounting Policies" in Note 1 of the Notes to the Consolidated Financial Statements included in Part II, Item 8. Consolidated Financial Statements and Supplementary Data is incorporated herein by reference.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

At December 31, 2016, we were not a party to any derivative financial instruments. We conduct all of our business in U.S. currency and hence do not have direct foreign currency risk. We are exposed to changes in interest rates, primarily with respect to our revolving credit facility under our Credit Agreement. If the effective interest rate for all of our variable rate debt were to increase by 100 basis points (1%), our annual interest expense would increase by a maximum of $2.0 million based on our debt balances outstanding at December 31, 2016. Further, we currently invest substantially all of our excess cash in short-term investments, primarily money market accounts, where returns effectively reflect current interest rates. As a result, market interest rate changes may impact our interest income or expense. The impact will depend on variables such as the magnitude of rate changes and the level of borrowings or excess cash balances. We do not consider this risk to be material. We manage such risk by continuing to evaluate the best investment rates available for short-term, high quality investments.

Item 8. Consolidated Financial Statements and Supplementary Data

The information required by Item 8 is found on pages 101 to 123 of this Annual Report on Form 10-K

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

(a) Evaluation of Disclosure Controls and Procedures

We are responsible for maintaining disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) that are designed to ensure that information required to be disclosed in our reports filed under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow for timely decisions regarding required disclosure.

As required by Rule 13a-15(b) under the Exchange Act, management, with the participation of our Chief Executive Officer and Chief Financial Officer, performed an evaluation of the effectiveness of our disclosure controls and procedures as of December 31, 2016. Based on our evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were not effective as of December 31, 2016 due to the identification of material weaknesses in our internal control over financial reporting as described in Management's Report on Internal Control Over Financial Reporting below.

(b) Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting and for the assessment of the effectiveness of internal control over financial reporting. As defined by Rule 13a-15(f) of the Exchange Act, internal control over financial reporting is a process designed by, or under the supervision of our Chief Executive Officer and our Chief Financial Officer and effected by our Board of Directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the consolidated financial statements for external purposes in accordance with U.S. GAAP.

Our internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect our transactions and dispositions of our assets; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the consolidated financial statements in accordance with generally accepted accounting principles and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement in our annual or interim financial statements will not be prevented or detected on a timely basis.

In connection with the preparation of our annual consolidated financial statements, management has undertaken an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2016, based on criteria established in the Internal Control-Integrated Framework issued by COSO. Management's assessment included an evaluation of the design of our internal control over financial reporting and testing of the operational effectiveness of those controls.

Based on that assessment, management identified the following material weaknesses:

> We did not maintain an effective control environment based on lack of established reporting lines and defined authorities and responsibilities for financial reporting at our wholly owned subsidiary, HDI, and did not have an effective risk assessment process on a periodic basis to assess the effects of changes in business operations and turnover of our employees that significantly impact our financial processes and internal control over financial reporting related to (i) our estimated liability for appeals associated with our contract with CMS (the "CMS Reserve") and (ii) the valuation of our accounts receivable allowance (the "Allowance"). As a result, we did not design and implement effective process level control activities, specifically management review controls over the measurement and disclosure of the CMS Reserve and the Allowance and controls over the completeness and accuracy of data used to calculate the CMS Reserve and the Allowance.

The material weaknesses identified above resulted in an immaterial reclassification error in revenue and selling, general and administrative expenses that was corrected prior to the issuance of the consolidated financial statements. These material weaknesses create a reasonable possibility as of December 31, 2016 that a material misstatement to the consolidated financial statements will not be prevented or detected on a timely basis; therefore, we concluded that our internal control over financial reporting was not effective as of December 31, 2016.

KPMG LLP, the independent registered public accounting firm that audited our consolidated financial statements included in this Annual Report on Form 10-K, has issued an adverse opinion in their report on the effectiveness of our internal control over financial reporting, a copy of which appears on page 99.

(c) Changes in Internal Control Over Financial Reporting

Except as relating to the material weaknesses identified in the current period and described under "Management's Report on Internal Control Over Financial Reporting," there have been no changes in our internal control over financial reporting identified in connection with the evaluation of our controls performed during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

(d) Remediation

Management is currently revising and supplementing our control environment and our risk assessment process and the design of our process level controls in order to remediate the material weaknesses described above, including a set of compensating controls in the near term. We are enhancing and revising the design of controls and procedures to ensure the calculations of the CMS Reserve and the Allowance properly utilize historical information to derive the period-end balances. Additionally, management will be supplementing the review controls over the CMS Reserve and the Allowance, and controls over the completeness and accuracy of the data used to calculate the balances with additional levels of review involving senior members of our accounting department and will assess the need for additional remediation steps. We believe that the steps identified should remediate the control weaknesses identified.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

BOARD OF DIRECTORS

The Board of Directors is currently composed of nine members, eight of whom are non-employee directors. Pursuant to our Bylaws, our Board of Directors is currently divided into two classes, Class I and Class II, with one class standing for election each year for a term of two years. The following table sets forth certain information with respect to each of our directors.

Name	Age	Has Served as a Director Since	Position with HMS
Class II Directors (Terms expire at the 2017 Annual Meeting)			
William F. Miller III	67	2000	Class II Director
Ellen A. Rudnick	66	1997	Class II Director
Richard H. Stowe	73	1989	Class II Director and Lead Independent Director
Cora M. Tellez	67	2012	Class II Director
Class I Directors (Terms expire at the 2018 Annual Meeting)			
Alex M. Azar II(1)	49	2016	Class I Director
Robert Becker(2)	63	2016	Class I Director
Craig R. Callen	61	2013	Class I Director
William C. Lucia	59	2009	Chairman, President and Chief Executive Officer, and Class I Director
Bart M. Schwartz	70	2010	Class I Director

(1) In October 2016, the Board of Directors increased the size of the board to nine members and appointed Mr. Azar as a Class I director.

(2) The Board of Directors appointed Mr. Becker as a Class I director in January 2016 to fill a vacancy on the Board.

Detailed biographical information of each director, as well as a description of the specific experience, qualifications, attributes and skills that led our Board to conclude that each director should serve as a member of our Board of Directors, is below.

CLASS II DIRECTORS (TERMS EXPIRE AT THE 2017 ANNUAL MEETING)

William F. Miller III

Mr. Miller has served as one of our directors since October 2000. In 2013, Mr. Miller joined KKR Advisors, a global investment firm, as a healthcare industry advisor. From 2006 to 2013, Mr. Miller was a partner at Highlander Partners, a private equity group in Dallas, Texas focused on investments in healthcare products, services and technology. From October 2000 to April 2005, Mr. Miller served as our Chief Executive Officer and from December 2000 to April 2006, Mr. Miller served as our Chairman. From 1983 to 1999, Mr. Miller served as President and Chief Operating Officer of EmCare Holdings, Inc., a national healthcare services firm focused on the provision of emergency physician medical services. From 1980 to 1983, Mr. Miller served as Administrator/Chief Operating Officer of Vail Mountain Medical. From 1997 to 2012, Mr. Miller served as a director of Lincare Holdings, Inc.

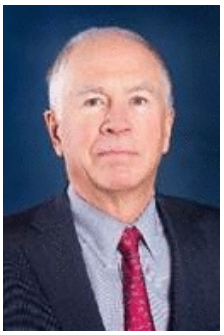
Mr. Miller brings to the Board of Directors both a thorough understanding of our business and the healthcare industry and extensive experience in the financial markets. His significant operational experience, both at HMS and at EmCare Holdings, makes him well-positioned to provide HMS with insight on financial, operational and strategic issues and to serve as a member of the Compliance and Ethics Committee.

Ellen A. Rudnick

Ms. Rudnick has served as one of our directors since 1997. Since 1999, Ms. Rudnick has served in various roles at the Polsky Center for Entrepreneurship and Innovation, University of Chicago Booth School of Business, including her current role as Senior Advisor for Entrepreneurship, adjunct faculty, and her prior role as Executive Director and Clinical Professor from 1999 through July 2016. From 1993 to 1999, Ms. Rudnick served as Chairman of Pacific Biometrics, Inc., a publicly held healthcare biodiagnostics company and its predecessor, Bioquant, which she co-founded. From 1990 to 1992, she served as President and Chief Executive Officer of Healthcare Knowledge Resources (HKR), a privately held healthcare information technology corporation and subsequently served as President of HCIA, Inc. (HCIA) following the acquisition of HKR by HCIA. From 1975 to 1990, Ms. Rudnick served in various positions at Baxter Health Care Corporation, including Corporate Vice President and President of its Management Services Division. Ms. Rudnick also serves as a director of Patterson Companies, Inc. and First Midwest Bancorp, Inc.

Ms. Rudnick brings to the Board of Directors extensive business understanding and demonstrated management expertise, having served in key leadership positions at a number of healthcare companies. Ms. Rudnick has a comprehensive understanding of the operational, financial and strategic challenges facing companies and knows how to make businesses work effectively and efficiently. Her management experience and service on other public company boards has provided her with a thorough understanding of the financial and other issues facing large companies, making her particularly valuable as the Chair of our Audit Committee and as a member of our Compliance and Ethics Committee and Nominating and Governance Committee.

Richard H. Stowe



Mr. Stowe has served as one of our directors since 1989 and as Lead Independent Director of the Board since July 2015. Mr. Stowe has served as a general partner of Health Enterprise Partners LP, a private equity firm, since 2005. From 1999 to 2005, Mr. Stowe was a private investor, a senior advisor to the predecessor funds to Health Enterprise Partners, and a senior advisor to Capital Counsel LLC, an asset management firm. From 1979 until 1998, Mr. Stowe was a general partner of Welsh, Carson, Anderson & Stowe. Prior to 1979, he was a Vice President in the venture capital and corporate finance groups of New Court Securities Corporation (now Rothschild, Inc.).

Mr. Stowe brings over 46 years of financial, capital markets and investment experience to our Board of Directors. Mr. Stowe's background and extensive experience make him well-positioned to serve as the Chair of the Compensation Committee, a member of the Nominating and Governance Committee and as our Lead Independent Director. Mr. Stowe has effectively carried out his responsibilities as a Chair for several of our Board committees and is well-respected by the independent directors. The Board believes that Mr. Stowe is highly qualified and continues to be in the best position to serve as Lead Independent Director.

Cora M. Tellez

Ms. Tellez has served as one of our directors since October 2012. Ms. Tellez is the President and Chief Executive Officer of Sterling HSA, an independent health savings accounts administrator which she founded in 2004. Prior to starting Sterling HSA, Ms. Tellez served as President of the health plans division of Health Net, Inc., an insurance provider. She later served as President of Prudential's western health care operations, CEO of Blue Shield of California, Bay Region and Regional Manager for Kaiser Permanente of Hawaii. Ms. Tellez also serves as Chief Executive Officer of Amazing CARE Network, Inc., a company she founded in January 2015. Ms. Tellez serves on the boards of directors of Pacific Premier Bancorp, Inc. and CorMedix Inc., as well as on the boards of various nonprofit organizations such as the Institute for Medical Quality and UC San Diego's Center for Integrative Medicine.

Ms. Tellez brings over 25 years of healthcare policy and operations experience to the Board. Her public company operational, financial and corporate governance experience is a valuable resource for our Board and makes her well-positioned to serve as the Chair of the Nominating and Governance Committee, a member of the Audit and Compensation Committees and as an audit committee financial expert.

CLASS I DIRECTORS (TERMS EXPIRE AT THE 2018 ANNUAL MEETING)

Alex M. Azar II

Mr. Azar has served as one of our directors since October 2016. Mr. Azar is currently Chairman of Seraphim Strategies, LLC, a firm he founded in 2017, which provides strategic consulting and counsel on the biopharmaceutical and health insurance industries, including biopharmaceutical pricing, reimbursement, access, and distribution, as well as federal and state healthcare policy. From January 2012 to January 2017, Mr. Azar served as President of Lilly USA, LLC, the largest affiliate of global biopharmaceutical company Eli Lilly & Co. (Lilly), where he was responsible for directing the sales and marketing operations of Lilly's U.S. commercial business and also directly led the U.S. Biomedicines division. From April 2009 to December 2011, he served as Lilly's Vice President of Managed Healthcare Services and Puerto Rico, and from June 2007 to April 2009 as its Senior Vice President of Corporate Affairs and Communications responsible for the company's global communications, government affairs, public policy, advocacy, and pricing, reimbursement and access organizations. Prior to joining Lilly, Mr. Azar served as the Deputy Secretary of the U.S. Department of Health and Human Services (HHS) from 2005 to 2007, where he was the Chief Operating Officer of the largest civilian cabinet department in the U.S. government. Mr. Azar supervised all operations of HHS, including the regulation of food and drugs, Medicare, Medicaid, medical research, public health, welfare, child and family services, disease prevention, Indian health, mental health services, and others. Mr. Azar served as General Counsel of HHS from 2001 to 2005. Prior to his service at HHS, Mr. Azar was in private legal practice. He also served as a Law Clerk to U.S. Supreme Court Justice Antonin Scalia. Mr. Azar serves on the boards of the American Council on Germany and the Indianapolis Symphony Orchestra.

Mr. Azar brings an important blend of government and healthcare industry experience to our Board of Directors. He has an informed perspective on healthcare policy and extensive experience with big data, which is particularly relevant to us as we expand into the care management and data analytics field.

Robert Becker

Mr. Becker has served as one of our directors since January 2016. Mr. Becker most recently served as President and CEO of Wolters Kluwer Health, a provider of information and point of care solutions to the healthcare industry, from December 2008 until his retirement in May 2015. In his role at Wolters Kluwer Health, Mr. Becker reported to the Chairman of the Executive Board and had global responsibility for Wolters Kluwer's $1.2 billion Health division. From August 2003 to November 2008, he served as CEO of Wolters Kluwer Law & Business. Mr. Becker led the transformation of both the Health and Law & Business divisions from traditional publishers to world class providers of digital content and software solutions through a combination of organic growth and mergers and acquisitions. Prior to joining Wolters Kluwer, Mr. Becker served as President and CEO of Jupiter Media Metrix, a provider of comprehensive research and measurement products and services designed to assist companies in utilizing Internet technologies to more effectively operate their businesses. Mr. Becker also spent 13 years with The Thomson Corporation, 10 years as a CEO and three as a CFO of several global businesses. Mr. Becker, who is a CPA, began his career at PriceWaterhouse auditing numerous public and privately held companies. Mr. Becker previously served on the board of directors of Symphony Health, a privately held portfolio company of Symphony Technology Group providing pharmacy claims and patient longitudinal health records to the pharmaceutical industry.

Mr. Becker's executive leadership experience and strong background in technology and data analytics provide valuable insight into strategic planning and operations to the Board. Among other qualifications, Mr. Becker brings to the Board extensive financial expertise, including budgeting, forecasting and mergers and acquisitions, making him well-positioned to serve as a member of the Audit Committee and an audit committee financial expert, as well as a member of the Nominating and Governance Committee.

Craig R. Callen

Mr. Callen has served as one of our directors since October 2013. Mr. Callen was a Senior Advisor at Crestview Partners, a private equity firm, from 2009 through 2016. From 2004 to 2007, Mr. Callen was Senior Vice President and Head of Strategic Planning and Business Development and a member of the Executive Committee for Aetna, Inc. In his role at Aetna, Mr. Callen reported directly to the Chairman and CEO and was responsible for oversight and development of Aetna's corporate strategy, including mergers and acquisitions. During his tenure, Mr. Callen and his team led the acquisitions of seven companies, investing over $2.0 billion, broadening Aetna's revenue, global presence, product line, targeted markets and participation in government programs. Prior to joining Aetna, Mr. Callen was a Managing Director and Head of U.S. Healthcare Investment Banking at Credit Suisse First Boston and Co-Head of Healthcare Investment Banking at Donaldson, Lufkin & Jenrette. Mr. Callen serves on the board of directors of Omega Healthcare Investors, Inc.

Mr. Callen brings over 20 years of healthcare investment banking experience and corporate development expertise to our Board, which are invaluable to us as we evaluate, develop and implement new solutions for clients. His extensive experience in a corporate setting and as an advisor to public/private healthcare companies positions him well to serve on the Compensation and Nominating and Governance Committees.

William C. Lucia

Mr. Lucia has served as our President and Chief Executive Officer since March 2009. He has been a member of our Board of Directors since May 2008 and was appointed Chairman of the Board in July 2015. From May 2005 to March 2009, Mr. Lucia served as our President and Chief Operating Officer. Since joining us in 1996, Mr. Lucia has held several positions with us, including: President of our subsidiary, Health Management Systems, Inc., from 2002 to 2009; President of our Payor Services Division from 2001 to 2002; Vice President and General Manager of our Payor Services Division from 2000 to 2001; Vice President of our Business Office Services from 1999 to 2000; Chief Operating Officer of our former subsidiary Quality Medical Adjudication, Incorporated (QMA) and Vice President of West Coast Operations from 1998 to 1999; Vice President and General Manager of QMA from 1997 to 1998; and Director of Information Systems for QMA from 1996 to 1997. Prior to joining us, Mr. Lucia served in various executive positions including Senior Vice President, Operations and Chief Information Officer for Celtic Life Insurance Company, and Senior Vice President, Insurance Operations for North American Company for Life and Health Insurance. Mr. Lucia is a Fellow of the Life Management Institute Program through LOMA, an international association through which insurance and financial services companies around the world engage in research and educational activities to improve company operations.

With over 20 years of experience with HMS working across multiple divisions and his prior experience in the insurance industry, Mr. Lucia brings to our Board in-depth knowledge of HMS and the healthcare and insurance industries, the evolving healthcare landscape and the array of challenges to be faced and demonstrates an ability to formulate and implement key strategic initiatives, making him well-positioned to lead our management team and provide essential insight and leadership to the Board.

Bart M. Schwartz

Mr. Schwartz has served as one of our directors since July 2010. Mr. Schwartz currently serves as the Chairman and Chief Executive Officer of SolutionPoint International, LLC, which provides an integrated array of business intelligence, security and compliance, identity assurance and situational awareness solutions. In 2003, Mr. Schwartz founded his own law firm, which specializes in, among other areas, conducting independent investigations, monitoring and Independent Private Sector Inspector General engagements and developing, auditing and implementing compliance programs. From 1991 to 2003, Mr. Schwartz served as the Chief Executive Officer of Decision Strategies, an internationally recognized investigative and security firm, which was sold to SPX Corporation in 2001. Mr. Schwartz has over 30 years' experience managing domestic and international investigations, prosecutions and assessments for clients in both the public and private sectors. He currently serves as the federally appointed Monitor of GM and as Chairman of the Board of Kadmon Holdings, Inc.

Mr. Schwartz brings extensive legal and compliance experience to our Board, which is particularly valuable as we continue to expand our business. Mr. Schwartz's background makes him well-positioned to serve as the Chair of the Compliance and Ethics Committee and as a member of the Audit and Nominating and Governance Committees.

EXECUTIVE OFFICERS

The following table sets forth certain information with respect to each person who currently serves as one of our executive officers as of the date of this Annual Report on Form 10-K. Our executive officers are elected annually by our Board of Directors and generally serve at the discretion of our Board of Directors. There are no arrangements or understandings between any of our executive officers and any other person pursuant to which they were selected as an officer. None of our directors or executive officers are related to any other director or executive officer of HMS or any of its subsidiaries by blood, marriage or adoption.

Name	Age	Position
William C. Lucia	59	Chairman, President and Chief Executive Officer
Meredith W. Bjorck	41	Executive Vice President, General Counsel and Corporate Secretary
Semone Neuman	53	Executive Vice President, Operations and Information Technology
Cynthia Nustad	46	Executive Vice President, Chief Strategy Officer
Jeffrey S. Sherman	51	Executive Vice President, Chief Financial Officer and Treasurer
Tracy A. South	58	Executive Vice President, Human Resources and Chief Administrative Officer
Douglas M. Williams	58	President, Markets and Product

The principal occupations for the last five years, as well as certain other biographical information, for each of our current executive officers who are not directors are set forth below. See “Class I Directors” above for biographical information for Mr. Lucia.

Meredith W. Bjorck

Ms. Bjorck has served as our Executive Vice President, General Counsel and Corporate Secretary since April 2016. Ms. Bjorck previously served as Senior Vice President, General Counsel and Corporate Secretary for Tuesday Morning Corporation, a national off-price retailer, from January 2013 to March 2016. From April 2008 until January 2013, Ms. Bjorck served in various capacities for CEC Entertainment, Inc., an international restaurant chain, including as Deputy General Counsel, Chief Compliance Officer and Corporate Secretary. Prior to joining CEC Entertainment, Ms. Bjorck was an attorney at Fulbright & Jaworski L.L.P. (now Norton Rose Fulbright) and Vinson & Elkins L.L.P., where she specialized in corporate securities and mergers and acquisitions.

Semone Neuman

Ms. Neuman has served as our Executive Vice President, Operations and Information Technology since December 2016, responsible for our operations for coordination of benefits, premium protection and subrogation services and information technology. From April 2013 to December 2016, she served as our Executive Vice President of Operations. Ms. Neuman has extensive experience in healthcare claims processing, operations and reengineering. She has a track record for leading change, driving quality performance and reducing unit costs in complex operating environments. Prior to joining HMS, Ms. Neuman served as Senior Vice President of Claim Operations at United HealthCare (UHC), from 2009 to 2013, where she oversaw the operations for all business lines and major platforms processing over 500 million claims annually. Under her leadership, UHC achieved industry-leading performance levels, earning the American Medical Association designation for the industry’s best claim operation in 2011 and 2012.

Cynthia Nustad

Ms. Nustad has served as our Executive Vice President, Chief Strategy Officer since December 2016, and is responsible for strategy development, evolution and growth of our technology and analytics software and services and care management solutions. From February 2011 to December 2016, she served as our Executive Vice President, Chief Information Officer. Prior to joining HMS, Ms. Nustad served as Vice President of Architecture and Technology for Regence Blue Cross Blue Shield (now Cambia Health Solutions), where she was responsible for servicing a large corporation across multiple sites and states from January 2005 to January 2011. Ms. Nustad has over 20 years of management experience in the healthcare information technology industry, including executive experience in enterprise technology, business transformation, product development and innovation. Ms. Nustad and her teams have earned numerous industry awards, including the Computerworld Premier 100 IT Leader award in 2013.

Jeffrey S. Sherman

Mr. Sherman has served as our Executive Vice President, Chief Financial Officer and Treasurer since September 2014, and is also responsible for corporate development, investor relations, risk management and corporate security. Mr. Sherman has over 25 years of experience in healthcare operations, strategic planning and financial performance in senior financial executive positions. Prior to joining HMS, Mr. Sherman served as Executive Vice President and Chief Financial Officer of AccentCare, a healthcare delivery organization, from September 2013 to August 2014. From April 2009 to September 2013, he served as Executive Vice President and Chief Financial Officer of Lifepoint Hospitals, Inc. From September 2005 until April 2009, Mr. Sherman served as Vice President and Treasurer of Tenet Healthcare, where he managed all aspects of corporate finance, including cash flow management and capital structure, and was also responsible for risk management. Mr. Sherman served in various capacities for Tenet Healthcare and its predecessor company since 1990, including as a hospital chief financial officer and regional vice president.

Tracy A. South

Ms. South has served as our Executive Vice President, Human Resources and Chief Administrative Officer since May 2014. She served as our Senior Vice President of Human Resources from December 2011 to May 2014. Ms. South has over 21 years of executive-level human resources experience, including at national healthcare organizations. From 2003 to 2011, Ms. South served as the Senior Vice President, Chief Human Resources Officer at Mosaic Sales Solutions, a privately-held full-service marketing agency in Irving, Texas. During her tenure at Mosaic, she built the company's North America Human Resources department, focusing on attracting and training a dispersed workforce of over 10,000 employees hired to represent world class brands at retail, in the community and online. In her role, Ms. South oversaw Talent Acquisition, HR Services and Organizational Effectiveness. Ms. South has also served in HR leadership roles at Tenet Healthcare and Aetna US Healthcare.

Douglas M. Williams

Mr. Williams has served as our President, Markets and Product since December 2016, with responsibility for leading sales and marketing, product management and payment integrity solutions. From January 2015 to December 2016, he served as our Division President of Markets with responsibility for leading the state and federal government and commercial markets, sales and marketing. From December 2013 to January 2015, he served as our Division President of Commercial Solutions, responsible for leading our commercial product and business development strategy. Prior to joining HMS, Mr. Williams served as Chief Information Officer of Aveta Inc. (now part of Optum, Inc.), a provider of managed healthcare services, from 2010 to 2013. Mr. Williams has over 25 years of experience in healthcare information technology, sales, and operations.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Pursuant to Section 16(a) of the Exchange Act our executive officers, directors and persons owning more than 10% of a registered class of our equity securities are required to file reports of ownership and changes in ownership of common stock with the SEC. Copies of such reports are required to be furnished to us.

Based solely on a review of the copies of such reports furnished to us, or written representations that no other reports were required, we believe that during fiscal 2016, all of the reporting persons complied with the requirements of Section 16(a).

CORPORATE GOVERNANCE

BOARD COMMITTEES AND RELATED MATTERS

The Board of Directors has the following standing committees: Audit Committee, Compensation Committee, Compliance and Ethics Committee and Nominating and Governance Committee, each of which operates pursuant to a separate charter that has been approved by the Board of Directors. A current copy of each charter is available on our website under the "Investors—Corporate Governance" tabs at http://investor.hms.com/corporate-governance.cfm. Each committee reviews the appropriateness of its charter on an annual basis, as required by its charter, and recommends any changes to the Board of Directors for approval.

The Board of Directors makes committee and committee chair assignments annually at its meeting following the annual meeting of shareholders, although further changes to committee assignments are made from time to time as deemed appropriate by the Board of Directors. The membership of each standing committee as of the date of this Annual Report on Form 10-K and the number of meetings held by each committee during 2016 are summarized in the table below.

Director	Board	Committee			
		Audit[2]	Compensation[3]	Compliance and Ethics	Nominating and Governance
Alex M. Azar II[1][4]	●				
Robert Becker[1][5]	●	●			●
Craig R. Callen[1]	●		●		●
William C. Lucia	Chairman				
William F. Miller III[1][6]	●			●	
Ellen A. Rudnick[1]	●	Chair		●	●
Bart M. Schwartz[1]	●	●		Chair	●
Richard H. Stowe[1]	Lead Independent Director		Chair		●
Cora M. Tellez[1][7]	●	●	●		Chair
Number of Meetings in 2016	**8**	**6**	**7**	**5**	**7**

(1) The Board has determined that the director is independent as defined in the NASDAQ Marketplace Rules.

(2) The Board has determined that each member of the Audit Committee meets NASDAQ's financial knowledge and sophistication requirements. In addition, the Board has determined that Mr. Becker and Ms. Tellez each qualify as an "audit committee financial expert," as such term is defined in Item 407(d)(5)(ii) of Regulation S-K.

(3) The Board has determined that each member of the Compensation Committee is an independent director, as independence for compensation committee members is defined in the NASDAQ Marketplace Rules. Each of Messrs. Callen and Stowe and Ms. Tellez also qualifies as an "outside director" within the meaning of Section 162(m) of the Internal Revenue Code of 1986 (the "Code") and as a "non-employee" director under Rule 16b-3 of the Exchange Act.

(4) Mr. Azar was appointed as an independent member of the Board of Directors in October 2016.

(5) Mr. Becker was appointed as a member of the Audit Committee and the Nominating and Governance Committee effective as of February 19, 2016.

(6) Mr. Miller was appointed as a member of the Compliance and Ethics Committee effective as of July 28, 2016.

(7) Ms. Tellez stepped down from the Compliance and Ethics Committee and was appointed as a member of the Compensation Committee effective as of July 28, 2016.

CODE OF CONDUCT

Our Board of Directors has adopted a Code of Conduct applicable to all of our directors, officers and employees, including all employees, officers, directors, contractors, contingent workers and business affiliates of HMS subsidiaries. The Code of Conduct is publicly available on our website under the "Investors—Corporate Governance" tab at http://investor.hms.com/corporate-governance.cfm and can also be obtained free of charge by sending a written request to our Corporate Secretary. To the extent permissible under NASDAQ Marketplace Rules, we intend to disclose amendments to our Code of Conduct, as well as waivers of the provisions thereof, that relate to our principal executive officer, principal financial officer, principal accounting officer, controller or persons performing similar functions on the Company's website under the "Investors—Corporate Governance" tab at http://investor.hms.com/corporate-governance.cfm.

Item 11. Executive Compensation

EXECUTIVE COMPENSATION

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis ("CD&A"), describes our 2016 executive compensation program and certain actions with respect to our 2017 executive compensation program and should be read in conjunction with the compensation tables that follow this CD&A. In particular, this CD&A explains how the Compensation Committee of the Board of Directors made its compensation decisions for our named executive officers for fiscal 2016.

For 2016, our named executive officers are:

- William C. Lucia, Chairman, President and Chief Executive Officer ("CEO");
- Jeffrey S. Sherman, Executive Vice President, Chief Financial Officer and Treasurer;
- Semone Neuman, Executive Vice President, Operations and Information Technology;
- Cynthia Nustad, Executive Vice President, Chief Strategy Officer; and
- Douglas Williams, President, Markets and Product.

2016 Say-on-Pay Vote

At our 2016 Annual Meeting of Shareholders, over 97% of the votes cast on the say-on-pay proposal were in favor of our 2015 executive compensation program described in our 2016 Proxy Statement. The Compensation Committee believes that this vote, and the consistent high level of support from our shareholders of our executive compensation program year over year, affirms our shareholders' strong support of HMS's general approach to executive compensation. Therefore, the Compensation Committee did not change its compensation philosophy as it made decisions for 2016. As market practices on executive compensation policies evolve, the Compensation Committee will continue to evaluate and, if needed, make changes to our executive compensation program to ensure that the program continues to reflect our pay-for-performance compensation philosophy and objectives. The Compensation Committee will also continue to consider the outcome of HMS's say-on-pay votes when making future compensation decisions for executive officers.

Executive Summary

2016 FINANCIAL PERFORMANCE OVERVIEW

Our full year 2016 financial performance included solid growth in revenue, operating income and adjusted EPS, margin expansion, higher adjusted EBITDA, strong operating cash flow and prudent capital deployment – including the Essette acquisition and share repurchases.

The following is an overview of our financial performance for the year ended December 31, 2016.

- We reported total revenue of $489.7 million, a 3.3% increase compared to total revenue for fiscal 2015 of $474.2 million.
- We reported net income of $37.6 million or $0.43 per diluted share, a 53.6% increase compared to net income for fiscal 2015 of $24.5 million or $0.28 per diluted share.
- We reported adjusted earnings before interest, income taxes, depreciation and amortization, stock-based compensation and non-recurring legal expense ("adjusted EBITDA") of $117.4 million, a 4.4% increase compared to adjusted EBITDA for fiscal 2015 of $112.5 million.
- We reported adjusted earnings per diluted share ("adjusted EPS") of $0.75, a 31.6% increase compared to adjusted EPS for fiscal 2015 of $0.57.

- Our stock price increased by 47.2% for the one-year period ending December 30, 2016, from $12.34 per share to $18.16 per share.

A reconciliation of the non-GAAP financial measures (adjusted EBITDA and adjusted EPS) to the most directly comparable GAAP measures is set forth below under the heading "Non-GAAP Financial Measures".

KEY 2016 COMPENSATION ACTIONS

The following highlights key decisions and actions of the Compensation Committee with respect to executive compensation for 2016. These decisions and actions were made with the advice of the Compensation Committee's independent consultant, Frederic W. Cook & Co., Inc. ("FW Cook") (see "Role of the Independent Compensation Consultant" below), and are discussed in greater detail later in this CD&A.

- Executive Compensation Peer Group. In January 2016, the Compensation Committee approved certain changes to its executive compensation peer group, resulting in a new 14 company peer group.

- Merit-Based Salary Increases. In February 2016, the Compensation Committee approved merit-based salary increases for the named executive officers, other than the CEO.

- Annual Short-Term Incentive Plan Performance Metrics. In February 2016, the Compensation Committee introduced a fourth performance metric, adjusted EPS, under the 2016 Short-Term Incentive Plan (the "2016 STIP"), in addition to the metrics used under the prior year's short-term incentive plan of revenue, adjusted EBITDA, and corporate strategic performance.

- Performance-Based Long-Term Incentive Awards. In February 2016, in light of our strong shareholder support evidenced by the results of the say-on-pay vote at our 2015 Annual Meeting of Shareholders, the Compensation Committee continued to grant annual long-term incentive awards to our executive officers consisting, on a substantially equal value basis, of 50% non-qualified stock options and 50% restricted stock units, half of which are subject to stock price performance conditions.

- Earned and Unearned Performance Awards. The Compensation Committee determined that the performance conditions for the long-term incentive awards granted on March 4, 2015, May 13, 2015 and March 2, 2016 had been achieved during 2016 (within the 3-year award period), and therefore, the awards have been earned subject only to any remaining time-based vesting and other terms applicable to the awards. In addition, the Compensation Committee determined that the performance conditions for the long-term incentive awards granted on November 15, 2013 had not been achieved within the 3-year award period and therefore, the awards were forfeited during 2016.

KEY COMPENSATION PRACTICES AND GOVERNANCE FEATURES

Our executive compensation program reflects a number of best practices used by the Compensation Committee and the Board of Directors.

What We Do	What We Don't Do
Pay-for-Performance. Payment of a significant amount of our executives' total direct compensation is contingent upon satisfaction of certain pre-determined financial and non-financial objectives.	**No Repricing.** We have not reduced the exercise price, repriced or provided cash payment for underwater stock options.
Annual Say-on-Pay Votes. We have annual say-on-pay votes and recommend continued annual votes.	**No Hedging or Pledging.** We do not permit pledging of our securities as collateral for a loan or entering into hedging and derivative transactions with respect to our securities by employees or directors.
Independent Compensation Consultant. The Compensation Committee retains a compensation consultant that is independent from management to provide advice to the committee on executive and director compensation, as well as other compensation and benefits matters.	**No Evergreen Equity Plans.** Our equity plan does not permit evergreen share authorizations or liberal share recycling.
Limited Use of Executive Perquisites. We offer limited executive perquisites in order to attract and retain top executive talent and to maintain competitiveness.	**No Pensions or Supplemental Executive Retirement Plans.** We only provide retirement benefits to executives that are generally available to all other employees.
Stock Ownership Guidelines. Our CEO is required to hold five times his base salary in our common stock and all other executive officers are required to hold two times their base salary in our common stock, aligning the executive officer's interests with those of our shareholders and mitigating the risk of focusing only on short-term goals.	**No Change-in-Control-Related Excise Tax Gross-ups.** We do not include change-in-control excise tax gross-up provisions in employment agreements.
Compensation Recovery (Clawback Policy). We are permitted to recover from any of HMS's current or former executive officers any incentive bonus and equity compensation gains attributable to such executive officer's misconduct occurring after January 1, 2015, that causes a subsequent restatement of our financial statements.	**No Single Trigger Change-in-Control Compensation.** We provide double trigger change-in-control compensation.
Employment Agreements. Each of our executive officers has entered into an employment agreement and restrictive covenant agreement with HMS.	
CEO Compensation. All of our independent directors as a group approve the compensation of our CEO, taking into account the recommendation of the Compensation Committee.	

Philosophy, Objectives and Principles of Our Executive Compensation Program

Our mission is to make the healthcare system work better for everyone. In order to support that mission and Board-approved strategic objectives, while providing adequate returns to our shareholders, we must compete for, attract, develop, motivate and retain top quality executive talent at the corporate and operating business unit levels during periods of both favorable and unfavorable business conditions.

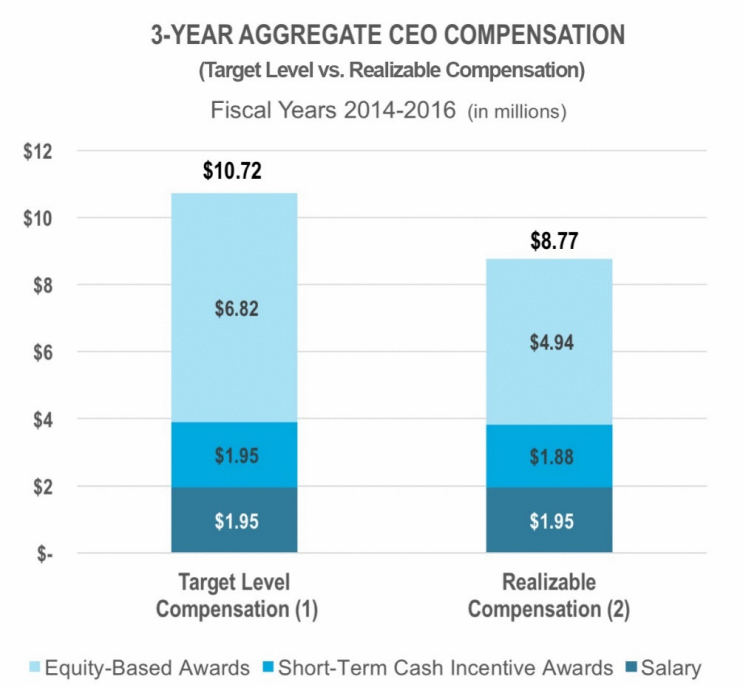
Our executive compensation program is a critical management tool in achieving these objectives. “Pay-for-performance” is the underlying philosophy for our executive compensation program. The program is designed and administered to:

- reward performance that drives the achievement of our short and long-term goals;
- align the interests of our senior executives with the interests of our shareholders, thus rewarding individual and team achievements that contribute to the attainment of our business goals;
- foster teamwork and encourage our senior executives to work together with key personnel in the interest of company performance;
- attract, develop, motivate and retain high-performing senior executives by providing a balance of total compensation opportunities, including salary and short and long-term incentives that are competitive with similarly situated companies and reflective of our performance;
- maximize the financial efficiency of the overall compensation program from tax, accounting and cash flow perspectives; and
- motivate our senior executives to pursue objectives that create long-term shareholder value and discourage behavior that could lead to excessive risk, by balancing our fixed and at-risk pay (both short and long-term incentives) and choosing multiple financial metrics for our short and long-term incentives.

PAY-FOR-PERFORMANCE

We design our compensation programs to make a meaningful amount of target total direct compensation (salary, plus target annual incentive compensation, plus target annual long-term incentive compensation) dependent on the achievement of performance objectives.

To illustrate this, in the chart that follows, we compare the aggregate target total direct compensation for our CEO for the last three fiscal years to the aggregate compensation for the last three fiscal years that had been earned or that may be considered realizable (based on the methodology described below) as of December 31, 2016. The chart illustrates that our annual and long-term incentive programs over the past three fiscal years have been designed to make a meaningful amount of our CEO’s target total direct compensation dependent on the achievement of performance objectives and have resulted in actual compensation significantly less than the target amount.



(1) "Target Level Compensation" equals the sum of (i) annual base salary paid in each of the last three fiscal years, (ii) the target value of short-term cash incentive awards for each of the last three fiscal years and (iii) stock awards and option awards granted in each of the last three fiscal years valued at the grant date fair value, the same value at which such awards are required to be reflected in the Summary Compensation Table included in this Annual Report on Form 10-K, under applicable SEC regulations. Target Level Compensation does not include amounts under All Other Compensation in the Summary Compensation Table.

(2) "Realizable Compensation" equals the sum of (i) annual base salary paid in each of the last three fiscal years, (ii) actual short-term cash incentive awards earned in each of the last three fiscal years, (iii) the value as of their vesting date of any portion of stock awards granted in each of the last three fiscal years that vested prior to December 31, 2016, (iv) an assumed realizable value for any portion of stock awards granted in each of the last three fiscal years that remained unvested on December 31, 2016, based on the closing market price per share of our common stock on December 30, 2016, the last trading day in 2016, of $18.16 per share and (v) the intrinsic value of option awards granted during fiscal 2015 and 2016 based on the difference between the option exercise prices of $16.77 per share and $13.94 per share, respectively, and the closing market price per share of our common stock on December 30, 2016 of $18.16 per share. For purposes of this table, the intrinsic value of the option award granted during 2014 is zero because the award has an exercise price per share that is greater than the closing market price per share of our common stock on December 30, 2016. For purposes of this table, all performance-based stock awards and option awards are considered earned and all option awards (whether time-based or performance-based) are considered fully vested. The value that may be realized by our CEO on such stock awards and option awards in the future, if any, will depend on the extent to which the performance-based stock awards and option awards are earned and vest, the extent to which time-based stock awards and option awards vest, the market price of our common stock on the vesting date for stock awards and the extent to which there is appreciation in the market price of our common stock over the respective exercise price per share of stock options at the time such options are exercised.

How We Determine Executive Compensation

ROLE OF MANAGEMENT

Our CEO, together with our Chief Financial Officer and Executive Vice President of Human Resources, develop recommendations regarding the design of our executive compensation program. In addition, they are involved in setting the financial and strategic objectives that, subject to the approval of the Board and the Compensation Committee, are used as the performance measures for the short and long-term incentive plans. Both the CEO and the Chief Financial Officer provide the Compensation Committee with information relevant to determining the achievement of financial and non-financial performance objectives and related funding levels under our short-term cash incentive plan. Also, as part of its review process in determining executive compensation, the Compensation Committee receives from our CEO an assessment of each other executive officer's performance against individual objectives and compensation recommendations for such officer, including base salary and short and long-term incentives.

ROLE OF THE COMPENSATION COMMITTEE

Our executive compensation program is administered by the Compensation Committee, which is composed entirely of independent directors. The Compensation Committee is responsible for designing our executive compensation program, including each element of the program, and determining and approving total executive remuneration. Each year, the Compensation Committee reviews a competitive analysis and assessment of the compensation provided to executive officers and approves executive compensation based on this review, as well as an evaluation of recommendations presented by our CEO with respect to the other executive officers and the advice of FW Cook. Our CEO does not participate in the Compensation Committee's deliberations or decisions with regard to his own compensation, and the Compensation Committee's decisions with respect to our CEO's compensation are reviewed and approved by the independent members of the Board of Directors as a group.

ROLE OF THE INDEPENDENT COMPENSATION CONSULTANT

The Compensation Committee is authorized to engage its own independent advisors to assist in carrying out its responsibilities. The Compensation Committee has retained FW Cook as its independent compensation consultant. Representatives of FW Cook regularly attend Compensation Committee meetings and communicate with the Chair of the Compensation Committee outside of meetings. FW Cook reports directly to the Compensation Committee and the Compensation Committee oversees the fees paid for its services. FW Cook provides the Compensation Committee with independent and objective guidance on a variety of matters related to our executive and director compensation programs and general compensation and benefits matters. In addition, FW Cook provides objective guidance regarding management's executive compensation recommendations, with the instruction that FW Cook is to advise the Compensation Committee independent of management and to provide such advice for the benefit of HMS and its shareholders. FW Cook does not provide any consulting services to HMS beyond its role as a consultant to the Compensation Committee. The Compensation Committee conducts an assessment of the independence of its compensation consultant annually, pursuant to SEC rules and, following its most recent assessment in April 2017, concluded that no conflict of interest exists that would prevent FW Cook from serving as an independent consultant to the Compensation Committee.

During fiscal 2016, FW Cook provided the following services to the Compensation Committee:

- assisted in the design and development of all elements of the 2016 executive and director compensation program;
- consulted on the composition of the peer group and provided competitive benchmarking and market data analysis based on the peer group;
- evaluated management's compensation recommendations and proposals;
- consulted on the design of the 2016 Omnibus Incentive Plan and amendments to the Annual Incentive Compensation Plan in light of best practices, industry trends and voting policies of proxy advisory firms;
- reviewed and provided advice on the design of the 2016 Short-Term Incentive Plan;
- reviewed agendas for the Compensation Committee meetings held in 2016;

- reviewed HMS's 2016 compensation risk assessment;
- consulted on compliance with Section 162(m) of the Code;
- provided updates regarding evolving regulatory requirements, emerging trends and best practices in executive compensation; and
- reviewed and provided advice on HMS's executive compensation-related disclosures in the 2016 Proxy Statement and reviewed the compensation-related disclosures and proposals in the 2017 Proxy Statement.

Competitive Pay Positioning and Peer Group Analyses

The Compensation Committee believes that competitive pay positioning is a key factor in helping to achieve our executive compensation program objectives. As part of our annual pay-setting process, the Compensation Committee uses benchmarking data to evaluate each executive officer's target compensation levels compared to similarly situated executives at peer group companies.

The Compensation Committee does not target the level of total direct compensation (or any specific element of compensation) for our executive officers to a specific percentile of our peer group. Instead, the Compensation Committee exercises its discretion in setting target compensation levels annually based on a variety of factors to achieve our compensation objectives:

- each executive's competitive pay positioning relative to similarly situated executives among our peer companies,
- each executive's scope of responsibilities, individual performance and expected contributions going forward,
- tenure,
- relative internal pay levels,
- recommendations by the CEO for the other executive officers, and
- prior year target and actual compensation levels.

Our peer group companies are selected by the Compensation Committee based on their similarity to us in size, financial profile and scope of operations, as well as potential to compete for executive talent. The Compensation Committee's general practice is to select companies that position HMS at approximately the peer group median across these metrics. The Compensation Committee reviews the peer group annually with guidance from FW Cook and may make modifications from time to time to ensure that it continues to provide an appropriate benchmark for competitive pay analyses.

In January 2016, the Compensation Committee, with guidance from FW Cook, reviewed and modified the peer group used to benchmark executive compensation for 2016. The peer group established by the Compensation Committee for 2016 consists of the 14 companies listed below, grouped by sub-industry (the "2016 Peer Group").

2016 Peer Group Companies		
Heath Care Technology	**Application Software**	**Data Processing and Outsourced Services**
Allscripts Healthcare Solutions, Inc.	Blackbaud, Inc.	ExlService Holdings, Inc.
athenahealth, Inc.	Bottomline Technologies (de), Inc.	MAXIMUS, Inc.
Computer Programs & Systems, Inc.	RealPage, Inc.	WEX Inc.
HealthStream, Inc.	Tyler Technologies, Inc.	
Medidata Solutions, Inc.		
Omnicell, Inc.		
Quality Systems, Inc.		

The Compensation Committee made the changes listed below to the peer group at the time of its review.

Peers Added		Peers Removed	
Company	**Rationale**	**Company**	**Rationale**
Blackbaud, Inc.	▪ Comparably-sized ▪ Application software industry ▪ Peer of peers	Dealertrack Technologies	▪ Acquired by Cox Automotive
Computer Programs & Systems, Inc.	▪ Health care technology industry ▪ Peer of peers	MedAssets	▪ Acquired by Pamplona Capital Management
Healthstream, Inc.	▪ Health care technology industry ▪ Peer of peer	Acxiom	▪ Not comparably-sized ▪ Not in a sub-industry referenced above
RealPage, Inc.	▪ Comparably-sized ▪ Application software industry ▪ Peer of peers	Fair Isaac	▪ Not comparably-sized
		NeuStar	▪ Not comparably sized

The chart below compares our revenue, net income, EBITDA (income before interest, income taxes, depreciation and amortization) and market capitalization to the median of those four measures for our 2016 Peer Group at the time the 2016 Peer Group was established in January 2016, and at the time it was subsequently reviewed in October 2016. In January 2016, our revenue, net income and market capitalization were below the 2016 Peer Group median, and our EBITDA was above the median. Increases in our stock price between January 2016 and October 2016 repositioned HMS's market capitalization considerably closer to the peer median and net income increased above the peer median.

	January 2016 Review			October 2016 Review		
(in millions)	HMS ($)	2016 Peer Group Median ($)	HMS Percentile Rank (%)	HMS ($)	2016 Peer Group Median ($)	HMS Percentile Rank (%)
Revenue[(1)]	458	529	32	490	633	30
Net Income[(1)(2)]	13	23	34	29	12	69
EBITDA[(1)]	85	68	60	94	78	57
Market Capitalization[(3)]	1,061	2,244	20	1,872	2,260	42

(1) Based on most recently reported four quarters as of January 25, 2016 and October 31, 2016 for the January 2016 review and the October 2016 review, respectively.

(2) Before extraordinary items and discontinued operations.

(3) As of December 31, 2015 and September 30, 2016 for the January 2016 review and the October 2016 review, respectively.

During the first quarter of 2016, the Compensation Committee evaluated competitive market data from our 2016 Peer Group with guidance from FW Cook. The analysis included benchmarking data on several factors:

- target total direct compensation (comprised of base salary, target bonus and recommended long-term incentive awards) for our executive officers relative to the compensation of similarly situated executives in the 2016 Peer Group based on the most recent proxy data,

- equity usage (shares granted in equity plans as a percentage of weighted average shares outstanding), and
- equity allocation, in both absolute dollar value and percentage of annual equity granted, among (i) the CEO, (ii) the next four most highly paid executives, (iii) the remaining executives and (iv) all other employees.

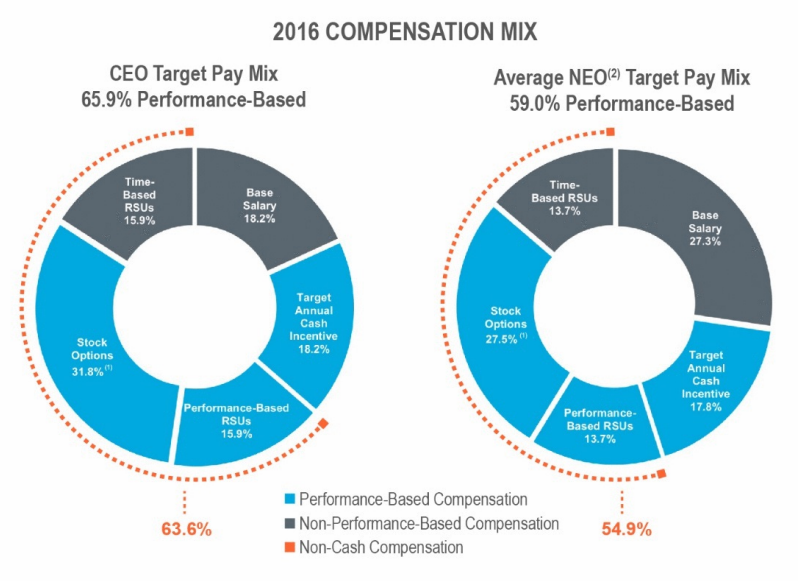
2016 Executive Compensation Elements

The elements of our executive compensation program for 2016 are summarized in the table below.

Element	Type	Objective
Annual Base Salary	Fixed cash compensation for performing day-to-day responsibilities	Recognizes skills, experience, knowledge and responsibilities
Annual Short-Term Incentive Compensation	Performance-based cash compensation awards based on the achievement of short-term financial goals and strategic objectives measured over a specific year	Promotes and rewards short-term corporate performance based on achievement of both financial and non-financial objectives
Annual Long-Term Incentive Compensation	Restricted stock units, 50% performance-based Nonqualified stock options, 50% performance-based	Builds executive stock ownership, retains executives and aligns compensation with the achievement of our long-term financial goals of creating shareholder value and our strategic objectives as measured over multi-year periods
Limited Executive Perquisites	Executive disability income insurance Executive financial consulting services	Maintains competitiveness in the market among our peer companies for both retention and recruitment purposes
Other Elements of Compensation	Broad-based benefits available to all employees Severance and change-in-control benefits	Attractive benefits package attracts and retains talent Supports executive retention and encourages executive independence and objectivity in considering a potential change in control transaction

Compensation Mix

The Compensation Committee does not have a formal or informal policy or target for allocating target total compensation between short-term and long-term compensation, performance and non-performance-based compensation, cash and non-cash compensation, or among the different forms of non-cash compensation. In allocating compensation between the different forms of compensation, we, with guidance from FW Cook, determine what we believe in our business judgment is the appropriate level with respect to each element of total direct compensation to achieve the objectives of our executive compensation program. The allocation of the primary elements of compensation for 2016 at target levels for both our CEO and the average of our other named executive officers is shown below.



(1) For purposes of this illustration, we include all stock options as performance-based compensation. One half of the stock options are subject to additional, predetermined performance-based vesting criteria based on stock price performance. See "Grants of Plan Based Awards for the Year Ended December 31, 2016" for a description of the vesting and other terms of the option awards granted on March 2, 2016.

(2) Includes named executive officers other than the CEO.

Annual Base Salary

Base salary is used to recognize the experience, skills, knowledge and responsibilities of our employees, including our named executive officers, and to provide a competitive level of fixed compensation to balance performance-based risks. The key factors in determining base salary are individual and Company performance, job responsibilities, the competitive rate among our peers for positions of like responsibility and internal pay equity among our employees with similar responsibilities and tenure. As noted above, the Compensation Committee does not target the amount of base salary or other components of compensation for our executive officers to a specific percentile of our peer group, but rather considers the peer group analysis together with a variety of factors in determining compensation.

The Compensation Committee reviews base salaries annually and, if appropriate, makes adjustments to reflect market levels generally every two years after taking into account individual responsibilities, performance and experience, the recommendations of the CEO and the benchmarking data provided by FW Cook. The Compensation Committee also reviews salaries on an interim basis as it determines appropriate based on significant changes in an executive's scope of responsibilities.

In February 2016, the Compensation Committee approved merit-based increases in base salary for each of our named executive officers, other than the CEO. The table below shows the annual base salaries for 2014 through 2016 for our named executive officers.

Named Executive Officer	2014 Year End Salary ($)	Increase (%)	2015 Year End Salary ($)	Increase [1] (%)	2016 Salary [1] ($)
Lucia	650,000	0	650,000	0	650,000
Sherman	500,000	0	500,000	3.0	515,000
Neuman	475,000	0	475,000	5.3	500,000
Nustad	425,000	0	425,000	3.0	437,750
Williams	400,000	18.8	475,000	5.3	500,000

(1) Effective February 29, 2016

Annual Short-Term Incentive Compensation

The Compensation Committee awards annual short-term cash incentive compensation to our named executive officers that reflects financial and strategic achievements based on both objective and subjective criteria, as well as individual performance. Our annual short-term incentive compensation is at-risk compensation. The Compensation Committee believes that this element of our executive compensation program promotes our performance-based compensation philosophy by providing named executive officers with direct financial incentives to achieve specific short-term performance goals intended to increase shareholder value and rewards both overall short-term corporate performance and individual contributions to attaining such performance. Our annual short-term cash incentive awards are paid in a lump sum during the first quarter following the completion of the fiscal year.

Each of our named executive officers was eligible to participate in the 2016 STIP. The target incentive opportunity for each of the named executive officers under the 2016 STIP, as approved by the Compensation Committee, is shown in the table below expressed as a percentage of base salary. The target incentive opportunities were determined based upon a number of factors, including salary levels, job responsibilities and the appropriate targeted level of short-term incentive opportunity for each named executive officer.

Named Executive Officer	Target Incentive Opportunity (as a % of base salary)
Lucia	100%
Sherman	65%
Neuman	65%
Nustad	65%
Williams	65%

2016 PERFORMANCE GOALS

Bonus payouts under the 2016 STIP were subject to the achievement of pre-determined performance goals based on the following financial and non-financial measures and relative weights:

Financial Measures	Non-Financial Measures
Revenue (25%)	Strategic Objectives (25%)
Adjusted EBITDA (25%)	
Adjusted EPS (25%)	

We chose revenue, adjusted EBITDA and adjusted EPS as financial measures under the 2016 STIP because we believe each is a strong indicator of our overall financial performance, a key indicator used by industry analysts to evaluate our operating performance and motivates our executives to drive company growth and profitability. Adjusted EPS was introduced as an additional financial metric for 2016 to further diversify the performance measures and further align the performance metrics with the interest of shareholders. Consistent with 2015, the Committee determined that payout of 50% of the bonus pool should be based on performance against earnings targets (by lowering the relative weighting of the adjusted EBITDA measure compared to 2015 and adding adjusted EPS) in order to drive profitability and long-term shareholder value.

We define adjusted EBITDA, which is a non-GAAP measure, as earnings before interest, income taxes, depreciation and amortization, stock-based compensation and non-recurring legal expense.

We define adjusted EPS, which is a non-GAAP measure, as earnings per share adjusted for stock-based compensation expense, non-recurring legal expense, amortization of acquisition related software and intangible assets and for the related taxes.

In addition, we chose to include strategic objectives under the 2016 STIP that are designed to enhance profitability and create long-term shareholder value.

Financial Objectives. Financial objectives are established based on the annual financial plan approved by the Board of Directors during the first quarter of the year and are intended to be challenging. For 2016, the revenue target was set higher than 2015 performance based on expectations of increased growth in our commercial health plan market, while the adjusted EBITDA and adjusted EPS targets were set at levels higher than 2015 performance after normalizing for anticipated changes in Medicare RAC and state revenues.

A threshold level of performance against each of the financial targets is required in order for the respective portion of the bonus pool to be funded. If the threshold level is met, the actual payout amount is calculated based on the funding curves below, which provide for funding greater than the target level only if results exceed 105% of target.

Adjusted EBITDA (25%) & Adjusted EPS (25%) Funding Curve	
Percent of Target Achieved	**% Funding of Bonus Pool**
<85%	—
85%	50%
86% - 94%	Payout is straight line from 50% to 100%
95 - 105%	100%
106% - 130%	Payout is straight line from 100% to 200%

Revenue (25%) Funding Curve	
Percent of Target Achieved	**% Funding of Bonus Pool**
<90%	—
90%	50%
91% - 94%	Payout is straight line from 50% to 100%
95 - 105%	100%
106% - 120%	Payout is straight line from 100% to 200%

The 2016 STIP authorized the Compensation Committee, in its discretion, to include or exclude the impact of acquisitions and/or dispositions of businesses during the performance period that would distort HMS's 2016 financial results; however, the Compensation Committee did not make any such adjustments in 2016.

Non-financial Objectives. The Compensation Committee established the following strategic objectives under the 2016 STIP: (i) achieve revenue growth by product and market; (ii) increase customer loyalty and retention; (iii) achieve certain growth objectives; (iv) achieve certain margin objectives; and (v) increase employee engagement. The level of achievement of the strategic objectives is determined in the Compensation Committee's sole discretion based on its review of the measured results.

RESULTS UNDER THE 2016 SHORT-TERM INCENTIVE PLAN

For fiscal 2016, we reported the following results under the financial performance measures that are used in determining payouts under our 2016 STIP.

For purposes of calculating the funding percentage under the 2016 STIP, the reported adjusted EBITDA and adjusted EPS results were reduced to include the impact of certain non-recurring legal fees, which resulted in lower payouts under the 2016 STIP. In addition, based on its evaluation of performance against the 2016 strategic objectives measures shown above, the Compensation Committee determined that a 90% payout for the strategic objectives was appropriate based on slightly lower than expected results in revenue growth in certain markets and products. The table below sets forth the calculated funding level under the 2016 STIP.

Performance Objectives	Performance Objective Weighting	Performance Target	Results under 2016 STIP	Achievement of Performance Objective	2016 STIP Funding Percentage[1]
Revenue	25%	$477.9M	$489.7M	102.5%	100.0%
Adjusted EBITDA	25%	$109.5M	$115.9M	105.8%	103.4%
Adjusted EPS	25%	$ 0.57	$ 0.74	129.8%	199.3%
Strategic Objectives	25%	100%	90.0%	90.0%	90.0%
Total	100%				123.2%

(1) Based on the funding curves shown above with respect to revenue, adjusted EBITDA and adjusted EPS.

2016 BONUS PAYOUTS

Bonus payouts for 2016 reflect the Company's strong financial performance for fiscal 2016 and above-target achievement of key financial metrics under the 2016 STIP.

Each of the named executive officers' short-term incentive awards for 2016 were determined by applying the formula set forth below, which, as provided under the 2016 STIP, includes the Committee's ability to use discretion to modify the calculated payout based on individual performance.

Base Salary	x	**Target Incentive Opportunity**	x	**2016 STIP funding percentage of 123.2% based on achievement of:** • 25% Adjusted EBITDA Target • 25% Adjusted EPS Target • 25% Revenue Target • 25% Strategic Objectives	=	**Cash Incentive Award** **(may be modified based on individual performance)**

The Compensation Committee considered the CEO's recommendations regarding individual bonus amounts for the named executive officers (other than himself) based on both corporate performance (as determined by the level of achievement under the 2016 STIP) and the officers' individual performance and determined to modify the awards for Mses. Neuman and Nustad and Messrs. Sherman and Williams based on performance within their respective business units. Mr. Lucia's bonus amount was determined solely based on corporate performance under the 2016 STIP, and all of the independent members of the Board as a group approved and ratified the Compensation Committee's decision with respect to the CEO's bonus amount. The table below compares target bonus amounts to actual bonus amounts paid to the named executive officers under the 2016 STIP.

Named Executive Officer	Target Bonus ($)	Actual Percentage of Target Bonus Paid (%)	Actual Bonus ($)
Lucia	650,000	123.2	800,800
Sherman	334,750	130.0	435,175
Neuman	325,000	120.0	390,000
Nustad	284,538	120.0	341,445
Williams	325,000	120.0	390,000

OTHER CONSIDERATIONS

The 2016 STIP operates as a sub-plan under our Annual Incentive Compensation Plan as amended and restated (the "AIP"), which was adopted by the Board and approved by our shareholders in order to qualify incentive awards as performance-based compensation that is intended to be deductible (to the extent possible) for federal income tax purposes under the Code. Each of the named executive officers was a participant in the AIP for 2016 and was eligible to receive a maximum bonus award of $2,000,000 for the 2016 performance period, subject to the Compensation Committee's authority to use negative discretion, if the predetermined objective goal for the fiscal year was met. This limit is in addition to the limit on performance-based cash awards under the 2016 Omnibus Plan. EBITDA was selected as the performance metric under the AIP for fiscal 2016 because it is one of the primary metrics used to measure our operating performance and although it is a non-GAAP financial measure, its components are calculated based on U.S. GAAP. EBITDA is defined as income before interest, income taxes, depreciation and amortization. The Compensation Committee establishes an initial performance requirement under the AIP, pursuant to which an executive may earn the initial right to receive the maximum bonus under the AIP. The performance requirement for fiscal 2016 was established at $50 million in EBITDA. The 2016 STIP then establishes a second performance requirement, consisting of the performance goals and objectives described above. The potentially achievable incentive compensation under this second performance requirement is less than or equal to the maximum possible bonus specified in the AIP which was approved by the shareholders.

Annual Long-Term Incentive Compensation

We believe that equity awards provide our named executive officers with a strong link to our long-term performance in order to create an ownership culture and help to align their interests with those of our shareholders. Annual long-term incentive awards are granted pursuant to our 2016 Omnibus Incentive Plan, which replaced and superseded the 2006 Stock Plan, upon approval by our shareholders on June 23, 2016. The 2016 Omnibus Plan, which is administered by the Compensation Committee, is intended to furnish a material incentive to employees by making available to them the benefits of a larger common stock ownership in HMS through stock options and other awards. The Board of Directors and the Compensation Committee believe that these increased incentives align compensation with the achievement of our long-term financial goal of creating shareholder value and our strategic objectives as measured over multi-year periods, as well as assist in the retention of employees.

TYPES OF LONG-TERM INCENTIVE AWARDS

For 2016, the Compensation Committee granted 50% of the total annual long-term incentive award value to our named executive officers in nonqualified stock options (50% of which are subject to stock price performance conditions) and 50% in restricted stock units (50% of which are subject to stock price performance conditions), pursuant to the 2006 Stock Plan. We believe that the mix of performance-based and non-performance-based stock options and restricted stock units is appropriate because it represents a balanced approach that reinforces our emphasis on pay-for-performance while retaining, incentivizing and compensating named executive officers for achievement of long-term goals intended to increase shareholder value.

Time-Based Stock Options. We believe stock options strongly support our objective of ensuring that pay is aligned with changes in shareholder value. We set the exercise price of all stock options equal to or above the closing price of our common stock on the NASDAQ Global Select Market on the day of the grant. Accordingly, a stock option is intended to provide a return to the executive only if the market price of our common stock appreciates from the exercise price of the stock option and the executive remains employed during the vesting period. To foster retention and long-term performance, time-based stock options vest in one-third increments on the first, second and third anniversaries of the date of grant.

Time-Based Restricted Stock Units. We believe restricted stock unit grants support the goal of retaining our named executive officers and further align the interests of our executives with shareholders by increasing their stock ownership. Because these restricted stock units vest in installments over time, these awards will provide a return to the executive only if the executive remains employed during the vesting period. The value of restricted stock unit awards increases or decreases as the market price of our common stock increases or decreases, further supporting our objective of ensuring that pay is aligned with changes in shareholder value. In addition, restricted stock units generally are perceived as more valuable than stock options during periods of stock price volatility. Time-based restricted stock units vest in one-third increments on the first, second and third anniversaries of the date of grant.

Performance-Based Awards. To drive long-term performance and shareholder value, we establish performance conditions with respect to 50% of the stock option awards and 50% of the restricted stock unit awards granted to the named executive officers. Performance-based awards are earned only to the extent pre-established performance goals are met, and, if earned, are subject to the time-based vesting requirements described above. For awards granted in 2016, both the performance-based stock options and performance-based restricted stock units will be earned only if our average closing price per share for the trading days during any 30-day calendar period preceding the first, second and/or third anniversaries of the date of grant is at least 25% higher than the closing price per share on the date of grant. If the performance condition is met prior to the first anniversary of the grant date, one-third of the performance-based stock options and restricted stock units will vest in three equal installments on the first, second and third anniversaries of the grant date; if the performance condition is met after the first anniversary but prior to the second anniversary of the grant date, two-thirds of the performance-based stock options and restricted stock units will vest on the second anniversary of the grant date and one-third will vest on the third anniversary of the grant date; if the performance condition is met after the second anniversary but prior to the third anniversary of the grant date, 100% of the performance-based stock options and restricted stock units will vest on the third anniversary of the grant date. If the performance condition is not achieved before the third anniversary of the grant date, the performance-based stock options and restricted stock units will be forfeited. The named executive officer must remain employed by the Company as of each vesting date.

The table below includes certain information regarding performance-based awards previously granted to our named executive officers that, during 2016, were either (i) earned at the target level, following the Compensation Committee's certification of the achievement of the respective performance goals (and are subject to time-based vesting according to the previously-approved award terms) or (ii) forfeited, following the Compensation Committee's determination that the performance goal had not been achieved during the 3-year award period.

Name	Award Type	Grant Date	Performance-Based Awards Earned in 2016 (#)	Performance-Based Awards Forfeited in 2016 (#)	Exercise Price of Options ($/Sh)	Grant Date Fair Value of Performance-Based Awards ($)
Lucia	Stock Options	11/15/2013	—	86,083	21.36	599,387
	Stock Options	3/4/2015	96,488	—	16.77	568,749
	Restricted Stock Units	3/4/2015	33,915	—	—	568,755
	Stock Options	3/2/2016	104,166	—	13.94	568,746
	Restricted Stock Units	3/2/2016	40,800	—	—	568,752
Sherman	Stock Options	3/4/2015	59,377	—	16.77	349,998
	Restricted Stock Units	3/4/2015	20,871	—	—	350,007
	Stock Options	5/13/2015	21,193	—	16.64	125,001
	Restricted Stock Units	5/13/2015	7,512	—	—	125,000
	Stock Options	3/2/2016	51,282	—	13.94	280,000
	Restricted Stock Units	3/2/2016	20,086	—	—	279,999
Neuman	Stock Options	11/15/2013	—	32,281	21.36	224,769
	Stock Options	3/4/2015	50,895	—	16.77	300,001
	Restricted Stock Units	3/4/2015	17,889	—	—	299,999
	Stock Options	5/13/2015	21,193	—	16.64	125,001
	Restricted Stock Units	5/13/2015	7,512	—	—	125,000
	Stock Options	3/2/2016	45,787	—	13.94	249,997
	Restricted Stock Units	3/2/2016	17,934	—	—	250,000
Nustad	Stock Options	11/15/2013	—	28,694	21.36	199,793
	Stock Options	3/4/2015	42,412	—	16.77	249,998
	Restricted Stock Units	3/4/2015	14,908	—	—	250,007
	Stock Options	3/2/2016	36,859	—	13.94	201,250
	Restricted Stock Units	3/2/2016	14,437	—	—	201,252
Williams	Stock Options	3/4/2015	50,895	—	16.77	300,001
	Restricted Stock Units	3/4/2015	17,889	—	—	299,999
	Stock Options	5/13/2015	21,193	—	16.64	125,001
	Restricted Stock Units	5/13/2015	7,512	—	—	125,000
	Stock Options	3/2/2016	45,787	—	13.94	249,997
	Restricted Stock Units	3/2/2016	17,934	—	—	250,000

2016 ANNUAL LONG-TERM INCENTIVE COMPENSATION

The 2016 annual long-term incentive awards for the named executive officers were determined based upon the Compensation Committee's subjective evaluation of the factors set forth below and guidance from FW Cook:

- competitive positioning among our peer group companies;
- corporate performance;
- relative shareholder return (for CEO's evaluation);
- recommendations of the CEO, based on individual performance, expected contributions going forward and appropriateness of the grant depending upon the level of responsibility (for executives other than the CEO);
- perceived retention value of the award;
- comparative share ownership and outstanding equity awards of HMS executives;
- awards granted to each executive in prior years; and
- potential wealth creation.

No mathematical weighting was applied to any individual factor. All of the independent directors as a group approved and ratified the 2016 annual long-term incentive award for the CEO.

The following long-term incentive awards were granted to our named executive officers, effective March 2, 2016:

Named Executive Officer	Value of Options Granted ($)	Number of Options Granted [1][2] (#)	Value of Restricted Stock Units Granted ($)	Number of Restricted Stock Units Granted [1][2] (#)
Lucia	1,137,500	208,333	1,137,500	81,600
Sherman	560,000	102,564	560,000	40,172
Neuman	500,000	91,575	500,000	35,868
Nustad	402,500	73,718	402,500	28,874
Williams	500,000	91,575	500,000	35,868

(1) See “Grants of Plan Based Awards For the Year Ended December 31, 2016” for a description of the vesting and other terms of the option and restricted stock unit awards.

(2) The options have an exercise price of $13.94 per share.

Limited Executive Perquisites

In order to enhance our ability to recruit and retain highly qualified executive talent, we offer Guaranteed Standard Issue, or individual disability income insurance, to employees earning more than $300,000 in annualized base salary, and financial counseling services to the CEO and any officers who report directly to the CEO. In addition, beginning in 2017, we also offer preventative health program benefits to our CEO and executives who report directly to the CEO. The Compensation Committee believes these benefits are reasonable and comparable to benefits offered by companies of a similar size to ours and better enable us to maintain competitiveness by providing high-performing executives with benefits that will facilitate strong, focused performance, while optimizing physical health. The cost of these perquisites constitutes a small percentage of each executive’s total compensation. Each of the named executive officers is eligible to receive these benefits. Mr. Williams opted not to receive financial counseling services during 2016, as reflected in the Summary Compensation Table.

Other Elements of Compensation

BENEFITS AND OTHER COMPENSATION

We maintain broad-based benefits that are provided to all employees, including health and dental insurance, life and disability insurance and a 401(k) plan. Our named executive officers are eligible to participate in all of our employee benefit plans, in each case on the same basis as other employees.

SEVERANCE AND CHANGE-IN-CONTROL BENEFITS

To enable us to offer competitive total compensation packages to our senior executives, as well as to ensure the ongoing retention of these individuals when considering transactions that may create uncertainty as to their future employment with us, in 2011, the Compensation Committee approved standardizing the terms of employment of our senior executives, which included providing consistent separation and change-in-control protection.

Based on information provided by FW Cook, the Compensation Committee believes that the protection afforded by the revised terms of employment described above provides a level of benefits that are estimated to be within a reasonable range based on competitive practices with respect to comparable positions. We believe that the benefits provided under these agreements are consistent with our objective of attracting and retaining highly qualified executives and provide reasonable assurance so that our senior executives are not distracted from their duties during the uncertainty that may accompany a possible change in control and as well as encourage executive independence and objectivity in considering any such transaction. The agreements and equity plans provide a "double trigger" for the payment of benefits upon a change of control, so that vesting occurs if a qualifying termination event occurs in connection with the change-in-control. The Compensation Committee believes that a “double trigger” is more appropriate than a “single trigger” because a double trigger prevents the unnecessary payment of benefits to an executive officer in the event that the change in control does not result in a qualifying termination event with respect to the executive's employment.

We have provided detailed information about Mr. Lucia's employment agreement and our agreements with the other named executive officers and the benefits provided to Mr. Lucia and the other named executive officers under their respective agreements, along with estimates of the value of such benefits under various circumstances, under the heading "Potential Payments Upon Termination of Employment or Change in Control" below.

EQUITY AWARD GRANT PRACTICES

Annual equity awards to eligible employees, including the named executive officers, are considered by the Compensation Committee at its regularly scheduled meeting held in the first quarter of each year. At this meeting, the Compensation Committee meets with management and FW Cook to discuss and consider annual long-term incentive awards and to approve individual award amounts and terms for the executive officers and other employees subject to Section 16 of the Exchange Act. The grant date for the 2016 annual equity awards was established as the second business day after the date that HMS filed its annual report on Form 10-K with the SEC.

The Compensation Committee also approves off-cycle initial equity grants to attract and retain key new hires. Generally, the grant value and equity mix is based on management's negotiations with new hire candidates. If the Company is in a blackout period when an individual is hired, then the grant date is established as the third trading day following the Company's public announcement of material non-public information. If the Company is not in a blackout period when an individual is hired, then the grant date is established on the date of the new hire's commencement of employment. Equity grants to new hires are subject to service-based vesting over four years. The Compensation Committee has delegated authority to the CEO to grant new hire awards, subject to certain limitations, on terms pre-established by the Compensation Committee to employees who are not subject to Section 16 of the Exchange Act. Grants approved by the CEO pursuant to this delegation are reviewed at the Compensation Committee's next regularly scheduled meeting.

The grant date for other off-cycle equity grants that may be approved by the Compensation Committee from time to time is established as the second business day after the date that HMS files its next annual or quarterly report with the SEC.

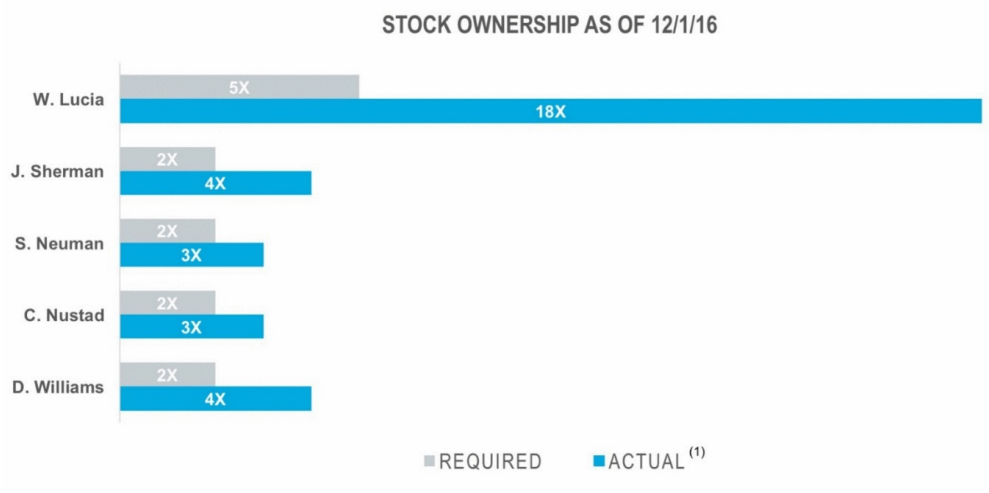
STOCK OWNERSHIP GUIDELINES FOR EXECUTIVE OFFICERS

The Board of Directors has established significant stock ownership guidelines for our executive officers to encourage them to own and hold a meaningful equity stake in HMS in order to further align their interests and actions with the interests of HMS and its shareholders. The guidelines for executive officers are based on a multiple of the executive's base salary.

Title	Value of Shares Required to be Owned
CEO	5 X Annual Base Salary
Other Executive Officers	2 X Annual Base Salary

For purposes of satisfying these guidelines, an executive officer's shares owned outright, directly or indirectly, and restricted stock and restricted stock units, whether or not vested, are counted in determining the executive's stock ownership. Each executive is required to meet his or her respective ownership guideline within five years after election (or promotion to a covered position), or in the case of executives in office at the time the guidelines were adopted, within five years of the date of adoption. To mitigate the impact of stock price fluctuation, the number of shares required to be held by each executive to satisfy the guidelines remains fixed through December 1, 2019. The Compensation Committee monitors compliance with these guidelines on an annual basis.

The following graph summarizes the stock ownership of each of our named executive officers as of December 1, 2016, as a multiple of base salary in effect as of December 1, 2016, pursuant to our Stock Ownership Guidelines.



(1) Rounded down to the nearest multiple

CLAWBACK POLICY

The Board of Directors has adopted a clawback policy that covers each of our current and former executive officers and applies to all forms of executive incentive compensation. Our clawback policy provides that the Board of Directors (or a Board committee) is authorized to recover from any current or former executive officer any bonus, incentive compensation or equity-based compensation gains resulting from certain misconduct occurring after January 1, 2015 that causes a restatement of our financial statements. The Board is required to review all circumstances and actions causing such restatement and to take action as it deems appropriate. We are monitoring this policy to ensure that it is consistent with applicable laws, and to the extent that the SEC adopts rules for clawback policies, we will revise our policy to reflect any necessary changes.

PROHIBITION ON HEDGING AND PLEDGING

Our Insider Trading Policy prohibits our employees and directors from, among many other actions, purchasing our securities on margin, borrowing against our securities held in a margin account, pledging our securities as collateral for a loan and entering into hedging and derivative transactions with respect to our securities.

TAX CONSIDERATIONS

Section 162(m) of the Code prohibits us from deducting from taxable income any compensation in excess of $1 million paid to our CEO and the three other most highly compensated named executive officers employed at the end of the year (other than our Chief Financial Officer), except to the extent that such compensation is paid pursuant to a shareholder approved plan upon the attainment of specified performance objectives. The Compensation Committee believes that tax deductibility is an important factor, but not the sole factor, to be considered in setting executive compensation policy. Accordingly, the Compensation Committee periodically reviews the potential consequences of Section 162(m) of the Code and generally intends to take such reasonable steps as are required to avoid the loss of a tax deduction due to Section 162(m) of the Code. However, the Compensation Committee may, in its judgment, authorize compensation payments or arrangements that do not comply with the exemptions in Section 162(m) of the Code when it believes that such payments are appropriate to attract and retain executive talent. In addition, because of the uncertainties associated with the application and interpretation of Section 162(m) of the Code and the regulations issued thereunder, there can be no assurance that compensation intended to satisfy the requirements for deductibility under Section 162(m) of the Code will in fact be deductible. We obtained shareholder approval of the AIP, as amended and restated, and the 2016 Omnibus Plan in 2016 in order to qualify awards under such plans, to the extent structured to comply with Section 162(m) of the Code, as performance-based compensation that is tax deductible under Section 162(m) of the Code.

EARLY 2017 COMPENSATION ACTIONS

The following is a brief summary of certain changes to the compensation of the named executive officers for fiscal 2017, which is intended to provide additional information to shareholders in their review of our compensation program for fiscal 2016. A more detailed description of compensation for fiscal 2017 will be included in the proxy statement for the 2018 Annual Meeting of Shareholders.

2017 Annual Base Salary

In February 2017, the Compensation Committee increased Mr. Lucia's annual base salary to $700,000, effective February 27, 2017, following its annual review of executive compensation. The Compensation Committee did not increase the annual base salary of any other named executive officer for 2017.

2017 Short-Term Incentive Plan Design

In February 2017, the Compensation Committee established the 2017 Short-Term Incentive Plan ("2017 STIP") for eligible employees, including our named executive officers. The 2017 STIP is substantially similar to the 2016 STIP with respect to the performance criteria and funding curves, and provides additional items for which the Compensation Committee may make adjustments in determining the level of achievement of the financial objectives. To ensure a minimum amount of earnings is achieved before bonuses are paid and to further align the plan design with shareholder interests, the Committee determined that if either the adjusted EBITDA or adjusted EPS results for fiscal 2017 do not meet the minimum threshold for funding under the 2017 STIP, the Committee may use negative discretion to reduce the entire bonus plan funding from the calculated amount. For a discussion of the performance goals under the 2016 STIP, see "2016 Performance Goals" earlier in this CD&A. Payouts under the 2017 STIP generally are capped at 200% of target and will be determined in early 2018.

2017 Long-Term Incentive Awards

In April 2017, the Compensation Committee approved the grant of annual long-term incentive awards to the named executive officers in the form of non-qualified stock options and restricted stock units, on a substantially equal value basis, pursuant to the 2016 Omnibus Plan. Due to the delay in filing the Company's annual report on Form 10-K for the year-ended December 31, 2016 with the SEC, the Committee determined to make the awards effective on the third business day following the filing of our quarterly report on Form 10-Q for the period ended March 31, 2017, with the SEC. One-half of the stock options and one-half of the restricted stock units are subject to stock price performance conditions.

Named Executive Officer	Grant Date Fair Value of Options Granted (1) ($)	Grant Date Fair Value of RSUs Granted (1) ($)
Lucia	1,500,000	1,500,000
Sherman	850,000	850,000
Neuman	600,000	600,000
Nustad	350,000	350,000
Williams	600,000	600,000

(1) The non-qualified stock options and restricted stock units vest as follows: 50% vest in three equal installments on the first, second and third anniversaries of the grant date, and the remaining 50% are earned upon the Company's achievement of the following performance condition and vest as set forth below: the Company's average closing price per share must be at least 25% higher than the closing price on the grant date for a period of 30 consecutive trading days preceding the first, second or third anniversaries of the grant date. If the performance condition is met prior to the first anniversary of the grant date, one-third of the performance-based stock options and restricted stock units will vest in three equal installments on the first, second and third anniversaries of the grant date; if the performance condition is met after the first anniversary but prior to the second anniversary of the grant date, two-thirds of the performance-based stock options and restricted stock units will vest on the second anniversary of the grant date and one-third will vest on the third anniversary of the grant date; if the performance condition is met after the second anniversary but prior to the third anniversary of the grant date, 100% of the performance-based stock options and restricted stock units will vest on the third anniversary of the grant date. If the performance condition is not achieved before the third anniversary of the grant date, the performance-based stock options and restricted stock units will be forfeited. The named executive officer must remain employed by the Company as of each vesting date.

NON-GAAP FINANCIAL MEASURES

The Company believes that the non-GAAP financial measures presented in this CD&A provide useful information to the Company's management, investors, and other interested parties about the Company's operating performance because they allow them to understand and compare the Company's operating results during the current periods to the prior year periods in a more consistent manner. The non-GAAP measures presented in this CD&A may not be comparable to similarly titled measures used by other companies. These non-GAAP financial measures are used in addition to and in conjunction with results presented in accordance with GAAP and reflect an additional way of viewing aspects of the Company's operations that, when viewed with GAAP results and the accompanying reconciliations to corresponding GAAP financial measures, provides a more complete understanding of the results of operations and trends affecting the Company's business. These non-GAAP financial measures should be considered as a supplement to, and not as a substitute for, or superior to financial measures calculated in accordance with GAAP.

Reconciliation of Net Income to EBITDA and Adjusted EBITDA
(in thousands)

	FY 2016	FY 2015
Net income	$ 37,636	$ 24,527
Net interest expense	8,198	7,763
Income taxes	11,835	15,282
Depreciation and amortization, net of deferred financing costs, included in net interest expense	44,930	50,598
Earnings before interest, taxes, depreciation and amortization (EBITDA)	$ 102,599	$ 98,170
Stock based compensation expense	13,277	14,297
Non-recurring legal fees (1)	1,563	-
Adjusted EBITDA	$ 117,439	$ 112,467

(1) In periods prior to 2016, legal fees related to disputes involving PCG were not included in adjusted earnings because they were not considered non-recurring at the time. For the twelve months ended December 31, 2015, related legal fees were $5.5 million.

Reconciliation of Net Income to GAAP EPS and Adjusted EPS
(in thousands, except per share amounts)

	FY 2016	FY 2015
Net Income	$ 37,636	$ 24,527
Stock-based compensation expense	13,277	14,297
Non-recurring legal fees [1]	1,563	-
Amortization of acquisition related software and intangible assets	28,030	28,148
Income tax related to adjustments	(15,536)	(16,295)
Sub-total	$ 64,970	$ 50,677
Weighted average common shares, diluted	86,987	88,361
Diluted GAAP EPS	0.43	$ 0.28
Diluted adjusted EPS	0.75	$ 0.57

(1) Related legal fees were not considered non-recurring in 2015. For the twelve months ended December 31, 2015, related legal fees were approximately $5.5 million and income taxes on related legal fees were approximately $2.1 million or the equivalent of $0.04 per diluted Adjusted EPS.

COMPENSATION COMMITTEE REPORT

The Compensation Committee of the Board of Directors of HMS Holdings Corp. has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management. Based on this review and discussion, the Compensation Committee recommended to the Board of Directors that the Compensation Discussion and Analysis be included in this Annual Report on Form 10-K.

By the Compensation Committee of the Board of Directors of HMS Holdings Corp.

Richard H. Stowe, *Chair*
Craig R. Callen
Cora M. Tellez

The information contained in the Compensation Committee Report shall not be deemed to be "soliciting material" or to be "filed" with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that we specifically incorporate it by reference in such filing.

SUMMARY COMPENSATION TABLE

The following table sets forth the cash and non-cash compensation awarded to or earned by our named executive officers for the fiscal years ended December 31, 2016, 2015 and 2014.

Name and Principal Position	Year	Salary [1] ($)	Bonus [2] ($)	Stock Awards [3] ($)	Option Awards [4] ($)	Non-Equity Incentive Plan Compen-sation [5] ($)	All Other Compen-sation [6] ($)	Total Compen-sation ($)
William C. Lucia	2016	650,000	—	1,137,504	1,137,498	800,800	33,421	3,759,223
Chairman, President	2015	650,000	—	1,137,493	1,137,498	606,385	31,491	3,562,867
and CEO	2014	650,000	—	1,412,490	737,497	468,000	10,400	3,278,387
Jeffrey S. Sherman	2016	512,115	—	559,998	559,999	435,175	28,391	2,095,678
EVP, Chief Financial	2015	500,000	—	949,997	1,933,332	303,193	28,194	3,714,716
Officer and Treasurer	2014	136,538[7]	355,000	337,493	1,087,493	—	—	1,916,524
Semone Neuman	2016	495,192	—	500,000	500,000	390,000	28,773	1,913,965
EVP, Operations and	2015	475,000	—	849,998	1,833,332	288,033	29,893	3,476,256
Information Technology	2014	470,192	—	787,480	287,494	265,000	13,677	1,823,843
Cynthia Nustad	2016	435,298	—	402,504	402,500	341,445	27,826	1,609,573
EVP, Chief	2015	425,000	—	499,997	1,237,501	257,714	29,387	2,449,599
Strategy Officer	2014	421,731	—	649,996	249,994	200,000	10,400	1,532,121
Douglas M. Williams	2016	495,192	—	500,000	500,000	390,000	13,595	1,898,787
President, Markets	2015	469,231	—	849,998	1,833,332	288,033	12,646	3,453,240
and Product	2014	396,923	50,000	499,980	274,994	230,000	8,885	1,460,782

(1) The amounts in this column consist of base salary earned for the fiscal year.

(2) The amounts in this column consist of (i) with respect to Mr. Sherman, a sign-on bonus of $200,000 paid in 2014 and a bonus payment of $155,000 ($150,000 of which was guaranteed) earned for 2014 and paid in 2015 and (ii) with respect to Mr. Williams, a sign-on bonus of $50,000 paid in 2014, pursuant to the terms of their respective employment agreements.

(3) The amounts in this column represent the aggregate grant date fair value of the restricted stock unit awards computed in accordance with FASB guidance on stock-based compensation. The grant date fair value of restricted stock units is determined based on the number of units awarded and the fair value of our common stock on the grant date, which is the closing sales price per share of our common stock reported on the NASDAQ Global Select Market on that date.

(4) The amounts in this column represent the aggregate grant date fair value of the stock option awards computed in accordance with FASB guidance on stock-based compensation. The relevant assumptions made in the valuations for the 2016, 2015 and 2014 stock option awards may be found in (i) Note 1 of the Notes to the Consolidated Financial Statements in this Annual Report on Form 10-K for the fiscal year ended December 31, 2016, (ii) Note 10 of the Notes to the Consolidated Financial Statements in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 and (iii) Note 11 of the Notes to the Consolidated Financial Statements in our Annual Report on Form 10-K for the fiscal year ended December 31, 2014, respectively. The grant date fair value of stock options is determined based on the number of options awarded and the fair value of the stock option on the grant date based upon the Black Scholes pricing model.

(5) The amounts in this column consist of amounts earned pursuant to the short-term (cash) incentive plan for the fiscal year reported, which are paid in the following fiscal year.

(6) The table below shows the components of “All Other Compensation” for the named executive officers for 2016.

(7) The amount reported consists of base salary earned by Mr. Sherman, prorated from his date of employment on September 8, 2014.

FISCAL 2016 ALL OTHER COMPENSATION TABLE

Name	401(k) Savings Plan Employer Matching Contributions[1] ($)	Executive Disability Insurance[2] ($)	Financial Counseling[3] ($)	Other[4] ($)	Tax Gross-ups[5] ($)	Total All Other Compensation ($)
Lucia	10,600	3,003	15,000	3,356	1,462	33,421
Sherman	10,600	2,791	15,000	—	—	28,391
Neuman	10,600	2,849	15,000	316	8	28,773
Nustad	10,600	2,226	15,000	—	—	27,826
Williams	10,600	2,995	—	—	—	13,595

(1) These amounts represent Company matching contributions to our named executive officers in the Company's 401(k) savings plan.

(2) These amounts represent the premiums paid by the Company on behalf of our named executive officers for executive disability insurance.

(3) These amounts represent the amounts paid on behalf of our named executive officers for financial counseling services.

(4) These amounts represent the cost of Company gifts given to the named executive officer in celebration of certain events.

(5) These amounts represent the amounts paid to the named executive officer for taxes incurred on Company gifts.

GRANTS OF PLAN-BASED AWARDS FOR THE YEAR ENDED DECEMBER 31, 2016

The following table provides information concerning each grant of an award made to our named executive officers in fiscal 2016 under our AIP, 2016 STIP and 2006 Stock Plan.

Name	Award Type	Grant Date	Compensation Committee Approval Date	Estimated Possible Payouts Under Non-Equity Incentive Plan Awards[1]		Estimated Future Payouts Under Equity Incentive Plan Awards [2]	All Other Stock Awards: Number of Shares of Stock or Units[3] (#)	All Other Option Awards: Number of Securities Underlying Options[4] (#)	Exercise or Base Price of Options[5] ($/Sh)	Grant Date Fair Value of Stock and Option Awards[6] ($)
				Target ($)	Maximum ($)	Target (#)				
Lucia	AIP/2016 STIP	—	—	650,000	2,000,000	—	—	—	—	—
	Stock Options [7]	3/2/2016	2/18/2016	—	—	104,166	—	104,167	13.94	1,137,498
	RSUs [7]	3/2/2016	2/18/2016	—	—	40,800	40,800	—	—	1,137,504
Sherman	AIP/2016 STIP	—	—	334,750	2,000,000	—	—	—	—	—
	Stock Options [7]	3/2/2016	2/18/2016	—	—	51,282	—	51,282	13.94	559,999
	RSUs [7]	3/2/2016	2/18/2016	—	—	20,086	20,086	—	—	559,998
Neuman	AIP/2016 STIP	—	—	325,000	2,000,000	—	—	—	—	—
	Stock Options [7]	3/2/2016	2/18/2016	—	—	45,787	—	45,788	13.94	500,000
	RSUs [7]	3/2/2016	2/18/2016	—	—	17,934	17,934	—	—	500,000
Nustad	AIP/2016 STIP	—	—	284,538	2,000,000	—	—	—	—	—
	Stock Options [7]	3/2/2016	2/18/2016	—	—	36,859	—	36,859	13.94	402,500
	RSUs [7]	3/2/2016	2/18/2016	—	—	14,437	14,437	—	—	402,504
Williams	AIP/2016 STIP	—	—	325,000	2,000,000	—	—	—	—	—

Stock Options [7]	3/2/2016	2/18/2016	—	—	45,787	—	45,788	13.94	500,000
RSUs [7]	3/2/2016	2/18/2016	—	—	17,934	17,934	—	—	500,000

(1) Amounts represent the target and maximum short-term (cash) incentive compensation payouts that could be earned by the named executive officers for 2016. The target amount shown is 100% of the individual's target annual award opportunity and assumes that the named executive officer achieves all related pre-determined financial and non-financial objectives. The maximum amount shown is the shareholder-approved maximum payout under the AIP. There are no threshold amounts under the 2016 STIP or the AIP. The actual short-term (cash) incentive compensation paid for 2016 is shown in the Summary Compensation Table in the "Non-Equity Incentive Plan Compensation" column. The AIP and our 2016 STIP are described in the Compensation Discussion and Analysis, under the heading "Annual Short-Term Incentive Compensation." For 2016, Mr. Lucia's target award opportunity was 100% of his base salary. The target award opportunity for Messrs. Sherman and Williams and Mses. Neuman and Nustad was 65% of his/her base salary.

(2) Amounts represent the portion of the award made to each named executive officer in 2016 that is dependent on certain pre-defined performance conditions and continued service for both non-qualified stock options and restricted stock units. These grants are discussed in the Compensation Discussion and Analysis under the heading "Annual Long-Term Incentive Compensation."

(3) Amounts represent the portion of the restricted stock unit award made to each named executive officer in 2016 that is conditioned on continued service. These restricted stock unit awards are discussed in the Compensation Discussion and Analysis under the heading "Annual Long-Term Incentive Compensation."

(4) Amounts represent the portion of the non-qualified stock option award made to the named executive officers in 2016 that is conditioned on continued service. These stock option awards are discussed in the Compensation Discussion and Analysis under the heading "Annual Long-Term Incentive Compensation."

(5) Represents the closing price of our common stock on the date of the grant.

(6) Amounts in this column represent the grant date fair value of each stock option grant and each restricted stock unit grant computed in accordance with FASB guidance on stock-based compensation, and exclude the impact of estimated forfeitures related to service-based vesting conditions. The relevant assumptions made in the valuations may be found in Note 1 of the Notes to the Consolidated Financial Statements in this Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

(7) The non-qualified stock options and restricted stock units vest as follows: 50% vests in three equal installments on the first, second and third anniversaries of the grant date, and the remaining 50% vests upon the Company's achievement of the following performance condition: the Company's average closing price per share must be at least 25% higher than the closing price on the grant date for a period of 30 consecutive trading days preceding the first, second or third anniversaries of the grant date. If the performance condition is met prior to the first anniversary of the grant date, one-third of the performance-based stock options and restricted stock units will vest in three equal installments on the first, second and third anniversaries of the grant date; if the performance condition is met after the first anniversary but prior to the second anniversary of the grant date, two-thirds of the performance-based stock options and restricted stock units will vest on the second anniversary of the grant date and one-third will vest on the third anniversary of the grant date; if the performance condition is met after the second anniversary but prior to the third anniversary of the grant date, 100% of the performance-based stock options and restricted stock units will vest on the third anniversary of the grant date. If the performance condition is not achieved before the third anniversary of the grant date, the performance-based stock options and restricted stock units will be forfeited. The named executive officer must remain employed by the Company as of each vesting date. The non-qualified stock options are exercisable over a term of ten years.

OUTSTANDING EQUITY AWARDS AT DECEMBER 31, 2016

	Option Awards					Stock Awards			
Name	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock that Have Not Vested (1) ($)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)
Lucia	30,000	—	—	19.77	9/30/2017	—	—	—	—
	71,628	—	—	22.95	9/30/2018	—	—	—	—
	64,100	—	—	27.79	10/4/2019	—	—	—	—
	86,083	—	—	21.36	11/14/2020	—	—	—	—
	32,410	16,205 (2)	48,616 (3)	21.63	11/11/2021	—	—	—	—
	32,163	160,813 (4)	—	16.77	3/3/2022	—	—	—	—
	—	208,333 (12)	—	13.94	3/3/2023	—	—	—	—
	—	—	—	—	—	11,743 (5)	213,253	—	—
	—	—	—	—	—	16,700 (6)	303,272	—	—
	—	—	—	—	—	5,683 (2)	103,203	17,048 (3)	309,592
	—	—	—	—	—	56,525 (4)	1,026,494	—	—
	—	—	—	—	—	81,600 (12)	1,481,856	—	—
Sherman	51,796	51,795 (7)	—	20.71	9/8/2021	—	—	—	—
	14,831	7,416 (2)	22,248 (3)	21.63	11/11/2021	—	—	—	—
	19,792	98,962 (4)	—	16.77	3/3/2022	—	—	—	—
	7,064	35,321 (9)	—	16.64	5/13/2022	—	—	—	—
	33,334	66,666 (10)	—	11.20	11/10/2022	—	—	—	—
	33,334	66,666 (10)	—	14.00	11/10/2022	—	—	—	—
	—	102,564 (12)	—	13.94	3/3/2023	—	—	—	—
	—	—	—	—	—	2,601 (2)	47,234	7,802 (3)	141,684
	—	—	—	—	—	34,785 (4)	631,696	—	—
	—	—	—	—	—	12,520 (9)	227,363	—	—
	—	—	—	—	—	40,172 (12)	729,524	—	—
Neuman	32,281	—	—	21.36	11/14/2020	—	—	—	—
	12,634	6,317 (2)	18,952 (3)	21.63	11/11/2021	—	—	—	—
	16,965	84,824 (4)	—	16.77	3/3/2022	—	—	—	—
	7,064	35,321 (9)	—	16.64	5/13/2022	—	—	—	—
	33,334	66,666 (10)	—	11.20	11/10/2022	—	—	—	—
	33,334	66,666 (10)	—	14.00	11/10/2022	—	—	—	—
	—	91,575 (12)	—	13.94	3/3/2023	—	—	—	—
	—	—	—	—	—	4,551 (8)	82,646	—	—
	—	—	—	—	—	12,370 (6)	224,639	—	—
	—	—	—	—	—	2,215 (2)	40,224	6,646 (3)	120,691
	—	—	—	—	—	29,815 (4)	541,440	—	—
	—	—	—	—	—	12,520 (9)	227,363	—	—

	—	—	—	—	—	35,868 (12)	651,363	—	—
Nustad	11,247	—	—	22.47	2/8/2018	—	—	—	—
	22,384	—	—	22.95	9/30/2018	—	—	—	—
	10,015	—	—	27.79	10/4/2019	—	—	—	—
	10,016	—	—	27.79	10/4/2019	—	—	—	—
	28,694	—	—	21.36	11/14/2020	—	—	—	—
	10,986	5,493 (2)	16,480 (3)	21.63	11/11/2021	—	—	—	—
	14,137	70,687 (4)	—	16.77	3/3/2022	—	—	—	—
	25,000	50,000 (10)	—	11.20	11/10/2022	—	—	—	—
	25,000	50,000 (10)	—	14.00	11/10/2022	—	—	—	—
	—	73,718 (5)	—	13.94	3/3/2023	—	—	—	—

	—	—	—	—	—	8,699 (5)	157,974	—	—
	—	—	—	—	—	9,896 (6)	179,711	—	—
	—	—	—	—	—	1,927 (2)	34,994	5,779 (3)	104,947
	—	—	—	—	—	24,846 (4)	451,203	—	—
	—	—	—	—	—	28,874 (12)	524,352	—	—
Williams	38,285	12,762 (11)	—	22.54	12/8/2020	—	—	—	—
	12,084	6,043 (2)	18,128 (3)	21.63	11/11/2021	—	—	—	—
	16,965	84,824 (4)	—	16.77	3/3/2022	—	—	—	—
	7,064	35,321 (9)	—	16.64	5/13/2022	—	—	—	—
	33,334	66,666 (10)	—	11.20	11/10/2022	—	—	—	—
	33,334	66,666 (10)	—	14.00	11/10/2022	—	—	—	—
	—	91,575 (12)	—	13.94	3/3/2023	—	—	—	—
	—	—	—	—	—	5,567 (6)	101,097	—	—
	—	—	—	—	—	2,119 (2)	38,481	6,357 (3)	115,443
	—	—	—	—	—	29,815 (4)	541,440	—	—
	—	—	—	—	—	12,520 (9)	227,363	—	—
	—	—	—	—	—	35,868 (12)	651,363	—	—

(1) The market value of shares or units of stock that have not vested is calculated by multiplying the closing market price per share of our common stock on December 30, 2016, the last trading day in 2016, of $18.16 per share by the number of shares or units of stock that have not vested.

(2) Represents stock options and restricted stock units granted on November 12, 2014. The remaining stock options and restricted stock units are scheduled to vest on November 12, 2017.

(3) Represents performance-based stock options and restricted stock units granted on November 12, 2014 that have not been earned. The stock options and restricted stock units are scheduled to vest on November 12, 2017, subject to satisfaction of the following performance condition: an increase in the average closing price per share of our common stock during the applicable trading days in any consecutive 30 calendar day period preceding the third anniversary of the grant date of at least 25% over the option exercise price.

(4) Represents stock options and restricted stock units granted on March 4, 2015. One-half of the stock options and restricted stock units granted are subject to time-based vesting in one-third increments. Of the remaining two-thirds that were unexercisable or that had not vested as of December 30, 2016, one-third vested on March 4, 2017, and one-third is scheduled to vest on March 4, 2018. One-half of the stock options and restricted stock units granted were subject to performance-based conditions that have been satisfied and subject to time-based vesting conditions. Two-thirds of these performance-based stock options and restricted stock units vested on March 4, 2017, and one-third is scheduled to vest on March 4, 2018.

(5) Represents restricted stock units granted on February 27, 2013 that were subject to performance-based conditions that have been satisfied and subject to time-based vesting conditions. Of the remaining restricted stock units that had not vested as of December 30, 2016, one-half vested on February 27, 2017, and one-half is scheduled to vest on February 27, 2018.

(6) Represents restricted stock units granted on March 5, 2014 that were subject to performance-based conditions that have been satisfied and subject to time-based vesting conditions. Of the remaining restricted stock units that had not vested as of December 30, 2016, one-half vested on March 5, 2017, and one-half is scheduled to vest on March 5, 2018.

(7) Represents stock options granted on September 8, 2014. One-half of the remaining stock options are scheduled to vest on September 8, 2017, and one-half are scheduled to vest on September 8, 2018.

(8) Represents restricted stock units granted on April 1, 2013. All of the remaining restricted stock units vested on April 1, 2017.

(9) Represents stock options and restricted stock units granted on May 13, 2015. One-half of the stock options and restricted stock units granted are subject to time-based vesting in one-third increments. Of the remaining two-thirds that were unexercisable or that had not vested as of December 30, 2016, one-third is scheduled to vest on May 13, 2017, and one-third is scheduled to vest on May 13, 2018. One-half of the stock options and restricted stock units granted were subject to performance-based conditions that have been satisfied and subject to time-based vesting conditions. Two-thirds of these performance-based stock options and restricted stock units are scheduled to vest on May 13, 2017, and one-third are scheduled to vest on May 13, 2018.

(10) Represents stock options granted on November 11, 2015. Of the remaining two-thirds that were unexercisable as of December 30, 2016, one-third is scheduled to vest on November 11, 2017, and one-third is scheduled to vest on November 11, 2018.

(11) Represents stock options granted on December 9, 2013. All of the remaining stock options are scheduled to vest on December 9, 2017.

(12) Represents stock options and restricted stock units granted on March 2, 2016. One-half of the stock options and restricted stock units granted are subject to time-based vesting in one-third increments. One-third of the time-based stock options and restricted stock units vested on March 2, 2017, and one-third is scheduled to vest on each of March 2, 2018 and March 2, 2019. One-half of the stock options and restricted stock units granted were subject to performance-based conditions that have been satisfied and subject to time-based vesting conditions. One-third of these performance-based stock options and restricted stock units vested on March 2, 2017, and one-third is scheduled to vest on each of March 2, 2018 and March 2, 2019.

OPTION EXERCISES AND STOCK VESTED IN 2016

The following table sets forth certain information concerning the stock options exercised and stock awards that vested for our named executive officers during the year ended December 31, 2016.

	Option Awards		Stock Awards	
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise[1] ($)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting[2] ($)
Lucia	339,328	4,504,336	44,906	604,649
Sherman	—	—	12,060	179,971
Neuman	—	—	21,417	310,316
Nustad	—	—	16,192	227,287
Williams	—	—	13,369	197,093

(1) The value realized on the exercise of stock options is based on the difference between the exercise price and the market price (used for tax purposes) of our common stock on the date of exercise.

(2) The value realized on vesting represents the number of shares acquired on vesting multiplied by the market value of shares of our common stock on the vesting date, which is the closing price of our common stock on:

(i) February 18, 2016 of $11.61 for Mr. Lucia (13,697 shares);

(ii) February 27, 2016 of $12.99 for Mr. Lucia (5,872 shares) and Ms. Nustad (4,349 shares);

(iii) March 4, 2016 of $14.01 for Messrs. Lucia (11,304 shares), Sherman (6,956 shares) and Williams (5,963 shares) and Mses. Neuman (5,963 shares) and Nustad (4,969 shares);

(iv) March 5, 2016 of $14.01 for Messrs. Lucia (8,350 shares) and Williams (2,783 shares) and Mses. Neuman (6,185 shares) and Nustad (4,948 shares);

(v) April 1, 2016 of $14.06 for Ms. Neuman (4,550 shares);

(vi) May 13, 2016 of $15.78 for Messrs. Sherman (2,504 shares) and Williams (2,504 shares) and Ms. Neuman (2,504 shares); and

(vii) November 12, 2016 of $16.54 for Messrs. Lucia (5,683 shares), Sherman (2,600 shares) and Williams (2,119 shares) and Mses. Neuman (2,215 shares) and Nustad (1,926 shares).

POTENTIAL PAYMENTS UPON TERMINATION OF EMPLOYMENT OR CHANGE IN CONTROL

The information and table in this section summarize the estimated compensation payable to each of our named executive officers in the event of termination of employment or a change in control. This compensation is payable pursuant to (i) the terms of the employment agreement with each of our named executive officers, and (ii) the terms of our equity incentive plans and related award agreements. Regardless of the manner in which the named executive officer's employment terminates, each executive is generally entitled to receive earned, unpaid salary and accrued but unused paid time off through the date of termination under his or her employment agreement. Each named executive officer is also entitled to receive any earned, unpaid bonus for the calendar year preceding the calendar year in which his or her employment ends unless such termination is for Cause. The definitions of "Cause," Change in Control," "Disability," and "Good Reason" appear at the end of the next section under the heading "Key Terms."

In addition to the compensation discussed above, the following table reflects the compensation and benefits that would have been paid to the named executive officers had their employment terminated on December 31, 2016 under the termination scenarios shown below, and assumes a closing price of our common stock as of December 30, 2016, the last trading day in 2016 ($18.16). The table also assumes that each named executive officer executes a separation agreement and general release, as required under the terms of their employment agreements, and complies with certain restrictive covenants and confidentiality provisions contained in their employment agreements and Restrictive Covenants Agreements (as defined and described under the heading "Restrictive Covenants Agreements"). The table does not include any amounts due for unused paid time off for 2016 or the value of immediately exercisable stock options at the date of termination (where vesting was not accelerated as a result of the termination). Due to a number of factors that may affect the availability, nature and amount of compensation upon termination, any actual amounts paid or distributed to named executive officers may be different from the amounts provided in this section. In addition, in connection with any actual termination or change in control situation, we may determine to enter into agreements or establish arrangements that alter the terms below.

Named Executive Officer and Type of Payment	Termination without Cause[1] ($)	Resignation for Good Reason[2] ($)	Termination without Cause following a Change in Control[3] ($)	Resignation for Good Reason following a Change in Control[3] ($)	Disability[4] ($)	Death or Retirement[5] ($)
Lucia						
Cash severance	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	—
Bonus compensation[6]	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	—
Continued health insurance coverage	22,833	22,833	22,833	22,833	22,833	—
RSUs[7][9]	3,437,670	3,437,670	3,437,670	3,437,670	3,437,670	3,437,670
Stock Options[8][9]	1,102,695	1,102,695	1,102,695	1,102,695	1,102,695	1,102,695
Total	7,163,198	7,163,198	7,163,198	7,163,198	7,163,198	4,540,365
Sherman						
Cash severance	515,000	515,000	515,000	—	—	—
Continued health insurance coverage	16,407	16,407	16,407	—	—	—
RSUs[7]	—	—	1,777,501	1,777,501	1,777,501	1,777,501
Stock Options[8]	—	—	1,365,391	1,365,391	1,365,391	1,365,391
Total	531,407	531,407	3,674,299	3,142,892	3,142,892	3,142,892
Neuman						
Cash severance	500,000	—	500,000	500,000	—	—
Continued health insurance coverage	10,669	—	10,669	10,669	—	—
RSUs[7]	—	—	1,888,368	1,888,368	1,888,368	1,888,368
Stock Options[8]	—	—	1,299,366	1,299,366	1,299,366	1,299,366
Total	510,669	—	3,698,402	3,698,402	3,187,733	3,187,733
Nustad						
Cash severance	437,750	—	437,750	437,750	—	—
Continued health insurance coverage	16,407	—	16,407	16,407	—	—
RSUs[7]	—	—	1,453,181	1,453,181	1,453,181	1,453,181
Stock Options[8]	—	—	965,345	965,345	965,345	965,345
Total	454,157	—	2,872,683	2,872,683	2,418,526	2,418,526
Williams						
Cash severance	500,000	—	500,000	500,000	—	—
Continued health insurance coverage	16,407	—	16,407	16,407	—	—
RSUs[7]	—	—	1,675,187	1,675,187	1,675,187	1,675,187
Stock Options[8]	—	—	1,299,366	1,299,366	1,299,366	1,299,366
Total	516,407	—	3,490,960	3,490,960	2,974,553	2,974,553

(1) Assuming involuntary termination without Cause, Messrs. Sherman and Williams and Mses. Neuman and Nustad would be entitled to cash severance in an amount equal to 12 times their monthly base salary paid ratably in equal installments over a 12 month period, and a lump sum amount equal to 12 times the difference between the monthly COBRA coverage premium for the same type of medical and dental coverage they are receiving as of the date their employment ends and their monthly employee contribution. Mr. Lucia would be entitled to cash severance in an amount equal to 24 times his monthly base salary paid ratably in equal installments over a 24-month period, continued health coverage for 24 months or until he becomes eligible for health coverage from another employer, whichever is earlier, and twice his bonus component. The bonus component varies depending upon whether the bonus for the year of termination is intended to be "performance-based" compensation and performance is satisfied, in which case it will be paid when bonuses are paid to our other senior executive officers, or whether the bonus is under a different program, in which case it will be his target bonus. In addition, Mr. Lucia would be treated as continuing in service for purposes of the vesting of any equity award under the terms of his employment agreement.

(2) The amounts in this column represent the amounts payable to the named executive officer in the event he resigns for Good Reason, as defined in his employment Agreement, which will be paid on the same schedule as if he were terminated without Cause.

(3) If within 24 months following a Change in Control, the named executive officer's employment is terminated without cause or the named executive officer resigns for Good Reason, Messrs. Sherman and Williams and Mses. Neuman and Nustad would receive the amount of cash severance equal to 12 times their monthly base salary in a single lump sum, and Mr. Lucia would receive the amount of his cash severance equal to 24 times his monthly base salary and twice his bonus component in a single lump sum. In addition, if Mr. Lucia is terminated without Cause or resigns for Good Reason within six months prior to a Change in Control, Mr. Lucia would receive a lump sum cash payment equal to the excess of the amount he would have received for any equity awards outstanding or deemed to be outstanding, or canceled or forfeited, as a result of termination or Change in Control, over the amount he actually received. The named executive officers would also be entitled to continued health coverage, and accelerated vesting of stock awards and option awards pursuant to the terms of the applicable agreements. Since the employment agreements of named executive officers and the equity awards have double-trigger Change in Control provisions (except with respect to equity awards not assumed by the acquiring entity), the table assumes that both a Change in Control and a subsequent termination of employment has occurred.

(4) In the event the employment of Messrs. Sherman or Williams, or Mses. Neuman or Nustad is terminated due to the executive's Disability, all outstanding stock awards will immediately vest and all option awards will become vested and fully exercisable pursuant to the terms of the applicable award agreements. A termination of Mr. Lucia's employment due to Disability would be treated as a termination without Cause pursuant to his employment agreement.

(5) The amounts in this column represent the amounts payable to the named executive officer if his or her employment is terminated upon death or Retirement. If the named executive officer's employment is terminated as a result of death, all outstanding stock awards will immediately vest and all option awards will become vested and fully exercisable upon termination pursuant to the terms of the applicable award agreements. If the named executive officer's employment is terminated as a result of Retirement, the named executive officer will be treated as continuing in service for vesting purposes and the vested portion of options shall remain exercisable until the second anniversary of such executive's Retirement, or until the last applicable vesting date or option expiration date under the applicable award agreement, whichever is sooner. Under the award agreements, "Retirement" means cessation of employment on or after attaining the age of 60 and having at least 5 years of continuous service with the Company. None of the named executive officers qualified for Retirement as of December 31, 2016.

(6) Amounts represent the target annual short-term (cash) incentive compensation that Mr. Lucia would be entitled to receive under his employment agreement as of the date his employment ends, and not the amount that the Compensation Committee determined to pay Mr. Lucia as set forth in the Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table.

(7) Except for the amounts reported for Mr. Lucia in the columns entitled Termination Without Cause or Resignation for Good Reason, the amounts reported represent the estimated market value of unvested restricted stock units (including any performance-based restricted stock units) that would have vested as of December 31, 2016 under the termination scenarios in the table, calculated based on the aggregate number of accelerated restricted stock units multiplied by the closing market price per share of our common stock on December 30, 2016, the last trading day in 2016, of $18.16 per share.

(8) Except for the amounts reported for Mr. Lucia in the columns entitled Termination Without Cause or Resignation for Good Reason, the amounts reported represent the estimated market value of outstanding stock options, which are not then exercisable (including any performance-based stock options), that would have become exercisable as of December 31, 2016 under the termination scenarios in the table, calculated based on the difference between the aggregate exercise price of all accelerated options and the aggregate market value of the underlying shares as of December 30, 2016, the last trading day in 2016, based on the closing market price per share of our common stock on December 30, 2016 of $18.16 per share.

(9) The amounts reported for Mr. Lucia in the columns entitled Termination Without Cause or Resignation for Good Reason represent the estimated market value of his (i) unvested restricted stock units (including any performance-based restricted stock units) as of December 31, 2016, calculated based on the aggregate number of restricted stock units multiplied by the closing market price per share of our common stock on December 30, 2016, the last trading day in 2016, of $18.16 per share and (ii) and outstanding stock options, which are not then exercisable (including any performance-based stock options) as of December 31, 2016, calculated based on the difference between the aggregate exercise price of such options and the aggregate market value of the underlying shares as of December 30, 2016, the last trading day in 2016, based on the closing market price per share of our common stock on December 30, 2016 of $18.16 per share, which would continue to vest under these termination scenarios pursuant to the terms of his employment agreement. The amounts reported assume that these restricted stock units and stock options are earned, to the extent such awards are performance-based, and fully vest.

Executive Employment Agreements

EMPLOYMENT AGREEMENT WITH MR. LUCIA

HMS and Mr. Lucia entered into the second amendment to his executive employment agreement, effective March 1, 2015, extending the term of his agreement to February 28, 2018. Under his employment agreement, Mr. Lucia is entitled to a minimum annual base salary of $650,000, subject to increase from time to time by the Board of Directors or the Compensation Committee, and a targeted annual short-term (cash) incentive award opportunity of 100% of his base salary. If we terminate Mr. Lucia's employment without Cause, in connection with a Change in Control or otherwise, or if his employment ceases because of his disability or if he terminates his employment with Good Reason, then provided that Mr. Lucia executes and does not revoke a separation agreement and release, and complies with his Restrictive Covenants Agreement, (i) he will be entitled to receive cash severance in an amount equal to (A) 24 times his monthly base salary paid ratably in equal installments over a 24 month period (unless his termination/resignation is in connection with a Change in Control, in which case the payment will be in a single lump sum), and (B) twice his bonus component that will vary depending upon whether the bonus for the year of termination is intended to be "performance-based" compensation and performance is satisfied, in which case it will be paid when bonuses are paid to our other senior executive officers, or whether the bonus is under a different program, in which case it will be his target bonus and will be paid on the same schedule as (A) above (unless his termination/resignation is in connection with a Change in Control, in which case the payment will be in a single lump sum), (ii) he will be entitled to continued health coverage for 24 months or until he becomes eligible for health coverage from another employer, whichever is earlier, and (iii) he will be treated as continuing in service for purposes of the vesting of any equity award until the earliest of: (x) the end of the Noncompetition Period (as defined in Mr. Lucia's Restrictive Covenants Agreement), (y) the last of the applicable vesting dates under such awards, or (z) the termination or violation of the Restrictive Covenants Agreement.

In addition, if we terminate Mr. Lucia's employment without Cause or Mr. Lucia resigns for Good Reason, and such termination occurs within a six-month period before a Change in Control, Mr. Lucia will receive a cash payment equal to the excess of the amount he would have received for such equity awards if he were continuing in service as of the date of the Change in Control and terminated immediately thereafter over the amount actually received, paid in a single lump sum payment at the time provided in the agreement. In the event that any payments and benefits, including any benefits provided to Mr. Lucia or for Mr. Lucia's benefit under the agreement or any other company plan or agreement, become subject to the excise tax under Section 4999 of the Code, such payments and benefits will be "cut-back" to an amount that is less than such amount that would cause the excise tax to the extent that such reduction would result in Mr. Lucia retaining a larger amount on an after-tax basis.

EMPLOYMENT AGREEMENTS WITH OTHER NAMED EXECUTIVE OFFICERS

We have employment agreements that are at-will, subject to certain notice and/or severance provisions, with Mr. Sherman, Ms. Neuman, Ms. Nustad and Mr. Williams. These employment agreements set forth the named executive officer's initial annualized base salary as follows: (i) Mr. Sherman at $500,000, (ii) Ms. Neuman at $450,000, (iii) Ms. Nustad at $350,000 and (iv) Mr. Williams at $400,000, subject to increase from time to time by the Board of Directors or the Compensation Committee. In addition, under the terms of these agreements, the named executive officers are eligible to receive bonus compensation from us in respect of each fiscal year (or portion thereof) during the term of their employment, in each case as may be determined by our Compensation Committee in its sole discretion on the basis of such performance-based or other criteria as it determines appropriate. For 2016, the targeted annual short-term (cash) incentive award opportunity for each other named executive was 65% of his/her base salary.

In the event any of these named executive officers is terminated without Cause, in connection with a Change in Control or otherwise, then provided that such named executive officer executes and does not revoke a separation agreement and release, and complies with the Restrictive Covenants Agreement, the executive will be entitled to receive (i) cash severance in an amount equal to 12 times the executive's monthly base salary paid ratably in equal installments over a 12 month period, (ii) a lump sum amount equal to 12 times the difference between the monthly COBRA coverage premium for the same type of medical and dental coverage (single, family, or other) the executive is receiving as of the date employment ends and then monthly employee contribution, which amount may be used for any purpose, and (iii) any earned but unpaid annual bonus for the calendar year preceding the calendar year in which employment ends. If within 24 months following a Change in Control, Mr. Williams' or Mses. Neuman's or Nustad's employment is terminated without Cause or resigns for Good Reason, provided that the executive executes a separation agreement and release, and complies with the Restrictive Covenants Agreement, he or she will receive the amounts set forth in (i) above in a single lump sum payment, rather than in installments as applies outside of a Change in Control.

Restrictive Covenants Agreements

We also have entered into a Noncompetition, Nonsolicitation, Proprietary and Confidential Information and Developments Agreement (the "Restrictive Covenants Agreement") with each of our named executive officers. Under the terms of the Restrictive Covenants Agreements, in Mr. Lucia's case, for the 24 months following the termination of his employment for any reason, and in the case of the other named executive officers, for the 12 months following the termination of employment for any reason, the named executive officer is generally prohibited from (i) engaging or assisting others to engage in any business or enterprise in the United States that competes with HMS's business, products or services, (ii) soliciting or diverting, or attempting to solicit or divert, the business of any of HMS's current or prospective clients, (iii) soliciting, recruiting or inducing or attempting to solicit, recruit or induce any company employee or independent contractor to leave HMS's employ (or, in some situations, hire any such company employee or independent contractor), and (iv) disclosing or utilizing for the benefit of any entity other than HMS, any system or product development ideas discussed or explored, even if not implemented, during the named executive officer's employment with HMS. The Restrictive Covenants Agreements also set forth certain obligations with respect to proprietary and confidential information and developments and inventions.

Equity Incentive Plans

All named executive officers participated in the Company's equity plans in 2016.

With respect to stock awards and option awards under the 2006 Stock Plan, the 2016 Omnibus Plan, and the related award agreements, such awards generally require that the named executive officer remain employed by the Company (or continue to serve on the Board of Directors if no longer employed by the Company) during the period designated by the Compensation Committee, subject to acceleration of vesting or continued vesting of equity awards in the termination scenarios described in the table under "Potential Payments Upon Termination of Employment or Change in Control." If the named executive officer's employment or Board membership ends before the designated period for any reason (other than upon death, Disability, Retirement, termination without Cause or resignation for Good Reason following a Change in Control, or as otherwise specified in the executive's employment agreement), all unvested restricted stock units will be forfeited and all unexercisable portions of option awards will expire immediately. If we terminate the named executive officer's employment or Board membership for Cause, all stock awards and option awards will immediately terminate without regard to whether such awards are vested or exercisable, respectively.

In general, the treatment of equity upon a Change in Control depends on if the awards are assumed by the successor company. Upon a Change in Control, and unless provided otherwise in the terms of an award agreement or employment agreement, awards granted under the 2006 Stock Plan and the 2016 Omnibus Plan vest on an accelerated basis only if a qualifying termination occurs within 24 months after a Change in Control. In this case, restricted stock unit awards will immediately vest and become free of restrictions, and any outstanding option awards will become fully vested and immediately exercisable. Such options will remain exercisable for 12 months following the qualifying termination, but not beyond the option expiration date set forth in the applicable award agreement. To the extent an award under the 2016 Omnibus Plan is not assumed in a Change in Control, accelerated vesting generally occurs upon a Change in Control.

Key Definitions

The capitalized terms used in the sections under the headings "Potential Payments Upon Termination of Employment or Change in Control" and "Executive Employment Agreements" are defined as below. These definitions are subject to further limitations if necessary to conform to Section 409A of the Code.

"CAUSE"

- Under the employment agreements for each of the named executive officers, "Cause" means: (i) fraud with respect to HMS or any of its subsidiaries and affiliates; (ii) material misrepresentation to any regulatory agency, governmental authority, outside or internal auditors, internal or external company counsel, or the Board of Directors concerning the operation or financial status of HMS or of any of its subsidiaries and affiliates; (iii) theft or embezzlement of assets of HMS or any of its subsidiaries or affiliates; (iv) conviction, or plea of guilty or nolo contendere to any felony (or to a felony charge reduced to a misdemeanor), or, with respect to the named executive officer's employment, to any misdemeanor (other than a traffic violation); (v) material failure to follow HMS's conduct and ethics policies that have been provided or made available to the named executive officer; (vi) a material breach of the named executive officer's employment agreement or Restrictive Covenants Agreement; and/or (vii) continued failure to attempt in good faith to perform his/her duties as reasonably assigned by the Board, in Mr. Lucia's case, or by his/her supervisor in the case of the other named executive officers. Certain of the foregoing definitions permit the named executive officer to attempt to cure the grounds for Cause prior to termination.

- Under the 2006 Stock Plan and the related award agreements, "Cause" is equated with "gross misconduct," and is determined by the Compensation Committee or our Board of Directors.

- During fiscal 2016, we adopted forms of Non-Qualified Stock Option Award Agreement and Restricted Stock Unit Award Agreement for awards under the 2016 Omnibus Plan, under which, "Gross Misconduct" is equated with "Cause" as defined in the employment agreements for the named executive officers. For participants that have not entered into employment agreements with HMS, "Gross Misconduct" means, for purposes of these awards, a conviction of any felony, or a misdemeanor with respect to the participant's employment, or the entering of a plea guilty or nolo contendere to such charge, the embezzlement or theft of HMS property, or a violation of a restrictive covenants or similar agreement with HMS.

"CHANGE IN CONTROL"

- Under the employment agreements and the terms of the 2006 Stock Plan and the 2016 Omnibus Plan, a "Change in Control" generally occurs, subject to specific exceptions, when:

  - a person or group beneficially owns 50.01% or more of our outstanding shares of common stock or the combined voting power of outstanding company securities entitled to vote in the election of directors;

  - there is a merger, consolidation, reorganization, recapitalization or share exchange involving HMS or a sale or other disposition of all or substantially all of HMS's assets, unless, immediately after the transaction (i) all or substantially all of the beneficial owners of HMS's outstanding common stock and outstanding voting securities prior to the transaction own, directly or indirectly, more than 50% of such securities after the transaction in substantially the same proportions as their initial ownership and (ii) no person beneficially owns 50.01%, or more of the outstanding shares of common stock or voting securities of the acquiring corporation (unless such ownership level existed prior to the transaction); or

  - during any one year-period, the individuals who are the continuing directors (as determined under the 2016 Omnibus Plan) cease for any reason to constitute a majority of the Board of Directors or the Board of a successor corporation.

"DISABILITY"

- Under the employment agreements, "Disability" exists when the Company determines that based upon appropriate medical evidence, the named executive officer has become physically or mentally incapacitated so as to render such executive incapable of performing the executive's usual and customary duties, with or without a reasonable accommodation, for at least 180 days (or in Mr. Sherman's case, for at least 120 days), whether or not consecutive, during any 12-month period, or if the named executive officer is found to be disabled within the Company's long-term disability insurance as then in effect.

- Under the related award agreements to the 2006 Stock Plan and the 2016 Omnibus Plan, "Disability" means permanent and total disability as defined by Section 22(e)(3) of the Code.

"GOOD REASON"

- Under the employment agreements, "Good Reason" means, the occurrence, without the named executive officer's prior written consent, of any of the following events: (i) a material diminution in his/her authority, duties or responsibilities (in Mr. Lucia's case, other than in connection with a portion of his authority, duties or responsibilities being assigned to or carried out by a President); (ii) a requirement that, in Mr. Lucia's case, he report to an officer rather than to the Board, and in the case of the other named executive officers, that they report to a new supervisor who has materially diminished authority, duties or responsibilities in comparison to his/her previous supervisor; (iii) a material reduction in the named executive officer's base salary (or, in Mr. Sherman's case, his base salary or target bonus percentage); (iv) HMS's requiring, (a) in the case of Messrs. Lucia and Sherman, that they perform their principal services in a geographic area more than 50 miles from HMS's offices in Irving, Texas, or such other place at which they have agreed to provide such services, and (b) in the case of Mses. Neuman and Nustad and Mr. Williams, that they perform their principal services primarily in a geographic area more than 50 miles from HMS's offices in Dallas, Texas and New York, New York, or such other place of primary employment at which they have agreed to provide such services; or (v) a material breach by HMS of any material provision of the named executive officer's employment agreement. Good Reason is also subject to certain timing restrictions and our ability to cure the proposed Good Reason.

COMPENSATION-RELATED RISK

We regularly assess risks related to our compensation programs for all employees, including non-executive officers. In February 2017, HMS's management and Compensation Committee, with the assistance of FW Cook, conducted a comprehensive assessment of the risks associated with our compensation policies and practices as they relate to risk management practices and risk-taking incentives. The Compensation Committee took into consideration our current compensation structure and the possible risks and mitigation factors associated with each compensation element, including the mix of cash, equity and fixed compensation with short- and long-term incentives, the use of multi-year vesting periods and performance criteria for equity awards, clawback provisions that apply to long-term incentive awards, stock ownership guidelines for executive officers and a cap on bonus pool funding and individual payouts for all short-term incentive awards. Based on the results of this assessment, the Compensation Committee does not believe our compensation policies and practices for employees create risks that are reasonably likely to have a material adverse effect on our company.

As discussed in more detail under the heading "Compensation Discussion and Analysis" above, the Compensation Committee reviews and approves executive compensation programs that focus on having the appropriate balance of features that mitigate compensation-related risk without diminishing the incentive nature of the compensation.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

None of the persons who served on the Compensation Committee during 2016 (Messrs. Stowe (Chair) and Callen and Ms. Tellez) were or are an officer or employee of HMS or had a related person transaction involving HMS requiring disclosure under Item 404 of Regulation S-K. During 2016, none of our executive officers (i) served as a member of the board of directors or compensation committee (or equivalent entity) of any other entity that had one or more of its executive officers serving as a member of our Compensation Committee or (ii) served as a member of the compensation committee (or equivalent entity) of any other entity that had one or more of its executive officers serving as a member of our Board of Directors.

DIRECTOR COMPENSATION

The Compensation Committee has the responsibility for recommending to the Board of Directors the form and amount of compensation for directors, which are subject to review and adjustment by the Board of Directors from time to time. Directors who are employed by HMS do not receive compensation for their service on the Board of Directors. Directors who are not our employees (non-employee directors) receive cash and equity-based compensation for their services as a director. All of our directors are reimbursed for reasonable expenses incurred in connection with attendance at meetings of the Board of Directors or its committees.

STANDARD COMPENSATION ARRANGEMENTS FOR NON-EMPLOYEE DIRECTORS

Our standard compensation arrangements for non-employee directors for fiscal 2016 are summarized in the table below. Amounts effective during the periods from January 1, 2016 through October 31, 2016, and November 1, 2016 through December 31, 2016, are shown separately to illustrate certain changes approved by the Board of Directors that became effective on November 1, 2016, as discussed in more detail below. Other than the meeting fees, the amounts shown in the table below are per annum.

		Effective 1/1/16-10/31/16 ($)	Effective 11/1/16-12/31/16 ($)
Cash Compensation			
Board Cash Retainer(1)	Board Member	50,000	60,000
Committee Chair Cash Retainer(1)(2)	Audit	20,000	20,000
	Compensation	15,000	15,000
	Compliance and Ethics	15,000	15,000
	Nominating and Governance	15,000	15,000
Committee Member Cash Retainer(1)	Audit	7,000	7,000
	Compensation	5,000	5,000
	Compliance and Ethics	5,000	5,000
	Nominating and Governance	5,000	5,000
Additional Cash Retainer(1)	Lead Independent Director	25,000	25,000
Meeting Fees	Per meeting fee for board meetings in excess of eight during fiscal year; does not include committee meetings	2,000	2,000
Equity-Based Compensation			
Annual Equity Retainer(3)	Board Member	130,000	165,000

(1) All cash retainer fees, unless deferred by a director pursuant to the Director Deferred Compensation Plan, are paid in quarterly installments in arrears. Cash retainer fees are pro-rated for partial periods of service.

(2) Committee chair cash retainers are paid in lieu of the respective committee member cash retainer.

(3) The annual equity retainer to non-employee directors is in the form of a substantially equal number of non-qualified stock options and restricted stock units. See "2016 Non-Employee Director Compensation Decisions" below for a discussion of the 2016 annual equity retainer awards.

2016 Non-Employee Director Compensation Decisions

In October 2016, the Compensation Committee reviewed the design and competitive positioning of our non-employee director compensation program in relation to our peer group. For a discussion regarding our peer group, see "Competitive Pay Position and Peer Group Analyses" under the subsection entitled "Compensation Discussion and Analysis." The peer group analysis included benchmarking data on total director compensation (taking into account our board and committee structure, board leadership structure, and number of meetings held during 2016), as well as pay mix, cash compensation and equity compensation levels, and general practices such as committee chair and member retainers and stock ownership guidelines. With guidance from FW Cook, the Compensation Committee recommended, and the Board approved, certain changes to our non-employee director compensation, effective as of November 1, 2016, as reflected in the table above under the heading "Standard Compensation Arrangements for Non-Employee Directors." These changes resulted in our total non-employee director compensation approximating the median level of our peer group companies.

Based on the recommendation of the Compensation Committee, in November 2016 the Board of Directors determined to change the timing of the annual non-employee director equity grant, which is typically granted during the fourth quarter, to the date of the annual meeting of shareholders beginning in 2017, primarily to align the vesting of the award with the directors' year of service. To compensate the non-employee directors for their board membership from November 2016 through the anticipated date of our 2017 annual meeting of shareholders, the Board approved a pro-rated grant, effective as of November 11, 2016, for each non-employee director (other than Mr. Azar), pursuant to the 2016 Omnibus Incentive Plan, or the 2016 Omnibus Plan, with an aggregate grant date fair value of $87,450. In connection with Mr. Azar's appointment to the Board in October 2016, Mr. Azar received an initial equity grant with an aggregate grant date fair value of $165,000, effective November 11, 2016, pursuant to the 2016 Omnibus Plan. In addition, in connection with Mr. Becker's appointment to the Board in January, 2016, Mr. Becker received an initial equity grant with an aggregate grant date fair value of $130,000, effective as of March 2, 2016, pursuant to the then-effective Fourth Amended and Restated 2006 Stock Plan, as amended (the "2006 Stock Plan"). For additional information regarding the 2016 non-employee director equity awards, see "2016 Director Compensation" below.

Equity-Based Compensation

Equity compensation provided to our non-employee directors consists of a substantially equal number of stock options and restricted stock units granted pursuant to the 2016 Omnibus Plan. Notwithstanding the changes in director grant timing that were approved in November 2016 for grants to be awarded beginning in 2017 (described above), equity grants to our non-employee directors historically have been approved annually in the fourth quarter of the fiscal year, are effective two business days following the filing of our next quarterly report on Form 10-Q with the SEC and vest in four equal installments, with 25% vesting on the last day of the calendar quarter in which the grant was effective and 25% vesting on the last day of each of the next three calendar quarters, provided that the non-employee director remains a member of our Board of Directors through each vesting date. Equity grants for new directors joining the Board are approved by the Compensation Committee at its next meeting following the director's appointment or election and are effective two business days following the filing of our next quarterly report on Form 10-Q or annual report on Form 10-K, as applicable, with the SEC.

Director Compensation Limits

Under the terms of the 2016 Omnibus Plan, the maximum number of shares subject to awards granted during a single fiscal year to any non-employee director, taken together with any cash fees paid to such non-employee director during the fiscal year, is limited to $500,000 in total value (calculating the value of any such awards based on the grant date fair value of such award for financial reporting purposes). The Compensation Committee may make exceptions to this limit for a non-executive chair of the Board or, in extraordinary circumstances, for other individual non-employee directors, as the Committee may determine in its discretion, provided that the non-employee director receiving such additional compensation may not participate in the decision to award such compensation.

Deferred Compensation

Each of our non-employee directors is eligible to participate in our Director Deferred Compensation Plan, under which the non-employee director may elect annually to defer payment of all or a portion of his or her cash retainer fees and annual restricted stock unit grants until the termination of his or her service as a member of the Board. The amount of any cash compensation deferred by a non-employee director is converted into a number of deferred stock units, determined based upon the closing price of our common stock on the NASDAQ Global Select Market on the date such fees would otherwise have been payable, and credited to a deferred compensation account maintained in his or her name. Any restricted stock units that are deferred by a non-employee director are credited to the non-employee director's account in the form of deferred stock units on a share-for-share basis on the date such restricted stock units would otherwise have been payable. The account will be credited with additional deferred stock units on the payment date for any dividends declared on our common stock, calculated based on the closing price of our common stock on the payment date. On the tenth business day of January of the year following a director's termination of service for any reason, the amounts accumulated in the deferred compensation account will be paid in a lump sum in shares of our common stock under the 2016 Omnibus Plan equal to the number of whole deferred stock units in the account and cash in lieu of any fractional shares.

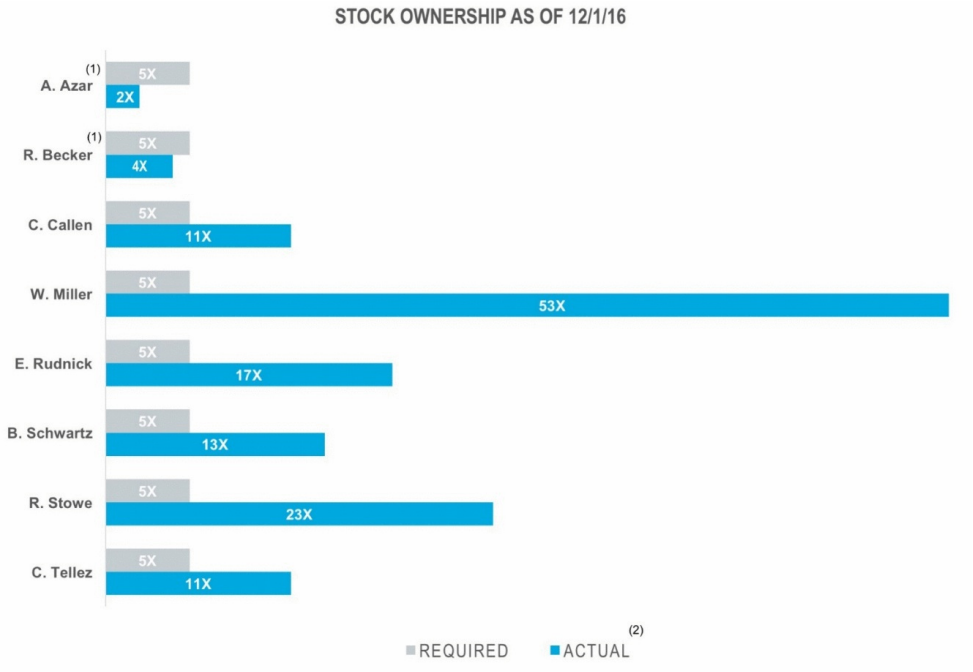
The following table sets forth the number of deferred stock units credited to the accounts of our non-employee directors as of December 31, 2016.

Name	Deferred Stock Units (#)
Azar	7,785
Becker	10,441
Callen	19,041
Holster	35,213
Miller	4,058
Rudnick	13,490
Schwartz	23,592
Stowe	50,381
Tellez	35,948

STOCK OWNERSHIP GUIDELINES FOR NON-EMPLOYEE DIRECTORS

The Board of Directors has established significant stock ownership guidelines for our non-employee directors to encourage non-employee directors to own and hold a meaningful ownership stake in HMS in order to further align their interests and actions with the interests of HMS and its shareholders. Our non-employee directors are required to own shares of HMS common stock equal in value to at least five times their annual cash retainer. For purposes of satisfying these guidelines, a non-employee director's shares owned outright, directly or indirectly, restricted stock and restricted stock units, whether or not vested, and deferred stock units are counted in determining the non-employee director's stock ownership. Each non-employee director is required to achieve his or her respective ownership guidelines within five years after election to the Board of Directors, or in the case of non-employee directors serving at the time the guidelines were adopted (July 28, 2016), within five years of the date of adoption. To mitigate the impact of stock price fluctuation, the number of shares required to be held by each non-employee director to satisfy the guidelines remains fixed through December 1, 2019. The Compensation Committee monitors compliance with these guidelines on an annual basis.

The following graph summarizes the stock ownership of each of our non-employee directors as of December 1, 2016, as a multiple of annual cash retainer in effect as of December 1, 2016, pursuant to our Stock Ownership Guidelines.



(1) Messrs. Azar and Becker joined the Board on October 11, 2016 and January 29, 2016, respectively. Pursuant to our stock ownership guidelines, Mr. Azar has until October 11, 2021 to achieve the ownership guideline, and Mr. Becker has until July 28, 2021 to achieve the ownership guideline.

(2) Rounded down to the nearest multiple.

2016 DIRECTOR COMPENSATION

The following table sets forth compensation earned by each of our non-employee directors for services as a director during fiscal 2016.

Name	Fees Earned or Paid in Cash[1] ($)	Stock Awards[2] [3] ($)	Option Awards[2][4] ($)	Total ($)
Alex M. Azar	13,217	116,723	48,270	178,210
Robert Becker	41,039	155,272	62,169	258,480
Craig R. Callen	61,720	61,860	25,582	149,162
Robert M. Holster [5]	24,038	—	—	24,038
William F. Miller	54,860	61,860	25,582	142,302
Ellen A. Rudnick	81,720	61,860	25,582	169,162
Bart M. Schwartz	78,720	61,860	25,582	166,162
Richard H. Stowe	96,720	61,860	25,582	184,162
Cora M. Tellez	79,360	61,860	25,582	166,802

(1) The amounts in this column include the value of fully vested deferred stock units received under our Director Deferred Compensation Plan in lieu of all or a specified portion of the non-employee director's cash retainer fees, calculated based on the fair market value of the underlying shares on the dates the cash retainer fees would otherwise have been paid. The aggregate number of deferred stock units credited to non-employee directors in lieu of all or a specified portion of the non-employee director's cash retainer fees for 2016, pursuant to each director's election, and the aggregate fair market value (calculated as of the date the units were credited to the non-employee director) of such deferred stock units are shown in Figure 1 below.

(2) The number of outstanding stock options and unvested restricted stock units, whether or not deferred under the Director Deferred Compensation Plan, held by the non-employee directors as of December 31, 2016 is shown in Figure 2 below.

(3) The amounts in this column represent the grant date fair value of the restricted stock units granted to the non-employee directors during fiscal 2016, whether or not deferred, computed in accordance with FASB guidance on stock-based compensation. The relevant assumptions made in the valuations may be found in Note 1 of the Notes to the Consolidated Financial Statements in this Annual Report on Form 10-K for the fiscal year ended December 31, 2016. The number of restricted stock units granted to each non-employee director during fiscal 2016 and the number of such restricted stock units that were deferred under our Director Deferred Compensation Plan, pursuant to each director's election, are shown in Figure 3 below. The restricted stock units, whether or not deferred, vest in four equal increments, with the first 25% vesting on the last day of the calendar quarter of the date of grant, and 25% vesting on the last day of each of the next three calendar quarters.

(4) The amounts in this column represent the grant date fair value of the nonqualified stock options granted to the non-employee directors during fiscal 2016, computed in accordance with FASB guidance on stock-based compensation. The relevant assumptions made in the valuations may be found in Note 1 of the Notes to the Consolidated Financial Statements in this Annual Report on Form 10-K for the fiscal year ended December 31, 2016. The number of nonqualified stock options granted to each non-employee director during fiscal 2016 is shown in Figure 4 below. The stock options vest in four equal increments, with the first 25% vesting on the last day of the calendar quarter of the date of grant, and 25% vesting on the last day of each of the next three calendar quarters.

(5) Mr. Holster retired from the Board of Directors effective as of the 2016 Annual Meeting held on June 23, 2016, and therefore did not receive an equity grant during fiscal 2016.

FIGURE 1 – DEFERRED STOCK UNITS RECEIVED IN LIEU OF CASH DURING FISCAL 2016

Name	Deferred Stock Units Received in Lieu of 2016 Cash Compensation (#)	Fair Market Value ($)
Azar	728	13,220
Schwartz	2,229	39,362
Stowe	5,478	96,728
Tellez	4,486	79,352

FIGURE 2 – OUTSTANDING STOCK OPTIONS AND UNVESTED RESTRICTED STOCK UNITS AT DECEMBER 31, 2016

Name	Outstanding Stock Options (#)	Unvested Restricted Stock Units (#)
Azar	7,057	5,293
Becker	10,441	2,805
Callen	19,041	2,805
Holster	35,213	—
Miller	26,983	2,805
Rudnick	26,983	2,806
Schwartz	26,983	2,806
Stowe	26,983	2,805
Tellez	21,725	2,805

FIGURE 3 – RESTRICTED STOCK UNITS GRANTED DURING FISCAL 2016

Name	Restricted Stock Units Granted(1) (#)	Restricted Stock Units Deferred (#)
Azar	7,057	7,057
Becker	10,441	10,441
Callen	3,740	3,740
Miller	3,740	—
Rudnick	3,740	1,870
Schwartz	3,740	1,870
Stowe	3,740	3,740
Tellez	3,740	3,740

(1) The amount shown represents the number of restricted stock units granted to each non-employee director (other than Mr. Becker) on November 11, 2016. The amount shown for Mr. Becker represents the aggregate number of restricted stock units granted on March 2, 2016 (6,701) and November 11, 2016 (3,740).

FIGURE 4 – STOCK OPTIONS GRANTED DURING FISCAL 2016

Name	Nonqualified Stock Options Granted(1) (#)
Azar	7,057
Becker	10,441
Callen	3,740
Miller	3,740
Rudnick	3,740
Schwartz	3,740
Stowe	3,740
Tellez	3,740

(1) The amount shown represents the number of nonqualified stock options granted to each non-employee director (other than Mr. Becker) on November 11, 2016. The amount shown for Mr. Becker represents the aggregate number of nonqualified stock options granted on March 2, 2016 (6,701) and November 11, 2016 (3,740).

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters

Equity Compensation Plan Information

The following table summarizes information about our equity compensation plans as of December 31, 2016. For additional information about our equity compensation plans see Note 10 – "Stock-Based Compensation" in our Notes to the Consolidated Financial Statements in Item 8. Consolidated Financial Statements and Supplemental Data.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by shareholders	6,515,239(1)	$ 17.35	7,142,562
Equity compensation plans not approved by shareholders	52,140(2)	$ 22.58	—
Total	6,567,379		

(1) This includes stock options and restricted stock units granted under our 2006 Stock Plan and 2016 Omnibus Plan.

(2) This includes stock options granted under the 2011 HDI Plan, which was assumed in connection with our acquisition of HDI and approved by the Compensation Committee of our Board.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following tables set forth information known to us with respect to the beneficial ownership of our common stock as of May 15, 2017 by (i) each of our directors, (ii) each of Messrs. Lucia, Sherman and Williams and Mses. Neuman and Nustad, our named executive officers for fiscal 2016, (iii) all of our directors and current executive officers as a group and (iv) each person (or group of affiliated persons) known by us to be the beneficial owner of more than 5% of our common stock.

The tables are based upon information supplied to us by directors, executive officers and principal shareholders and filings under the Exchange Act. We have based our calculation of the percentage of beneficial ownership on 83,909,845 shares of our common stock outstanding as of May 15, 2017, unless otherwise noted. The beneficial ownership reported in the following tables is determined in accordance with the applicable rules of the SEC and does not necessarily indicate beneficial ownership for any other purpose. For purposes of the following tables, an entity or individual is considered the beneficial owner of shares of common stock if the entity or individual directly or indirectly has or shares voting power or investment power, as defined in the rules of the SEC, with respect to such shares or has the right to acquire beneficial ownership of such shares within 60 days of May 15, 2017.

Unless otherwise noted and subject to applicable community property laws, to our knowledge each shareholder named in the following table possesses sole voting and investment power over the shares listed. The address of each person listed in the table is c/o HMS Holdings Corp., 5615 High Point Drive, Irving, Texas 75038. To our knowledge, as of May 15, 2017, none of our officers or directors has pledged any of the shares that they respectively beneficially own as security.

SECURITY OWNERSHIP OF MANAGEMENT

Name of Beneficial Owner	Number of Outstanding Shares of Common Stock	Number of Shares Underlying Options Exercisable Within 60 Days[1]	Number of Shares Underlying Restricted Stock Units that will Vest Within 60 Days[2][3]	Percent of Class
Directors (who are not officers):				
Alex M. Azar II	—	5,292	—	*
Robert Becker	5,000	9,506	—	*
Craig R. Callen	19,000	18,106	—	*
William F. Miller III	164,940[4]	26,048	935	*
Ellen A. Rudnick	42,980	26,048	467	*
Bart M. Schwartz	20,306	26,048	467	*
Richard H. Stowe	25,000	26,048	—	*
Cora M. Tellez	580	20,790	—	*
Named Executive Officers:				
William C. Lucia	522,092[5]	482,316	—	1.2%
Semone Neuman	35,280	238,222	—	*
Cynthia Nustad	32,209	224,462	—	*
Jeffrey S. Sherman	50,507[6]	274,907	—	*
Douglas Williams	43,532	243,676	—	*
All current directors and executive officers as a group (15 persons)[7]	995,664[8]	1,784,002	1,869	3.3%

* Less than 1% of outstanding shares

(1) Includes the number of shares that could be purchased by exercise of options exercisable at May 15, 2017 or within 60 days thereafter. The amounts reported in this column are excluded from the amounts reported in the column "Number of Outstanding Shares of Common Stock."

(2) Includes the number of shares underlying restricted stock units that are not subject to outstanding performance conditions and vest within 60 days of May 15, 2017, and excludes vested and unvested deferred stock units acquired pursuant to the Director Deferred Compensation Plan. Restricted stock units do not have voting power and are payable solely in shares of HMS common stock. The amounts reported in this column are excluded from the amounts reported in the column "Number of Outstanding Shares of Common Stock."

(3) Excludes deferred stock units (whether or not vested) held by non-employee directors pursuant to the Director Deferred Compensation Plan as follows: Mr. Azar (8,523), Mr. Becker (10,441), Mr. Callen (19,041), Mr. Miller (4,058), Ms. Rudnick (13,490), Mr. Schwartz (24,127), Mr. Stowe (51,672), and Ms. Tellez (37,018).

(4) Includes 9,000 shares of common stock held in trusts for the benefit of Mr. Miller's family. Mr. Miller disclaims beneficial ownership of the shares of common stock held by the trusts.

(5) Includes 522,092 shares of common stock held by the William C. Lucia Family Trust, a revocable trust for which Mr. Lucia serves as trustee.

(6) Includes 10,760 shares of common stock held by a revocable family trust for the benefit of Mr. Sherman's children and for which Mr. Sherman and his spouse serve as trustees.

(7) Includes the named executive officers, the current directors and Mses. Bjorck and South.

(8) Includes the shares reported in footnotes (4), (5) and (6).

Based on a review of filings with the SEC, the following entities hold more than 5% of our outstanding shares of common stock as of the date indicated on the respective filing.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS

Name and Address of Beneficial Owner	Number of Outstanding Shares of Common Stock (#)	Percent of Class (%)
BlackRock, Inc.(1)	9,836,431	11.6
The Vanguard Group(2)	7,907,910	9.3
T. Rowe Price Associates, Inc.(3)	6,819,568	8.0

(1) Based solely on a Schedule 13G/A filed with the SEC on January 12, 2017. According to the Schedule 13G/A, BlackRock, Inc., in its capacity as a parent holding company or control person of subsidiaries that acquired the reported securities, has sole voting power over 9,442,892 shares and sole dispositive power over 9,836,431 shares. The Schedule 13G/A was filed on BlackRock's behalf and on behalf of its subsidiaries BlackRock (Netherlands) B.V.; BlackRock Advisors, LLC; BlackRock Asset Management Canada Limited; BlackRock Asset Management Ireland Limited; BlackRock Asset Management Schweiz AG; BlackRock Financial Management, Inc.; BlackRock Fund Advisors; BlackRock Institutional Trust Company, N.A.; BlackRock Investment Management (Australia) Limited; BlackRock Investment Management (UK) Ltd and BlackRock Investment Management, LLC. BlackRock Fund Advisors beneficially owns 5% or greater of the outstanding shares of the class. BlackRock's principal business address is 55 East 52nd Street, New York, NY 10055.

(2) Based solely on a Schedule 13G/A filed with the SEC on February 13, 2017. According to the Schedule 13G/A, The Vanguard Group, a registered investment advisor, has sole voting power over 167,345 shares, shared voting power over 12,078 shares, sole dispositive power over 7,732,809 shares and shared dispositive power over 175,101 shares. Vanguard Fiduciary Trust Company, a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner of 163,023 shares as a result of its serving as investment manager of collective trust accounts. Vanguard Investments Australia, Ltd., a wholly-owned subsidiary of The Vanguard Group, Inc., is the beneficial owner of 16,400 shares as a result of its serving as investment manager of Australian investment offerings. The Vanguard Group's principal business address is 100 Vanguard Boulevard, Malvern, PA 19355.

(3) Based solely on a Schedule 13G filed with the SEC on February 2, 2017. According to the Schedule 13G, T. Rowe Price Associates, Inc., a registered investment advisor ("Price Associates"), has sole voting power over 957,740 shares and sole dispositive power over 6,819,568 shares. Price Associates does not serve as custodian of the assets of any of its clients; accordingly, in each instance only the client or the client's custodian or trustee bank has the right to receive dividends paid with respect to, and proceeds from the sale of, such securities. The ultimate power to direct the receipt of dividends paid with respect to, and the proceeds from the sale of, such securities, is vested in the individual and institutional clients which Price Associates serves as investment adviser. Any and all discretionary authority which has been delegated to Price Associates may be revoked in whole or in part at any time. Price Associates' principal business address is 100 E. Pratt Street, Baltimore, MD 21202.

Item 13. Certain Relationships and Related Transactions and Director Independence

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Related Person Transaction Policy

The Audit Committee is responsible for reviewing all transactions with related persons on an ongoing basis for potential conflict of interest situations, and all such transactions must be approved by the Audit Committee. Our Board of Directors has adopted a written Related Person Transaction Policy to assist the Audit Committee in reviewing proposed transactions between HMS and certain individuals deemed to be "related persons." The policy applies to our executive officers, directors, director nominees and 5% shareholders (and their immediate family members),

each of whom we refer to as a "related person," and governs the review of any transaction, arrangement or relationship in which we are a participant, the amount involved exceeds $120,000 and a related person has a direct or indirect material interest. We refer to such a transaction, arrangement or relationship as a "related person transaction."

Review and Approval of Related Person Transactions

Pursuant to our Related Person Transaction Policy, a related person must notify the Corporate Secretary of any plan to enter into, extend or modify any transaction with HMS or its affiliates that could be a related person transaction. The proposed transaction is reviewed and, if deemed appropriate, approved by the Audit Committee prior to entry into the transaction. Under the policy, any related person transactions that are ongoing in nature and previously approved by the Audit Committee will be reviewed annually. A transaction with a related person reviewed under the policy will be considered approved or ratified if it is authorized by the Audit Committee after full disclosure of the related person's interest in the transaction. The Audit Committee will review and consider all relevant information regarding the transaction, including the impact on a director's independence or a Board committee's composition in the event the related person is a director, as it deems appropriate under the circumstances.

The Audit Committee may approve or ratify the transaction only if the Audit Committee determines that, under all of the circumstances, the transaction is in, or is not inconsistent with, the best interests of HMS. In connection with approving a transaction with a related person, the Audit Committee may impose any conditions on the transaction that it deems appropriate. All related person transactions will be disclosed in applicable SEC filings to the extent required by the Securities Act and the Exchange Act and related rules and regulations. There have been no transactions with related persons since the beginning of fiscal 2016 reportable pursuant to applicable SEC rules.

DIRECTOR INDEPENDENCE

A majority of our Board of Directors must be comprised of "independent directors" in accordance with the NASDAQ Marketplace Rules. Under Rule 5605(a)(2) of the NASDAQ Marketplace Rules, a director will only qualify as an "independent director" if, in the opinion of our Board of Directors, that person does not have a relationship which would interfere with the exercise of independent judgment in carrying out the responsibilities of a director. Based on its review of the applicable independence standards and answers to annual questionnaires completed by the directors, our Board of Directors has determined that each of Messrs. Azar, Becker, Callen, Miller, Schwartz and Stowe and Mses. Rudnick and Tellez is an "independent director" as defined under the NASDAQ Marketplace Rules. The Board of Directors previously determined that Mr. Robert M. Holster, who retired from our Board of Directors effective at the 2016 annual meeting of shareholders, was an independent director during the time he served on the Board in 2016.

Item 14. Principal Accounting Fees and Services

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

KPMG LLP ("KPMG") has served as our (and our predecessor's) independent registered public accounting firm since 1981. The aggregate fees for the services rendered by KPMG during the past two fiscal years are set forth in the table below.

Audit and Non-Audit Fees

Type of Fee	2016 ($)	2015 ($)
Audit Fees[1]	1,600,000	945,000
Audit-Related Fees[2]	—	—
Tax Fees[3]	1,757,388	320,000
All Other Fees[4]	—	—
Total Fees for Services Provided[5]	**3,357,388**	**1,265,000**

(1) Audit fees consist of fees for professional services rendered for the audit of our consolidated financial statements, review of interim financial statements and services normally provided by the independent registered public accounting firm in connection with regulatory filings, including registration statements. The amount shown for fiscal 2016 represents the aggregate fees estimated to be billed by KPMG for the services rendered.

(2) Audit-related fees may consist of fees for audits of benefit plans and due diligence related to mergers and acquisitions. KPMG did not perform any audit-related services during fiscal years 2015 and 2016.

(3) Tax fees consist of fees for permissible tax services, including tax compliance, tax analysis and tax implementation provided during the ordinary course of operations.

(4) All other fees consist of services not included in the categories above. KPMG did not perform any other services during fiscal years 2015 and 2016.

(5) All audit and non-audit services disclosed in the table were pre-approved by the Audit Committee prior to the provision of the services.

Audit Committee Pre-Approval Policies and Procedures

In accordance with its Charter, the Audit Committee pre-approves all audit and permissible non-audit services provided by our independent registered public accounting firm. At the time of the annual engagement of our independent registered public accounting firm or as soon as practicable thereafter, the Audit Committee pre-approves specific services and/or categories of services that may be provided during the year by the independent registered public accounting firm and the estimated fees for such services. During the year, circumstances may arise when it may become necessary or appropriate to engage the independent registered public accounting firm for additional services not contemplated in the original pre-approval. In such circumstances, our senior management seeks approval from the Audit Committee to engage the independent registered public accounting firm for such additional services. A description of any proposed non-audit services is provided to the Audit Committee along with the estimated fees for its pre-approval. For each proposed service, the independent registered public accounting firm is required to provide detailed supporting documentation at the time of approval to permit the Audit Committee to make a determination whether the performance of such services would impair the auditor's independence. The Audit Committee is regularly informed of any non-audit services provided by the independent auditor pursuant to this pre-approval process.

PART IV

Item 15. Exhibits and Financial Statement Schedules

1. *Financial Statements.*

   The financial statements are listed in the Index to Consolidated Financial Statements on page 100.

2. *Financial Statement Schedules.*

   Financial Statement Schedule II-Valuation and Qualifying Accounts is set forth on page 124. All other financial statement schedules have been omitted as they are either not required, not applicable or the information is otherwise included.

3. *Exhibits.*

   The Exhibits are set forth on the Exhibit Index on page 125 and incorporated herein by reference. The Exhibits include agreements to which the Company is a party or has a beneficial interest. The agreements have been filed to provide investors with information regarding their respective terms. The agreements are not intended to provide any other actual information about the Company or its business or operations. In particular, the assertions embodied in any representations, warranties, and covenants contained in the agreements may be subject to qualifications with respect to knowledge and materiality different from those applicable to investors and may be qualified by information in confidential disclosure schedules not included with the exhibits. These disclosure schedules may contain information that modifies, qualifies and creates exceptions to the representations, warranties and covenants set forth in the agreements. Moreover, certain representations, warranties, and covenants in the agreements may have been used for the purpose of allocating risk between parties, rather than establishing matters as facts. In addition, information concerning the subject matter of the representations, warranties and covenants may have changed after the date of the respective agreement, which subsequent information may or may not be fully reflected in the Company's public disclosures. Accordingly, investors should not rely on the representations, warranties and covenants in the agreements as characterizations of the actual state of facts about the Company or its business or operations on the date hereof.

Item 16. Form 10-K Summary

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized on June 6, 2017.

HMS Holdings Corp.

/s/ WILLIAM C. LUCIA
William C. Lucia
Chairman of the Board, President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Annual Report on Form 10-K has been signed below by the following persons on behalf of the Registrant and in the capacities indicated on June 6, 2017.

Signature	Title
/s/ WILLIAM C. LUCIA William C. Lucia	Director, Chairman of the Board, President and Chief Executive Officer (Principal Executive Officer)
/s/ JEFFREY S. SHERMAN Jeffrey S. Sherman	Executive Vice President, Chief Financial Officer and Treasurer (Principal Financial Officer)
/s/ GREG D. AUNAN Greg D. Aunan	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)
/s/ ALEX M. AZAR II Alex M. Azar II	Director
/s/ ROBERT BECKER Robert Becker	Director
/s/ CRAIG R. CALLEN Craig R. Callen	Director
/s/ WILLIAM F. MILLER III William F. Miller III	Director
/s/ ELLEN A. RUDNICK Ellen A. Rudnick	Director
/s/ BART M. SCHWARTZ Bart M. Schwartz	Director
/s/ RICHARD H. STOWE Richard H. Stowe	Director
/s/ CORA M. TELLEZ Cora M. Tellez	Director

HMS HOLDINGS CORP. AND SUBSIDIARIES
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
HMS Holdings Corp.:

We have audited the accompanying consolidated balance sheets of HMS Holdings Corp. and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2016. In connection with our audits of the consolidated financial statements, we also have audited financial statement schedule II. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statement schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of HMS Holdings Corp. and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), HMS Holdings Corp.'s internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated June 6, 2017 expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP
KPMG LLP
Dallas, Texas
June 6, 2017

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
HMS Holdings Corp.:

We have audited HMS Holdings Corp.'s internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control - Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). HMS Holdings Corp.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. Material weaknesses existed related to the Company not maintaining an effective control environment based on a lack of established reporting lines and defined authorities and responsibilities for financial reporting, and not conducting an effective risk assessment process on a periodic basis to assess the effects of changes in business operations and turnover of its employees that significantly impacts its financial processes and internal control over financial reporting. As a result, the Company did not design and implement effective control activities and management review controls over the estimated liability of appeals and the accounts receivable allowance, including controls over the completeness and accuracy of data used to calculate the respective account balances. These material weaknesses have been identified and included in management's assessment. We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of HMS Holdings Corp. and subsidiaries as of December 31, 2016 and 2015, and the related consolidated statements of income, shareholders' equity and cash flows for each of the years in the three-year period ended December 31, 2016. These material weaknesses were considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2016 consolidated financial statements, and this report does not affect our report dated June 6, 2017, which expressed an unqualified opinion on those consolidated financial statements.

In our opinion, because of the effect of the aforementioned material weaknesses on the achievement of the objectives of the control criteria, HMS Holdings Corp. has not maintained effective internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

/s/ KPMG LLP
KPMG LLP
Dallas, Texas
June 6, 2017

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and per share amounts)

	December 31, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	$ 175,999	$ 145,610
Accounts receivable, net of allowance of $10,772 and $11,464, at December 31, 2016 and 2015, respectively	173,582	169,146
Prepaid expenses	13,699	11,261
Income tax receivable	3,354	-
Other current assets	1,001	3,051
Total current assets	367,635	329,068
Property and equipment, net	92,167	96,551
Goodwill	379,716	361,468
Intangible assets, net	37,797	54,308
Deferred financing costs, net	2,790	4,873
Other assets	2,650	4,329
Total assets	$ 882,755	$ 850,597
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable, accrued expenses and other liabilities	$ 59,402	$ 51,661
Estimated liability for appeals	30,755	33,078
Income taxes payable	-	3,873
Total current liabilities	90,157	88,612
Long-term liabilities:		
Revolving credit facility	197,796	197,796
Net deferred tax liabilities	22,717	30,961
Deferred rent	5,427	6,006
Other liabilities	10,048	2,520
Total long-term liabilities	235,988	237,283
Total liabilities	326,145	325,895
Commitments and contingencies (Note 12)		
Shareholders' equity:		
Preferred stock -- $0.01 par value; 5,000,000 shares authorized; none issued	-	-
Common stock -- $0.01 par value; 175,000,000 shares authorized; 95,966,852 shares issued and 83,552,774 shares outstanding at December 31, 2016; 95,263,461 shares issued and 83,989,715 shares outstanding at December 31, 2015	959	952
Capital in excess of par value	345,025	330,290
Retained earnings	326,110	288,474
Treasury stock, at cost -- 12,414,078 shares at December 31, 2016 and 11,273,746 shares December 31, 2015	(115,484)	(95,014)
Total shareholders' equity	556,610	524,702
Total liabilities and shareholders' equity	$ 882,755	$ 850,597

See accompanying notes to the consolidated financial statements.

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
(in thousands, except per share amounts)

	Years Ended December 31,		
	2016	2015	2014
Revenue	$ 489,720	$ 474,216	$ 443,225
Cost of services:			
Compensation	189,271	178,272	181,273
Data processing	37,337	40,915	39,661
Occupancy	14,000	15,766	16,950
Direct project expenses	46,254	51,527	36,866
Other operating expenses	27,778	28,895	24,588
Amortization of acquisition related software and intangible assets	28,030	28,148	28,612
Total cost of services	342,670	343,523	327,950
Selling, general and administrative expenses	89,381	83,121	81,071
Total operating expenses	432,051	426,644	409,021
Operating income	57,669	47,572	34,204
Interest expense	(8,519)	(7,812)	(7,931)
Interest income	321	49	57
Income before income taxes	49,471	39,809	26,330
Income tax expense	11,835	15,282	12,383
Net income	$ 37,636	$ 24,527	$ 13,947
Basic income per common share:			
Net income per common share -- basic	$ 0.45	$ 0.28	$ 0.16
Diluted income per common share:			
Net income per common share -- diluted	$ 0.43	$ 0.28	$ 0.16
Weighted average shares:			
Basic	84,221	87,881	87,673
Diluted	86,987	88,361	88,164

See accompanying notes to the consolidated financial statements

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(in thousands except share and per share amounts)

	Common Stock				Treasury Stock		
	# of Shares Issued	Par Value	Capital in Excess of Par Value	Retained Earnings	# of Shares	Amount	Total Shareholders' Equity
Balance at January 1, 2014	93,826,453	$ 936	$ 296,517	$250,000	6,526,305	$ (45,014)	$ 502,439
Net income	-	-	-	13,947	-	-	13,947
Stock-based compensation expense	-	-	13,356	-	-	-	13,356
Exercise of stock options	516,552	5	4,105	-	-	-	4,110
Vesting of restricted stock awards and units, net of shares withheld for employee tax	168,439	2	(1,660)	-	-	-	(1,658)
Excess tax benefit from exercise of stock options	-	-	1,795	-	-	-	1,795
Shortfall due to exercise of stock options	-	-	(323)	-	-	-	(323)
Deferred tax asset reversal for unexercised stock options	-	-	(576)	-	-	-	(576)
Balance at December 31, 2014	94,511,444	943	313,214	263,947	6,526,305	(45,014)	533,090
Net income	-	-	-	24,527	-	-	24,527
Stock-based compensation expense	-	-	14,297	-	-	-	14,297
Purchase of treasury stock	-	-	-	-	4,747,441	(50,000)	(50,000)
Exercise of stock options	577,559	7	4,180	-	-	-	4,187
Vesting of restricted stock awards and units, net of shares withheld for employee tax	174,458	2	(1,031)	-	-	-	(1,029)
Excess tax benefit from exercise of stock options	-	-	1,569	-	-	-	1,569
Shortfall due to exercise of stock options	-	-	(827)	-	-	-	(827)
Deferred tax asset reversal for unexercised stock options	-	-	(1,112)	-	-	-	(1,112)
Balance at December 31, 2015	95,263,461	952	330,290	288,474	11,273,746	(95,014)	524,702
Net income	-	-	-	37,636	-	-	37,636
Stock-based compensation expense	-	-	13,277	-	-	-	13,277
Purchase of treasury stock	-	-	-	-	1,140,332	(20,470)	(20,470)
Exercise of stock options	510,512	5	2,935	-	-	-	2,940
Vesting of restricted stock awards and units, net of shares withheld for employee tax	192,879	2	(1,477)	-	-	-	(1,475)
Balance at December 31, 2016	95,966,852	$ 959	$ 345,025	$326,110	12,414,078	$(115,484)	$ 556,610

See accompanying notes to the consolidated financial statements.

HMS HOLDINGS CORP. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Years ended December 31,		
	2016	2015	2014
Operating activities:			
Net income	$ 37,636	$ 24,527	$ 13,947
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization of property and equipment	24,882	30,328	32,864
Amortization of intangible assets	20,164	20,270	20,734
Amortization of deferred financing costs	2,083	2,084	2,084
Stock-based compensation expense	13,277	14,297	13,356
Deferred income taxes	(7,368)	(14,020)	(12,290)
(Gain) / Loss on disposal of assets	(948)	84	219
Change in fair value of contingent consideration	-	-	(517)
Changes in operating assets and liabilities, net of the effect of acquisitions:			
Accounts receivable	(3,554)	(12,045)	14,625
Prepaid expenses	(2,399)	549	1,132
Prepaid income taxes	-	6,711	3,445
Other current assets	2,066	(412)	(2,150)
Other assets	234	10	121
Income taxes receivable / (payable)	(7,227)	3,873	-
Accounts payable, accrued expenses and other liabilities	12,116	(250)	18,039
Estimated liability for appeals	(2,323)	(3,721)	(5,053)
Net cash provided by operating activities	88,639	72,285	100,556
Investing activities:			
Acquisition of a business, net of cash acquired	(20,678)	-	-
Proceeds from sale of cost basis investment	2,496	-	-
Purchases of land, property and equipment	(13,703)	(8,620)	(22,687)
Investment in capitalized software	(7,316)	(3,197)	(3,514)
Net cash used in investing activities	(39,201)	(11,817)	(26,201)
Financing activities:			
Repayment of revolving credit facility	-	-	(35,000)
Proceeds from exercise of stock options	2,940	4,187	4,110
Payments of tax withholdings on behalf of employees for net-share settlement for stock-based compensation	(1,475)	(1,029)	(1,658)
Payments on capital lease obligations	(44)	(1,132)	(1,629)
Payments on contingent consideration	-	-	(428)
Purchases of treasury stock	(20,470)	(50,000)	-
Net cash used in financing activities	(19,049)	(47,974)	(34,605)
Net increase in cash and cash equivalents	30,389	12,494	39,750
Cash and cash equivalents			
Cash and cash equivalents at beginning of year	145,610	133,116	93,366
Cash and cash equivalents at end of year	$ 175,999	$ 145,610	$ 133,116
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	$ 20,326	$ 22,878	$ 21,144
Cash paid for interest	$ 6,196	$ 5,694	$ 4,458
Supplemental disclosure of noncash activities:			
Change in balance of accrued property and equipment purchases	$ 684	$ 729	$ 1,610

See accompanying notes to the consolidated financial statements.

HMS HOLDINGS CORP. AND SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1. Business and Summary of Significant Accounting Policies

(a) Business

HMS is a leading provider of cost containment solutions in the U.S. healthcare marketplace. Using innovative technology as well as extensive data services and powerful analytics, the Company delivers coordination of benefits, payment integrity and care management solutions through its operating subsidiaries to help healthcare payers improve performance and outcomes. The Company is managed and operates as one business segment with a single management team that reports to the Chief Executive Officer. The Company serves state Medicaid programs, commercial health plans, federal government health agencies, government and private employers, child support agencies, and other healthcare payers and sponsors. Together the various services help the Company's customers recover improper payments; prevent future improper payments; reduce fraud, waste and abuse; and ensure regulatory compliance.

(b) Summary of Significant Accounting Policies

(i) Principles of Consolidation

The consolidated financial statements include the Company's accounts and transactions and those of the Company's wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

(ii) Use of Estimates

The preparation of the consolidated financial statements in conformity with United States Generally Accepted Accounting Principles ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

(iii) Reclassifications

In the 2015 Consolidated Balance Sheets, the Company reported Accounts Receivable, net of allowance for doubtful accounts and estimated allowance for appeals. In the 2016 Consolidated Balance Sheets, Accounts Receivable, net of allowance includes the allowance for doubtful accounts, revenue adjustments and the estimated allowance for appeals.

(iv) Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less to be cash equivalents. Cash equivalents consist of deposits that are readily convertible into cash.

(v) Concentration of Credit Risk

The Company's policy is to limit credit exposure by placing cash in accounts which are exposed to minimal interest rate and credit risk. HMS maintains cash and cash equivalents in cash depository accounts with large financial institutions with a minimum credit rating of A1/P1 or better, as defined by Standard and Poor's. The balance at these institutions generally exceeds the maximum balance insured by the Federal Deposit Insurance Corporation of up to $250,000 per entity. HMS has not experienced any losses in cash and cash equivalents and believes these cash and cash equivalents do not expose the Company to any significant credit risk.

The Company is subject to potential credit risk related to changes in economic conditions within the healthcare market. However, HMS believes that the billing and collection policies are adequate to minimize the potential credit risk. The Company performs ongoing credit evaluations of customers and generally does not require collateral.

(vi) Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Depreciation is provided over the estimated useful lives of the assets utilizing the straight-line method. HMS amortizes leasehold improvements on a straight-line basis over the term of the related lease which is typically five years, including any anticipated renewal periods, or the life of the leasehold improvement, whichever is shorter. Equipment leased under capital leases is depreciated over the shorter of (i) the term of the lease and (ii) the estimated useful life of the equipment. Capitalized software costs related to software that is acquired or developed for internal use while in the application development stage. All other costs to develop software for internal use, either in the preliminary project stage or post-implementation stage, are expensed as incurred. Amortization of capitalized software is calculated on a straight-line basis over the expected economic life. Land is not depreciated.

Estimated useful lives are as follows:

Property and Equipment	Useful Life (in years)
Equipment	2 - 3
Leasehold improvements	3 - 10
Furniture and fixtures	3 - 5
Capitalized software	3 - 10
Building and building improvements	up to 39.5

Property and equipment is reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. When indicators exist, recoverability of assets is measured by a comparison of the carrying value of the asset group to the estimated undiscounted future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying value of the asset group exceeds the fair value of the assets, which amount is charged to earnings. Fair value is based on a projection of the estimated discounted future net cash flows expected to result from the asset group, using a discount rate reflective of the Company's cost of funds. The Company did not recognize any impairment charges related to property and equipment during the years ended December 31, 2016, 2015 or 2014.

(vii) Intangible assets

The Company records assets acquired and liabilities assumed in a business combination based upon their acquisition date fair values. In most instances there is not a readily defined or listed market price for individual assets and liabilities acquired in connection with a business, including intangible assets. The determination of fair value for individual assets and liabilities in many instances requires a high degree of estimation and the valuation of intangible assets, in particular, is subjective. Significant estimates in intangible assets include, but are not limited to, growth rates, discount rates, customer attrition rates, expected levels of revenues, earnings, cash flows and tax rates. The use of different valuation techniques and assumptions are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. All of the Company's intangible assets are subject to amortization and are amortized using the straight-line method over their estimated period of benefit. Estimated useful lives are as follows:

Intangible Assets	Useful Life (in years)
Customer relationships	5 - 10
Restrictive covenants	3 - 7
Trade name	3 - 5
Intellectual property	5

Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. When indicators exist, recoverability of assets is measured by a comparison of the carrying value of the asset group to the estimated undiscounted future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying value of the asset group exceeds the fair value of the assets, which amount is charged to earnings. Fair value is based on a projection of the estimated discounted future net cash flows expected to result from the asset group, using a discount rate reflective of the Company's cost of funds. The Company did not recognize any impairment charges related to intangible assets during the years ended December 31, 2016, 2015 or 2014.

(viii) Goodwill

Goodwill is the excess of acquisition costs over the fair values of assets and liabilities of acquired businesses. During the measurement period, which is up to one year from the acquisition date, the Company may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings.

Goodwill is subject to a periodic assessment for impairment. HMS assesses goodwill for impairment on an annual basis as of June 30th of each year or more frequently if an event occurs or changes in circumstances would more likely than not reduce the fair value of a reporting unit below its carrying amount. Assessment of goodwill impairment is at the HMS Holdings Corp. entity level as the Company operates as a single reporting unit. The Company has the option to perform a qualitative assessment to determine if impairment is more likely than not to have occurred. If the Company can support the conclusion that it is more likely than not that the fair value of a reporting unit is greater than its carrying amount, then HMS would not need to perform the two-step impairment test for that reporting unit. If the Company cannot support such a conclusion, or the Company does not elect to perform the qualitative assessment, then the first step of the goodwill impairment test is used to identify potential impairment by comparing the fair value of a reporting unit with its carrying amount, including goodwill. HMS completed the annual impairment test as of June 30, 2016 using the optional qualitative assessment and determined no impairment existed. There were no impairment charges related to goodwill during the years ended December 31, 2016, 2015 or 2014.

(ix) Income Taxes

Income taxes are accounted for under the asset and liability method. Under this method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to temporary differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. This method also requires the recognition of future tax benefits for net operating loss carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized as income or expense in the period that includes the enactment date. A valuation allowance is provided against deferred tax assets to the extent their realization is not more likely than not. Uncertain income tax positions are accounted for by prescribing a minimum recognition threshold that a tax position is required to meet before being recognized in the financial statements. Although the Company believes that it has adequately reserved for uncertain tax positions (including interest and penalties), it can provide no assurance that the final tax outcome of these matters will not be materially different. The Company makes adjustments to these reserves in accordance with the income tax accounting guidance when facts and circumstances change, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences will affect the provision for income taxes in the period in which such determination is made, and could have a material impact on our financial condition and operating results.

(x) Revenue Recognition

The Company provides services under contracts that contain various fee structures, including contingency fee and fixed fee arrangements. Revenue is recognized when a contract exists, services have been provided to the customer, the fee is fixed and determinable, and collectability is reasonably assured. In addition, the Company has contracts with the federal government which are generally cost-plus or time and material based. Revenue on cost-plus contracts is recognized based on costs incurred plus the negotiated fee earned. Revenue on time and materials contracts is recognized based on hours worked and expenses incurred. In addition, some of the Company's contracts may include customer acceptance provisions. Formal customer sign-off is not always necessary to recognize revenue, provided HMS objectively demonstrates that the criteria specified in the acceptance provision are satisfied. Due to the range of products and services that HMS provides and the differing fee structures associated with each type of contract, revenue may be recognized in irregular increments. A portion of our revenue is recorded net of an estimate of future revenue adjustments, with an offsetting entry to accounts receivable allowance, based on historical patterns of billing adjustments, length of operating and collection cycle and customer negotiations, behaviors and payment patterns. Changes in these estimates are recorded to revenue in the period of change.

(xi) Estimated Liability for Appeals

Under the Company's Recovery Audit Contractor ("RAC") contract with Centers for Medicare and Medicaid Services ("CMS"), the Medicaid RAC contracts with various states, and similar contracts for commercial health plan customers, HMS recognizes revenue when findings are sent to the customer for offset against future claims payments. Providers have the right to appeal a finding and may pursue additional appeals if the initial appeal is found in favor of the customer. HMS records a) a liability for findings which have been adjudicated in favor of providers and b) an estimated liability for findings that are probable of being returned to providers following a successful appeal. Resolution of appeals can take substantial time to resolve as there is a significant backlog in the system for resolving appeals, as over the course of the Company's existing RAC contract, healthcare providers have increased their pursuit of appeals beyond the first and second levels of appeals to the third level of appeal, where cases are heard by Administrative Law Judges ("ALJs"). In the Company's experience, decisions at the third level of appeal are the least favorable as ALJs exercise greater discretion and there is less predictability in the ALJ decisions as compared to appeals for the first or second levels. The estimated liability is based on the amount of revenue that is subject to appeals, closures or other adjustments and the Company's historical experience with appeals. The liability for appeals is an offset to revenue to the Company's Consolidated Statements of Income. The total liability for appeals balance of $30.8 million and $33.1 million as of December 31, 2016 and 2015, respectively, includes $17.3 million and $15.9 million, respectively, of CMS liabilities which represents findings which have been adjudicated in favor of providers and $11.1 million and $12.8 million, respectively, of CMS liabilities which represents an estimate of findings that are probable of being returned to providers following a successful appeal. To the extent the amount to be returned to providers following a successful appeal, closure or other adjustment exceeds or is less than the amount recorded, revenue in the applicable period would be reduced or increased by such amount. Any future changes to any of the Company's customer contracts, including further modifications to the transition plan for incumbent Medicare RACs may require the Company to apply different assumptions that could materially affect the Company's liability for future periods.

(xii) Expense Classifications

HMS cost of services is presented in the categories set forth below. Each category within cost of services excludes expenses relating to Selling, general and administrative expenses ("SG&A") functions, which are presented separately as a component of total operating costs. A description of the primary expenses included in each category is as follows:

Cost of Services:

- *Compensation:* Salary, fringe benefits, bonus and stock-based compensation.
- *Data processing:* Hardware, software and data communication costs.
- *Occupancy:* Rent, utilities, depreciation, office equipment and repair and maintenance costs.
- *Direct project expense:* Variable costs incurred from third party providers that are directly associated with specific revenue generating projects and employee travel expenses.
- *Other operating expense:* Professional fees, temporary staffing, travel and entertainment, insurance and local and property tax costs.
- *Amortization of acquisition related software and intangible assets:* Amortization of the cost of acquisition related software and intangible assets.

SG&A:

- Expenses related to general management, marketing and administration activities.

(xiii) Estimating Valuation Allowances and Accrued Liabilities

The preparation of financial statements requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenue and expenses during the reported period. In particular, management must make estimates of the probability of collecting accounts receivable. When evaluating the adequacy of the accounts receivable allowance, management reviews the accounts receivables based on an analysis of historical revenue adjustments, bad debts, customer concentrations, customer credit-worthiness, current economic trends and changes in customer payment terms. As of December 31, 2016 and 2015, the accounts receivable balance was $173.6 million and $169.1 million, net of allowance of $10.8 million and $11.5 million, respectively.

(xiv) Stock-Based Compensation

Long-Term Incentive Award Plans

The Company grants equity-based compensation awards, including stock options and restricted stock units, to HMS employees and non-employee directors under the 2016 Omnibus Plan, which was approved by the Company's shareholders on June 23, 2016. The 2016 Omnibus Plan replaced and superseded the Company's 2006 Stock Plan and 2011 HDI Plan. All of the Company's employees as well as HMS non-employee directors are eligible to participate in the 2016 Omnibus Plan. Awards granted under the 2016 Omnibus Plan generally vest over one to four years. The exercise price of stock options granted under the 2016 Omnibus Plan may not be less than the fair market value of a share of stock on the grant date, as measured by the closing price of the Company's common stock on the NASDAQ Global Select Market and the term of a stock option may not exceed ten years. Certain stock option and restricted stock unit awards granted to senior executives are subject to performance-based vesting conditions. The performance-based awards are market condition awards as the performance condition is based on the Company's common stock price over the applicable performance period.

Stock-Based Compensation Expense

For awards subject to service-based vesting conditions, the Company recognizes stock-based compensation expense equal to the grant date fair value of the award on a straight-line basis over the requisite service period, which is generally the vesting term. For the performance-based awards subject to market conditions, the Company recognizes stock-based compensation expense equal to the grant date fair value of the stock options on a straight-line basis over the requisite service period.

The fair value of each option grant with service-based conditions is estimated using the Black-Scholes pricing model. The fair value of each option grant with market-based conditions is estimated using a Monte Carlo simulation model. The fair value of each restricted stock unit is calculated based on the closing sale price of the Company's common stock on the grant date.

The determination of the fair value of the stock options on the grant date using the models above is affected by the Company's stock price, as well as assumptions regarding a number of complex and subjective variables. Certain key variables include: the Company's expected stock price volatility over the expected term of the awards; a risk-free interest rate; and any expected dividends. The Company estimates stock price volatility based on the historical volatility of the Company's common stock and estimates the expected term of the awards based on the Company's historical option exercises for similar types of stock option awards. The assumed risk-free interest rate is based on the yield on the measurement date of a zero-coupon U.S. Treasury bond with a maturity period equal to the option's expected term. The Company does not anticipate paying any cash dividends in the foreseeable future and therefore, uses an expected dividend yield of zero in the option valuation models. The fair value of all awards also includes an estimate of expected forfeitures. Forfeitures are estimated based on historical experience. If actual forfeitures vary from estimates, a difference in compensation expense will be recognized in the period the actual forfeitures occur. Upon the exercise of stock options or the vesting of restricted stock units, the resulting excess tax benefits or deficiencies, if any, are recognized as income tax expense or benefit. Additionally, excess tax benefits are required to be reflected as a cash flow operating activity.

(xv) Fair Value of Financial Instruments

Financial instruments are categorized into a three-level fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels. The fair value hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). If the inputs used to measure fair value fall within different levels of the hierarchy, the category level is based on the lowest priority level input that is significant to the fair value measurement of the instrument. In the event the fair value is not readily available or determinable, the financial instrument is carried at cost and referred to as a cost method investment. The fair value hierarchy is as follows:

- *Level 1*: Observable inputs such as quoted prices in active markets;
- *Level 2:* Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and
- *Level 3:* Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

Financial instruments (principally cash and cash equivalents, accounts receivable, accounts payable and accrued expenses) are carried at cost, which approximates fair value due to the short-term maturity of these instruments. The Company's long-term credit facility is carried at cost. Due to the variable interest rate associated with the revolving credit facility and the variable interest margin based upon the Company's consolidated leverage ratio, cost approximates its fair value. The fair value of the contingent consideration liability is determined using Level 3 inputs. See Note 4 – "Acquisitions" in our Notes to the Consolidated Financial Statements under Item 8. Consolidated Financial Statements and Supplementary Data for additional information regarding the fair value of financial instruments.

(xvi) Leases

HMS accounts for the lease agreements as either operating or capital leases, depending on certain defined criteria. Lease costs are amortized on a straight-line basis without regard to deferred payment terms, such as rent holidays, that defer the commencement date of required payments. Additionally, incentives such as tenant improvement allowances, are capitalized and are treated as a reduction of rental expense over the term of the lease agreement.

(xvii) Contingencies

From time to time, HMS is involved in legal proceedings in the ordinary course of business. The Company assesses the likelihood of any adverse judgments or outcomes to these contingencies as well as potential ranges or probable losses and establish reserves accordingly. HMS records accruals for outstanding legal matters when it believes it is probable that a loss will be incurred and the amount can be reasonable estimated. Significant judgment is required to determine both probability and the estimated amount. HMS reviews these provisions at least quarterly and adjusts the provisions to reflect the impact of negotiations, settlements, rulings, advice of legal counsel and updated information. Litigation is inherently unpredictable and is subject to significant uncertainties, some of which are beyond the Company's control. The amount of reserves required may change in future periods due to new developments in each matter or changes in approach to a matter such as a change in settlement strategy.

(xviii) Recent Accounting Guidance

Recently Adopted Accounting Guidance

In April 2015, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2015-05, *Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40): Customer's Accounting for Fees Paid in a Cloud Computing Arrangement* ("ASU 2015-05"). ASU 2015-05 provides explicit guidance to help companies evaluate the accounting for fees paid by a customer in a cloud computing arrangement and clarifies that if a cloud computing arrangement includes a software license, the customer should account for the license consistent with its accounting for other software licenses. If the arrangement does not include a software license, the customer should account for the arrangement as a service contract. ASU 2015-05 is effective for annual reporting periods beginning after December 15, 2015, including interim periods within such annual reporting periods with early adoption permitted. The adoption of this guidance did not have a material effect on the Company's consolidated financial statements.

In November 2015, the FASB issued ASU 2015-17, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes* ("ASU 2015-17"). ASU 2015-17 simplifies the current presentation of separately classifying deferred tax assets and deferred tax liabilities as current and noncurrent in a classified balance sheet by requiring companies to present them as noncurrent. ASU 2015-17, as amended, is effective for annual reporting periods beginning after December 15, 2016, including interim periods within such annual reporting periods with early adoption permitted. The Company elected to early adopt the new guidance in the fourth quarter of fiscal year 2016. The Company elected to apply the presentation requirements for the balance sheet retrospectively to all periods presented which resulted in a decrease to total current assets and total long term liabilities of $7.5 million at December 31, 2015.

In March 2016, the FASB issued ASU No. 2016-09, *Compensation – Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting*, ("ASU 2016-09") that changes the accounting for certain aspects of share-based payments to employees. The new guidance requires excess tax benefits and tax deficiencies to be recorded in the income statement when stock awards vest or are settled. In addition, cash flows related to excess tax benefits will no longer be separately classified as a financing activity apart from other income tax cash flows. The standard also allows Companies to repurchase more of an employee's vesting shares for tax withholding purposes without triggering liability accounting, clarifies that all cash payments made to tax authorities on an employee's behalf for withheld shares should be presented as a financing activity on the cash flows statement and provides an accounting policy election to account for forfeitures as they occur. ASU 2016-09 is effective for annual reporting periods beginning after December 15, 2016, including interim periods within such annual reporting periods with early adoption permitted. The Company elected to early adopt the new guidance in the fourth quarter of fiscal year 2016 which requires us to reflect any adjustments as of January 1, 2016, the beginning of the annual period that includes the interim period of adoption. The primary impact of adoption was the recognition of excess tax benefits in the provision for income taxes rather than paid-in capital for all periods in fiscal year 2016. Additional amendments to the accounting for income taxes and minimum statutory withholding tax requirements had no impact to retained earnings as of January 1, 2016, where the cumulative effect of these changes are required to be recorded. The Company elected to continue to estimate forfeitures expected to occur to determine the amount of compensation cost to be recognized in each period. We elected to apply the presentation requirements for cash flows related to excess tax benefits retrospectively to all periods presented which resulted in an increase to both net cash from operations and net cash used in financing of $1.6 million and $1.8 million for the years ended December 31, 2015 and 2014, respectively. Adoption of the new standard resulted in the recognition of net excess tax benefits in the provision for income taxes rather than paid-in capital of $1.9 million for the year ended December 31, 2016. The presentation requirements for cash flows related to employee taxes paid for withheld shares had no impact to any of the periods presented on the consolidated statements of cash flow since such cash flows have historically been presented as a financing activity.

Recent Accounting Guidance Not Yet Adopted

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (Topic 606) ("ASU 2014-09"), which is the new comprehensive revenue recognition standard that will supersede all existing revenue recognition guidance under U.S. GAAP. The FASB has recently issued several amendments to the standard, including: principal versus agent considerations; clarification on accounting for licenses of intellectual property and identifying performance obligations; narrow scope-improvements and practical expedients; and technical corrections and improvements. ASU 2014-09 is effective for annual reporting periods beginning after December 15, 2017, including interim periods within such annual reporting periods with early adoption permitted. The Company does not plan to early adopt this guidance and therefore will adopt on January 1, 2018. The guidance permits two methods of adoption: retrospectively to each prior reporting period presented (full retrospective method), or retrospectively with the cumulative effect of initially applying the guidance recognized at the date of initial application (modified retrospective method). The Company is in the process of determining the adoption method but preliminarily expects to use the modified retrospective method. The Company, with the assistance of external consultants, has developed and is currently following a preliminary implementation plan. One major element of this plan involves reviewing historical contracts to quantify the impact that adoption will have on the Company's operations. Depending on the results of the Company's review, there could be material changes to the timing and recognition of revenues and certain associated expenses. The Company expects to complete the review of historical contracts and the overall assessment process, including selecting a transition plan and an assessment of the overall impact to the results of operations by the end of the third quarter of 2017.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* ("ASU 2016-02"). ASU 2016-02 will require most lessees to recognize a majority of the Company's leases on the balance sheet, which will increase reported assets and liabilities. ASU 2016-02 is effective for annual reporting periods beginning after December 15, 2018 including interim periods within such annual reporting periods with early adoption permitted. The Company has not early adopted this guidance and is currently evaluating the impact on the Company's consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, *Statements of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"). The amendment clarifies where certain cash receipts and cash payments are presented and classified in the statement of cash flows. Current guidance does not include specific guidance on the eight classification issues presented in the amendments, which are intended to reduce diversity in practice with respect to classification and presentation of such cash receipts and payments. The amendments are effective for annual reporting periods beginning after December 15, 2017, and for interim reporting periods within such annual periods. The Company is currently evaluating the impact on the Company's financial statements.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations (Topic 805) – Clarifying the Definition of a Business* ("ASU 2017-01"). ASU 2017-01 finalizes previous proposals regarding shareholder concerns that the definition of a business is applied too broadly. The guidance assists entities with evaluating whether transactions should be accounted for as acquisitions of assets or of businesses. The amendments are effective for annual periods beginning after December 15, 2017, including interim periods within those periods. The Company is currently evaluating the impact on the Company's financial statements of adopting this guidance.

In January 2017, the FASB issued ASU No. 2017-04, *Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment (* "ASU 2017-04"). This amendment simplifies the manner in which an entity is required to test for goodwill impairment by eliminating Step 2 from the goodwill impairment test. Step 2 measures goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. The amendment simplifies this approach by having the entity (1) perform its annual or interim goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount, and (2) recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value, with the understanding that the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The amendment is effective for public entities that are U.S. Securities and Exchange Commission ("SEC") filers prospectively for their annual, or any interim, goodwill impairment tests in fiscal years beginning after December 15, 2019. Early adoption is permitted for all entities for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. The Company is currently evaluating the impact on the Company's financial statements of adopting this guidance.

Other new pronouncements issued but not effective until after December 31, 2016, if any, are not expected to have a material impact on the Company's financial position, results of operations or liquidity.

2. Property and Equipment

Property and equipment consisted of the following (*in thousands*):

	December 31, 2016	December 31, 2015
Equipment	$ 94,345	$ 90,496
Leasehold improvements	8,637	8,512
Building	8,624	8,624
Building improvements	12,671	11,367
Land	2,769	2,769
Furniture and fixtures	10,728	10,858
Capitalized software	110,696	104,266
	248,470	236,892
Less: accumulated depreciation and amortization	(156,303)	(140,341)
Property and equipment, net	92,167	96,551

	December 31,		
(in millions)	2016	2015	2014
Depreciation and amortization expense related to property and equipment	$ 24.9	$ 30.3	$ 32.9

Net capital leases included as part of equipment were approximately $4,000 and $51,000 at December 31, 2016 and 2015, respectively. Accumulated depreciation for equipment under capital leases was approximately $6.1 million and $6.0 million for the years ended December 31, 2016 and 2015. Depreciation expense for equipment under capital leases for the years ended December 31, 2016, 2015 and 2014 was approximately $40,000, $1.2 million, and $1.6 million, respectively.

3. Intangible Assets

Intangible assets consisted of the following (*in thousands*):

	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
December 31, 2016			
Customer relationships	$ 103,090	$ (71,914)	$ 31,176
Trade name	15,936	(11,393)	4,543
Intellectual property	2,100	(140)	1,960
Restrictive covenants	133	(15)	118
Total	$ 121,259	$ (83,462)	$ 37,797
December 31, 2015			
Customer relationships	$ 101,806	$ (57,497)	$ 44,309
Trade name	17,000	(10,221)	6,779
Restrictive covenants	16,800	(13,580)	3,220
Total	$ 135,606	$ (81,298)	$ 54,308

In 2016, the Company wrote-off approximately $16.8 million of fully amortized restrictive covenant intangibles and $1.2 million of fully amortized trade name intangibles.

Amortization expense of intangible assets is expected to approximate the following (*in thousands*):

Year ending December 31,	
2017	$ 17,306
2018	16,685
2019	2,245
2020	791
2021	463
Thereafter	307

For the years ended December 31, 2016, 2015 and 2014, amortization expense related to intangible assets was $20.2 million, $20.3 million and $20.7 million, respectively.

4. Acquisitions

On September 2, 2016, the Company acquired the outstanding capital stock of Essette, a care management technology company which helps risk-bearing organizations manage the care delivered to their members, for aggregate consideration of $24.2 million, which is primarily comprised of cash payments of $21.3 million. To fund the purchase price, the Company utilized cash on hand. The acquisition is subject to adjustment based upon the final amount of adjusted working capital of Essette at closing.

The Company allocated the purchase price, net of cash acquired, to a) at their acquisition date fair values, the following tangible assets: net deferred tax assets of $0.9 million and other net assets of $0.9 million and b) at their acquisition date fair values, the following amortizing intangible assets: intellectual property of $2.1 million, customer relationships of $1.3 million, restrictive covenants of $0.1 million, and trade name of $0.1 million. Goodwill of $18.2 million represents the excess purchase price over the net identifiable tangible and intangible assets. The intangible assets are valued using various methods which requires several judgments, including growth rates, discount rates, customer attrition rates, and expected levels of revenues, earnings, cash flows and tax rates. The intangible assets are amortized over their estimated useful lives on a straight-line basis and are not expected to be deductible for tax purposes. The goodwill recognized from the acquisition was a result of expected synergies to be realized from future revenue growth, is not expected to be deductible for tax purposes, has an indefinite useful life and will be included in the Company's annual impairment testing. Contingent consideration, up to an aggregate maximum $12.0 million, will be payable in calendar years 2017, 2018, or 2019, respectively, should Essette achieve certain revenue targets as defined in the stock purchase agreement. The contingent consideration is valued using a method which requires several judgments but primarily include discount rates and expected levels of revenues. In the fourth quarter 2016, purchase accounting adjustments included a $1.1 million increase to total transaction consideration and to goodwill, a $0.7 million increase to other net assets, and a $0.2 million increase in the customer relationship intangible. The amounts shown above may change in the near term as management continues to assess the fair value of acquired assets and liabilities.

The acquisition was not significant to the Company's consolidated financial statements; therefore, pro forma results of the operations related to this business acquisition for the year ended December 31, 2015 have not been presented. The immaterial results of Essette's operations since September 2, 2016 have been included in the Company's consolidated financial statements.

There were no changes in the carrying amount of goodwill for the years ended December 31, 2015 and 2014.

5. Accounts Payable, Accrued Expenses and Other Liabilities

Accounts payable, accrued expenses and other liabilities consisted of the following (*in thousands*):

	December 31, 2016	December 31, 2015
Accounts payable, trade	$ 13,847	$ 7,790
Accrued compensation and other	28,507	21,948
Accrued operating expenses	17,048	21,923
Total accounts payable, accrued expenses and other liabilities	$ 59,402	$ 51,661

6. Income Taxes

Income tax expense is as follows (*in thousands*):

	December 31,		
	2016	2015	2014
Current tax expense:			
Federal	$ 16,274	$ 25,852	$ 20,244
State	2,929	3,450	4,429
Total current tax expense:	19,203	29,302	24,673
Deferred tax expense (benefit):			
Federal	(7,115)	(12,571)	(12,421)
State	(253)	(1,449)	131
Total deferred tax benefit:	(7,368)	(14,020)	(12,290)
Total income tax expense	$ 11,835	$ 15,282	$ 12,383

A reconciliation of the income tax expense calculated using the applicable federal statutory rate to the actual income tax expense is as follows (*in thousands*):

	December 31,					
	2016	%	2015	%	2014	%
Computed at federal statutory rate	$ 17,315	35.0	$ 13,934	35.0	$ 9,215	35.0
State and local tax expense, net of federal benefit	2,448	5.0	1,038	2.6	2,973	11.3
Net perm deduction and credit tax benefits from prior years	(6,213)	(12.6)	-	-	-	-
Net perm deduction and credit tax benefits from current year	(1,509)	(3.1)	-	-	-	-
Other, net	(206)	(0.4)	310	0.8	195	0.7
Total income tax expense	$ 11,835	23.9	$ 15,282	38.4	$ 12,383	47.0

The Company's effective tax rate decreased to 23.9% for the year ended December 31, 2016 from 38.4% for the year ended December 31, 2015, primarily due to the Company's recognition of tax benefits for R&D Credits and the Section 199 Deduction, as discussed below.

As a result of an analysis performed during 2016 the Company determined certain activities it performs qualify for (i) Research and Development Tax Credits ("R&D Credits") provided in Internal Revenue Code ("IRC") Section 41 and (ii) the U.S. Production activities deduction ("Section 199 Deduction") provided in IRC Section 199. During the third quarter of 2016, the Company determined it was economically viable to claim the R&D Credits and the Section 199 Deduction for all open tax years. As a result, the Company recognized net tax benefits during the year ended December 31, 2016 of $2.2 million and $5.7 million for federal and state R&D Credits and the Section 199 Deduction, respectively, relating to tax years 2012 through 2016.

Deferred income taxes are recognized for the future tax consequences of temporary differences between the financial statement and tax bases of assets and liabilities. The tax effect of temporary differences that give rise to a significant portion of the deferred tax assets and deferred tax liabilities are as follows (in thousands):

	December 31, 2016	December 31, 2015
Deferred tax assets:		
Stock-based compensation	$ 10,373	$ 9,059
Goodwill and intangible assets	10,711	10,449
Allowance for doubtful accounts	4,108	1,766
Deferred rent	1,120	1,119
Tenant improvements	1,226	1,392
Estimated liability for appeals	11,596	-
Net operating loss carry-forwards	2,141	113
Property and equipment	79	-
Accrued expenses and other	7,811	6,298
Total deferred tax assets	49,165	30,196
Deferred tax liabilities:		
Goodwill and intangible assets	52,729	56,790
Section 481(a) adjustment	14,757	-
Property and equipment	-	894
Capitalized software cost	4,396	3,473
Total deferred tax liabilities	71,882	61,157
Total net deferred tax liabilities	$ 22,717	$ 30,961

Included in Other liabilities on the Consolidated Balance Sheets, are the total amount of unrecognized tax benefits of approximately $7.4 million and $1.3 million as of December 31, 2016 and 2015, respectively, (net of the federal benefit for state issues) that, if recognized, would favorably affect the Company's future effective tax rate. Also included in Other Liabilities on the Consolidated Balance Sheets, are accrued liabilities for interest expense and penalties related to unrecognized tax benefits of $0.6 million and $0.4 million as of December 31, 2016 and 2015, respectively. HMS includes interest expense and penalties in the provision for income taxes in the Consolidated Statements of Income. The amount of interest expense (net of federal and state income tax benefits) and penalties in the Consolidated Statements of Income for the years ended December 31, 2016, 2015 and 2014 was $0.2 million, $0.6 million and $0.4 million, respectively. The Company believes it is reasonably possible the amount of unrecognized tax benefits may decrease by $0.9 million during 2017, due to the expiration of the statute of limitations in various state jurisdictions.

A reconciliation of the beginning and ending amounts of unrecognized tax benefits are as follows *(in thousands)*:

	December 31, 2016	December 31, 2015
Unrecognized tax benefits at January 1	$ 1,329	$ 1,329
Additions for tax positions taken during prior periods	763	565
Additions for tax positions taken during current period including amended prior years	5,931	-
Reductions related to the expiration of statutes of limitations	(590)	(565)
Unrecognized tax benefits at December 31	$ 7,433	$ 1,329

The Company increased the provision for unrecognized tax benefits by $5.9 million during the year ended December 31, 2016, related to tax benefits recognized associated with R&D Credits and the Section 199 Deduction for all open tax years.

At December 31, 2016, HMS had federal and state pre-tax net operating loss carryforwards of approximately $13.8 million, which will be available to offset future taxable income. If not used, these carryforwards will expire between 2020 and 2036.The Company files income tax returns with the U.S. Federal government and various state jurisdictions. HMS is no longer subject to U.S. Federal income tax examinations for years before 2012. The Company received notification the Internal Revenue Service intends to audit years 2013 and 2014. HMS operates in a number of state and local jurisdictions, most of which have never audited the Company's records. Accordingly, HMS is subject to state and local income tax examinations based upon the various statutes of limitations in each jurisdiction. The Company is currently being examined by the State of New York.

7. Credit Agreement

During the years ended December 31, 2016 and 2015, no principal payments were made against the Company's revolving credit facility. The $197.8 million principal balance of the revolving credit facility is due in May 2018. The Company has commenced discussions to extend or refinance the revolving credit facility.

The Credit Agreement provides for an initial $500 million revolving credit facility, and, under specified circumstances, the revolving credit facility can be increased or one or more incremental term loan facilities can be added, provided that the incremental credit facilities do not exceed in the aggregate the sum of (a) $75 million plus (b) an additional amount not less than $25 million, so long as the total secured leverage ratio, calculated giving pro forma effect to the requested incremental borrowing and other customary and appropriate pro forma adjustment events, including any permitted acquisitions, is no greater than 2.5:1.0. The Company's obligations and any amounts due under the Credit Agreement are guaranteed by the Company's material 100% owned subsidiaries and secured by a security interest in all or substantially all of the Company's and the Company's subsidiaries' physical assets.

The Credit Agreement requires the Company to comply with certain principal financial covenants and other covenants, including a maximum consolidated leverage ratio reducing from 3.50:1.00 to 3.25:1.00 over the next five years and a minimum interest coverage ratio of 3.00:1.00. See Note 14 – "Subsequent Events" in our Notes to the Consolidated Financial Statements under Item 8. Consolidated Financial Statements and Supplementary Data for additional information regarding the amendment to our Credit Agreement.

The interest rates applicable to the revolving credit facility are, at the Company's option, either:

a) the LIBOR multiplied by the statutory reserve rate plus an interest margin ranging from 1.50% to 2.25% based on the Company's consolidated leverage ratio, or
b) a base rate (which is equal to the greatest of (i) Citibank's prime rate, (ii) the federal funds effective rate plus 0.50% and (iii) the one-month LIBOR plus 1.00% plus an interest margin ranging from 0.50% to 1.25% based on the Company's consolidated leverage ratio.

HMS pays an unused commitment fee on the revolving credit facility during the term of the Credit Agreement ranging from 0.375% to 0.50% per annum based on the consolidated leverage ratio.

Interest expense and the commitment fees on the unused portion of the Company's revolving credit facility are as follows (*in thousands*):

	December 31,		
	2016	2015	2014
Interest expense	$ 4,837	$ 4,117	$ 4,186
Commitment fees	$ 1,518	$ 1,513	$ 1,465

At December 31, 2016 and 2015, the unamortized balance of deferred financing costs was $2.8 million and $4.9 million, respectively. HMS amortized $2.1 million in December 31, 2016, 2015 and 2014, respectively, of interest expense related to the Company's deferred financing costs.

As part of a contractual agreement with a customer, the Company has an outstanding irrevocable letter of credit for $3.0 million, which was established against the existing revolving credit facility. On May 1, 2017, the expiration date of the letter of credit was extended to April 26, 2018.

8. Equity

(a) Share Repurchase

On July 30, 2015, the Company's Board of Directors approved a share repurchase program authorizing the repurchase of up to $75 million of the Company's common stock from time to time on the open market or in privately negotiated transactions. The repurchase program is authorized through July 30, 2017, and may be suspended or discontinued at any time. Repurchased shares will be available for use in connection with issuance under the Company's stock plans and for other corporate purposes. Repurchases may also be made under a Rule 10b5-1 plan, which would permit shares to be repurchased when HMS might otherwise be precluded from doing so under insider trading laws. The timing and amount of any shares repurchased under the program will be determined by management based on its evaluation of market conditions and other factors. During the year ended December 31, 2016, the Company repurchased $20 million of the Company's common stock pursuant to this authorization and 10b5-1 plans. All repurchases were made using cash resources.

Following are the Company's monthly stock repurchases for the fourth quarter of fiscal year 2016, all of which were made as part of publicly announced plans or programs:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Program[1]	Approximate Dollar Value of Shares That May Yet Be Purchased Under the Program
October 1, 2016 to October 31, 2016	—	$ —	—	$ —
November 1, 2016 to November 30, 2016	570,717	17.61	570,717	15,000,000
December 1, 2016 to December 31, 2016	569,615	18.25	569,615	5,000,000
October 1, 2016 to December 31, 2016	**1,140,332**	**$ 17.93**	**1,140,332**	**$ 5,000,000**

(1) Represents shares repurchased through the Company's Share Repurchase Program publicly announced in August 2015.

(b) Preferred Stock

The Company's certificate of incorporation, as amended, authorizes the issuance of up to 5,000,000 shares of "blank check" preferred stock with such designations, rights and preferences as may be determined by the Company's Board of Directors. As of December 31, 2016, no preferred stock had been issued.

9. Employee Benefit Plan

The Company sponsors the 401(k) Plan for eligible employees. Eligible employees must complete 90 days of service in order to enroll in the 401(k) Plan. Participants may make voluntary contributions to the 401(k) Plan of up to 60% of their annual base pre-tax compensation not to exceed the federally determined maximum allowable contribution. In addition, the 401(k) Plan permits the Company to make discretionary contributions. During 2016, 2015 and 2014 HMS matched 100% of the first 3% of pay contributed by each eligible employee and 50% on the next 2% of pay contributed. These matching contributions vest immediately and are not in the form of the Company's common stock.

For the years ended December 31, 2016, 2015 and 2014, HMS contributed $4.8 million, $4.8 million and $5.0 million, respectively, to the 401(k) Plan in the form of matching contributions.

10. Stock-Based Compensation

Stock-Based Compensation Expense

Total stock-based compensation expense in the Company's Consolidated Statements of Income related to the Company's long-term incentive award plans was as follows *(in thousands)*:

	December 31,		
	2016	2015	2014
Cost of services-compensation	$ 3,805	$ 6,242	$ 5,075
Selling, general and administrative	9,472	8,055	8,280
Total	$ 13,277	$ 14,297	$ 13,355

Stock Options

Stock-based compensation expense related to stock options was approximately $6.9 million, $6.4 million and $7.6 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Presented below is a summary of stock option activity for the year ended December 31, 2016 (*in thousands except for weighted average exercise price and weighted average remaining contractual terms*):

	Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Terms	Aggregate Intrinsic Value
Outstanding at December 31, 2015	5,030	$ 17.37		
Granted	1,078	14.07		
Exercised	(511)	7.03		
Forfeitures	(67)	17.76		
Expired	(339)	22.67		
Outstanding at December 31, 2016	5,191	17.35	5.00	$ 12,854
Expected to vest at December 31, 2016	2,207	15.22	5.72	7,219
Exercisable at December 31, 2016	2,150	$ 20.25	4.02	$ 3,042

The weighted-average grant-date fair value per share of the stock options granted during the years ended December 31, 2016, 2015 and 2014 was $5.55, $5.37 and $7.59, respectively. HMS estimated the fair value of each stock option grant on the date of grant using a Black-Scholes option pricing model and weighted–average assumptions set forth in the following table:

	December 31,		
	2016	2015	2014
Expected dividend yield	0%	0%	0%
Risk-free interest rate	1.20%	1.54%	1.57%
Expected volatility	44.01%	40.62%	38.18%
Expected life (years)	4.90	4.89	4.82

During the years ended December 31, 2016, 2015 and 2014, the Company issued 510,512, 577,559 and 516,552 shares, respectively, of the Company's common stock upon the exercise of outstanding stock options and received proceeds of $2.9 million, $4.2 million and $4.1 million, respectively. The total intrinsic value of stock options exercised during the years ended December 31, 2016, 2015 and 2014 was $6.3 million, $5.9 million and $6.5 million, respectively.

As of December 31, 2016, there was approximately $12.7 million of total unrecognized compensation cost related to stock options outstanding, which is expected to be recognized over a weighted average period of 1.05 years.

The excess tax benefit from the exercise of stock options for the years ended December 31, 2016, 2015 and 2014 was $1.9 million, $1.6 million and $1.8 million, respectively.

Restricted Stock Units

Stock-based compensation expense related to restricted stock units was $6.4 million, $7.9 million and $5.7 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Presented below is a summary of restricted stock units activity for the year ended December 31, 2016 *(in thousands, except for weighted average grant date fair value per unit):*

	Number of Units	Weighted Average Grant Date Fair Value per Unit
Outstanding balance at December 31, 2015	1,154	$ 18.85
Granted	637	14.26
Vesting of restricted stock units, net of units withheld for taxes	(193)	18.64
Units withheld for taxes	(102)	18.64
Forfeitures	(83)	16.95
Outstanding balance at December 31, 2016	1,413	$ 16.44

As of December 31, 2016, 1,231,736 restricted stock units remained unvested and there was approximately $14.1 million of unrecognized compensation cost related to restricted stock units, which is expected to be recognized over a weighted average vesting period of 0.92 years.

11. Earnings per Share

The following table sets forth the computation of basic and diluted earnings per share *(in thousands, except per share data)*:

	Years ended December 31,		
	2016	2015	2014
Net income	$ 37,636	$ 24,527	$ 13,947
Weighted average common shares outstanding-basic	84,221	87,881	87,673
Plus: net effect of dilutive stock options and restricted common shares	2,766	480	491
Weighted average common shares outstanding-diluted	86,987	88,361	88,164
Net income per common share-basic	$ 0.45	$ 0.28	$ 0.16
Net income per common share-diluted	$ 0.43	$ 0.28	$ 0.16

For the years ended December 31, 2016, 2015 and 2014, 2,070,771, 3,480,458 and 2,442,628 stock options, respectively, were not included in the diluted earnings per share calculation because the effect would have been anti-dilutive. For the years ended December 31, 2016, 2015 and 2014, restricted stock units representing 46,651, 305,999 and 90,905 shares of common stock, respectively, were not included in the diluted earnings per share calculation because the effect would have been anti-dilutive.

12. Commitments and Contingencies

(a) Lease Commitments

The Company leases office space, data processing equipment and software licenses under operating leases that expire on various dates through 2024. The lease agreements provide for rent escalations. Lease expense, exclusive of sublease income, for the year ended December 31, 2016, 2015 and 2014 was $5.0 million, $5.4 million and $6.9 million, respectively. Lease and sublease income was approximately $27,000, $25,000 and $42,000 for the years ended December 31, 2016, 2015 and 2014, respectively.

Minimum annual lease payments to be made both under capital leases and operating leases, net of nominal sublease payments to be received for each of the next five years ending December 31 and thereafter are as follows (*in thousands*):

	Capital Lease Payments	Operating Lease Payments
2017	$ 4	$ 16,077
2018	-	6,304
2019	-	4,294
2020	-	3,815
2021	-	3,226
Thereafter	-	4,852
Total	4	$ 38,568
Less: Interest	-	
Total	$ 4	

(b) Litigation

Dennis Demetre and Lori Lewis: In July 2012, Dennis Demetre and Lori Lewis (the "Plaintiffs"), filed an action in the Supreme Court of the State of New York against HMS Holdings Corp., claiming an undetermined amount of damages alleging that various actions by HMS unlawfully deprived the Plaintiffs of the acquisition earn-out portion of the purchase price for Allied Management Group Special Investigation Unit ("AMG") under the applicable Stock Purchase Agreement (the "SPA") and that HMS had breached certain contractual provisions under the SPA. The Plaintiffs filed a second amended complaint with two causes of action for breach of contract and one cause of action for breach of implied covenant of good faith and fair dealing. HMS asserted a counterclaim against Plaintiffs for breach of contract based on contractual indemnification costs, including attorneys' fees arising out of the Company's defense of AMG in *Kern Health Systems v. AMG, Dennis Demetre and Lori Lewis* (the "California Action"), which are recoverable under the SPA. Mediation took place in September 2014 but the matter was not resolved. In June 2016, Kern Health Systems and AMG entered into a settlement agreement that resolved all claims in the California Action.

In January 2016, HMS moved for summary judgment on its counterclaim for breach of contract and for summary judgment on the Plaintiffs' breach of contract causes of action against HMS (HMS did not move for summary judgment on Plaintiffs' breach of implied covenant of good faith and fair dealing claim). The motions were argued on June 22, 2016. A decision on the motions has not yet been issued by the Court and a trial date has not been set. HMS continues to believe that the Plaintiffs' claims are without merit and will continue to vigorously defend against them.

Shareholder Proceedings: On March 3, 2017, a putative securities class action was filed in the Federal District Court for the District of New Jersey, entitled *Danahar v. HMS Holdings Corp., et al*. The complaint names the Company, its Chief Executive Officer, and its Chief Financial Officer as defendants and arises out of the Company's disclosure on March 2, 2017 that the filing of its 2016 Form 10-K would be delayed in order to permit the Company to complete the Company's previously disclosed review of its estimated liability for appeals and related internal control over financial reporting, and that the Company's auditor had informed the Company that it had identified what it believed was a material weakness in the Company's internal control over financial reporting related to the CMS reserves. The complaint alleges that the Company's Form 10-K for the period ended December 31, 2015 and its quarterly reports on Form 10-Q for the period January 1, 2016 to September 30, 2016 were false and misleading for failing to disclose the matters set forth above. On May 19, 2017, the New Jersey District Court granted the defendants' motion to transfer the action to the United States District Court for the Northern District of Texas. The action is at its early stages, and the Company has not yet responded to the complaint.

From time to time, HMS may be subject to investigations, legal proceedings and other disputes arising in the ordinary course of the Company's business, including but not limited to regulatory audits, billing and contractual disputes, employment-related matters and post-closing disputes related to acquisitions. Due to the Company's contractual relationships, including those with federal and state government entities, HMS's operations, billing and business practices are subject to scrutiny and audit by those entities and other multiple agencies and levels of government, as well as to frequent transitions and changes in the personnel responsible for oversight of the Company's contractual performance. HMS may have contractual disputes with its customers arising from differing interpretations of contractual provisions that define the Company's rights, obligations, scope of work or terms of payment, and with associated claims of liability for inaccurate or improper billing for reimbursement of contract fees, or for sanctions or damages for alleged performance deficiencies. Resolution of such disputes may involve litigation or may require that HMS accept some amount of loss or liability in order to avoid customer abrasion, negative marketplace perceptions and other disadvantageous results that could affect the Company's business, financial condition, results of operations and cash flows.

HMS records accruals for outstanding legal matters when it believes it is probable that a loss will be incurred and the amount can be reasonably estimated. The Company evaluates, on a quarterly basis, developments in legal matters that could affect the amount of any accrual and developments that would make a loss contingency both probable and reasonably estimable. If a loss contingency is not both probable and estimable, HMS does not establish an accrued liability.

13. Customer Concentration

(a) Geographic Information

The Company operates within the United States.

(b) Major Customers

For the years ended December 31, 2016, 2015 and 2014 no one individual Company customer accounted for more than 10% of the Company's total revenue.

(c) Concentration of Revenue

The composition of the Company's ten largest customer's changes periodically. For the years ended December 31, 2016, 2015 and 2014, the Company's ten largest customers represented 40.6%, 44.0% and 40.1% of HMS' total revenue, respectively. The Company's agreements with the ten current largest customers expire between 2017 and 2020. In many instances, HMS provides services pursuant to agreements that may be renewed or subject to a competitive reprocurement process. Several of the Company's contracts, including those with some of its largest customers, may be terminated for convenience.

14. Subsequent Events

(a) Credit Agreement

On March 8, 2017, Amendment No. 1 to the Credit Agreement was executed which amended, among other things, the Company's requirement to furnish to Citibank, N.A., as administrative agent, and the lenders party to the Credit Agreement, financial statements and other information within 90 days of the fiscal year end to 180 days for the fiscal year ended December 31, 2016. These financial statements include the audited consolidated balance sheet and related statements of income, stockholders' equity and cash flows of the Company and its subsidiaries.

(b) Eliza Holding Corp. Acquisition

On April 17, 2017, the Company completed its previously announced acquisition of Eliza Holding Corp. ("Eliza"), a Delaware Company, pursuant to an Agreement and Plan of Merger dated March 10, 2017 (the "Merger Agreement"), for a cash purchase price of approximately $172.0 million, after adjustments for working capital, cash, transaction expenses and indebtedness. The acquisition was funded with available liquidity, consisting of approximately 75% cash on hand and approximately 25% of borrowings under the Company's credit facility. The purchase price is subject to certain post-closing purchase price adjustments.

The Merger Agreement was entered into by and among the Company, Echo Acquisition Sub, Inc., a Delaware corporation and an indirect wholly owned subsidiary of the Company (the "Merger Sub"), Eliza, and Parthenon Investors III, L.P., a Delaware limited partnership, solely in its capacity as the representative for equity holders of Eliza. Under the terms of the Merger Agreement, the Merger Sub merged with and into Eliza (the "Merger") and Eliza continued as the surviving corporation becoming an indirect wholly owned subsidiary of the Company.

The Merger Agreement contains customary representations, warranties and covenants. The Merger Agreement also contains indemnification provisions that are subject to specified limitations, including recourse to a representation and warranty insurance policy for certain losses.

In connection with the preparation of these audited consolidated financial statements, an evaluation of subsequent events was performed through the date these audited consolidated financial statements were issued and, other than the events above, there are no other events that have occurred that would require adjustments or disclosure to the Company's audited consolidated financial statements.

15. Quarterly Financial Data (Unaudited)

The table below summarizes the Company's unaudited quarterly operating results for the last two fiscal years (*in thousands, except per share amounts*):

Year ended December 31, 2016	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Revenue	$ 119,763	$ 123,550	$ 124,604	$ 125,590
Operating income	$ 9,909	$ 16,352	$ 12,650	$ 18,758
Net income	$ 4,560	$ 8,566	$ 13,508	$ 11,002
Net income per common share - basic	$ 0.05	$ 0.10	$ 0.16	$ 0.14
Net income per common share - diluted	$ 0.05	$ 0.10	$ 0.16	$ 0.12
Revenue, as reported	$ 119,763	$ 123,550	$ 124,604	$ 125,590
Revenue, as revised	$ 119,758	$ 121,512	$ 122,860	
Selling, general and administrative expenses, as reported	$ 22,930	$ 22,227	$ 24,875	$ 23,136
Selling, general and administrative expenses, as revised	$ 22,925	$ 20,189	$ 23,131	

During the fourth quarter of 2016, the Company identified a material weakness in accounting for its accounts receivable allowance, resulting in overstatements of revenue and of selling, general and administrative expenses for the quarters ended March 31, 2016 of $5,050, June 30, 2016 of $2,038,000, and September 30, 2016 of $1,744,244. Due to the immaterial nature of the error, the Company revised the quarterly financial information above, and will revise the quarterly information for 2016 when it is presented in future filings.

Year ended December 31, 2015	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Revenue	$ 110,324	$ 116,934	$ 118,444	$ 128,514
Operating income	$ 7,981	$ 11,752	$ 13,016	$ 14,823
Net income	$ 3,522	$ 5,418	$ 6,862	$ 8,725
Net income per common share - basic	$ 0.04	$ 0.06	$ 0.08	$ 0.10
Net income per common share - diluted	$ 0.04	$ 0.06	$ 0.08	$ 0.10

SCHEDULE II – VALUATION AND QUALIFYING ACCOUNTS
For the years ended December 31, 2016, 2015 and 2014

Accounts receivable allowance and Estimated liability for appeals as of December 31, 2016, 2015 and 2014 are as follows:

Accounts receivable allowance *(in thousands)*:

	Balance at Beginning of Year	Provision	Recoveries	Charge-offs	Balance at End of Year
Year ended December 31, 2014	$ 15,899	12,861	(17)	(19,384)	$ 9,359
Year ended December 31, 2015	$ 9,359	8,046	(100)	(5,841)	$ 11,464
Year ended December 31, 2016	$ 11,464	21,583	108	(22,383)	$ 10,772

Estimated liability for appeals *(in thousands)*:

	Balance at Beginning of Year	Provision	Appeals found in providers favor	Balance at End of Year
Year ended December 31, 2014	$ 19,853	1,459	(1,998)	$ 19,314
Year ended December 31, 2015	$ 19,314	2,610	(9,123)	$ 12,801
Year ended December 31, 2016	$ 12,801	721	(2,396)	$ 11,126

The above chart represents the CMS estimated reserve liability only. See Note 1 - "Business and Summary of Significant Accounting Policies" in our Notes to the Consolidated Financial Statements under Item 8. Consolidated Financial Statements and Supplementary Data for additional information regarding the estimated liability for appeals.

HMS HOLDINGS CORP. AND SUBSIDIARIES
Exhibit Index

Where an exhibit is filed by incorporation by reference to a previously filed registration statement or report, such registration statement or report is identified after the description of the exhibit.

Exhibit Number	Description
2.1	Agreement and Plan of Merger among Health Management Systems, Inc., HMS Holdings Corp. and HMS Acquisition Corp. dated December 16, 2002 (incorporated by reference to Exhibit A to HMS Holdings Corp.'s Prospectus and Proxy Statement (Reg No. 333-100521) as filed with the SEC on January 24, 2003)
2.2	Agreement and Plan of Merger, between the HMS Holdings Corp., a Delaware corporation and HMS Holdings Corp., a New York corporation dated July 17, 2013 (incorporated by reference to Exhibit 2.1 to HMS Holding Corp.'s Current Report on Form 8-K/12g-3 (File No. 000-50194) as filed with the SEC on July 23, 2013)
3.1	Conformed copy of Certificate of Incorporation of HMS Holdings Corp., as amended through July 9, 2015 (incorporated by reference to Exhibit 3.1 to HMS Holding Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on August 10, 2015)
3.2	Amended and Restated Bylaws of HMS Holdings Corp. dated May 4, 2016 (incorporated by reference to Exhibit 3.2 to HMS Holdings Corp.'s Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on May 5, 2016)
4.1	Specimen Common Stock Certificate (incorporated by reference to Exhibit 4.1 to HMS Holding Corp.'s Current Report on Form 8-K/12g-3 (File No. 000-50194) as filed with the SEC on July 23, 2013)
4.2	See Exhibits 3.1 and 3.2 for provisions defining the rights of holders of common stock of HMS Holdings Corp.
10.1†	HMS Holdings Corp. Fourth Amended and Restated 2006 Stock Plan (the "2006 Stock Plan") (incorporated by reference to Exhibit 3.1 to HMS Holdings Corp.'s Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on July 12, 2011)
10.2†	Amendment No. 1 to the 2006 Stock Plan (incorporated by reference to Exhibit 10.6 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2012)
10.3†	Form of 2010 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.2 to HMS Holdings Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 8, 2010)
10.4†	Form 2010 Employee Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.4 to HMS Holdings Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) filed with the SEC on November 8, 2010)
10.5†	Form of 2011 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.16 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2012)
10.6†	Form of 2011 Employee Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.18 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2012)
10.7†	Form of 2012 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.20 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2013)
10.8†	Form of 2012 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.22 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2013)

Exhibit Number	Description
10.9†	Form of 2013 Executive Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.24 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2013)
10.10†	Form of 2013 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.1 to HMS Holding Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 12, 2014)
10.11†	Form of 2013 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.3 to HMS Holding Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 12, 2014)
10.12†	Form of March 2014 Executive Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.4 to HMS Holding Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 12, 2014)
10.13†	Form of November 2014 Executive Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.1 to HMS Holding Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 10, 2014)
10.14†	Form of 2014 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.26 to HMS Holding Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 2, 2015)
10.15†	Form of 2014 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.28 to HMS Holding Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 2, 2015)
10.16†	Form of March 2015 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference Exhibit 10.1 to HMS Holding Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 11, 2015)
10.17†	Form of March 2015 Executive Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference Exhibit 10.2 to HMS Holding Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 11, 2015)
10.18†	Form of 2015 Director Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.21 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2016)
10.19†	Form of 2015 Director Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.22 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2016)
10.20†	Form of November 2015 Executive Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.23 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2016)
10.21†	Form of 2016 Executive and Senior Vice President Non-Qualified Stock Option Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.1 to HMS Holdings Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 10, 2016)
10.22†	Form of 2016 Executive and Senior Vice President Restricted Stock Unit Agreement under the 2006 Stock Plan (incorporated by reference to Exhibit 10.2 to HMS Holdings Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 10, 2016)
10.23†	HMS Holdings Corp. 2016 Omnibus Incentive Plan ("the "2016 Omnibus Plan") (incorporated by reference to Exhibit 10.2 to HMS Holdings Corp.'s Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on June 27, 2016)

Exhibit Number	Description
10.24†	Form of Non-Qualified Stock Option Award Agreement for Employees under the 2016 Omnibus Plan (incorporated by reference to Exhibit 10.1 to HMS Holdings Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 9, 2016)
10.25†	Form of Restricted Stock Unit Award Agreement for Employees under the 2016 Omnibus Plan (incorporated by reference to Exhibit 10. to HMS Holdings Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 9, 2016)
10.26†	Form of Non-Qualified Stock Option Award Agreement for Non-Employee Directors under the 2016 Omnibus Plan (incorporated by reference to Exhibit 10.3 to HMS Holdings Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 9, 2016)
10.27†	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors under the 2016 Omnibus Plan (incorporated by reference to Exhibit 10.4 to HMS Holdings Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on November 9, 2016)
10.28†	HDI Holdings, Inc. Amended 2011 Stock Option and Stock Issuance Plan (the "HDI 2011 Stock Plan") (incorporated by reference to Exhibit 10.21 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2012)
10.29†	Form of 2011 Employee Non-Qualified Stock Option Agreement under the HDI 2011 Stock Plan (incorporated by reference to Exhibit 10.22 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on February 29, 2012)
10.30†	Executive Employment Agreement between William C. Lucia and HMS Holdings Corp. dated March 1, 2013 (incorporated by reference to Exhibit 10.20 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2013)
10.31†	Letter of Amendment to Executive Employment Agreement between William C. Lucia and HMS Holdings Corp. dated April 30, 2013 (incorporated by reference to Exhibit 10.1 to Amendment No. 1 to HMS Holdings Corp.'s Annual Report on Form 10-K/A (File No. 000-50194) as filed with the SEC on April 30, 2013)
10.32†	Second Amendment to Executive Employment Agreement between HMS Holdings Corp. and William C. Lucia dated January 20, 2015 (incorporated by reference to Exhibit 10.1 to HMS Holding Corp.'s Current Report on Form 8-K (Filed No. 000-50194) as filed with the SEC on January 23, 2015)
10.33†	Employment Agreement between Jeffrey S. Sherman and HMS Holdings Corp. dated July 28, 2014 (incorporated by reference to Exhibit 10.1 to HMS Holdings Corp.'s Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on September 8, 2014)
10.34†	Employment Agreement between Semone Wagner and HMS Holdings Corp. dated January 16, 2013 (incorporated by reference to Exhibit 99.2 to HMS Holding Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 3, 2014)
10.35†	Employment Agreement between Cynthia Nustad and HMS Business Services, Inc. dated May 15, 2012 (incorporated by reference to Exhibit 10.47 to Amendment No. 1 to HMS Holding Corp.'s Annual Report on Form 10-K/A (File No. 000-50194) as filed with the SEC on April 30, 2015)
10.36†	Employment Agreement between Douglas M. Williams and HMS Holdings Corp. dated November 13, 2013 (incorporated by reference to Exhibit 10.33 to HMS Holdings Corp.'s Annual Report on Form 10-K (File No. 000-50194) as filed with the SEC on March 1, 2016)
10.37†	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.1 to HMS Holdings Corp.'s Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on August 6, 2014)
10.38†	HMS Holdings Corp. Director Deferred Compensation Plan, as amended through June 29, 2016 (incorporated by reference to Exhibit 10.3 to HMS Holdings Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on August 9, 2016)

Exhibit Number	Description
10.39†	2016 HMS Holdings Corp. Annual Incentive Compensation Plan as amended and restated (incorporated by reference to Exhibit 10.1 to HMS Holdings Corp.'s Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on June 27, 2016)
10.40	Credit Agreement dated May 3, 2013 among HMS Holdings Corp., the Guarantors Party thereto, the Lenders party thereto and Citibank, N.A. as Administrative Agent (incorporated by reference to Exhibit 10.1 to HMS Holdings Corp.'s Current Report on Form 8-K (File No. 000-50194) as filed with the SEC on May 6, 2013)
10.41	HDI Lease between New Russell One LLC and HMS Business Services, Inc. dated February 27, 2014 (incorporated by reference to Exhibit 10.5 to HMS Holdings Corp.'s Quarterly Report on Form 10-Q (File No. 000-50194) as filed with the SEC on May 12, 2014)
21.1*	HMS Holdings Corp. List of Subsidiaries
23.1*	Consent of Independent Registered Public Accounting Firm
31.1*	Rule 13a-14(a)/15d-14(a) Certification of the Principal Executive Officer of HMS Holdings Corp., as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2*	Rule 13a-14(a)/15d-14(a) Certification of the Principal Financial Officer of HMS Holdings Corp., as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1‡	Section 1350 Certification of the Principal Executive Officer of HMS Holdings Corp., as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2‡	Section 1350 Certification of the Principal Financial Officer of HMS Holdings Corp., as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document

† Indicates a management contract or compensatory plan, contract or arrangement
* Filed herewith
‡ Furnished herewith

Exhibit 21.1

HMS HOLDINGS CORP.
LIST OF SUBSIDIARIES

Subsidiary	State of Incorporation
Health Management Systems, Inc.	New York
Permedion, Inc. [1]	New York
Reimbursement Services Group Inc.	New York
IntegriGuard, LLC (*DBA — HMS Federal*)	Delaware
HealthDataInsights, Inc.	Nevada
Allied Management Group Special Investigations Unit, Inc.	California
HMS Care Analytics, Inc.	Delaware
Essette, Inc. [2]	Colorado
Eliza Holding Corp. [2]	Delaware
Eliza Corporation [3]	Delaware
ElizaLive, Inc. [4]	Delaware

[1] Wholly-owned by Health Management Systems, Inc.

[2] Wholly-owned by HMS Care Analytics, Inc.

[3] Wholly-owned by Eliza Holding Corp.

[4] Wholly-owned by Eliza Corporation

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

The Board of Directors
HMS Holdings Corp.:

We consent to the incorporation by reference in the registration statements (Nos. 333-161415, 333-149836, 333-139025, 333-178752, 333-183361 and 333-212319) on Form S-8 of HMS Holdings Corp. of our reports dated June 6, 2017, with respect to the consolidated balance sheets of HMS Holdings Corp. as of December 31, 2016 and 2015, and the related consolidated statements of income, shareholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2016, and the related financial statement schedule, and the effectiveness of internal control over financial reporting as of December 31, 2016, which reports appear in the December 31, 2016 annual report on Form 10-K of HMS Holdings Corp.

Our report dated June 6, 2017, on the effectiveness of internal control over financial reporting as of December 31, 2016, expresses our opinion that HMS Holdings Corp. did not maintain effective internal control over financial reporting as of December 31, 2016 because of the effect of material weaknesses on the achievement of the objectives of the control criteria and contains an explanatory paragraph that states the Company did not maintain an effective control environment based on a lack of established reporting lines and defined authorities and responsibilities for financial reporting, or conduct an effective risk assessment process on a periodic basis to assess the effects of changes in business operations and turnover of its employees that significantly impacts its financial processes and internal control over financial reporting. As a result, the Company did not design and implement effective control activities and management review controls over the estimated liability of appeals or the accounts receivable allowance, including controls over the completeness and accuracy of data used to calculate the respective account balances.

/s/ KPMG LLP
(signed) KPMG LLP

Dallas, Texas
June 6, 2017

Exhibit 31.1

Certification

I, William C. Lucia, certify that:

1. I have reviewed this Annual Report on Form 10-K of HMS Holdings Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: June 6, 2017

/s/ William C. Lucia
William C. Lucia
Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

Certification

I, Jeffrey S. Sherman, certify that:

1. I have reviewed this Annual Report on Form 10-K of HMS Holdings Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: June 6, 2017

/s/ Jeffrey S. Sherman
Jeffrey S. Sherman
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

Certification Pursuant To 18 U.S.C. Section 1350 As Adopted Pursuant To Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of HMS Holdings Corp. (the "*Company*") on Form 10-K for the year ended December 31, 2016 as filed with the Securities and Exchange Commission (the "*Report*"), I, William C. Lucia, Chief Executive Officer of the Company, hereby certify, to the best of my knowledge, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ William C. Lucia
William C. Lucia
Chief Executive Officer
(Principal Executive Officer)

Date: June 6, 2017

Exhibit 32.2

Certification Pursuant To 18 U.S.C. Section 1350 As Adopted Pursuant To Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of HMS Holdings Corp. (the "*Company*") on Form 10-K for the year ended December 31, 2016 as filed with the Securities and Exchange Commission (the "*Report*"), I, Jeffrey S. Sherman, Chief Financial Officer of the Company, hereby certify, to the best of my knowledge, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) the Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Jeffrey S. Sherman
Jeffrey S. Sherman
Chief Financial Officer
(Principal Financial Officer)

Date: June 6, 2017

This page is intentionally left blank

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2018

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number: 1-10864

UNITEDHEALTH GROUP®

UnitedHealth Group Incorporated
(Exact name of registrant as specified in its charter)

Delaware	**41-1321939**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
UnitedHealth Group Center **9900 Bren Road East** **Minnetonka, Minnesota**	**55343**
(Address of principal executive offices)	**(Zip Code)**

(952) 936-1300
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

COMMON STOCK, $.01 PAR VALUE	**NEW YORK STOCK EXCHANGE, INC.**
(Title of each class)	**(Name of each exchange on which registered)**

Securities registered pursuant to Section 12(g) of the Act: NONE

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one)

Large accelerated filer ☒	Accelerated filer ☐
Non-accelerated filer ☐	Smaller reporting company ☐
	Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the registrant as of June 30, 2018 was $234,490,429,732 (based on the last reported sale price of $245.34 per share on June 30, 2018, on the New York Stock Exchange), excluding only shares of voting stock held beneficially by directors, executive officers and subsidiaries of the registrant.

As of January 31, 2019, there were 959,538,515 shares of the registrant's Common Stock, $.01 par value per share, issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The information required by Part III of this report, to the extent not set forth herein, is incorporated by reference from the registrant's definitive proxy statement relating to its 2019 Annual Meeting of Shareholders. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

UNITEDHEALTH GROUP

Table of Contents

PART I

ITEM 1. BUSINESS

INTRODUCTION

Overview

UnitedHealth Group is a diversified health care company dedicated to helping people live healthier lives and helping make the health system work better for everyone. The terms "we," "our," "us," "its," "UnitedHealth Group," or the "Company" used in this report refer to UnitedHealth Group Incorporated and its subsidiaries.

Through our diversified family of businesses, we leverage core competencies in data and health information; advanced technology; and clinical expertise. These core competencies are deployed within our two distinct, but strategically aligned, business platforms: health benefits operating under UnitedHealthcare and health services operating under Optum.

UnitedHealthcare provides health care benefits to an array of customers and markets. UnitedHealthcare Employer & Individual serves employers ranging from sole proprietorships to large, multi-site and national employers, public sector employers and individual consumers. UnitedHealthcare Medicare & Retirement delivers health and well-being benefits for Medicare beneficiaries and retirees. UnitedHealthcare Community & State manages health care benefit programs on behalf of state Medicaid and community programs and their participants. UnitedHealthcare Global includes the provision of health and dental benefits and hospital and clinical services to employer groups and individuals in South America, and other diversified global health businesses.

Optum is a health services business serving the broad health care marketplace, including payers, care providers, employers, governments, life sciences companies and consumers, through its OptumHealth, OptumInsight and OptumRx businesses. These businesses have dedicated units that help improve overall health system performance through optimizing care quality, reducing costs and improving consumer experience and care provider performance, leveraging distinctive capabilities in data and analytics, pharmacy care services, population health, health care delivery and health care operations.

Through UnitedHealthcare and Optum, in 2018, we processed more than three-quarters of a trillion dollars in gross billed charges and we managed more than $250 billion in aggregate health care spending on behalf of the customers and consumers we serve. Our revenues are derived from premiums on risk-based products; fees from management, administrative, technology and consulting services; sales of a wide variety of products and services related to the broad health care industry; and investment and other income. Our two business platforms have four reportable segments:

- UnitedHealthcare, which includes UnitedHealthcare Employer & Individual, UnitedHealthcare Medicare & Retirement, UnitedHealthcare Community & State and UnitedHealthcare Global;
- OptumHealth;
- OptumInsight; and
- OptumRx.

UnitedHealthcare

Through its health benefits offerings, UnitedHealthcare is enabling better health, helping to control rising health care costs and creating a better health care experience for its customers. UnitedHealthcare's market position is built on:

- strong local-market relationships;

- the breadth of product offerings, which are responsive to many distinct market segments in health care;
- service and advanced technology, including digital consumer engagement;
- competitive medical and operating cost positions;
- effective clinical engagement;
- extensive expertise in distinct market segments; and
- innovation for customers and consumers.

UnitedHealthcare utilizes Optum's capabilities to help coordinate patient care, improve affordability of medical care, analyze cost trends, manage pharmacy benefits, work with care providers more effectively and create a simpler consumer experience.

In the United States, UnitedHealthcare arranges for discounted access to care through networks that include 1.3 million physicians and other health care professionals and more than 6,000 hospitals and other facilities.

UnitedHealthcare is subject to extensive government regulation. See further discussion of our regulatory environment below under "Government Regulation" and in Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

UnitedHealthcare Employer & Individual

UnitedHealthcare Employer & Individual offers an array of consumer-oriented health benefit plans and services nationwide for large national employers, public sector employers, mid-sized employers, small businesses, and individual consumers. UnitedHealthcare Employer & Individual provides access to medical services for 27 million people on behalf of our customers and alliance partners, including employer customers serving people across all 50 states, the District of Columbia and most U.S. territories. Products are offered through affiliates that are licensed as insurance companies, health maintenance organizations (HMOs), or third-party administrators (TPAs). Large employer groups typically use self-funded arrangements where UnitedHealthcare Employer & Individual earns a service fee. Smaller employer groups and individuals are more likely to purchase risk-based products because they are less willing or unable to bear a greater potential liability for health care expenditures.

Through its risk-based product offerings, UnitedHealthcare Employer & Individual assumes the risk of both medical and administrative costs for its customers in return for a monthly premium, which is typically a fixed rate per individual served for a one-year period. When providing administrative and other management services to customers that elect to self-fund the health care costs of their employees and employees' dependents, UnitedHealthcare Employer & Individual receives a fixed monthly service fee per individual served. These customers retain the risk of financing medical benefits for their employees and employees' dependents, while UnitedHealthcare Employer & Individual provides services such as coordination and facilitation of medical and related services to customers, consumers and health care professionals, administration of transaction processing and access to a contracted network of physicians, hospitals and other health care professionals, including dental and vision.

The consolidated purchasing capacity represented by the individuals served by UnitedHealth Group makes it possible for UnitedHealthcare Employer & Individual to contract for cost-effective access to a large number of conveniently located care professionals and facilities. UnitedHealthcare Employer & Individual has relationships with network care providers that integrate data and analytics, implement value-based payments and care management programs, and enable us to jointly better manage health care and improve quality across populations.

UnitedHealthcare Employer & Individual typically distributes its products through consultants or direct sales in the larger employer and public sector segments. In the smaller group segment of the commercial marketplace,

UnitedHealthcare Employer & Individual's distribution system consists primarily of direct sales and sales through collaboration with brokers and agents. UnitedHealthcare Employer & Individual also distributes products through wholesale agents or agencies that contract with health insurance carriers to distribute individual or group benefits and provide other related services to their customers. In addition, UnitedHealthcare Employer & Individual distributes its products through professional employer organizations, associations and through both multi-carrier and its own proprietary private exchange marketplaces.

UnitedHealthcare Employer & Individual's diverse product portfolio offers employers a continuum of benefit designs, price points and approaches to consumer engagement, which provides the flexibility to meet a full spectrum of their coverage needs.

UnitedHealthcare Employer & Individual's major product families include:

Traditional Products. Traditional products include a full range of medical benefits and network options, and offer a spectrum of covered services, including preventive care, direct access to specialists and catastrophic protection.

Consumer Engagement Products. Consumer engagement products couple plan design with financial accounts to increase individuals' responsibility for their health and well-being. This suite of products includes high-deductible consumer-driven benefit plans, which include health reimbursement accounts (HRAs), health savings accounts (HSAs) and consumer engagement services such as personalized behavioral incentive programs, consumer education and other digital offerings.

Clinical and Pharmacy Products. UnitedHealthcare Employer & Individual offers a comprehensive suite of clinical and pharmacy care services products, which complement its service offerings by improving quality of care, engaging consumers and providing cost-saving options. Consumers served by UnitedHealthcare Employer & Individual can access clinical products that help them make better health care decisions and better use of their medical benefits, which contribute to improved health and lowered medical expenses.

Each medical plan has a core set of clinical programs embedded in the offering, with additional services available depending on offering type (risk-based or self-funded), line of business (e.g., small business, key accounts, public sector, national accounts or individual consumers) and clinical need. UnitedHealthcare Employer & Individual's clinical programs include:

- wellness programs;
- decision support;
- utilization management;
- case and disease management;
- complex condition management;
- on-site programs, including biometrics and flu shots;
- incentives to reinforce positive behavior change;
- mental health/substance use disorder management; and
- employee assistance programs.

UnitedHealthcare Employer & Individual's comprehensive and integrated pharmacy care services promote lower costs by using formulary programs to produce better unit costs, encouraging consumers to use drugs that offer improved value and outcomes, helping consumers take actions to improve their health and supporting the appropriate use of drugs based on clinical evidence through physician and consumer education programs.

Specialty Offerings. Through its broad network, UnitedHealthcare Employer & Individual delivers dental, vision, hearing, life, transportation, critical illness and disability product offerings using an integrated approach in private and retail settings.

UnitedHealthcare Medicare & Retirement

UnitedHealthcare Medicare & Retirement provides health and well-being services to individuals age 50 and older, addressing their unique needs for preventive and acute health care services, as well as services dealing with chronic disease and other specialized issues common among older people. UnitedHealthcare Medicare & Retirement is fully dedicated to serving this growing senior market segment, providing products and services in all 50 states, the District of Columbia and most U.S. territories. UnitedHealthcare Medicare & Retirement has distinct pricing, underwriting, clinical program management and marketing capabilities dedicated to health products and services in this market.

UnitedHealthcare Medicare & Retirement offers a selection of products that allow people to obtain the health coverage and services they need as their circumstances change. UnitedHealthcare Medicare & Retirement is positioned to serve seniors who find that affordable, network-based care provided through Medicare Advantage plans meets their unique health care needs. For those who prefer traditional fee-for-service Medicare, UnitedHealthcare Medicare & Retirement offers both Medicare Supplement and Medicare Prescription Drug Benefit (Medicare Part D) prescription drug programs that supplement their government-sponsored Medicare by providing additional benefits and coverage options. UnitedHealthcare Medicare & Retirement services include care management and clinical management programs, a nurse health line service, 24-hour access to health care information, access to discounted health services from a network of care providers and administrative services.

UnitedHealthcare Medicare & Retirement has extensive distribution capabilities and experience, including direct marketing to consumers on behalf of its key clients, including AARP, the nation's largest membership organization dedicated to the needs of people age 50 and over, and state and U.S. government agencies. Products are also offered through employer groups and agent channels.

UnitedHealthcare Medicare & Retirement's major product categories include:

Medicare Advantage. UnitedHealthcare Medicare & Retirement provides health care coverage for seniors and other eligible Medicare beneficiaries primarily through the Medicare Advantage program administered by the Centers for Medicare & Medicaid Services (CMS), including Medicare Advantage HMO plans, preferred provider organization (PPO) plans, Point-of-Service plans, Private-Fee-for-Service plans and Special Needs Plans (SNPs). Under the Medicare Advantage program, UnitedHealthcare Medicare & Retirement provides health insurance coverage in exchange for a fixed monthly premium per member from CMS plus, in some cases, monthly consumer premiums. Premium amounts received from CMS vary based on the geographic areas in which individuals reside; demographic factors such as age, gender and institutionalized status; and the health status of the individual. Medicare Advantage plans are designed to compete at the local level, taking into account consumer and care provider preferences, competitor offerings, our quality and cost initiatives, our historical financial results and the long-term payment rate outlook for each geographic area. UnitedHealthcare Medicare & Retirement served 4.9 million people through its Medicare Advantage products as of December 31, 2018.

Built on more than 20 years of experience, UnitedHealthcare Medicare & Retirement's senior-focused care management model operates at a medical cost level below that of traditional Medicare, while helping seniors live healthier lives. Through our HouseCalls program, nurse practitioners performed 1.5 million in-home preventive care visits in 2018 to address unmet care opportunities and close gaps in care. Our Navigate4Me program provides a single point of contact and a direct line of support for individuals as they go through their health care experiences. For high-risk patients in certain care settings and programs, UnitedHealthcare Medicare & Retirement uses proprietary, automated medical record software that enables clinical care teams to capture and track patient data and clinical encounters, creating a comprehensive set of care information that bridges across

home, hospital and nursing home care settings. Proprietary predictive modeling tools help identify people at high risk and enable care managers to create individualized care plans that help them obtain the right care, in the right place, at the right time.

Medicare Part D. UnitedHealthcare Medicare & Retirement provides Medicare Part D benefits to beneficiaries throughout the United States and its territories through its Medicare Advantage and stand-alone Medicare Part D plans. The stand-alone Medicare Part D plans address a large spectrum of people's needs and preferences for their prescription drug coverage, including low-cost prescription options. Each of the plans includes the majority of the drugs covered by Medicare and provides varying levels of coverage to meet the diverse needs of Medicare beneficiaries. As of December 31, 2018, UnitedHealthcare enrolled 9.0 million people in the Medicare Part D programs, including 4.7 million individuals in the stand-alone Medicare Part D plans, with the remainder in Medicare Advantage plans incorporating Medicare Part D coverage.

Medicare Supplement. UnitedHealthcare Medicare & Retirement is currently serving 4.9 million seniors nationwide through various Medicare Supplement products in association with AARP. UnitedHealthcare Medicare & Retirement offers a full range of supplemental products at a diversity of price points. These products cover various levels of coinsurance and deductible gaps that seniors are exposed to in the traditional Medicare program.

Premium revenues from CMS represented 30% of UnitedHealth Group's total consolidated revenues for the year ended December 31, 2018, most of which were generated by UnitedHealthcare Medicare & Retirement.

UnitedHealthcare Community & State

UnitedHealthcare Community & State is dedicated to serving state programs that care for the economically disadvantaged, the medically underserved and people without the benefit of employer-funded health care coverage, in exchange for a monthly premium per member from the state program. In some cases, these premiums are subject to experience or risk adjustments. UnitedHealthcare Community & State's primary customers oversee Medicaid plans, including Temporary Assistance to Needy Families (TANF), Children's Health Insurance Programs (CHIP), Dual SNPs (DSNPs), Aged, Blind and Disabled and other federal, state and community health care programs. As of December 31, 2018, UnitedHealthcare Community & State participated in programs in 30 states and the District of Columbia, and served 6.5 million people; including 1 million people through Medicaid expansion programs in 15 states under the Patient Protection and Affordable Care Act (ACA).

States using managed care services for Medicaid beneficiaries select health plans by using a formal bid process or by awarding individual contracts. A number of factors are considered by UnitedHealthcare Community & State when choosing programs for participation, including the state's commitment and consistency of support for its Medicaid managed care program in terms of service, innovation and funding; the eligible population base, both immediate and long term; and the structure of the projected program. UnitedHealthcare Community & State works with its state customers to advocate for actuarially sound rates, commensurate with medical cost trends.

These health plans and care programs are designed to address the complex needs of the populations they serve, including the chronically ill, people with disabilities and people with a higher risk of medical, behavioral and social conditions. UnitedHealthcare Community & State administers benefits for the unique needs of children, pregnant women, adults, seniors and those who are institutionalized or are nursing home eligible. These individuals often live in areas that are medically underserved and are less likely to have a consistent relationship with the medical community or a care provider. They also often face significant social and economic challenges.

UnitedHealthcare Community & State leverages the national capabilities of UnitedHealth Group locally, supporting effective care management, strong regulatory partnerships, greater administrative efficiency, improved clinical outcomes and the ability to adapt to a changing national and local market environment. UnitedHealthcare Community & State coordinates resources among family, physicians, other health care

providers, and government and community-based agencies and organizations to facilitate continuous and effective care and often addresses other social determinants that can affect people's health status and health system usage.

Approximately 75% of the people in state Medicaid programs are served by managed care, but this population represents only 50% of total Medicaid spending. UnitedHealthcare Community & State's business development opportunities include entering fee-for-service markets converting to managed care, which represents a population of nearly 8 million people; and growing in existing managed care markets, including state expansions to populations with more complex needs requiring more sophisticated models of care. This expansion includes integrated care management of physical, behavioral, long-term care services and supports, and social services by applying strong data analytics and community-based collaboration.

UnitedHealthcare Community & State continues to evolve its clinical model to enhance quality and the clinical experience for the people it serves. The model enables UnitedHealthcare Community & State to quickly identify the people who could benefit most from more highly coordinated care; typically, the 5% who are most at risk drive over 50% of states' medical costs.

UnitedHealthcare Global

UnitedHealthcare Global serves 6.2 million people with medical benefits, residing principally in Brazil, Chile, Colombia and Peru but also in more than 130 other countries. UnitedHealthcare Global owns and operates more than 300 hospitals, specialty centers, primary care and emergency services clinics in South America and Portugal. UnitedHealthcare Global provides a comprehensive range of health and mobilization capabilities and supports the health systems of individual nations with support for improving health care financing and delivery. Clients include multi-national and local businesses, governments and individual consumers around the world.

Global Markets. UnitedHealthcare Global serves local populations in select markets around the world, primarily in Brazil; Chile; Colombia; Peru; and Portugal, by touching nearly every aspect of health care and leveraging expertise in clinical care management and health care data to improve outcomes, raise quality and constrain costs.

In Brazil, Amil provides health benefits to 4.1 million people through a broad network of owned and affiliated clinics, hospitals and care providers. Dental benefits are also provided to 2.2 million people. Amil's members have access to a provider network of physicians and other health care professionals, hospitals, laboratories and diagnostic imaging centers. Americas Serviços Médicos offers health care delivery in Brazil through hospitals, ambulatory clinics and surgery centers to Amil members and consumers served by the external payer market.

Empresas Banmédica provides health benefits and health care services to 2.1 million people in Chile, Colombia and Peru through a network of owned and affiliated clinics, hospitals and care providers. Empresas Banmédica owns and operates hospitals, clinics and outpatient centers.

Lusíadas Saúde provides clinical services to people in Portugal through an owned network of hospitals and outpatient clinics.

Global Solutions. UnitedHealthcare Global includes other diversified global health services with a variety of offerings for international customers.

Optum

Optum is a technology-enabled health services business serving the broad health care marketplace, including:

- Those who need care: the consumers who need the right support, information, resources and products to achieve their health goals.

- Those who provide care: pharmacies, hospitals, physicians, practices and other health care facilities seeking to modernize the health system and support the best possible patient care and experiences.
- Those who pay for care: employers, health plans, and state, federal and municipal agencies devoted to ensuring the populations they sponsor receive high-quality care, administered and delivered efficiently and effectively.
- Those who innovate for care: global life sciences organizations dedicated to developing more effective approaches to care, enabling technologies and medicines that improve care delivery and health outcomes.

Optum operates three business segments leveraging distinctive capabilities in data and analytics, pharmacy care services, population health, health care delivery and health care operations:

- OptumHealth focuses on care delivery, care management, wellness and consumer engagement, and health financial services;
- OptumInsight specializes in data and analytics and other health care information technology services, and delivers operational services and support; and
- OptumRx provides pharmacy care services.

OptumHealth

OptumHealth is a diversified health and wellness business serving the physical, emotional and health-related financial needs of 93 million unique individuals. OptumHealth enables population health through programs offered by employers, payers, government entities and directly with the care delivery system. OptumHealth products and services deliver value by improving quality and patient satisfaction while lowering cost. OptumHealth builds high-performing networks and centers of excellence across the care continuum, by working directly with physicians to advance population health and by coordinating care for the most medically complex patients.

OptumHealth serves patients and care providers through its local ambulatory care services business and delivers care through a physician-led, patient-centric and data-driven organization comprised of more than 35,000 employed, managed or contracted physicians. OptumHealth also enables care providers' transition from traditional, fee-for-service care delivery to performance- based delivery and payment models that improve the focus on patient health and outcomes, such as those emerging through accountable care organizations (ACOs) and local care provider partnerships. Through strategic partnerships, alliances and ownership arrangements, OptumHealth helps care providers adopt new approaches and technologies that improve the coordination of care across all providers involved in patient care. MedExpress' neighborhood care centers provide urgent and walk-in care services with a consumer-friendly approach and Surgical Care Affiliates' independent ambulatory surgical centers and surgical hospitals provide high-value surgical services at a substantially lower cost than a traditional in-patient hospital setting.

OptumServe provides a wide range of health services specifically tailored to active military and veterans and the agencies that support them.

OptumHealth serves people through population health services that meet both the preventive care and health intervention needs of consumers across the care continuum—physical health and wellness, mental health, complex medical conditions, disease management, hospitalization and post-acute care. This includes offering access to proprietary networks of provider specialists in many clinical specialties, including behavioral health, organ transplant, chiropractic and physical therapy. OptumHealth engages consumers in managing their health, including guidance, tools and programs that help them achieve their health goals and maintain healthy lifestyles.

Optum Financial Services, through Optum Bank, a wholly-owned subsidiary, serves consumers through 5.2 million health savings and other accounts approaching $10 billion in assets under management as of

December 31, 2018. During 2018, Optum Bank processed nearly $160 billion in digital medical payments to physicians and other health care providers. Organizations across the health system rely on Optum to manage and improve payment flows through its highly automated, scalable, digital payment systems.

OptumHealth offers its products on a risk basis, where it assumes responsibility for health care costs in exchange for a monthly premium per individual served, on an administrative fee basis, under which it manages or administers delivery of the products or services in exchange for a fixed monthly fee per individual served, or on a fee-for-service basis, where it delivers medical services to patients in exchange for a contracted fee. For its financial services offerings, OptumHealth charges fees and earns investment income on managed funds.

OptumHealth sells its products primarily through its direct sales force, strategic collaborations and external producers in three markets: employers (which includes the sub-markets of large, mid-sized and small employers), payers (which includes the sub-markets of health plans, TPAs, underwriter/stop-loss carriers and individual market intermediaries) and government entities (which includes states, CMS, the Department of Defense, the Veterans Administration and other federal procurement agencies).

OptumInsight

OptumInsight provides services, technology and health care expertise to major participants in the health care industry. OptumInsight's capabilities are focused on technology, research and consulting and managed services that help improve the quality of care and drive greater efficiency in the health care system. Technology includes population health and risk analytics, administrative and clinical technology for claims editing, risk adjustment and payment integrity, health information and electronic data exchange and technology strategy and management. Research and consulting helps organizations reduce administrative costs and implement best practices to improve clinical performance. Managed services provides solutions such as revenue cycle management, risk analytics, payment integrity outsourcing and state Medicaid data and technology management. Hospital systems, physicians, health plans, governments, life sciences companies and other organizations that comprise the health care industry depend on OptumInsight to help them improve performance, achieve efficiency, reduce costs, advance quality, meet compliance mandates and modernize their core operating systems to meet the changing needs of the health system.

Many of OptumInsight's software and information products and professional services are delivered over extended periods, often several years. OptumInsight maintains an order backlog to track unearned revenues under these long-term arrangements. The backlog consists of estimated revenue from signed contracts, other legally binding agreements and anticipated contract renewals based on historical experience with OptumInsight's customers. OptumInsight's aggregate backlog at December 31, 2018 was $17.0 billion, of which $8.6 billion is expected to be realized within the next 12 months. The aggregate backlog includes $6.2 billion related to intersegment agreements. OptumInsight's aggregate backlog at December 31, 2017, was $15.0 billion. OptumInsight cannot provide any assurance that it will be able to realize all of the revenues included in the backlog due to uncertainties with regard to the timing and scope of services and the potential for cancellation, non-renewal or early termination of service arrangements.

OptumInsight's products and services are sold primarily through a direct sales force. OptumInsight's products are also supported and distributed through an array of alliances and business partnerships with other technology vendors, who integrate and interface OptumInsight's products with their applications.

OptumInsight believes it is well positioned to address the needs of four primary market segments: care providers (e.g., physicians and hospital systems), health plans, governments and life sciences companies.

Care Providers. Serving more than four out of five U.S. hospitals and more than 100,000 physicians, OptumInsight assists care providers in meeting their challenge to improve patient outcomes and care amid changing payment models and pressures. OptumInsight brings a broad array of solutions to help care providers

meet these challenges, with particular focus on clinical performance and quality improvement, population health, data management and analytics, revenue management, cost containment, compliance, cloud-enabled collaboration and consumer engagement.

Health Plans. OptumInsight serves three out of four U.S. health plans through cost-effective, technology-enabled solutions that help them improve efficiency, understand and optimize growth while managing risk, deliver on clinical performance and compliance goals, and build and manage strong networks of care.

Governments. OptumInsight provides services tailored to government payers, including data and analytics technology, claims management and payment accuracy services, and strategic consulting.

Life Sciences. OptumInsight provides services to global life sciences companies. These companies look to OptumInsight for data, analytics and expertise in core areas of health economics and outcomes research, market access consulting, integrated clinical and health care claims data and informatics services, epidemiology and drug safety, and patient reported outcomes.

OptumRx

OptumRx provides a full spectrum of pharmacy care services to 65 million people in the United States through its network of more than 67,000 retail pharmacies, multiple home delivery, specialty and compounding pharmacies and through the provision of home infusion services. In 2018, OptumRx added capabilities in managing limited and ultra-limited distribution drugs in oncology, HIV, pain management and ophthalmology as well as capabilities to serve the growing pharmacy needs of people with behavioral health and substance use disorders, particularly Medicare and Medicaid beneficiaries.

OptumRx's comprehensive whole-person approach to pharmacy care services integrates demographic, medical, laboratory, pharmaceutical and other clinical data and applies analytics to drive clinical care insight to support care treatments and compliance, benefiting clients and individual consumers through enhanced services, elevated clinical quality and cost trend management.

In 2018, OptumRx managed $91 billion in pharmaceutical spending, including $40 billion in specialty pharmaceutical spending.

OptumRx provides pharmacy care services to a number of health plans, including a substantial majority of UnitedHealthcare members, large national employer plans, unions and trusts and government entities. OptumRx's distribution system consists primarily of health insurance brokers and other health care consultants and direct sales.

OptumRx offers multiple clinical programs and services to help clients manage overall pharmacy and health care costs in a clinically appropriate manner, which are designed to promote good health outcomes, and to help target inappropriate utilization and non-adherence to medication, each of which may result in adverse medical events that affect member health and client pharmacy and medical spend. OptumRx provides various utilization management, medication management, quality assurance, adherence and counseling programs to complement the client's plan design and clinical strategies. OptumRx offers a distinctive approach to integrating the management of medical and pharmaceutical care, using data and advanced analytics to help improve comprehensive decision-making, elevate quality, close gaps in care and reduce costs for customers and members.

As of December 31, 2018, OptumRx operated four home delivery pharmacies in the United States, which provide patients with access to maintenance medications and enables OptumRx to manage clients' drug costs through operating efficiencies and economies of scale. As of December 31, 2018, OptumRx's specialty pharmacy operations included more than 70 specialty and infusion pharmacies located throughout the United States that are used for delivery of advanced medications to people with chronic or genetic diseases and disorders. OptumRx also operates community mental health facility pharmacies, which help align benefits, care management and pharmacy services for those living with complex, chronic medical and behavioral health issues.

GOVERNMENT REGULATION

Our businesses are subject to comprehensive federal, state and international laws and regulations. We are regulated by federal, state and international regulatory agencies that generally have discretion to issue regulations and interpret and enforce laws and rules. The regulations can vary significantly from jurisdiction to jurisdiction and the interpretation of existing laws and rules also may change periodically. Domestic and international governments continue to enact and consider various legislative and regulatory proposals that could materially impact certain aspects of the health care system. New laws, regulations and rules, or changes in the interpretation of existing laws, regulations and rules, including as a result of changes in the political climate, could adversely affect our business.

If we fail to comply with, or fail to respond quickly and appropriately to changes in, applicable laws, regulations and rules, our business, results of operations, financial position and cash flows could be materially and adversely affected. See Part I, Item 1A, "Risk Factors" for a discussion of the risks related to our compliance with federal, state and international laws and regulations.

Federal Laws and Regulation

We are subject to various levels of U.S. federal regulation. For example, when we contract with the federal government, we are subject to federal laws and regulations relating to the award, administration and performance of U.S. government contracts. CMS regulates our UnitedHealthcare businesses and certain aspects of our Optum businesses. Payments by CMS to our businesses are subject to regulations, including those governing fee-for-service and the submission of information relating to the health status of enrollees for purposes of determining the amounts of certain payments to us. CMS also has the right to audit our performance to determine our compliance with CMS contracts and regulations and the quality of care we provide to Medicare beneficiaries. Our commercial business is further subject to CMS audits related to medical loss ratios (MLRs) and risk adjustment data.

UnitedHealthcare Community & State has Medicaid and CHIP contracts that are subject to federal regulations regarding services to be provided to Medicaid enrollees, payment for those services and other aspects of these programs. There are many regulations affecting Medicare and Medicaid compliance and the regulatory environment with respect to these programs is complex. We are also subject to federal law and regulations relating to the administration of contracts with federal agencies. In addition, our business is subject to laws and regulations relating to consumer protection, anti-fraud and abuse, anti-kickbacks, false claims, prohibited referrals, inappropriately reducing or limiting health care services, anti-money laundering, securities and antitrust compliance.

The Tax Cuts and Jobs Act. In December 2017, the U.S. federal government enacted a tax bill (Tax Cuts and Jobs Act or Tax Reform). The Tax Cuts and Jobs Act changed existing United States tax law and included numerous provisions that affected our results of operations, financial position and cash flows. For instance, Tax Reform reduced the U.S. corporate income tax rate and changed business-related exclusions and deductions and credits.

Privacy, Security and Data Standards Regulation. The administrative simplification provisions of the Health Insurance Portability and Accountability Act of 1996, as amended (HIPAA), apply to both the group and individual health insurance markets, including self-funded employee benefit plans. Federal regulations related to HIPAA contain minimum standards for electronic transactions and code sets and for the privacy and security of protected health information.

The Health Information Technology for Economic and Clinical Health Act (HITECH) imposed requirements on uses and disclosures of health information; included contracting requirements for HIPAA business associate agreements; extended parts of HIPAA privacy and security provisions to business associates; added federal data

breach notification requirements for covered entities and business associates and reporting requirements to the U.S. Department of Health and Human Services (HHS) and the Federal Trade Commission (FTC) and, in some cases, to the local media; strengthened enforcement and imposed higher financial penalties for HIPAA violations and, in certain cases, imposed criminal penalties for individuals, including employees. In the conduct of our business, depending on the circumstances, we may act as either a covered entity or a business associate. Federal consumer protection laws may also apply in some instances to privacy and security practices related to personally identifiable information.

The use and disclosure of individually identifiable health data by our businesses is also regulated in some instances by other federal laws, including the Gramm-Leach-Bliley Act (GLBA) or state statutes implementing GLBA. These federal laws and state statutes generally require insurers to provide customers with notice regarding how their non-public personal health and financial information is used and the opportunity to "opt out" of certain disclosures before the insurer shares such information with a third party, and generally prescribe safeguards for the protection of personal information. Neither the GLBA nor HIPAA privacy regulations preempt more stringent state laws and regulations that may apply to us, as discussed below.

ERISA. The Employee Retirement Income Security Act of 1974, as amended (ERISA), regulates how our services are provided to or through certain types of employer-sponsored health benefit plans. ERISA is a set of laws and regulations that is subject to periodic interpretation by the U.S. Department of Labor (DOL) as well as the federal courts. ERISA sets forth standards on how our business units may do business with employers who sponsor employee health benefit plans, particularly those that maintain self-funded plans. Regulations established by the DOL subject us to additional requirements for administration of benefits, claims payment and member appeals under health care plans governed by ERISA.

State Laws and Regulation

Health Care Regulation. Our insurance and HMO subsidiaries must be licensed by the jurisdictions in which they conduct business. All of the states in which our subsidiaries offer insurance and HMO products regulate those products and operations. The states require periodic financial reports and establish minimum capital or restricted cash reserve requirements. The National Association of Insurance Commissioners (NAIC) has adopted model regulations that, where adopted by states, require expanded governance practices and risk and solvency assessment reporting. Most states have adopted these or similar measures to expand the scope of regulations relating to corporate governance and internal control activities of HMOs and insurance companies. We are required to maintain a risk management framework and file a confidential self-assessment report with state insurance regulators. We file reports annually with Connecticut, our lead regulator, and with New York, as required by that state's regulation. Certain states have also adopted their own regulations for minimum MLRs with which health plans must comply. In addition, a number of state legislatures have enacted or are contemplating significant reforms of their health insurance markets, either independent of or to comply with or be eligible for grants or other incentives in connection with the ACA, which may affect our operations and our financial results.

Health plans and insurance companies are regulated under state insurance holding company regulations. Such regulations generally require registration with applicable state departments of insurance and the filing of reports that describe capital structure, ownership, financial condition, certain intercompany transactions and general business operations. Most state insurance holding company laws and regulations require prior regulatory approval of acquisitions and material intercompany transfers of assets, as well as transactions between the regulated companies and their parent holding companies or affiliates. These laws may restrict the ability of our regulated subsidiaries to pay dividends to our holding companies.

Some of our business activity is subject to other health care-related regulations and requirements, including PPO, Managed Care Organization (MCO), utilization review (UR), TPA, pharmacy care services, durable medical equipment or care provider-related regulations and licensure requirements. These regulations differ from state to

state and may contain network, contracting, product and rate, licensing and financial and reporting requirements. There are laws and regulations that set specific standards for delivery of services, appeals, grievances and payment of claims, adequacy of health care professional networks, fraud prevention, protection of consumer health information, pricing and underwriting practices and covered benefits and services. State health care anti-fraud and abuse prohibitions encompass a wide range of activities, including kickbacks for referral of members, billing for unnecessary medical services and improper marketing. Certain of our businesses are subject to state general agent, broker and sales distribution laws and regulations. UnitedHealthcare Community & State and certain of our Optum businesses are subject to regulation by state Medicaid agencies that oversee the provision of benefits to our Medicaid and CHIP beneficiaries and to our dually eligible (for Medicare and Medicaid) beneficiaries. We also contract with state governmental entities and are subject to state laws and regulations relating to the award, administration and performance of state government contracts.

State Privacy and Security Regulations. A number of states have adopted laws and regulations that may affect our privacy and security practices, such as state laws that govern the use, disclosure and protection of social security numbers and protected health information or that are designed to implement GLBA or protect credit card account data. State and local authorities increasingly focus on the importance of protecting individuals from identity theft, with a significant number of states enacting laws requiring businesses to meet minimum cyber-security standards and notify individuals of security breaches involving personal information. State consumer protection laws may also apply to privacy and security practices related to personally identifiable information, including information related to consumers and care providers. Different approaches to state privacy and insurance regulation and varying enforcement philosophies in the different states may materially and adversely affect our ability to standardize our products and services across state lines. See Part I, Item 1A, “Risk Factors” for a discussion of the risks related to compliance with state privacy and security regulations.

Corporate Practice of Medicine and Fee-Splitting Laws. Certain of our businesses function as direct medical service providers and, as such, are subject to additional laws and regulations. Some states have corporate practice of medicine laws that prohibit specific types of entities from practicing medicine or employing physicians to practice medicine. Moreover, some states prohibit certain entities from engaging in fee-splitting practices that involve sharing in the fees or revenues of a professional practice. These prohibitions may be statutory or regulatory, or may be imposed through judicial or regulatory interpretation. The laws, regulations and interpretations in certain states have been subject to limited judicial and regulatory interpretation and are subject to change.

Pharmacy and Pharmacy Benefits Management (PBM) Regulations

OptumRx’s businesses include home delivery, specialty and compounding pharmacies, as well as clinic-based pharmacies that must be licensed as pharmacies in the states in which they are located. Certain of our home delivery, specialty and compounding pharmacies must also register with the U.S. Drug Enforcement Administration (DEA) and individual state controlled substance authorities to dispense controlled substances. In addition to adhering to the laws and regulations in the states where our home delivery, specialty and compounding pharmacies are located, we also are required to comply with laws and regulations in some non-resident states where we deliver pharmaceuticals, including those requiring us to register with the board of pharmacy in the non-resident state. These non-resident states generally expect our home delivery, specialty and compounding pharmacies to follow the laws of the state in which the pharmacies are located, but some states also require us to comply with the laws of that non-resident state when pharmaceuticals are delivered there. Additionally, certain of our pharmacies that participate in programs for Medicare and state Medicaid providers are required to comply with the applicable Medicare and Medicaid provider rules and regulations. Other laws and regulations affecting our home delivery and specialty pharmacies include federal and state statutes and regulations governing the labeling, packaging, advertising and adulteration of prescription drugs and dispensing of controlled substances. See Part I, Item 1A, “Risk Factors” for a discussion of the risks related to our pharmacy care services businesses.

Federal and state legislation of PBM activities affect both our ability to limit access to a pharmacy provider network or remove network providers. Additionally, many states limit our ability to manage and establish maximum allowable costs for generic prescription drugs. With respect to formulary services, a number of government entities, including CMS, HHS and state departments of insurance, regulate the administration of prescription drug benefits offered through federal or state exchanges. Many states also regulate the scope of prescription drug coverage, as well as the delivery channels to receive such prescriptions, for insurers, MCOs and Medicaid managed care plans. These regulations could limit or preclude (i) certain plan designs, (ii) limited networks, (iii) requirements to use particular care providers or distribution channel, (iv) copayment differentials among providers and (v) formulary tiering practices.

Legislation seeking to regulate PBM activities introduced or enacted at the federal or state level could impact our business practices with others in the pharmacy supply chain, including pharmaceutical manufacturers and network providers. Additionally, organizations like the NAIC periodically issue model regulations and credentialing organizations, like the National Committee for Quality Assurance (NCQA) and the Utilization Review Accreditation Commission (URAC), may establish standards that impact PBM pharmacy activities. While these model regulations and standards do not have the force of law, they may influence states to adopt their recommendations and impact the services we deliver to our clients.

Consumer Protection Laws

Certain of our businesses participate in direct-to-consumer activities and are subject to regulations applicable to on-line communications and other general consumer protection laws and regulations such as the Federal Tort Claims Act, the Federal Postal Service Act and the FTC's Telemarketing Sales Rule. Most states also have similar consumer protection laws.

Certain laws, such as the Telephone Consumer Protection Act, give the FTC, Federal Communications Commission ("FCC") and state attorneys general the ability to regulate, and bring enforcement actions relating to, telemarketing practices and certain automated outbound contacts such as phone calls, texts or emails. Under certain circumstances, these laws may provide consumers with a private right of action. Violations of these laws could result in substantial statutory penalties and other sanctions.

Banking Regulation

Optum Bank is subject to regulation by federal banking regulators, including the Federal Deposit Insurance Corporation, which performs annual examinations to ensure that the bank is operating in accordance with federal safety and soundness requirements, and the Consumer Financial Protection Bureau, which may perform periodic examinations to ensure that the bank is in compliance with applicable consumer protection statutes, regulations and agency guidelines. Optum Bank is also subject to supervision and regulation by the Utah State Department of Financial Institutions, which carries out annual examinations to ensure that the bank is operating in accordance with state safety and soundness requirements and performs periodic examinations of the bank's compliance with applicable state banking statutes, regulations and agency guidelines. In the event of unfavorable examination results from any of these agencies, the bank could become subject to increased operational expenses and capital requirements, enhanced governmental oversight and monetary penalties.

International Regulation

Certain of our businesses operate internationally and are subject to regulation in the jurisdictions in which they are organized or conduct business. These regulatory regimes vary from jurisdiction to jurisdiction. In addition, our non-U.S. businesses and operations are subject to U.S. laws that regulate the conduct and activities of U.S.-based businesses operating abroad, such as the Foreign Corrupt Practices Act (FCPA), which prohibits offering, promising, providing or authorizing others to give anything of value to a foreign government official to obtain or retain business or otherwise secure a business advantage.

COMPETITION

As a diversified health care company, we operate in highly competitive markets across the full expanse of health care benefits and services, including organizations ranging from startups to highly sophisticated Fortune 50 global enterprises, for-profit and non-profit companies, and private and government-sponsored entities. New entrants and business combinations also contribute to a dynamic and competitive environment. We compete fundamentally on the quality and value we provide to those we serve, which can include elements such as product and service innovation; use of technology; consumer and provider engagement and satisfaction; sales, marketing and pricing. See Part I, Item 1A, "Risk Factors" for additional discussion of our risks related to competition.

INTELLECTUAL PROPERTY RIGHTS

We have obtained trademark registration for the UnitedHealth Group, UnitedHealthcare and Optum names and logos. We own registrations for certain of our other trademarks in the United States and abroad. We hold a portfolio of patents and have patent applications pending from time to time. We are not substantially dependent on any single patent or group of related patents.

Unless otherwise noted, trademarks appearing in this report are trademarks owned by us. We disclaim any proprietary interest in the marks and names of others.

EMPLOYEES

As of December 31, 2018, we employed 300,000 individuals.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following sets forth certain information regarding our executive officers as of February 12, 2019, including the business experience of each executive officer during the past five years:

Name	Age	Position
Stephen J. Hemsley	66	Executive Chair of the Board
David S. Wichmann	56	Chief Executive Officer
Steven H. Nelson	59	Executive Vice President; Chief Executive Officer of UnitedHealthcare
Andrew P. Witty	54	Executive Vice President; Chief Executive Officer of Optum
John F. Rex	56	Executive Vice President; Chief Financial Officer
Thomas E. Roos	46	Senior Vice President; Chief Accounting Officer
Marianne D. Short	67	Executive Vice President; Chief Legal Officer
D. Ellen Wilson	61	Executive Vice President; Chief Human Resources Officer

Our Board of Directors elects executive officers annually. Our executive officers serve until their successors are duly elected and qualified, or until their earlier death, resignation, removal or disqualification.

Mr. Hemsley is Executive Chair of the Board of UnitedHealth Group and has served in that capacity since September 2017. Mr. Hemsley previously served as Chief Executive Officer from 2006 to August 2017. He has been a member of the Board of Directors since 2000.

Mr. Wichmann is Chief Executive Officer of UnitedHealth Group and a member of the Board of Directors and has served in that capacity since September 2017. Mr. Wichmann previously served as President of UnitedHealth

Group from November 2014 to August 2017. Mr. Wichmann also served as Chief Financial Officer of UnitedHealth Group from January 2011 to June 2016. From April 2008 to November 2014, Mr. Wichmann served as Executive Vice President of UnitedHealth Group and President of UnitedHealth Group Operations.

Mr. Nelson is Executive Vice President of UnitedHealth Group and Chief Executive Officer of UnitedHealthcare and has served in that capacity since August 2017. Mr. Nelson served as Chief Executive Officer of UnitedHealthcare's Medicare & Retirement, from March 2014 to August 2017. He served as Chief Executive Officer of UnitedHealthcare Community & State from August 2012 to March 2014. From January 2008 to July 2012 he served as President of UnitedHealthcare Community & State and then as Chief Executive Officer of UnitedHealthcare Employer & Individual's West Region business.

Mr. Witty is Executive Vice President of UnitedHealth Group and Chief Executive Officer of Optum and has served in that capacity since July 2018. He previously served as a UnitedHealth Group director from August 2017 to March 2018. Prior to joining UnitedHealth Group, Mr. Witty was CEO and a board member of GlaxoSmithKline, a global pharmaceutical company, from 2008 to April 2017.

Mr. Rex is Executive Vice President and Chief Financial Officer of UnitedHealth Group and has served in that capacity since June 2016. From March 2012 to June 2016, Mr. Rex served as Executive Vice President and Chief Financial Officer of Optum. Prior to joining Optum in 2012, Mr. Rex spent over a decade at JP Morgan, a global financial services firm, and its predecessors, concluding his tenure as a Managing Director.

Mr. Roos is Senior Vice President and Chief Accounting Officer of UnitedHealth Group and has served in that capacity since August 2015. Prior to joining UnitedHealth Group, Mr. Roos was a Partner at Deloitte & Touche LLP, an independent registered public accounting firm, from September 2007 to August 2015.

Ms. Short is Executive Vice President and Chief Legal Officer of UnitedHealth Group and has served in that capacity since January 2013. Prior to joining UnitedHealth Group, Ms. Short served as the Managing Partner at Dorsey & Whitney LLP, an international law firm, from January 2007 to December 2012.

Ms. Wilson is Executive Vice President and Chief Human Resources Officer of UnitedHealth Group and has served in that capacity since June 2013. From January 2012 to May 2013, Ms. Wilson served as Chief Administrative Officer of Optum. Prior to joining Optum, Ms. Wilson served for 17 years at Fidelity Investments, concluding her tenure there as head of Human Resources.

Additional Information

UnitedHealth Group Incorporated was incorporated in January 1977 in Minnesota. On July 1, 2015, UnitedHealth Group Incorporated changed its state of incorporation from Minnesota to Delaware pursuant to a plan of conversion. Our executive offices are located at UnitedHealth Group Center, 9900 Bren Road East, Minnetonka, Minnesota 55343; our telephone number is (952) 936-1300.

You can access our website at *www.unitedhealthgroup.com* to learn more about our company. From that site, you can download and print copies of our annual reports to shareholders, annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, along with amendments to those reports. You can also download from our website our certificate of incorporation, bylaws and corporate governance policies, including our Principles of Governance, Board of Directors Committee Charters and Code of Conduct. We make periodic reports and amendments available, free of charge, on our website, as soon as reasonably practicable after we file or furnish these reports to the Securities and Exchange Commission (SEC). We will also provide a copy of any of our corporate governance policies published on our website free of charge, upon request. To request a copy of any of these documents, please submit your request to: UnitedHealth Group Incorporated, 9900 Bren Road East, Minnetonka, MN 55343, Attn: Corporate Secretary. Information on or linked to our website is neither part of nor incorporated by reference into this Annual Report on Form 10-K or any other SEC filings.

Our transfer agent, Equiniti (EQ), can help you with a variety of shareholder-related services, including change of address, lost stock certificates, transfer of stock to another person and other administrative services. You can write to our transfer agent at: EQ Shareowner Services, P.O. Box 64854, St. Paul, Minnesota 55164-0854, or telephone (800) 401-1957 or (651) 450-4064.

ITEM 1A. RISK FACTORS

CAUTIONARY STATEMENTS

The statements, estimates, projections or outlook contained in this Annual Report on Form 10-K include forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (PSLRA). When used in this Annual Report on Form 10-K and in future filings by us with the SEC, in our news releases, presentations to securities analysts or investors, and in oral statements made by or with the approval of one of our executive officers, the words "believe," "expect," "intend," "estimate," "anticipate," "forecast," "outlook," "plan," "project," "should" or similar words or phrases are intended to identify such forward-looking statements. These statements are intended to take advantage of the "safe harbor" provisions of the PSLRA. These forward-looking statements involve risks and uncertainties that may cause our actual results to differ materially from the expectations expressed or implied in the forward-looking statements. Any forward-looking statement in this report speaks only as of the date of this report and, except as required by law; we undertake no obligation to update any forward-looking statement to reflect events or circumstances, including unanticipated events, after the date of this report.

The following discussion contains cautionary statements regarding our business that investors and others should consider. We do not undertake to address in future filings or communications regarding our business or results of operations how any of these factors may have caused our results to differ from discussions or information contained in previous filings or communications. In addition, any of the matters discussed below may have affected past, as well as current, forward-looking statements about future results. Any or all forward-looking statements in this Annual Report on Form 10-K and in any other public filings or statements we make may turn out to be wrong. Our forward-looking statements can be affected by inaccurate assumptions we might make or by known or unknown risks and uncertainties. Many factors discussed below will be important in determining our future results. By their nature, forward-looking statements are not guarantees of future performance or results and are subject to risks, uncertainties and assumptions that are difficult to predict or quantify.

If we fail to estimate, price for and manage our medical costs in an effective manner, the profitability of our risk-based products and services could decline and could materially and adversely affect our results of operations, financial position and cash flows.

Through our risk-based benefit products, we assume the risk of both medical and administrative costs for our customers in return for monthly premiums. Premium revenues from risk-based benefits products comprise nearly 80% of our total consolidated revenues. We generally use approximately 80% to 85% of our premium revenues to pay the costs of health care services delivered to these customers. The profitability of our products depends in large part on our ability to predict, price for and effectively manage medical costs. In addition, our OptumHealth business negotiates capitation arrangements with commercial third-party payers. Under the typical capitation arrangement, the health care provider receives a fixed percentage of a third-party payer's premiums to cover all or a defined portion of the medical costs provided to the capitated member. If we fail to predict accurately, or effectively price for or manage the costs of providing care to our capitated members, our results of operations could be materially and adversely affected.

We manage medical costs through underwriting criteria, product design, negotiation of favorable provider contracts and care management programs. Total medical costs are affected by the number of individual services rendered, the cost of each service and the type of service rendered. Our premium revenue on commercial policies and Medicaid contracts are typically based on a fixed monthly rate per individual served for a 12-month period

and is generally priced one to six months before the contract commences. Our revenue on Medicare policies is based on bids submitted to CMS in June the year before the contract year. Although we base the commercial and Medicaid premiums we charge and our Medicare bids on our estimates of future medical costs over the fixed contract period, many factors may cause actual costs to exceed those estimated and reflected in premiums or bids. These factors may include medical cost inflation, increased use of services, increased cost of individual services, large-scale medical emergencies, the introduction of new or costly drugs, treatments and technology, new treatment guidelines, new mandated benefits (such as the expansion of essential benefits coverage) or other regulatory changes and insured population characteristics. Relatively small differences between predicted and actual medical costs or utilization rates as a percentage of revenues can result in significant changes in our financial results. For example, if our 2018 medical costs for commercial insured products had been 1% higher than our actual medical costs, without proportionally higher revenues from such products, our annual net earnings for 2018 would have been reduced by approximately $305 million, excluding any offsetting impact from risk adjustment or from reduced premium rebates due to minimum MLRs.

In addition, the financial results we report for any particular period include estimates of costs that have been incurred for which claims are still outstanding. These estimates involve an extensive degree of judgment. If these estimates prove inaccurate, our results of operations could be materially and adversely affected.

Our business activities are highly regulated and new laws or regulations or changes in existing laws or regulations or their enforcement or application could materially and adversely affect our business.

We are regulated by federal, state and local governments in the United States and other countries where we do business. Our insurance and HMO subsidiaries must be licensed by and are subject to regulation in the jurisdictions in which they conduct business. For example, states require periodic financial reports and enforce minimum capital or restricted cash reserve requirements. Health plans and insurance companies are also regulated under state insurance holding company regulations and some of our activities may be subject to other health care-related regulations and requirements, including those relating to PPOs, MCOs, UR and TPA-related regulations and licensure requirements. Under state guaranty association laws, certain insurance companies can be assessed (up to prescribed limits) for certain obligations to the policyholders and claimants of impaired or insolvent insurance companies that write the same line or similar lines of business. Any such assessment could expose our insurance entities and other insurers to the risk that they would be required to pay a portion of an impaired or insolvent insurance company’s claims through state guaranty associations.

Certain of our businesses provide products or services to various government agencies. For example, some of our UnitedHealthcare and Optum businesses hold government contracts or provide services related to government contracts and are subject to U.S. federal and state and non U.S. self-referral, anti-kickback, medical necessity, risk adjustment, false claims and other laws and regulations governing government contractors and the use of government funds. Our relationships with these government agencies are subject to the terms of contracts that we hold with the agencies and to laws and regulations regarding government contracts. Among others, certain laws and regulations restrict or prohibit companies from performing work for government agencies that might be viewed as an actual or potential conflict of interest. These laws may limit our ability to pursue and perform certain types of work, thereby materially and adversely affecting our results of operations, financial position and cash flows.

Certain of our Optum businesses are also subject to regulations that are distinct from those faced by our insurance and HMO subsidiaries, including, for example, state telemedicine regulations; debt collection laws; banking regulations; distributor and producer licensing requirements; state corporate practice of medicine doctrines; fee-splitting rules; and health care facility licensure and certificate of need requirements, some of which could impact our relationships with physicians, hospitals and customers. These risks and uncertainties may materially and adversely affect our ability to market or provide our products and services, or to do so at targeted operating margins, or may increase the regulatory burdens under which we operate.

The laws and rules governing our businesses and interpretations of those laws and rules are subject to frequent change. For example, legislative, administrative and public policy changes to the ACA are being considered, and we cannot predict if the ACA will be further modified or repealed or replaced. Litigation challenges have been brought seeking to invalidate the ACA in whole or in part; and a federal district court struck down the ACA in its entirety as unconstitutional in 2018. That opinion has been stayed and appealed. Further, the integration into our businesses of entities that we acquire may affect the way in which existing laws and rules apply to us, including by subjecting us to laws and rules that did not previously apply to us. The broad latitude given to the agencies administering, interpreting and enforcing current and future regulations governing our businesses could force us to change how we do business, restrict revenue and enrollment growth, increase our health care and administrative costs and capital requirements, or expose us to increased liability in courts for coverage determinations, contract interpretation and other actions.

We also must obtain and maintain regulatory approvals to market many of our products and services, increase prices for certain regulated products and services and complete certain acquisitions and dispositions or integrate certain acquisitions. For example, premium rates for our health insurance and managed care products are subject to regulatory review or approval in many states and by the federal government. Additionally, we must submit data on all proposed rate increases on many of our products to HHS for monitoring purposes. Geographic and product expansions may be subject to state and federal regulatory approvals. Delays in obtaining necessary approvals or our failure to obtain or maintain adequate approvals could materially and adversely affect our results of operations, financial position and cash flows.

Certain of our businesses operate internationally and are subject to regulation in the jurisdictions in which they are organized or conduct business. These regulatory regimes encompass, among other matters, local and cross-border taxation, licensing, tariffs, intellectual property, investment, capital (including minimum solvency margin and reserve requirements), management control, labor, anti-fraud, anti-corruption and privacy and data protection regulations (including requirements for cross-border data transfers) that vary by jurisdiction. We currently operate outside of the United States and in the future may acquire or commence additional businesses based outside of the United States, increasing our exposure to non-U.S. regulatory regimes. For example, our UnitedHealthcare Global business subjects us to Brazilian laws and regulations affecting hospitals, managed care and insurance industries and to regulation by Brazilian regulators, including the national regulatory agency for private health insurance and plans, the Agência Nacional de Saúde Suplementar, while the Banmédica business is subject to Chilean, Colombian and Peruvian laws, regulations and regulators applicable to hospitals and private insurance. Any international regulator may take an approach to the interpretation, implementation and enforcement of industry regulations that could differ from the approach taken by U.S. regulators. In addition, our non-U.S. businesses and operations are subject to U.S. laws that regulate the conduct and activities of U.S.-based businesses operating abroad, such as the FCPA, which prohibits offering, promising, providing or authorizing others to give anything of value to a foreign government official to obtain or retain business or otherwise secure a business advantage. Our failure to comply with U.S. or non-U.S. laws and regulations governing our conduct outside the United States or to establish constructive relations with non-U.S. regulators could adversely affect our ability to market our products and services, or to do so at targeted operating margins, which may have a material adverse effect on our business, financial condition and results of operations.

The health care industry is regularly subject to negative publicity, including as a result of governmental investigations, adverse media coverage and political debate surrounding industry regulation. Negative publicity may adversely affect our stock price and damage our reputation in various markets.

As a result of our participation in various government health care programs, both as a payer and as a service provider to payers, we are exposed to additional risks associated with program funding, enrollments, payment adjustments, audits and government investigations that could materially and adversely affect our business, results of operations, financial position and cash flows.

We participate in various federal, state and local government health care benefit programs, including as a payer in Medicare Advantage, Medicare Part D, various Medicaid programs and CHIP, and receive substantial

revenues from these programs. Certain of our Optum businesses also provide services to payers participating in government health care programs. A reduction or less than expected increase, or a protracted delay, in government funding for these programs or change in allocation methodologies, or termination of the contract at the option of the government, may materially and adversely affect our results of operations, financial position and cash flows.

The government health care programs in which we participate generally are subject to frequent changes, including changes that may reduce the number of persons enrolled or eligible for coverage, reduce the amount of reimbursement or payment levels, reduce our participation in certain service areas or markets, or increase our administrative or medical costs under such programs. Revenues for these programs depend on periodic funding from the federal government or applicable state governments and allocation of the funding through various payment mechanisms. Funding for these government programs depends on many factors outside of our control, including general economic conditions and budgetary constraints at the federal or applicable state level. For example, CMS has in the past reduced or frozen Medicare Advantage benchmarks, and additional cuts to Medicare Advantage benchmarks are possible. In addition, from time to time, CMS makes changes to the way it calculates Medicare Advantage risk adjustment payments. Although we have adjusted members' benefits and premiums on a selective basis, ceased to offer benefit plans in certain counties, and intensified both our medical and operating cost management in response to the benchmark reductions and other funding pressures, these or other strategies may not fully address the funding pressures in the Medicare Advantage program. In addition, payers in the Medicare Advantage program may be subject to reductions in payments from CMS as a result of decreased funding or recoupment pursuant to government audit.

Under the Medicaid managed care program, state Medicaid agencies seek bids from eligible health plans to continue their participation in the acute care Medicaid health programs. If we are not successful in obtaining renewals of state Medicaid managed care contracts, we risk losing the members that were enrolled in those Medicaid plans. Under the Medicare Part D program, to qualify for automatic enrollment of low income members, our bids must result in an enrollee premium below a regional benchmark, which is calculated by the government after all regional bids are submitted. If the enrollee premium is not below the government benchmark, we risk losing the members who were auto-assigned to us and will not have additional members auto-assigned to us. In general, our bids are based upon certain assumptions regarding enrollment, utilization, medical costs and other factors. If any of these assumptions is materially incorrect, either as a result of unforeseen changes to the programs on which we bid, or submission by our competitors at lower rates than our bids, our results of operations, financial position and cash flows could be materially and adversely affected.

Many of the government health care coverage programs in which we participate are subject to the prior satisfaction of certain conditions or performance standards or benchmarks. For example, as part of the ACA, CMS has a system that provides various quality bonus payments to Medicare Advantage plans that meet certain quality star ratings at the individual plan or local contract level. The star rating system considers various measures adopted by CMS, including, among others, quality of care, preventive services, chronic illness management and customer satisfaction. Plans must have a rating of four stars or higher to qualify for bonus payments. If we do not maintain or continue to improve our star ratings, our plans may not be eligible for quality bonuses and we may experience a negative impact on our revenues and the benefits that our plans can offer, which could materially and adversely affect the marketability of our plans, our membership levels, results of operations, financial position and cash flows. Any changes in standards or care delivery models that apply to government health care programs, including Medicare and Medicaid, or our inability to improve our quality scores and star ratings to meet government performance requirements or to match the performance of our competitors could result in limitations to our participation in or exclusion from these or other government programs, which in turn could materially and adversely affect our results of operations, financial position and cash flows.

CMS uses various payment mechanisms to allocate funding for Medicare programs, including adjustment of monthly capitation payments to Medicare Advantage plans and Medicare Part D plans according to the predicted health status of each beneficiary as supported by data from health care providers for Medicare Advantage plans,

as well as, for Medicare Part D plans, risk-sharing provisions based on a comparison of costs predicted in our annual bids to actual prescription drug costs. Some state Medicaid programs utilize a similar process. For example, our UnitedHealthcare Medicare & Retirement and UnitedHealthcare Community & State businesses submit information relating to the health status of enrollees to CMS or state agencies for purposes of determining the amount of certain payments to us. CMS and the Office of Inspector General for HHS periodically perform risk adjustment data validation (RADV) audits of selected Medicare health plans to validate the coding practices of and supporting documentation maintained by health care providers. Certain of our local plans have been selected for such audits, which have in the past resulted and could in the future result in retrospective adjustments to payments made to our health plans, fines, corrective action plans or other adverse action by CMS.

We have been and may in the future become involved in routine, regular and special governmental investigations, audits, reviews and assessments. For example, various governmental agencies have conducted investigations into certain PBM practices, which have resulted in other PBMs agreeing to civil penalties, including the payment of money and corporate integrity agreements. Additionally, such investigations, audits or reviews sometimes arise out of, or prompt claims by private litigants or whistleblowers that, among other allegations, we failed to disclose certain business practices or, as a government contractor, submitted false or erroneous claims to the government. Governmental investigations, audits, reviews and assessments could lead to government actions, which could result in adverse publicity, the assessment of damages, civil or criminal fines or penalties, or other sanctions, including restrictions or changes in the way we conduct business, loss of licensure or exclusion from participation in government programs, any of which could have a material adverse effect on our business, results of operations, financial position and cash flows.

If we sustain cyber-attacks or other privacy or data security incidents that result in security breaches that disrupt our operations or result in the unintended dissemination of protected personal information or proprietary or confidential information, we could suffer a loss of revenue and increased costs, exposure to significant liability, reputational harm and other serious negative consequences.

We routinely process, store and transmit large amounts of data in our operations, including protected personal information as well as proprietary or confidential information relating to our business or third parties. Some of the data we process, store and transmit may be outside of the United States due to our information technology systems and international business operations. We are regularly the target of attempted cyber-attacks and other security threats and may be subject to breaches of the information technology systems we use. We have programs in place that are intended to detect, contain and respond to data security incidents and that provide employee awareness training regarding phishing, malware and other cyber risks to protect against cyber risks and security breaches. However, because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and may be difficult to detect for long periods of time, we may be unable to anticipate these techniques or implement adequate preventive measures. Experienced computer programmers and hackers may be able to penetrate our security controls and access, misappropriate or otherwise compromise protected personal information or proprietary or confidential information or that of third-parties, create system disruptions or cause system shutdowns that could negatively affect our operations. They also may be able to develop and deploy viruses, worms and other malicious software programs that attack our systems or otherwise exploit any security vulnerabilities. Hardware, software, or applications we develop or procure from third parties may contain defects in design or manufacture or other problems that could unexpectedly compromise information security. Our facilities and services may also be vulnerable to security incidents or security attacks; acts of vandalism or theft; coordinated attacks by activist entities; misplaced or lost data; human error; malicious social engineering; or other events that could negatively affect our systems, our customers' data, proprietary or confidential information relating to our business or third parties, or our operations. In certain circumstances we may rely on third party vendors to process, store and transmit large amounts of data for our business whose operations are subject to similar risks.

The costs to eliminate or address the foregoing security threats and vulnerabilities before or after a cyber-incident could be material. Our remediation efforts may not be successful and could result in interruptions, delays, or

cessation of service and loss of existing or potential customers. In addition, breaches of our security measures and the unauthorized dissemination of sensitive personal information, proprietary information or confidential information about us or our customers or other third-parties, could expose our customers' private information and our customers to the risk of financial or medical identity theft, or expose us or other third-parties to a risk of loss or misuse of this information, result in litigation and potential liability, including regulatory penalties, for us, damage our brand and reputation, or otherwise harm our business.

If we fail to comply with applicable privacy, security and data laws, regulations and standards, including with respect to third-party service providers that utilize protected personal information on our behalf, our business, reputation, results of operations, financial position and cash flows could be materially and adversely affected.

The collection, maintenance, protection, use, transmission, disclosure and disposal of protected personal information is regulated at the federal, state, international and industry levels and requirements are imposed on us by contracts with customers. These laws, rules and requirements are subject to change. Compliance with new privacy and security laws, regulations and requirements may result in increased operating costs, and may constrain or require us to alter our business model or operations. For example, the HITECH amendments to HIPAA imposed further restrictions on our ability to collect, disclose and use protected personal information and imposed additional compliance requirements on our business.

Internationally, many of the jurisdictions in which we operate have established their own data security and privacy legal framework with which we or our customers must comply. We expect that there will continue to be new proposed laws, regulations and industry standards concerning privacy, data protection and information security in the European Union, Brazil, Chile, India and other jurisdictions, and we cannot yet determine the impacts such future laws, regulations and standards may have on our businesses or the businesses of our customers. For example, effective May 2018, the European Union's General Data Protection Regulation (GDPR) overhauled data protection laws in the European Union. The new regulation superseded prior European Union privacy and data protection legislation, imposed more stringent European Union data protection requirements on us or our customers, and prescribed greater penalties for noncompliance. Brazilian privacy legislation, similar in certain respects to GDPR, goes into effect in 2020.

Many of our businesses are also subject to the Payment Card Industry Data Security Standard, which is a multifaceted security standard that is designed to protect credit card account data.

HIPAA requires business associates as well as covered entities to comply with certain privacy and security requirements. While we provide for appropriate protections through our contracts with our third-party service providers and in certain cases assess their security controls, we have limited oversight or control over their actions and practices. Several of our businesses act as business associates to their covered entity customers and, as a result, collect, use, disclose and maintain protected personal information in order to provide services to these customers. HHS has announced that it will continue its audit program to assess HIPAA compliance efforts by covered entities and expand it to include business associates. An audit resulting in findings or allegations of noncompliance could have a material adverse effect on our results of operations, financial position and cash flows.

Through our Optum businesses, including our Optum Labs business, we maintain a database of administrative and clinical data that is statistically de-identified in accordance with HIPAA standards. Noncompliance or findings of noncompliance with applicable laws, regulations or requirements, or the occurrence of any privacy or security breach involving the misappropriation, loss or other unauthorized disclosure of protected personal information, whether by us or by one of our third-party service providers, could have a material adverse effect on our reputation and business and, among other consequences, could subject us to mandatory disclosure to the media, loss of existing or new customers, significant increases in the cost of managing and remediating privacy or security incidents and material fines, penalties and litigation awards. Any of these consequences could have a material and adverse effect on our results of operations, financial position and cash flows.

Our businesses providing pharmacy care services face regulatory and operational risks and uncertainties that may differ from the risks of our other businesses.

We provide pharmacy care services through our OptumRx and UnitedHealthcare businesses. Each business is subject to federal and state anti-kickback, beneficiary inducement and other laws that govern the relationships of the business with pharmaceutical manufacturers, physicians, pharmacies, customers and consumers. As a provider of pharmacy benefit management services, OptumRx is also subject to an increasing number of licensure, registration and other laws and accreditation standards that impact the business practices of a pharmacy benefit manager. OptumRx also conducts business through home delivery, specialty and compounding pharmacies, pharmacies located in community mental health centers and home infusion, which subjects it to extensive federal, state and local laws and regulations, including those of the DEA and individual state controlled substance authorities, the FDA and Boards of Pharmacy. In addition, federal and state legislatures regularly consider new regulations for the industry that could materially affect current industry practices, including potential new legislation and regulations regarding the receipt or disclosure of rebates and other fees from pharmaceutical companies, the development and use of formularies and other utilization management tools, the use of average wholesale prices or other pricing benchmarks, pricing for specialty pharmaceuticals, limited access to networks and pharmacy network reimbursement methodologies.

We could face potential claims in connection with purported errors by our home delivery, specialty or compounding or clinic-based pharmacies or the provision of home infusion services, including as a result of the risks inherent in the packaging and distribution of pharmaceuticals and other health care products. Disruptions from any of our home delivery, specialty pharmacy or home infusion services could materially and adversely affect our results of operations, financial position and cash flows.

In addition, our pharmacy care services businesses provide services to sponsors of health benefit plans that are subject to ERISA. A private party or the DOL, which is the agency that enforces ERISA, could assert that the fiduciary obligations imposed by the statute apply to some or all of the services provided by our pharmacy care services businesses even where those businesses are not contractually obligated to assume fiduciary obligations. If a court were to determine that fiduciary obligations apply, we could be subject to claims for breaches of fiduciary obligations or claims that we entered into certain prohibited transactions.

If we fail to compete effectively to maintain or increase our market share, including maintaining or increasing enrollments in businesses providing health benefits, our results of operations, financial position and cash flows could be materially and adversely affected.

Our businesses compete throughout the United States, South America and other foreign markets and face significant competition in all of the geographic markets in which we operate. In particular markets, our competitors, compared to us, may have greater capabilities, resources or market share; a more established reputation; superior supplier or health care professional arrangements; better existing business relationships; lower profit margin or financial return expectations; or other factors that give such competitors a competitive advantage. Our competitive position may also be adversely affected by significant merger and acquisition activity that has occurred in the industries in which we operate, both among our competitors and suppliers (including hospitals, physician groups and other health care professionals). Consolidation may make it more difficult for us to retain or increase our customer base, improve the terms on which we do business with our suppliers, or maintain or increase profitability.

In addition, our success in the health care marketplace will depend on our ability to develop and deliver innovative and potentially disruptive products and services to satisfy evolving market demands. If we do not continue to innovate and provide products and services that are useful and relevant to consumers, we may not remain competitive, and we risk losing market share to existing competitors and disruptive new market entrants. For example, new direct-to-consumer business models from competing businesses may make it more difficult for us to directly engage consumers in the selection and management of their health care benefits and health care

usage, and we may face challenges from new technologies and market entrants that could affect our existing relationship with health plan enrollees in these areas. Our business, results of operations, financial position and cash flows could be materially and adversely affected if we do not compete effectively in our markets, if we set rates too high or too low in highly competitive markets, if we do not design and price our products properly and competitively, if we are unable to innovate and deliver products and services that demonstrate value to our customers, if we do not provide a satisfactory level of services, if membership or demand for other services does not increase as we expect or declines, or if we lose accounts with more profitable products while retaining or increasing membership in accounts with less profitable products.

If we fail to develop and maintain satisfactory relationships with physicians, hospitals and other service providers, our business could be materially and adversely affected.

Our results of operations and prospects are substantially dependent on our continued ability to contract with physicians, hospitals, pharmaceutical benefit service providers, pharmaceutical manufacturers and other service providers at competitive prices. Any failure by us to develop and maintain satisfactory relationships with health care providers, whether in-network or out-of-network, could materially and adversely affect our business, results of operations, financial position and cash flows. In addition, certain activities related to network design, provider participation in networks and provider payments could result in disputes that may be costly, divert management's attention from our operations and result in negative publicity.

In any particular market, physicians and health care providers could refuse to contract, demand higher payments, or take other actions that could result in higher medical costs, less desirable products for customers or difficulty meeting regulatory or accreditation requirements. In some markets, certain health care providers, particularly hospitals, physician and hospital organizations or multi-specialty physician groups, may have significant market positions or near monopolies that could result in diminished bargaining power on our part. In addition, ACOs; practice management companies (which aggregate physician practices for administrative efficiency); and other organizational structures adopted by physicians, hospitals and other care providers may change the way in which these providers do business with us and may change the competitive landscape. Such organizations or groups of physicians may compete directly with us, which could adversely affect our business, and our results of operations, financial position and cash flows by impacting our relationships with these providers or affecting the way that we price our products and estimate our costs, which might require us to incur costs to change our operations. In addition, if these providers refuse to contract with us, use their market position to negotiate favorable contracts or place us at a competitive disadvantage, our ability to market products or to be profitable in those areas could be materially and adversely affected.

Our health care benefits businesses have capitation arrangements with some physicians, hospitals and other health care providers. Capitation arrangements limit our exposure to the risk of increasing medical costs, but expose us to risk related to the adequacy of the financial and medical care resources of the health care provider. To the extent that a capitated health care provider organization faces financial difficulties or otherwise is unable to perform its obligations under the capitation arrangement, we may be held responsible for unpaid health care claims that should have been the responsibility of the capitated health care provider and for which we have already paid the provider, under the capitation arrangement. Further, payment or other disputes between a primary care provider and specialists with whom the primary care provider contracts could result in a disruption in the provision of services to our members or a reduction in the services available to our members. Health care providers with which we contract may not properly manage the costs of services, maintain financial solvency or avoid disputes with other providers. Any of these events could have a material adverse effect on the provision of services to our members and our operations.

Some providers that render services to our members do not have contracts with us. In those cases, we do not have a pre-established understanding about the amount of compensation that is due to the provider for services rendered to our members. In some states, the amount of compensation due to these out-of-network providers is defined by law or regulation, but in most instances the amount is either not defined or is established by a standard

that does not clearly specify dollar terms. In some instances, providers may believe that they are underpaid for their services and may either litigate or arbitrate their dispute with us or try to recover from our members the difference between what we have paid them and the amount they charged us.

The success of some of our businesses, including OptumHealth and UnitedHealthcare Global, depend on maintaining satisfactory relationships with physicians as our employees, independent contractors or joint venture partners. The physicians that practice medicine or contract with our affiliated physician organizations could terminate their provider contracts or otherwise become unable or unwilling to continue practicing medicine or contracting with us. There is and will likely be heightened competition in the markets where we operate to acquire or manage physician practices or to employ or contract with individual physicians. If we are unable to maintain or grow satisfactory relationships with physicians, or to acquire, recruit or, in some instances, employ physicians, or to retain enrollees following the departure of a physician, our revenues could be materially and adversely affected. In addition, our affiliated physician organizations contract with competitors of UnitedHealthcare. Our businesses could suffer if our affiliated physician organizations fail to maintain relationships with these companies, or fail to adequately price their contracts with these third-party payers.

In addition, physicians, hospitals, pharmaceutical benefit service providers, pharmaceutical manufacturers and certain health care providers are customers of our Optum businesses. Physicians also provide medical services at facilities owned by our Optum businesses. Given the importance of health care providers and other constituents to our businesses, failure to maintain satisfactory relationships with them could materially and adversely affect our results of operations, financial position and cash flows.

We are routinely subject to various legal actions due to the nature of our business, which could damage our reputation and, if resolved unfavorably, could result in substantial penalties or monetary damages and materially and adversely affect our results of operations, financial position and cash flows.

We are routinely made party to a variety of legal actions related to, among other matters, the design, management and delivery of our product and service offerings. These matters have included or could in the future include matters related to health care benefits coverage and payment claims (including disputes with enrollees, customers and contracted and non-contracted physicians, hospitals and other health care professionals), tort claims (including claims related to the delivery of health care services, such as medical malpractice by staff at our affiliates' facilities, or by health care practitioners who are employed by us, have contractual relationships with us, or serve as providers to our managed care networks), whistleblower claims (including claims under the False Claims Act or similar statutes), contract and labor disputes, tax claims and claims related to disclosure of certain business practices. We are also party to certain class action lawsuits brought by health care professional groups and consumers. In addition, we operate in jurisdictions outside of the United States where contractual rights, tax positions and applicable regulations may be subject to interpretation or uncertainty to a greater degree than in the United States, and therefore subject to dispute by customers, government authorities or others. We are largely self-insured with regard to litigation risks. While we maintain excess liability insurance with outside insurance carriers for claims in excess of our self-insurance, certain types of damages, such as punitive damages in some circumstances, are not covered by insurance. Although we record liabilities for our estimates of the probable costs resulting from self-insured matters, it is possible that the level of actual losses will significantly exceed the liabilities recorded.

We cannot predict the outcome of significant legal actions in which we are involved and are incurring expenses in resolving these matters. The legal actions we face or may face in the future could further increase our cost of doing business and materially and adversely affect our results of operations, financial position and cash flows. In addition, certain legal actions could result in adverse publicity, which could damage our reputation and materially and adversely affect our ability to retain our current business or grow our market share in some markets and businesses.

Any failure by us to manage successfully our strategic alliances or complete, manage or integrate acquisitions and other significant strategic transactions or relationships domestically or outside the United States could materially and adversely affect our business, prospects, results of operations, financial position and cash flows.

As part of our business strategy, we frequently engage in discussions with third parties regarding possible investments, acquisitions, divestitures, strategic alliances, joint ventures and outsourcing transactions and often enter into agreements relating to such transactions. For example, we have a strategic alliance with AARP under which we provide AARP-branded Medicare Supplement insurance to AARP members and other AARP-branded products and services to Medicare beneficiaries. If we fail to meet the needs of our alliance or joint venture partners, including by developing additional products and services, providing high levels of service, pricing our products and services competitively or responding effectively to applicable federal and state regulatory changes, our alliances and joint ventures could be damaged or terminated, which in turn could adversely impact our reputation, business and results of operations. Further, if we fail to identify and successfully complete transactions that further our strategic objectives, we may be required to expend resources to develop products and technology internally, we may be placed at a competitive disadvantage or we may be adversely affected by negative market perceptions, any of which may have a material adverse effect on our results of operations, financial position or cash flows.

Success in completing acquisitions is also dependent on efficiently integrating the acquired business into our existing operations, including our internal control environment, or otherwise leveraging its operations, which may present challenges that are different from those presented by organic growth and that may be difficult for us to manage. If we cannot successfully integrate these acquisitions and realize contemplated revenue growth opportunities and cost savings, our business, prospects, results of operations, financial position and cash flows could be materially and adversely affected.

As we expand and operate our business outside of the United States, we are presented with challenges that differ from those presented by acquisitions of domestic businesses, including challenges in adapting to new markets, languages, business, labor and cultural practices and regulatory environments. Adapting to these challenges could require us to devote significant senior management and other resources to the acquired businesses before we realize anticipated synergies or other benefits from the acquired businesses. These challenges vary widely by country and may include political instability, government intervention, discriminatory regulation and currency exchange controls or other restrictions that could prevent us from transferring funds from these operations out of the countries in which our acquired businesses operate, or converting local currencies that we hold into U.S. dollars or other currencies. If we are unable to manage successfully our non-U.S. acquisitions, our business, prospects, results of operations and financial position could be materially and adversely affected.

Foreign currency exchange rates and fluctuations may have an impact on our shareholders' equity from period to period, which could adversely affect our debt to debt-plus-equity ratio, and our future revenues, costs and cash flows from international operations. Any measures we may implement to reduce the effect of volatile currencies may be costly or ineffective.

Our sales performance will suffer if we do not adequately attract, retain and provide support to a network of independent producers and consultants.

Our products and services are sold in part through nonexclusive producers and consultants for whose services and allegiance we must compete. Our sales would be materially and adversely affected if we are unable to attract, retain and support such independent producers and consultants or if our sales strategy is not appropriately aligned across distribution channels. Our relationships with producers could be materially and adversely impacted by changes in our business practices and the nature of our relationships to address these pressures, including potential reductions in commission levels.

A number of investigations have been conducted regarding the marketing practices of producers selling health care products and the payments they receive and have resulted in enforcement actions against companies in our industry and producers marketing and selling those companies' products. If we were subjected to similar investigations and enforcement actions, such actions could result in penalties and the imposition of corrective action plans, which could materially and adversely impact our ability to market our products.

Unfavorable economic conditions could materially and adversely affect our revenues and our results of operations.

Unfavorable economic conditions may impact demand for certain of our products and services. For example, high unemployment can cause lower enrollment or lower rates of renewal in our employer group plans. Unfavorable economic conditions also have caused and could continue to cause employers to stop offering certain health care coverage as an employee benefit or elect to offer this coverage on a voluntary, employee-funded basis as a means to reduce their operating costs. In addition, unfavorable economic conditions could adversely impact our ability to increase premiums or result in the cancellation by certain customers of our products and services. These conditions could lead to a decrease in our membership levels and premium and fee revenues and could materially and adversely affect our results of operations, financial position and cash flows.

During a prolonged unfavorable economic environment, state and federal budgets could be materially and adversely affected, resulting in reduced reimbursements or payments in our federal and state government health care coverage programs, including Medicare, Medicaid and CHIP. A reduction in state Medicaid reimbursement rates could be implemented retrospectively to apply to payments already negotiated or received from the government and could materially and adversely affect our results of operations, financial position and cash flows. In addition, state and federal budgetary pressures could cause the affected governments to impose new or a higher level of taxes or assessments for our commercial programs, such as premium taxes on health insurance and surcharges or fees on select fee-for-service and capitated medical claims. Any of these developments or actions could materially and adversely affect our results of operations, financial position and cash flows.

A prolonged unfavorable economic environment also could adversely impact the financial position of hospitals and other care providers, which could materially and adversely affect our contracted rates with these parties and increase our medical costs or materially and adversely affect their ability to purchase our service offerings. Further, unfavorable economic conditions could adversely impact the customers of our Optum businesses, including health plans, hospitals, care providers, employers and others, which could, in turn, materially and adversely affect Optum's financial results.

Our investment portfolio may suffer losses, which could adversely affect our results of operations, financial position and cash flows.

Market fluctuations could impair our profitability and capital position. Volatility in interest rates affects our interest income and the market value of our investments in debt securities of varying maturities, which constitute the vast majority of the fair value of our investments as of December 31, 2018. Relatively low interest rates on investments, such as those experienced during recent years, have adversely impacted our investment income. In addition, a delay in payment of principal or interest by issuers, or defaults by issuers (primarily issuers of our investments in corporate and municipal bonds), could reduce our investment income and require us to write down the value of our investments, which could adversely affect our profitability and equity.

There can be no assurance that our investments will produce total positive returns or that we will not sell investments at prices that are less than their carrying values. Changes in the value of our investment assets, as a result of interest rate fluctuations, changes in issuer financial conditions, illiquidity or otherwise, could have an adverse effect on our equity. In addition, if it became necessary for us to liquidate our investment portfolio on an accelerated basis, such an action could have an adverse effect on our results of operations and the capital position of our regulated subsidiaries.

If the value of our intangible assets is materially impaired, our results of operations, equity and credit ratings could be materially and adversely affected.

As of December 31, 2018, our goodwill and other intangible assets had a carrying value of $68 billion, representing 45% of our total consolidated assets. We periodically evaluate our goodwill and other intangible assets to determine whether all or a portion of their carrying values may be impaired, in which case a charge to earnings may be necessary. The value of our goodwill may be materially and adversely impacted if businesses that we acquire perform in a manner that is inconsistent with our assumptions. In addition, from time to time we divest businesses, and any such divestiture could result in significant asset impairment and disposition charges, including those related to goodwill and other intangible assets. Any future evaluations requiring an impairment of our goodwill and other intangible assets could materially and adversely affect our results of operations and equity in the period in which the impairment occurs. A material decrease in equity could, in turn, adversely impact our credit ratings and potentially impact our compliance with the financial covenants in our bank credit facilities.

If we fail to maintain properly the integrity or availability of our data or successfully consolidate, integrate, upgrade or expand our existing information systems, or if our technology products do not operate as intended, our business could be materially and adversely affected.

Our ability to price adequately our products and services, to provide effective service to our customers in an efficient and uninterrupted fashion, and to report accurately our results of operations depends on the integrity of the data in our information systems. We periodically consolidate, integrate, upgrade and expand our information systems' capabilities as a result of technology initiatives and recently enacted regulations, changes in our system platforms and integration of new business acquisitions. In addition, recent trends toward greater consumer engagement in health care require new and enhanced technologies, including more sophisticated applications for mobile devices. Our information systems require an ongoing commitment of significant resources to maintain, protect and enhance existing systems and develop new systems to keep pace with continuing changes in information processing technology, evolving systems and regulatory standards and changing customer preferences. If the information we rely upon to run our businesses is found to be inaccurate or unreliable or if we fail to maintain or protect our information systems and data integrity effectively, we could lose existing customers, have difficulty attracting new customers, experience problems in determining medical cost estimates and establishing appropriate pricing, have difficulty preventing, detecting and controlling fraud, have disputes with customers, physicians and other health care professionals, become subject to regulatory sanctions or penalties, incur increases in operating expenses or suffer other adverse consequences. Our process of consolidating the number of systems we operate, upgrading and expanding our information systems' capabilities, enhancing our systems and developing new systems to keep pace with continuing changes in information processing technology may not be successful. Failure to protect, consolidate and integrate our systems successfully could result in higher than expected costs and diversion of management's time and energy, which could materially and adversely affect our results of operations, financial position and cash flows.

Certain of our businesses sell and install software products that may contain unexpected design defects or may encounter unexpected complications during installation or when used with other technologies utilized by the customer. Connectivity among competing technologies is becoming increasingly important in the health care industry. A failure of our technology products to operate as intended and in a seamless fashion with other products could materially and adversely affect our results of operations, financial position and cash flows.

Uncertain and rapidly evolving U.S. federal and state, non-U.S. and international laws and regulations related to the health information technology market may present compliance challenges and could materially and adversely affect the configuration of our information systems and platforms, and our ability to compete in this market.

If we are not able to protect our proprietary rights to our databases, software and related products, our ability to market our knowledge and information-related businesses could be hindered and our results of operations, financial position and cash flows could be materially and adversely affected.

We rely on our agreements with customers, confidentiality agreements with employees and third parties, and our trademarks, trade secrets, copyrights and patents to protect our proprietary rights. These legal protections and precautions may not prevent misappropriation of our proprietary information. In addition, substantial litigation regarding intellectual property rights exists in the software industry, and we expect software products to be increasingly subject to third-party infringement claims as the number of products and competitors in this industry segment grows. Such litigation and misappropriation of our proprietary information could hinder our ability to market and sell products and services and our results of operations, financial position and cash flows could be materially and adversely affected.

Restrictions on our ability to obtain funds from our regulated subsidiaries could materially and adversely affect our results of operations, financial position and cash flows.

Because we operate as a holding company, we are dependent on dividends and administrative expense reimbursements from our subsidiaries to fund our obligations. Many of these subsidiaries are regulated by departments of insurance or similar regulatory authorities. We are also required by law or regulation to maintain specific prescribed minimum amounts of capital in these subsidiaries. The levels of capitalization required depend primarily on the volume of premium revenues generated by the applicable subsidiary. In most states, we are required to seek approval by state regulatory authorities before we transfer money or pay dividends from our regulated subsidiaries that exceed specified amounts. An inability of our regulated subsidiaries to pay dividends to their parent companies in the desired amounts or at the time of our choosing could adversely affect our ability to reinvest in our business through capital expenditures or business acquisitions, as well as our ability to maintain our corporate quarterly dividend payment, repurchase shares of our common stock and repay our debt. If we are unable to obtain sufficient funds from our subsidiaries to fund our obligations, our results of operations, financial position and cash flows could be materially and adversely affected.

Any downgrades in our credit ratings could adversely affect our business, financial condition and results of operations.

Claims paying ability, financial strength and debt ratings by Nationally Recognized Statistical Rating Organizations are important factors in establishing the competitive position of insurance companies. Ratings information is broadly disseminated and generally used by customers and creditors. We believe our claims paying ability and financial strength ratings are important factors in marketing our products to certain of our customers. Our credit ratings impact both the cost and availability of future borrowings. Each of the credit rating agencies reviews its ratings periodically. Our ratings reflect each credit rating agency's opinion of our financial strength, operating performance and ability to meet our debt obligations or obligations to policyholders. There can be no assurance that our current credit ratings will be maintained in the future. Any downgrades in our credit ratings could materially increase our costs of or ability to access funds in the debt capital markets and otherwise materially increase our operating costs.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

To support our business operations in the United States and other countries we own and lease real properties. Our various reportable segments use these facilities for their respective business purposes, and we believe these current facilities are suitable for their respective uses and are adequate for our anticipated future needs.

ITEM 3. LEGAL PROCEEDINGS

The information required by this Item 3 is incorporated herein by reference to the information set forth under the captions "Legal Matters" and "Governmental Investigations, Audits and Reviews" in Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

MARKET AND HOLDERS

Our common stock is traded on the New York Stock Exchange (NYSE) under the symbol UNH. On January 31, 2019, there were 11,948 registered holders of record of our common stock.

DIVIDEND POLICY

In June 2018, our Board of Directors increased the Company's annual cash dividend rate to shareholders to $3.60 per share compared to $3.00 per share, which the Company had paid since June 2017. Declaration and payment of future quarterly dividends is at the discretion of the Board and may be adjusted as business needs or market conditions change.

ISSUER PURCHASES OF EQUITY SECURITIES

In November 1997, our Board of Directors adopted a share repurchase program, which the Board evaluates periodically. There is no established expiration date for the program. During the fourth quarter of 2018, we repurchased 3.3 million shares at an average price of $256.15 per share. As of December 31, 2018, we had Board authorization to purchase up to 94 million shares of our common stock.

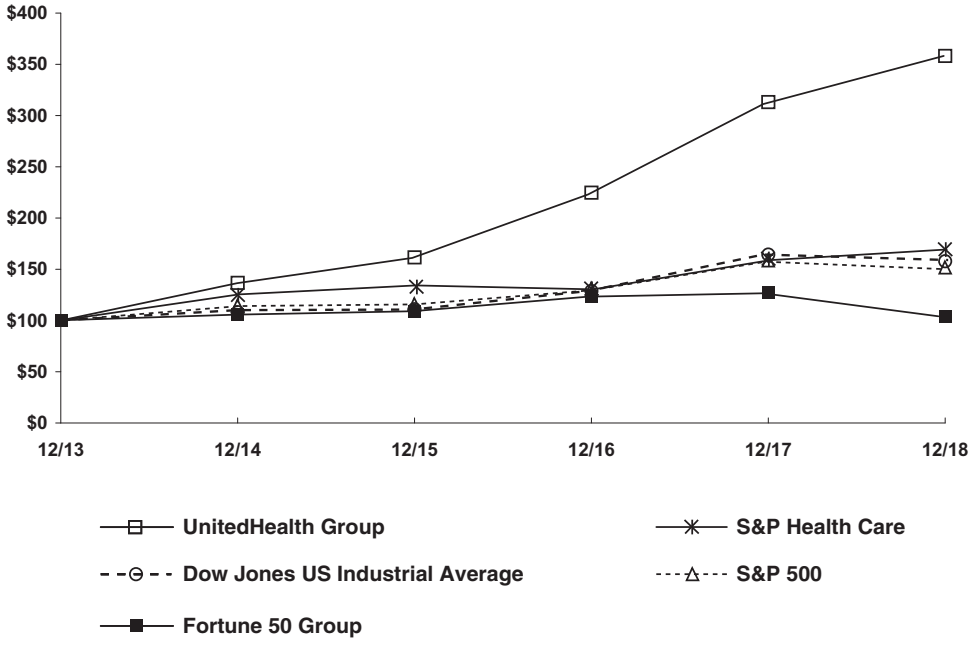
PERFORMANCE GRAPH

The following performance graph compares the cumulative five-year total return to shareholders on our common stock relative to the cumulative total returns of the S&P 500 index, the S&P Health Care Index and the Dow Jones US Industrial Average Index for the five-year period ended December 31, 2018. We have also included the customized peer group of certain *Fortune 50* companies that we have compared ourselves to in prior years. We believe that these indices provide a more meaningful comparison than the previous subset of the Fortune 50 given our diverse businesses. The comparisons assume the investment of $100 on December 31, 2013 in our common stock and in each index, and that dividends were reinvested when paid.

The *Fortune 50* Group consists of the following companies: American International Group, Inc., Berkshire Hathaway Inc., Cardinal Health, Inc., Citigroup Inc., General Electric Company, International Business Machines Corporation and Johnson & Johnson. We are not included in this *Fortune 50* Group index. In calculating the cumulative total shareholder return of the indexes, the shareholder returns of the *Fortune 50* Group companies are weighted according to the stock market capitalizations of the companies at January 1 of each year.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

Among UnitedHealth Group, the S&P Health Care Index, the Dow Jones US Industrial Average Index, the S&P 500 Index, and Fortune 50 Group



	12/13	12/14	12/15	12/16	12/17	12/18
UnitedHealth Group	**$100.00**	**$136.46**	**$161.37**	**$223.35**	**$312.29**	**$357.64**
S&P Health Care Index	**100.00**	**125.34**	**133.97**	**130.37**	**159.15**	**169.44**
Dow Jones US Industrial Average	**100.00**	**110.04**	**110.28**	**128.47**	**164.58**	**158.85**
S&P 500 Index	**100.00**	**113.69**	**115.26**	**129.05**	**157.22**	**150.33**
Fortune 50 Group	**100.00**	**105.33**	**108.75**	**123.33**	**126.45**	**103.96**

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

ITEM 6. SELECTED FINANCIAL DATA

(in millions, except percentages and per share data)	For the Years Ended December 31, 2018	2017 (a)	2016	2015 (b)	2014
Consolidated operating results					
Revenues	$226,247	$201,159	$184,840	$157,107	$130,474
Earnings from operations	17,344	15,209	12,930	11,021	10,274
Net earnings attributable to UnitedHealth Group common shareholders	11,986	10,558	7,017	5,813	5,619
Return on equity (c)	24.4%	24.4%	19.4%	17.7%	17.3%
Basic earnings per share attributable to UnitedHealth Group common shareholders	$ 12.45	$ 10.95	$ 7.37	$ 6.10	$ 5.78
Diluted earnings per share attributable to UnitedHealth Group common shareholders	12.19	10.72	7.25	6.01	5.70
Cash dividends declared per common share	3.45	2.875	2.375	1.875	1.405
Consolidated cash flows from (used for)					
Operating activities	$ 15,713	$ 13,596	$ 9,795	$ 9,740	$ 8,051
Investing activities	(12,385)	(8,599)	(9,355)	(18,395)	(2,534)
Financing activities	(4,365)	(3,441)	(1,011)	12,239	(5,293)
Consolidated financial condition (as of December 31)					
Cash and investments	$ 46,834	$ 43,831	$ 37,143	$ 31,703	$ 28,063
Total assets	152,221	139,058	122,810	111,254	86,300
Total commercial paper and long-term debt	36,554	31,692	32,970	31,965	17,324
Redeemable noncontrolling interests	1,908	2,189	2,012	1,736	1,388
Total equity	54,319	49,833	38,177	33,725	32,454

(a) Includes the impact of the revaluation of our net deferred tax liabilities due to Tax Reform enacted in December 2017.

(b) Includes the effects of the July 2015 acquisition of Catamaran Corporation (Catamaran) and related debt issuances.

(c) Return on equity is calculated as net earnings attributable to UnitedHealth Group common shareholders divided by average shareholders' equity. Average shareholders' equity is calculated using the shareholders' equity balance at the end of the preceding year and the shareholders' equity balances at the end of each of the four quarters of the year presented.

This selected financial data should be read with the accompanying "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 and the Consolidated Financial Statements and Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read together with the accompanying Consolidated Financial Statements and Notes to the Consolidated Financial Statements thereto included in Item 8, "Financial Statements and Supplementary Data." Readers are cautioned that the statements, estimates, projections or outlook contained in this report, including discussions regarding financial prospects, economic conditions, trends and uncertainties contained in this Item 7, may constitute forward-looking statements within the meaning of the PSLRA. These forward-looking statements involve risks and uncertainties that may cause our actual results to differ materially from the expectations expressed or implied in the forward-looking statements. A description of some of the risks and uncertainties can be found further below in this Item 7 and in Part I, Item 1A, "Risk Factors."

EXECUTIVE OVERVIEW

General

UnitedHealth Group is a diversified health care company dedicated to helping people live healthier lives and helping make the health system work better for everyone. Through our diversified family of businesses, we leverage core competencies in data analytics and health information; advanced technology; and clinical expertise. These core competencies are deployed within our two distinct, but strategically aligned, business platforms: health benefits operating under UnitedHealthcare and health services operating under Optum.

We have four reportable segments across our two business platforms, UnitedHealthcare and Optum:

- UnitedHealthcare, which includes UnitedHealthcare Employer & Individual, UnitedHealthcare Medicare & Retirement, UnitedHealthcare Community & State and UnitedHealthcare Global;
- OptumHealth;
- OptumInsight; and
- OptumRx.

Further information on our business and reportable segments is presented in Part I, Item 1, "Business" and in Note 13 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

Business Trends

Our businesses participate in the United States, South America and certain other international health markets. In the United States, health care spending has grown consistently for many years and comprises 18% of gross domestic product (GDP). We expect overall spending on health care to continue to grow in the future, due to inflation, medical technology and pharmaceutical advancement, regulatory requirements, demographic trends in the population and national interest in health and well-being. The rate of market growth may be affected by a variety of factors, including macro-economic conditions and regulatory changes, which have impacted and could further impact our results of operations.

Pricing Trends. To price our health care benefit products, we start with our view of expected future costs. We frequently evaluate and adjust our approach in each of the local markets we serve, considering relevant factors, such as product positioning, price competitiveness and environmental, competitive, legislative and regulatory considerations, including minimum MLR thresholds. We will continue seeking to balance growth and profitability across all of these dimensions.

The commercial risk market remains highly competitive in both the small group and large group segments. We expect broad-based competition to continue as the industry adapts to individual and employer needs amid reform changes. The ACA included an annual, nondeductible insurance industry tax (Health Insurance Industry Tax) to be levied proportionally across the insurance industry for risk-based health insurance products. A provision in the 2018 federal budget imposed a one year moratorium for 2019 on the collection of the Health Insurance Industry Tax. Pricing for contracts that cover a portion of calendar year 2019 reflected the impact of the moratorium. The industry has continued to experience favorable medical cost trends due to moderated utilization, which has impacted the competitive pricing environment.

Medicare Advantage funding continues to be pressured, as discussed below in "Regulatory Trends and Uncertainties."

We expect continued Medicaid revenue growth due to anticipated changes in mix and increases in the number of people we serve; we also believe that the payment rate environment creates the risk of downward pressure on Medicaid margin percentages. We continue to take a prudent, market-sustainable posture for both new business and maintenance of existing relationships. We continue to advocate for actuarially sound rates that are commensurate with our medical cost trends and we remain dedicated to partnering with those states that are committed to the long-term viability of their programs.

Medical Cost Trends. Our medical cost trends primarily relate to changes in unit costs, health system utilization and prescription drug costs. We endeavor to mitigate those increases by engaging physicians and consumers with information and helping them make clinically sound choices, with the objective of helping them achieve high-quality, affordable care.

Delivery System and Payment Modernization. The health care market continues to change based on demographic shifts, new regulations, political forces and both payer and patient expectations. Health plans and care providers are being called upon to work together to close gaps in care and improve overall care quality, improve the health of populations and reduce costs. We continue to see a greater number of people enrolled in plans with underlying incentive-based care provider payment models that reward high-quality, affordable care and foster collaboration. We work together with clinicians to leverage our data and analytics to provide the necessary information to close gaps in care and improve overall health outcomes for patients.

We are increasingly rewarding care providers for delivering improvements in quality and cost-efficiency. As of December 31, 2018, we served nearly 17 million people through some form of aligned contractual arrangement, including full-risk, shared-risk and bundled episode-of-care and performance incentive payment approaches. As of December 31, 2018, our contracts with value-based elements totaled $74 billion in annual spending, including $18 billion through risk-transfer agreements.

This trend is creating needs for health management services that can coordinate care around the primary care physician, including new primary care channels, and for investments in new clinical and administrative information and management systems, which we believe provide growth opportunities for our Optum business platform.

Regulatory Trends and Uncertainties

Following is a summary of management's view of the trends and uncertainties related to some of the key provisions of the ACA and other regulatory matters. For additional information regarding the ACA and regulatory trends and uncertainties, see Part I, Item 1 "Business—Government Regulation" and Item 1A, "Risk Factors."

Medicare Advantage Rates. Final 2019 Medicare Advantage rates resulted in an increase in industry base rates of 3.4%, short of the industry forward medical cost trend, which creates continued pressure in the Medicare Advantage program.

The ongoing pressure on Medicare Advantage funding places continued importance on effective medical management and ongoing improvements in administrative efficiency. There are a number of adjustments we have made to partially offset these rate pressures and reductions. In some years, these adjustments will impact the majority of the seniors we serve through Medicare Advantage. For example, we seek to intensify our medical and operating cost management, make changes to the size and composition of our care provider networks, adjust members' benefits and implement or increase the member premiums that supplement the monthly payments we receive from the government. Additionally, we decide annually on a county-by-county basis where we will offer Medicare Advantage plans.

As Medicare Advantage payments change, other products may become relatively more attractive to Medicare beneficiaries and increase the demand for other senior health benefits products, such as our market-leading Medicare Supplement and stand-alone Medicare Part D insurance offerings.

Our Medicare Advantage rates are currently enhanced by CMS quality bonuses in certain counties based on our local plans' Star ratings. The level of Star ratings from CMS, based upon specified clinical and operational performance standards, will impact future quality bonuses.

Tax Reform. Tax Reform was enacted by the U.S federal government in December 2017, changing existing United States tax law, including reducing the U.S. corporate income tax rate. In 2018, the impact of Tax Reform was partially offset by the return of the nondeductible Health Insurance Industry Tax.

Health Insurance Industry Tax. After a moratorium in 2017, the industry-wide amount of the Health Insurance Industry Tax in 2018 was $14.3 billion, with our portion being $2.6 billion. The return of the tax impacted year-over-year comparability of our financial results, including revenues, the medical care ratio (MCR), operating cost ratio and effective tax rate. A one year moratorium is imposed on the collection of the Health Insurance Industry Tax in 2019.

SELECTED OPERATING PERFORMANCE ITEMS

The following represents a summary of select 2018 year-over-year operating comparisons to 2017.

- Consolidated revenues increased by 12%, UnitedHealthcare revenues increased 12% and Optum revenues grew 11%.
- UnitedHealthcare's addition of 2.2 million people through acquisition and 250,000 through organic growth was offset by 2.9 million fewer people served as a result of completion of its commitment under the TRICARE military health care program.
- Earnings from operations increased by 14%, including increases of 7% at UnitedHealthcare and 23% at Optum.
- Diluted earnings per common share increased 14% to $12.19.
- Cash flows from operations were $15.7 billion, an increase of 16%.

RESULTS SUMMARY

The following table summarizes our consolidated results of operations and other financial information:

(in millions, except percentages and per share data)	For the Years Ended December 31, 2018	2017	2016	Change 2018 vs. 2017		Change 2017 vs. 2016	
Revenues:							
Premiums	$178,087	$158,453	$144,118	$19,634	12%	$14,335	10%
Products	29,601	26,366	26,658	3,235	12	(292)	(1)
Services	17,183	15,317	13,236	1,866	12	2,081	16
Investment and other income	1,376	1,023	828	353	35	195	24
Total revenues	226,247	201,159	184,840	25,088	12	16,319	9
Operating costs:							
Medical costs	145,403	130,036	117,038	15,367	12	12,998	11
Operating costs	34,074	29,557	28,401	4,517	15	1,156	4
Cost of products sold	26,998	24,112	24,416	2,886	12	(304)	(1)
Depreciation and amortization	2,428	2,245	2,055	183	8	190	9
Total operating costs	208,903	185,950	171,910	22,953	12	14,040	8
Earnings from operations	17,344	15,209	12,930	2,135	14	2,279	18
Interest expense	(1,400)	(1,186)	(1,067)	(214)	18	(119)	11
Earnings before income taxes	15,944	14,023	11,863	1,921	14	2,160	18
Provision for income taxes	(3,562)	(3,200)	(4,790)	(362)	11	1,590	(33)
Net earnings	12,382	10,823	7,073	1,559	14	3,750	53
Earnings attributable to noncontrolling interests	(396)	(265)	(56)	(131)	49	(209)	373
Net earnings attributable to UnitedHealth Group common shareholders	$ 11,986	$ 10,558	$ 7,017	$ 1,428	14%	$ 3,541	50%
Diluted earnings per share attributable to UnitedHealth Group common shareholders	$ 12.19	$ 10.72	$ 7.25	$ 1.47	14%	$ 3.47	48%
Medical care ratio (a)	81.6%	82.1%	81.2%	(0.5)%		0.9%	
Operating cost ratio	15.1	14.7	15.4	0.4		(0.7)	
Operating margin	7.7	7.6	7.0	0.1		0.6	
Tax rate	22.3	22.8	40.4	(0.5)		(17.6)	
Net earnings margin (b)	5.3	5.2	3.8	0.1		1.4	
Return on equity (c)	24.4%	24.4%	19.4%	—%		5.0%	

(a) Medical care ratio is calculated as medical costs divided by premium revenue.

(b) Net earnings margin attributable to UnitedHealth Group shareholders.

(c) Return on equity is calculated as net earnings attributable to UnitedHealth Group common shareholders divided by average shareholders' equity. Average shareholders' equity is calculated using the shareholders' equity balance at the end of the preceding year and the shareholders' equity balances at the end of each of the four quarters of the year presented.

2018 RESULTS OF OPERATIONS COMPARED TO 2017 RESULTS

Consolidated Financial Results

Revenue

The increase in revenue was primarily driven by the increase in the number of individuals served through risk-based products across our UnitedHealthcare benefits businesses; pricing trends, including the Health Insurance

Industry Tax in 2018; and growth across the Optum business, primarily due to expansion and growth in care delivery, pharmacy care services, managed services and advisory services.

Medical Costs and MCR

Medical costs increased due to growth in people served through risk-based products and medical cost trends. The MCR decreased due to the revenue effects of the Health Insurance Industry Tax, which more than offset business mix changes and a lower level of favorable reserve development.

Reportable Segments

See Note 13 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data" for more information on our segments. The following table presents a summary of the reportable segment financial information:

(in millions, except percentages)	For the Years Ended December 31, 2018	2017	2016	Change 2018 vs. 2017		Change 2016 vs. 2015	
Revenues							
UnitedHealthcare	$183,476	$163,257	$148,581	$20,219	12%	$14,676	10%
OptumHealth	24,145	20,570	16,908	3,575	17	3,662	22
OptumInsight	9,008	8,087	7,333	921	11	754	10
OptumRx	69,536	63,755	60,440	5,781	9	3,315	5
Optum eliminations	(1,409)	(1,227)	(1,088)	(182)	15	(139)	13
Optum	101,280	91,185	83,593	10,095	11	7,592	9
Eliminations	(58,509)	(53,283)	(47,334)	(5,226)	10	(5,949)	13
Consolidated revenues	$226,247	$201,159	$184,840	$25,088	12%	$16,319	9%
Earnings from operations							
UnitedHealthcare	$ 9,113	$ 8,498	$ 7,307	$ 615	7%	$ 1,191	16%
OptumHealth	2,430	1,823	1,428	607	33	395	28
OptumInsight	2,243	1,770	1,513	473	27	257	17
OptumRx	3,558	3,118	2,682	440	14	436	16
Optum	8,231	6,711	5,623	1,520	23	1,088	19
Consolidated earnings from operations	$ 17,344	$ 15,209	$ 12,930	$ 2,135	14%	$ 2,279	18%
Operating margin							
UnitedHealthcare	5.0%	5.2%	4.9%	(0.2)%		0.3%	
OptumHealth	10.1	8.9	8.4	1.2		0.5	
OptumInsight	24.9	21.9	20.6	3.0		1.3	
OptumRx	5.1	4.9	4.4	0.2		0.5	
Optum	8.1	7.4	6.7	0.7		0.7	
Consolidated operating margin	7.7%	7.6%	7.0%	0.1%		0.6%	

UnitedHealthcare

The following table summarizes UnitedHealthcare revenues by business:

(in millions, except percentages)	For the Years Ended December 31, 2018	2017	2016	Change 2018 vs. 2017		Change 2017 vs. 2016	
UnitedHealthcare Employer & Individual	$ 54,761	$ 52,066	$ 53,084	$ 2,695	5%	$ (1,018)	(2)%
UnitedHealthcare Medicare & Retirement	75,473	65,995	56,329	9,478	14	9,666	17
UnitedHealthcare Community & State	43,426	37,443	32,945	5,983	16	4,498	14
UnitedHealthcare Global	9,816	7,753	6,223	2,063	27	1,530	25
Total UnitedHealthcare revenues	$183,476	$163,257	$148,581	$20,219	12%	$14,676	10%

The following table summarizes the number of individuals served by our UnitedHealthcare businesses, by major market segment and funding arrangement:

(in thousands, except percentages)	December 31, 2018	2017	2016	Change 2018 vs. 2017		Change 2017 vs. 2016	
Commercial:							
Risk-based	8,495	8,420	8,820	75	1%	(400)	(5)%
Fee-based	18,420	18,595	18,900	(175)	(1)	(305)	(2)
Fee-based TRICARE	—	2,850	2,860	(2,850)	(100)	(10)	—
Total commercial	26,915	29,865	30,580	(2,950)	(10)	(715)	(2)
Medicare Advantage	4,945	4,430	3,630	515	12	800	22
Medicaid	6,450	6,705	5,890	(255)	(4)	815	14
Medicare Supplement (Standardized)	4,545	4,445	4,265	100	2	180	4
Total public and senior	15,940	15,580	13,785	360	2	1,795	13
Total UnitedHealthcare — domestic medical	42,855	45,445	44,365	(2,590)	(6)	1,080	2
International	6,220	4,080	4,220	2,140	52	(140)	(3)
Total UnitedHealthcare — medical	49,075	49,525	48,585	(450)	(1)%	940	2%
Supplemental Data:							
Medicare Part D stand-alone	4,710	4,940	4,930	(230)	(5)%	10	—%

The overall increase in people served through risk-based benefit plans in the commercial group market was due to growth in services to small groups. Fee-based commercial group business declined primarily due to customers converting their retirees to Medicare Advantage plans, as well as certain customers expanding the number of carriers and reconfiguring geographies served. Medicare Advantage increased year-over-year due to growth in people served through individual and employer-sponsored group Medicare Advantage plans. The decrease in people served through Medicaid was primarily driven by states adding new carriers to existing programs, reduced enrollment from state efforts to manage eligibility status and the sale of our New Mexico Medicaid plan. Medicare Supplement growth reflected strong customer retention and new sales. International growth was primarily driven by an acquisition in the first quarter.

UnitedHealthcare's revenue and earnings from operations increased due to growth in the number of individuals served across its risk-based businesses, a higher revenue membership mix, rate increases for underlying medical cost trends and the impact of the return of the Health Insurance Industry Tax. UnitedHealthcare's operating margin decreased slightly due to the performance of our traditional community-based TANF Medicaid business.

Optum

Total revenues and earnings from operations increased as each segment reported increased revenues and earnings from operations as a result of the factors discussed below, as well as productivity and overall cost management initiatives.

The results by segment were as follows:

OptumHealth

Revenue and earnings from operations increased at OptumHealth primarily due to organic and acquisition-related growth in care delivery and behavioral health, digital consumer engagement and health financial services.

OptumInsight

Revenue and earnings from operations at OptumInsight increased primarily due to growth in data analytics product and service offerings and managed services as well as organic and acquisition-related growth in advisory services.

OptumRx

Revenue and earnings from operations at OptumRx increased primarily due to growth in specialty pharmacy, home delivery services, and overall prescription growth. OptumRx fulfilled 1,343 million and 1,298 million adjusted scripts in 2018 and 2017, respectively.

2017 RESULTS OF OPERATIONS COMPARED TO 2016 RESULTS

Consolidated Financial Results

Revenue

The increase in revenue was primarily driven by organic growth in the number of individuals served across our UnitedHealthcare benefits businesses and growth across the Optum business. The increase was partially offset by revenue decreases due to the withdrawals of the ACA-compliant products in the individual market and the effects of the Health Insurance Industry Tax moratorium.

Medical Costs and MCR

Medical costs increased due to risk-based membership growth and medical cost trends. The MCR increased due to the effects of the Health Insurance Industry Tax moratorium, offset primarily by the reduction in individual ACA business, medical management initiatives and an increase in favorable medical cost reserve development.

Income Tax Rate

Our effective tax rate decreased primarily due to the impact of Tax Reform and the Health Insurance Tax moratorium. The provision for income taxes included a $1.2 billion benefit from the revaluation of net deferred tax liabilities.

Reportable Segments

UnitedHealthcare

UnitedHealthcare’s revenue increase was due to growth in the number of individuals served across its businesses and price increases for underlying medical cost trends, which were partially offset by the reduction of people served in ACA-compliant individual products and the impact of the Health Insurance Industry Tax moratorium.

The increase in UnitedHealthcare's earnings from operations was led by diversified growth and increased operating margin. The 2016 results included losses in ACA-compliant individual products and guaranty fund assessments.

Optum

Total revenues and earnings from operations increased as each segment reported increased revenues and earnings from operations as a result of the factors discussed below.

The results by segment were as follows:

OptumHealth

Revenue and earnings from operations increased at OptumHealth primarily due to organic and acquisition-related growth in care delivery.

OptumInsight

Revenue and earnings from operations at OptumInsight increased primarily due to growth in revenue management services and business process services.

OptumRx

Revenue and earnings from operations at OptumRx increased primarily due to client and consumer growth. In 2017, OptumRx fulfilled 1.3 billion adjusted scripts compared to 1.2 billion in 2016.

LIQUIDITY, FINANCIAL CONDITION AND CAPITAL RESOURCES

Liquidity

Introduction

We manage our liquidity and financial position in the context of our overall business strategy. We continually forecast and manage our cash, investments, working capital balances and capital structure to meet the short-term and long-term obligations of our businesses while seeking to maintain liquidity and financial flexibility. Cash flows generated from operating activities are principally from earnings before noncash expenses.

Our regulated subsidiaries generate significant cash flows from operations and are subject to financial regulations and standards in their respective jurisdictions. These standards, among other things, require these subsidiaries to maintain specified levels of statutory capital, as defined by each jurisdiction, and restrict the timing and amount of dividends and other distributions that may be paid to their parent companies.

In both 2018 and 2017, our U.S. regulated subsidiaries paid their parent companies dividends of $3.7 billion. See Note 10 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data" for further detail concerning our regulated subsidiary dividends.

Our nonregulated businesses also generate significant cash flows from operations that are available for general corporate use. Cash flows generated by these entities, combined with dividends from our regulated entities and financing through the issuance of long-term debt as well as issuance of commercial paper or the ability to draw under our committed credit facilities, further strengthen our operating and financial flexibility. We use these cash flows to expand our businesses through acquisitions, reinvest in our businesses through capital expenditures, repay debt and return capital to our shareholders through shareholder dividends and/or repurchases of our common stock, depending on market conditions.

Summary of our Major Sources and Uses of Cash and Cash Equivalents

(in millions)	For the Years Ended December 31, 2018	2017	2016	Change 2018 vs. 2017	Change 2017 vs. 2016
Sources of cash:					
Cash provided by operating activities	$ 15,713	$ 13,596	$ 9,795	$ 2,117	$ 3,801
Issuances of long-term debt and commercial paper, net of repayments	4,134	—	990	4,134	(990)
Proceeds from common share issuances	838	688	429	150	259
Customer funds administered	—	3,172	1,692	(3,172)	1,480
Other	—	—	37	—	(37)
Total sources of cash	20,685	17,456	12,943		
Uses of cash:					
Cash paid for acquisitions, net of cash assumed	(5,997)	(2,131)	(1,760)	(3,866)	(371)
Cash dividends paid	(3,320)	(2,773)	(2,261)	(547)	(512)
Common share repurchases	(4,500)	(1,500)	(1,280)	(3,000)	(220)
Repayments of long-term debt and commercial paper, net of issuances	—	(2,615)	—	2,615	(2,615)
Purchases of property, equipment and capitalized software	(2,063)	(2,023)	(1,705)	(40)	(318)
Purchases of investments, net of sales and maturities	(4,099)	(4,319)	(5,927)	220	1,608
Other	(1,743)	(539)	(581)	(1,204)	42
Total uses of cash	(21,722)	(15,900)	(13,514)		
Effect of exchange rate changes on cash and cash equivalents	(78)	(5)	78	(73)	(83)
Net (decrease) increase in cash and cash equivalents	$ (1,115)	$ 1,551	$ (493)	$ (2,666)	$ 2,044

2018 Cash Flows Compared to 2017 Cash Flows

Increased cash flows provided by operating activities were primarily driven by higher net earnings in 2018 and the impact to 2017 cash flows from operating activities due to a change in net deferred tax liabilities from Tax Reform, partially offset by changes in working capital accounts.

Other significant changes in sources or uses of cash year-over-year included net issuances of debt in 2018 compared to net repayments in 2017, an increase in cash paid for acquisitions, increased share repurchases and a decrease in customer funds administered due to the timing of government payments.

2017 Cash Flows Compared to 2016 Cash Flows

Increased cash flows provided by operating activities were primarily driven by higher net earnings and changes in working capital accounts, partially offset by the change in net deferred tax liabilities driven by tax reform.

Other significant changes in sources or uses of cash year-over-year included net repayments of debt compared to 2016 net proceeds from debt issuances, which were partially offset by lower net purchases of investments.

Financial Condition

As of December 31, 2018, our cash, cash equivalent, available-for-sale debt securities and equity securities balances of $44.7 billion included $10.9 billion of cash and cash equivalents (of which $925 million was

available for general corporate use), $31.9 billion of debt securities and $2.0 billion of investments in equity securities. Given the significant portion of our portfolio held in cash equivalents, we do not anticipate fluctuations in the aggregate fair value of our financial assets to have a material impact on our liquidity or capital position. Other sources of liquidity, primarily from operating cash flows and our commercial paper program, which is supported by our bank credit facilities, reduce the need to sell investments during adverse market conditions. See Note 4 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data" for further detail concerning our fair value measurements.

Our available-for-sale debt portfolio had a weighted-average duration of 3.3 years and a weighted-average credit rating of "Double A" as of December 31, 2018. When multiple credit ratings are available for an individual security, the average of the available ratings is used to determine the weighted-average credit rating.

Capital Resources and Uses of Liquidity

In addition to cash flows from operations and cash and cash equivalent balances available for general corporate use, our capital resources and uses of liquidity are as follows:

Commercial Paper and Bank Credit Facilities. Our revolving bank credit facilities provide liquidity support for our commercial paper borrowing program, which facilitates the private placement of senior unsecured debt through third-party broker-dealers, and are available for general corporate purposes. For more information on our commercial paper and bank credit facilities, see Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

Our revolving bank credit facilities contain various covenants, including covenants requiring us to maintain a defined debt to debt-plus-shareholders' equity ratio of not more than 60%. As of December 31, 2018, our debt to debt-plus-shareholders' equity ratio, as defined and calculated under the credit facilities, was 38%.

Long-Term Debt. Periodically, we access capital markets to issue long-term debt for general corporate purposes, such as, to meet our working capital requirements, to refinance debt, to finance acquisitions or for share repurchases. For more information on our debt, see Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8 "Financial Statements and Supplementary Data."

Credit Ratings. Our credit ratings as of December 31, 2018 were as follows:

	Moody's		S&P Global		Fitch		A.M. Best	
	Ratings	Outlook	Ratings	Outlook	Ratings	Outlook	Ratings	Outlook
Senior unsecured debt	A3	Stable	A+	Stable	A-	Stable	A-	Stable
Commercial paper	P-2	n/a	A-1	n/a	F1	n/a	AMB-1	n/a

The availability of financing in the form of debt or equity is influenced by many factors, including our profitability, operating cash flows, debt levels, credit ratings, debt covenants and other contractual restrictions, regulatory requirements and economic and market conditions. For example, a significant downgrade in our credit ratings or adverse conditions in the capital markets may increase the cost of borrowing for us or limit our access to capital.

Share Repurchase Program. As of December 31, 2018, we had Board authorization to purchase up to 94 million shares of our common stock. For more information on our share repurchase program, see Note 10 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

Dividends. In June 2018, our Board increased our annual cash dividend rate to shareholders to $3.60 per share from $3.00 per share. For more information on our dividend, see Note 10 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

CONTRACTUAL OBLIGATIONS AND COMMITMENTS

The following table summarizes future obligations due by period as of December 31, 2018, under our various contractual obligations and commitments:

(in millions)	2019	2020 to 2021	2022 to 2023	Thereafter	Total
Debt (a)	$ 3,463	$ 8,970	$ 7,396	$ 37,988	$ 57,817
Operating leases	669	1,103	761	1,343	3,876
Purchase and other obligations (b)	1,216	2,205	808	175	4,404
Other liabilities (c)	1,206	260	257	5,213	6,936
Redeemable noncontrolling interests (d)	1,276	380	25	227	1,908
Total contractual obligations	$ 7,830	$ 12,918	$ 9,247	$ 44,946	$ 74,941

(a) Includes interest coupon payments and maturities at par or put values. The table also assumes amounts are outstanding through their contractual term. See Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data" for more detail.

(b) Includes fixed or minimum commitments under existing purchase obligations for goods and services, including agreements that are cancelable with the payment of an early termination penalty and remaining capital commitments for venture capital funds and other funding commitments. Excludes agreements that are cancelable without penalty and excludes liabilities to the extent recorded in our Consolidated Balance Sheets as of December 31, 2018.

(c) Includes obligations associated with contingent consideration and payments related to business acquisitions, certain employee benefit programs, amounts accrued for guaranty fund assessments, unrecognized tax benefits, and various long-term liabilities. Due to uncertainty regarding payment timing, obligations for employee benefit programs, charitable contributions, future settlements, unrecognized tax benefits and other liabilities have been classified as "Thereafter."

(d) Includes commitments for redeemable shares of our subsidiaries. When the timing of the redemption is indeterminable, the commitment has been classified as "Thereafter."

Pending Acquisitions. In December 2017, we entered into an agreement to acquire a company in the health care sector for a total of approximately $4.3 billion, which is not reflected in the table above.

We do not have other significant contractual obligations or commitments that require cash resources. However, we continually evaluate opportunities to expand our operations, which include internal development of new products, programs and technology applications and may include acquisitions.

OFF-BALANCE SHEET ARRANGEMENTS

As of December 31, 2018, we were not involved in any off-balance sheet arrangements, which have or are reasonably likely to have a material effect on our financial condition, results of operations or liquidity.

RECENTLY ISSUED ACCOUNTING STANDARDS

See Note 2 of Notes to the Consolidated Financial Statements in Part II, Item 8 "Financial Statements and Supplementary Data" for a discussion of new accounting pronouncements that affect us.

CRITICAL ACCOUNTING ESTIMATES

Critical accounting estimates are those estimates that require management to make challenging, subjective or complex judgments, often because they must estimate the effects of matters that are inherently uncertain and may change in subsequent periods. Critical accounting estimates involve judgments and uncertainties that are sufficiently sensitive and may result in materially different results under different assumptions and conditions.

Medical Costs Payable

Medical costs and medical costs payable include estimates of our obligations for medical care services that have been rendered on behalf of insured consumers, but for which claims have either not yet been received or processed. Depending on the health care professional and type of service, the typical billing lag for services can be up to 90 days from the date of service. Approximately 90% of claims related to medical care services are known and settled within 90 days from the date of service and substantially all within twelve months. As of December 31, 2018, our days outstanding in medical payables was 50 days, calculated as total medical payables divided by total medical costs times the number of days in the period.

In each reporting period, our operating results include the effects of more completely developed medical costs payable estimates associated with previously reported periods. If the revised estimate of prior period medical costs is less than the previous estimate, we will decrease reported medical costs in the current period (favorable development). If the revised estimate of prior period medical costs is more than the previous estimate, we will increase reported medical costs in the current period (unfavorable development). Medical costs in 2018, 2017 and 2016 included favorable medical cost development related to prior years of $320 million, $690 million and $220 million, respectively.

In developing our medical costs payable estimates, we apply different estimation methods depending on the month for which incurred claims are being estimated. For example, for the most recent two months, we estimate claim costs incurred by applying observed medical cost trend factors to the average per member per month (PMPM) medical costs incurred in prior months for which more complete claim data is available, supplemented by a review of near-term completion factors.

Completion Factors. A completion factor is an actuarial estimate, based upon historical experience and analysis of current trends, of the percentage of incurred claims during a given period that have been adjudicated by us at the date of estimation. Completion factors are the most significant factors we use in developing our medical costs payable estimates for periods prior to the most recent two months. Completion factors include judgments in relation to claim submissions such as the time from date of service to claim receipt, claim inventory levels and claim processing backlogs, as well as other factors. If actual claims submission rates from providers (which can be influenced by a number of factors, including provider mix and electronic versus manual submissions) or our claim processing patterns are different than estimated, our reserve estimates may be significantly impacted.

The following table illustrates the sensitivity of these factors and the estimated potential impact on our medical costs payable estimates for those periods as of December 31, 2018:

Completion Factors (Decrease) Increase in Factors	Increase (Decrease) In Medical Costs Payable
	(in millions)
(0.75)%	$ 550
(0.50)	366
(0.25)	182
0.25	(181)
0.50	(362)
0.75	(541)

Medical Cost Per Member Per Month Trend Factors. Medical cost PMPM trend factors are significant factors we use in developing our medical costs payable estimates for the most recent two months. Medical cost trend factors are developed through a comprehensive analysis of claims incurred in prior months, provider contracting and expected unit costs, benefit design and a review of a broad set of health care utilization indicators, including but not limited to, pharmacy utilization trends, inpatient hospital authorization data and influenza incidence data from the National Centers for Disease Control. We also consider macroeconomic variables such as GDP growth, employment and disposable income. A large number of factors can cause the medical cost trend to vary from our estimates, including: our ability and practices to manage medical and pharmaceutical costs, changes in level and

mix of services utilized, mix of benefits offered, including the impact of co-pays and deductibles, changes in medical practices, catastrophes and epidemics.

The following table illustrates the sensitivity of these factors and the estimated potential impact on our medical costs payable estimates for the most recent two months as of December 31, 2018:

Medical Cost PMPM Quarterly Trend Increase (Decrease) in Factors	Increase (Decrease) In Medical Costs Payable
	(in millions)
3%	$ 703
2	469
1	234
(1)	(234)
(2)	(469)
(3)	(703)

The completion factors and medical costs PMPM trend factors analyses above include outcomes that are considered reasonably likely based on our historical experience estimating liabilities for incurred but not reported benefit claims.

Management believes the amount of medical costs payable is reasonable and adequate to cover our liability for unpaid claims as of December 31, 2018; however, actual claim payments may differ from established estimates as discussed above. Assuming a hypothetical 1% difference between our December 31, 2018 estimates of medical costs payable and actual medical costs payable, excluding AARP Medicare Supplement Insurance and any potential offsetting impact from premium rebates, 2018 net earnings would have increased or decreased by approximately $140 million.

For more detail related to our medical cost estimates, see Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, “Financial Statements and Supplementary Data.”

Revenues

We derive a substantial portion of our revenues from health care insurance premiums. We recognize premium revenues in the period eligible individuals are entitled to receive health care services. Customers are typically billed monthly at a contracted rate per eligible person multiplied by the total number of people eligible to receive services.

Our Medicare Advantage and Medicare Part D premium revenues are subject to periodic adjustment under the CMS risk adjustment payment methodology. The CMS risk adjustment model provides higher per member payments for enrollees diagnosed with certain conditions and lower payments for enrollees who are healthier. We estimate risk adjustment revenues based upon the data submitted and expected to be submitted to CMS. As a result of the variability of factors that determine such estimations, the actual amount of CMS’ retroactive payments could be materially more or less than our estimates. This may result in favorable or unfavorable adjustments to our Medicare premium revenue and, accordingly, our profitability. For more detail on premium revenues, see Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, “Financial Statements and Supplementary Data.” Risk adjustment data for our plans is subject to review by the federal and state governments, including audit by regulators. See Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, “Financial Statements and Supplementary Data” for additional information regarding these audits. Our estimates of premiums to be recognized are reduced by any expected premium minimum MLR rebates payable by us.

Goodwill and Intangible Assets

Goodwill. We evaluate goodwill for impairment annually or more frequently when an event occurs or circumstances change that indicate the carrying value may not be recoverable. When testing goodwill for

impairment, we may first assess qualitative factors to determine if it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value. During a qualitative analysis, we consider the impact of changes, if any, to the following factors: macroeconomic, industry and market factors, cost factors, changes in overall financial performance, and any other relevant events and uncertainties impacting a reporting unit. If our qualitative assessment indicates that goodwill impairment is more likely than not, we perform additional quantitative analyses. We may also elect to skip the qualitative testing and proceed directly to the quantitative testing. For reporting units where a quantitative analysis is performed, we perform a multi-step test measuring the fair values of the reporting units and comparing them to their aggregate carrying values, including goodwill. If the fair value is less than the carrying value of the reporting unit, then the implied value of goodwill would be calculated and compared to the carrying amount of goodwill to determine whether goodwill is impaired.

We estimate the fair values of our reporting units using discounted cash flows, which include assumptions about a wide variety of internal and external factors. Significant assumptions used in the impairment analysis include financial projections of free cash flow (including significant assumptions about operations, capital requirements and income taxes), long-term growth rates for determining terminal value beyond the discretely forecasted periods and discount rates. For each reporting unit, comparative market multiples are used to corroborate the results of our discounted cash flow test.

Forecasts and long-term growth rates used for our reporting units are consistent with, and use inputs from, our internal long-term business plan and strategies. Key assumptions used in these forecasts include:

- *Revenue trends.* Key revenue drivers for each reporting unit are determined and assessed. Significant factors include: customer and/or membership growth, medical trends and the impact and expectations of regulatory environments. Additional macro-economic assumptions relating to unemployment, GDP growth, interest rates and inflation are also evaluated and incorporated, as appropriate.
- *Medical cost trends.* For further discussion of medical cost trends, see the “Medical Cost Trend” section of Executive Overview-Business Trends and the “Medical Costs Payable” critical accounting estimate above. Similar factors, including historical and expected medical cost trend levels, are considered in estimating our long-term medical trends at the reporting unit level.
- *Operating productivity.* We forecast expected operating cost levels based on historical levels and expectations of future operating cost levels.
- *Capital levels.* The operating and long-term capital requirements for each business are considered.

Discount rates are determined for each reporting unit and include consideration of the implied risk inherent in their forecasts. Our most significant estimate in the discount rate determinations involves our adjustments to the peer company weighted average costs of capital that reflect reporting unit-specific factors. We have not made any adjustments to decrease a discount rate below the calculated peer company weighted average cost of capital for any reporting unit. Company-specific adjustments to discount rates are subjective and thus are difficult to measure with certainty. The passage of time and the availability of additional information regarding areas of uncertainty with respect to the reporting units’ operations could cause these assumptions to change in the future. As of October 1, 2018, we completed our annual impairment tests for goodwill with all of our reporting units having fair values substantially in excess of their carrying values.

Intangible Assets. Our finite-lived intangible assets are subject to impairment tests when events or circumstances indicate that an asset’s (or asset group’s) carrying value may exceed its estimated fair value. Consideration is given on a quarterly basis to a number of potential impairment indicators, including: changes in the use of the assets, changes in legal or other business factors that could affect value, experienced or expected operating cash-flow deterioration or losses, adverse changes in customer populations, adverse competitive or technological advances that could impact value and other factors.

Our indefinite-lived intangible assets are tested for impairment on an annual basis, or more frequently if impairment indicators exist. To determine if an indefinite-lived intangible asset is impaired, we compare its

estimated fair value to its carrying value. If the carrying value exceeds its estimated fair value, an impairment would be recorded for the amount by which the carrying value exceeds its estimated fair value. Intangible assets were not impaired in 2018.

LEGAL MATTERS

A description of our legal proceedings is presented in Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

CONCENTRATIONS OF CREDIT RISK

Investments in financial instruments such as marketable securities and accounts receivable may subject us to concentrations of credit risk. Our investments in marketable securities are managed under an investment policy authorized by our Board of Directors. This policy limits the amounts that may be invested in any one issuer and generally limits our investments to U.S. government and agency securities, state and municipal securities and corporate debt obligations that are investment grade. Concentrations of credit risk with respect to accounts receivable are limited due to the large number of employer groups and other customers that constitute our client base. As of December 31, 2018, there were no significant concentrations of credit risk.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our primary market risks are exposures to changes in interest rates that impact our investment income and interest expense and the fair value of certain of our fixed-rate investments and debt, as well as foreign currency exchange rate risk of the U.S. dollar primarily to the Brazilian real and Chilean peso.

As of December 31, 2018, we had $14 billion of financial assets on which the interest rates received vary with market interest rates, which may materially impact our investment income. Also as of December 31, 2018, $9 billion of our financial liabilities, which include commercial paper, debt and deposit liabilities, were at interest rates that vary with market rates, either directly or through the use of related interest rate swap contracts.

The fair value of certain of our fixed-rate investments and debt also varies with market interest rates. As of December 31, 2018, $30 billion of our investments were fixed-rate debt securities and $32 billion of our debt was non-swapped fixed-rate term debt. An increase in market interest rates decreases the market value of fixed-rate investments and fixed-rate debt. Conversely, a decrease in market interest rates increases the market value of fixed-rate investments and fixed-rate debt.

We manage exposure to market interest rates by diversifying investments across different fixed-income market sectors and debt across maturities, as well as by endeavoring to match our floating-rate assets and liabilities over time, either directly or through the use of interest rate swap contracts. Unrealized gains and losses on investments in available-for-sale securities are reported in comprehensive income.

The following tables summarize the impact of hypothetical changes in market interest rates across the entire yield curve by 1% point or 2% points as of December 31, 2018 and 2017 on our investment income and interest expense per annum and the fair value of our investments and debt (in millions, except percentages):

	December 31, 2018			
Increase (Decrease) in Market Interest Rate	Investment Income Per Annum	Interest Expense Per Annum	Fair Value of Financial Assets (b)	Fair Value of Financial Liabilities
2%	$ 276	$ 189	$ (2,242)	$ (5,017)
1	138	94	(1,140)	(2,724)
(1)	(138)	(94)	1,118	3,155
(2)	(276)	(189)	2,196	6,953

	December 31, 2017			
Increase (Decrease) in Market Interest Rate	Investment Income Per Annum (a)	Interest Expense Per Annum (a)	Fair Value of Financial Assets (b)	Fair Value of Financial Liabilities
2%	$ 300	$ 170	$ (1,958)	$ (4,546)
1	150	85	(933)	(2,460)
(1)	(150)	(85)	950	2,923
(2)	(197)	(133)	1,773	6,414

(a) Given the low absolute level of short-term market rates on our floating-rate assets and liabilities as of December 31, 2017, the assumed hypothetical change in interest rates does not reflect the full 200 basis point reduction in interest income or interest expense in 2017, as the rate cannot fall below zero.

(b) As of December 31, 2018 and 2017, some of our investments had interest rates below 2% so the assumed hypothetical change in the fair value of investments does not reflect the full 200 basis point reduction.

We have an exposure to changes in the value of foreign currencies, primarily the Brazilian real and the Chilean peso, to the U.S. dollar in translation of UnitedHealthcare Global's operating results at the average exchange rate over the accounting period, and UnitedHealthcare Global's assets and liabilities at the spot rate at the end of the accounting period. The gains or losses resulting from translating foreign assets and liabilities into U.S. dollars are included in equity and comprehensive income.

An appreciation of the U.S. dollar against the Brazilian real or Chilean peso reduces the carrying value of the net assets denominated in those currencies. For example, as of December 31, 2018, a hypothetical 10% and 25% increase in the value of the U.S. dollar against those currencies would have caused a reduction in net assets of approximately $600 million and $1.4 billion, respectively. We manage exposure to foreign currency earnings risk primarily by conducting our international business operations in their functional currencies.

As of December 31, 2018, we had $2.0 billion of investments in equity securities, consisting of investments in non-U.S. dollar fixed-income funds; employee savings plan related investments; and dividend paying stocks. Valuations in non-U.S. dollar funds are subject to foreign exchange rates.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of UnitedHealth Group Incorporated and Subsidiaries:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of UnitedHealth Group Incorporated and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 12, 2019 expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinions

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/S/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 12, 2019

We have served as the Company's auditor since 2002.

UnitedHealth Group
Consolidated Balance Sheets

(in millions, except per share data)	December 31, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 10,866	$ 11,981
Short-term investments	3,458	3,509
Accounts receivable, net of allowances of $712 and $641	11,388	9,568
Other current receivables, net of allowances of $502 and $440	6,862	6,262
Assets under management	3,032	3,101
Prepaid expenses and other current assets	3,086	2,663
Total current assets	38,692	37,084
Long-term investments	32,510	28,341
Property, equipment and capitalized software, net of accumulated depreciation and amortization of $4,141 and $3,694	8,458	7,013
Goodwill	58,910	54,556
Other intangible assets, net of accumulated amortization of $4,592 and $4,309	9,325	8,489
Other assets	4,326	3,575
Total assets	$ 152,221	$ 139,058
Liabilities, redeemable noncontrolling interests and equity		
Current liabilities:		
Medical costs payable	$ 19,891	$ 17,871
Accounts payable and accrued liabilities	16,705	15,180
Commercial paper and current maturities of long-term debt	1,973	2,857
Unearned revenues	2,396	2,269
Other current liabilities	12,244	12,286
Total current liabilities	53,209	50,463
Long-term debt, less current maturities	34,581	28,835
Deferred income taxes	2,474	2,182
Other liabilities	5,730	5,556
Total liabilities	95,994	87,036
Commitments and contingencies (Note 12)		
Redeemable noncontrolling interests	1,908	2,189
Equity:		
Preferred stock, $0.001 par value — 10 shares authorized; no shares issued or outstanding	—	—
Common stock, $0.01 par value — 3,000 shares authorized; 960 and 969 issued and outstanding	10	10
Additional paid-in capital	—	1,703
Retained earnings	55,846	48,730
Accumulated other comprehensive loss	(4,160)	(2,667)
Nonredeemable noncontrolling interests	2,623	2,057
Total equity	54,319	49,833
Total liabilities, redeemable noncontrolling interests and equity	$ 152,221	$ 139,058

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Consolidated Statements of Operations

(in millions, except per share data)	For the Years Ended December 31, 2018	2017	2016
Revenues:			
Premiums	$178,087	$158,453	$144,118
Products	29,601	26,366	26,658
Services	17,183	15,317	13,236
Investment and other income	1,376	1,023	828
Total revenues	226,247	201,159	184,840
Operating costs:			
Medical costs	145,403	130,036	117,038
Operating costs	34,074	29,557	28,401
Cost of products sold	26,998	24,112	24,416
Depreciation and amortization	2,428	2,245	2,055
Total operating costs	208,903	185,950	171,910
Earnings from operations	17,344	15,209	12,930
Interest expense	(1,400)	(1,186)	(1,067)
Earnings before income taxes	15,944	14,023	11,863
Provision for income taxes	(3,562)	(3,200)	(4,790)
Net earnings	12,382	10,823	7,073
Earnings attributable to noncontrolling interests	(396)	(265)	(56)
Net earnings attributable to UnitedHealth Group common shareholders	$ 11,986	$ 10,558	$ 7,017
Earnings per share attributable to UnitedHealth Group common shareholders:			
Basic	$ 12.45	$ 10.95	$ 7.37
Diluted	$ 12.19	$ 10.72	$ 7.25
Basic weighted-average number of common shares outstanding	963	964	952
Dilutive effect of common share equivalents	20	21	16
Diluted weighted-average number of common shares outstanding	983	985	968
Anti-dilutive shares excluded from the calculation of dilutive effect of common share equivalents	6	5	3

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Consolidated Statements of Comprehensive Income

(in millions)	For the Years Ended December 31, 2018	2017	2016
Net earnings	$12,382	$10,823	$7,073
Other comprehensive (loss) income:			
Gross unrealized (losses) gains on investment securities during the period	(294)	209	(73)
Income tax effect	67	(72)	26
Total unrealized (losses) gains, net of tax	(227)	137	(47)
Gross reclassification adjustment for net realized gains included in net earnings	(62)	(83)	(166)
Income tax effect	14	30	60
Total reclassification adjustment, net of tax	(48)	(53)	(106)
Total foreign currency translation (losses) gains	(1,242)	(70)	806
Other comprehensive (loss) income	(1,517)	14	653
Comprehensive income	10,865	10,837	7,726
Comprehensive income attributable to noncontrolling interests	(396)	(265)	(56)
Comprehensive income attributable to UnitedHealth Group common shareholders	$10,469	$10,572	$7,670

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Consolidated Statements of Changes in Equity

(in millions)	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss): Net Unrealized Gains (Losses) on Investments	Accumulated Other Comprehensive Income (Loss): Foreign Currency Translation (Losses) Gains	Nonredeemable Noncontrolling Interests	Total Equity
Balance at January 1, 2016	953	$ 10	$ 29	$37,125	$ 56	$ (3,390)	$ (105)	$33,725
Adjustment to adopt ASU 2016-09				28				28
Net earnings				7,017			40	7,057
Other comprehensive (loss) income					(153)	806		653
Issuances of common stock, and related tax effects	9	—	191					191
Share-based compensation			455					455
Common share repurchases	(10)	—	(316)	(964)				(1,280)
Cash dividends paid on common shares ($2.375 per share)				(2,261)				(2,261)
Acquisition of redeemable noncontrolling interest shares			(143)					(143)
Redeemable noncontrolling interest fair value and other adjustments			(216)					(216)
Distributions to nonredeemable noncontrolling interest							(32)	(32)
Balance at December 31, 2016	952	10	—	40,945	(97)	(2,584)	(97)	38,177
Net earnings				10,558			194	10,752
Other comprehensive income (loss)					84	(70)		14
Issuances of common stock, and related tax effects	26	—	2,225					2,225
Share-based compensation			582					582
Common share repurchases	(9)	—	(1,500)					(1,500)
Cash dividends paid on common shares ($2.875 per share)				(2,773)				(2,773)
Acquisition of redeemable noncontrolling interest shares			283					283
Redeemable noncontrolling interest fair value and other adjustments			113					113
Acquisition of nonredeemable noncontrolling interests							2,112	2,112
Distributions to nonredeemable noncontrolling interest							(152)	(152)
Balance at December 31, 2017	969	10	1,703	48,730	(13)	(2,654)	2,057	49,833
Adjustment to adopt ASU 2016-01				(24)	24			—
Net earnings				11,986			273	12,259
Other comprehensive loss					(275)	(1,242)		(1,517)
Issuances of common stock, and related tax effects	10	—	814					814
Share-based compensation			620					620
Common share repurchases	(19)	—	(2,974)	(1,526)				(4,500)
Cash dividends paid on common shares ($3.45 per share)				(3,320)				(3,320)
Redeemable noncontrolling interests fair value and other adjustments			(163)					(163)
Acquisition of nonredeemable noncontrolling interests							521	521
Distributions to nonredeemable noncontrolling interests							(228)	(228)
Balance at December 31, 2018	960	$ 10	$ —	$55,846	$ (264)	$ (3,896)	$ 2,623	$54,319

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Consolidated Statements of Cash Flows

(in millions)	For the Years Ended December 31, 2018	2017	2016
Operating activities			
Net earnings	$12,382	$10,823	$ 7,073
Noncash items:			
Depreciation and amortization	2,428	2,245	2,055
Deferred income taxes	42	(965)	81
Share-based compensation	638	597	485
Other, net	(71)	217	(82)
Net change in other operating items, net of effects from acquisitions and changes in AARP balances:			
Accounts receivable	(1,351)	(1,062)	(1,357)
Other assets	(750)	(630)	(1,601)
Medical costs payable	1,831	1,284	1,849
Accounts payable and other liabilities	526	930	1,494
Unearned revenues	38	157	(202)
Cash flows from operating activities	15,713	13,596	9,795
Investing activities			
Purchases of investments	(14,010)	(14,588)	(17,547)
Sales of investments	3,641	4,623	7,339
Maturities of investments	6,270	5,646	4,281
Cash paid for acquisitions, net of cash assumed	(5,997)	(2,131)	(1,760)
Purchases of property, equipment and capitalized software	(2,063)	(2,023)	(1,705)
Other, net	(226)	(126)	37
Cash flows used for investing activities	(12,385)	(8,599)	(9,355)
Financing activities			
Common share repurchases	(4,500)	(1,500)	(1,280)
Cash dividends paid	(3,320)	(2,773)	(2,261)
Proceeds from common stock issuances	838	688	429
Repayments of long-term debt	(2,600)	(4,398)	(2,596)
Repayments of commercial paper, net	(201)	(3,508)	(382)
Proceeds from issuance of long-term debt	6,935	5,291	3,968
Customer funds administered	(131)	3,172	1,692
Other, net	(1,386)	(413)	(581)
Cash flows used for financing activities	(4,365)	(3,441)	(1,011)
Effect of exchange rate changes on cash and cash equivalents	(78)	(5)	78
(Decrease) increase in cash and cash equivalents	(1,115)	1,551	(493)
Cash and cash equivalents, beginning of period	11,981	10,430	10,923
Cash and cash equivalents, end of period	$10,866	$11,981	$10,430
Supplemental cash flow disclosures			
Cash paid for interest	$ 1,410	$ 1,133	$ 1,055
Cash paid for income taxes	3,257	4,004	4,726
Supplemental schedule of non-cash investing activities			
Common stock issued for acquisitions	$ —	$ 2,164	$ —

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Notes to the Consolidated Financial Statements

1. Description of Business

UnitedHealth Group Incorporated (individually and together with its subsidiaries, "UnitedHealth Group" and "the Company") is a diversified health care company dedicated to helping people live healthier lives and helping make the health system work better for everyone.

Through its diversified family of businesses, the Company leverages core competencies in data and health information; advanced technology; and clinical expertise. These core competencies are deployed within two distinct, but strategically aligned, business platforms: health benefits operating under UnitedHealthcare and health services operating under Optum.

2. Basis of Presentation, Use of Estimates and Significant Accounting Policies

Basis of Presentation

The Company has prepared the Consolidated Financial Statements according to U.S. Generally Accepted Accounting Principles (GAAP) and has included the accounts of UnitedHealth Group and its subsidiaries.

Use of Estimates

These Consolidated Financial Statements include certain amounts based on the Company's best estimates and judgments. The Company's most significant estimates relate to estimates and judgments for medical costs payable and revenues, valuation and impairment analysis of goodwill and other intangible assets and estimates of other current liabilities and other current receivables. Certain of these estimates require the application of complex assumptions and judgments, often because they involve matters that are inherently uncertain and will likely change in subsequent periods. The impact of any change in estimates is included in earnings in the period in which the estimate is adjusted.

Revenues

Premiums

Premium revenues are primarily derived from risk-based health insurance arrangements in which the premium is typically at a fixed rate per individual served for a one-year period, and the Company assumes the economic risk of funding its customers' health care and related administrative costs.

Premium revenues are recognized in the period in which eligible individuals are entitled to receive health care benefits. Health care premium payments received from the Company's customers in advance of the service period are recorded as unearned revenues. Fully insured commercial products of U.S. health plans, Medicare Advantage and Medicare Prescription Drug Benefit (Medicare Part D) plans with medical loss ratios as calculated under the definitions in the Patient Protection and Affordable Care Act (ACA) and related federal and state regulations and implementing regulation, that fall below certain targets are required to rebate ratable portions of their premiums annually. Medicare Advantage premium revenue includes the impact of the Centers for Medicare & Medicaid Services (CMS) quality bonuses based on plans' Star ratings.

Premium revenues are recognized based on the estimated premiums earned, net of projected rebates, because the Company is able to reasonably estimate the ultimate premiums of these contracts. The Company also records premium revenues from capitation arrangements at its OptumHealth businesses.

The Company's Medicare Advantage and Medicare Part D premium revenues are subject to periodic adjustment under CMS' risk adjustment payment methodology. CMS deploys a risk adjustment model that apportions

premiums paid to all health plans according to health severity and certain demographic factors. The CMS risk adjustment model provides higher per member payments for enrollees diagnosed with certain conditions and lower payments for enrollees who are healthier. Under this risk adjustment methodology, CMS calculates the risk adjusted premium payment using diagnosis data from hospital inpatient, hospital outpatient and physician treatment settings. The Company and health care providers collect, capture and submit the necessary and available diagnosis data to CMS within prescribed deadlines. The Company estimates risk adjustment premium revenues based upon the diagnosis data submitted and expected to be submitted to CMS. Risk adjustment data for the Company's plans are subject to review by the government, including audit by regulators. See Note 12 for additional information regarding these audits.

Products and Services

For the Company's OptumRx pharmacy care services business, the majority of revenues are derived from products sold through a contracted network of retail pharmacies or home delivery, specialty and compounding pharmacy facilities. Product revenues include ingredient costs (net of rebates), a negotiated dispensing fee and customer co-payments for drugs dispensed through the Company's mail-service pharmacy. In retail pharmacy transactions, revenues recognized exclude the member's applicable co-payment. Pharmacy products are billed to customers based on the number of transactions occurring during the billing period. Product revenues are recognized when the prescriptions are dispensed through the retail network or received by consumers through the Company's mail-service pharmacy. The Company has entered into contracts in which it is primarily obligated to pay its network pharmacy providers for benefits provided to their customers regardless of whether the Company is paid. The Company is also involved in establishing the prices charged by retail pharmacies, determining which drugs will be included in formulary listings and selecting which retail pharmacies will be included in the network offered to plan sponsors' members and accordingly, are reported on a gross basis.

Services revenue consists of fees derived from services performed for customers that self-insure the health care costs of their employees and employees' dependents. Under service fee contracts, the Company receives monthly, a fixed fee per employee, which is recognized as revenue as the Company performs, or makes available, the applicable services to the customer. The customers retain the risk of financing health care costs for their employees and employees' dependents, and the Company administers the payment of customer funds to physicians and other health care professionals from customer-funded bank accounts. As the Company has neither the obligation for funding the health care costs, nor the primary responsibility for providing the medical care, the Company does not recognize premium revenue and medical costs for these contracts in its Consolidated Financial Statements. For these fee-based customer arrangements, the Company provides coordination and facilitation of medical services; transaction processing; customer, consumer and care professional services; and access to contracted networks of physicians, hospitals and other health care professionals. These services are performed throughout the contract period.

Revenues are also comprised of a number of services and products sold through Optum. OptumHealth's service revenues include net patient service revenues that are recorded based upon established billing rates, less allowances for contractual adjustments, and are recognized as services are provided. For its financial services offerings, OptumHealth charges fees and earns investment income on managed funds. OptumInsight provides software and information products, advisory consulting arrangements and services outsourcing contracts, which may be delivered over several years. OptumInsight revenues are generally recognized over time and measured each period based on the progress to date as services are performed or made available to customers.

As of December 31, 2018 and 2017, accounts receivables related to products and services were $3.9 billion and $3.7 billion, respectively. In 2018 and 2017, the Company had no material bad-debt expense and there were no material contract assets, contract liabilities or deferred contract costs recorded on the Consolidated Balance Sheets as of December 31, 2018 or 2017.

For the years ended December 31, 2018 and 2017, revenue recognized from performance obligations related to prior periods (for example, due to changes in transaction price) was not material.

Revenue expected to be recognized in any future year related to remaining performance obligations, excluding revenue pertaining to contracts that have an original expected duration of one year or less, contracts where revenue is recognized as invoiced and contracts with variable consideration related to undelivered performance obligations, is not material.

See Note 13 for disaggregation of revenue by segment and type.

Medical Costs and Medical Costs Payable

The Company's estimate of medical costs payable represents management's best estimate of its liability for unpaid medical costs as of December 31, 2018.

Each period, the Company re-examines previously established medical costs payable estimates based on actual claim submissions and other changes in facts and circumstances. As more complete claim information becomes available, the Company adjusts the amount of the estimates and includes the changes in estimates in medical costs in the period in which the change is identified. Approximately 90% of claims related to medical care services are known and settled within 90 days from the date of service and substantially all within twelve months.

Medical costs and medical costs payable include estimates of the Company's obligations for medical care services that have been rendered on behalf of insured consumers, but for which claims have either not yet been received, processed, or paid. The Company develops estimates for medical care services incurred but not reported (IBNR), which includes estimates for claims that have not been received or fully processed, using an actuarial process that is consistently applied, centrally controlled and automated. The actuarial models consider factors such as time from date of service to claim processing, seasonal variances in medical care consumption, health care professional contract rate changes, medical care utilization and other medical cost trends, membership volume and demographics, the introduction of new technologies, benefit plan changes, and business mix changes related to products, customers and geography.

In developing its medical costs payable estimates, the Company applies different estimation methods depending on which incurred claims are being estimated. For the most recent two months, the Company estimates claim costs incurred by applying observed medical cost trend factors to the average per member per month (PMPM) medical costs incurred in prior months for which more complete claim data are available, supplemented by a review of near-term completion factors (actuarial estimates, based upon historical experience and analysis of current trends, of the percentage of incurred claims during a given period that have been adjudicated by the Company at the date of estimation). For months prior to the most recent two months, the Company applies the completion factors to actual claims adjudicated-to-date to estimate the expected amount of ultimate incurred claims for those months.

Cost of Products Sold

The Company's cost of products sold includes the cost of pharmaceuticals dispensed to unaffiliated customers either directly at its home delivery and specialty pharmacy locations, or indirectly through its nationwide network of participating pharmacies. Rebates attributable to non-affiliated clients are accrued as rebates receivable and a reduction of cost of products sold, with a corresponding payable for the amounts of the rebates to be remitted to those non-affiliated clients in accordance with their contracts and recorded in the Consolidated Statements of Operations as a reduction of product revenue. Cost of products sold also includes the cost of personnel to support the Company's transaction processing services, system sales, maintenance and professional services.

Cash, Cash Equivalents and Investments

Cash and cash equivalents are highly liquid investments that have an original maturity of three months or less. The fair value of cash and cash equivalents approximates their carrying value because of the short maturity of the instruments.

Investments with maturities of less than one year are classified as short-term. Because of regulatory requirements, certain investments are included in long-term investments regardless of their maturity date. The Company classifies these investments as held-to-maturity and reports them at amortized cost. Substantially all other investments are classified as available-for-sale and reported at fair value based on quoted market prices, where available. Equity investments, with certain exceptions, are measured at fair value with changes in fair value recognized in net earnings.

The Company excludes unrealized gains and losses on investments in available-for-sale debt securities from net earnings and reports them as comprehensive income and, net of income tax effects, as a separate component of equity. To calculate realized gains and losses on the sale of debt securities, the Company specifically identifies the cost of each investment sold.

The Company evaluates an investment for impairment by considering the length of time and extent to which market value has been less than cost or amortized cost, the financial condition and near-term prospects of the issuer as well as specific events or circumstances that may influence the operations of the issuer and the Company's intent to sell the security or the likelihood that it will be required to sell the security before recovery of the entire amortized cost.

New information and the passage of time can change these judgments. The Company manages its investment portfolio to limit its exposure to any one issuer or market sector, and largely limits its investments to investment grade quality. Securities downgraded below policy minimums after purchase will be disposed of in accordance with the Company's investment policy.

Assets Under Management

The Company provides health insurance products and services to members of AARP under a Supplemental Health Insurance Program (the AARP Program) and to AARP members and non-members under separate Medicare Advantage and Medicare Part D arrangements. The products and services under the AARP Program include supplemental Medicare benefits, hospital indemnity insurance, including insurance for individuals between 50 to 64 years of age, and other related products.

Pursuant to the Company's agreement, AARP Program assets are managed separately from the Company's general investment portfolio and are used to pay costs associated with the AARP Program. These assets are invested at the Company's discretion, within investment guidelines approved by AARP. The Company does not guarantee any rates of return on these investments and, upon any transfer of the AARP Program contract to another entity, the Company would transfer cash equal in amount to the fair value of these investments at the date of transfer to that entity. Because the purpose of these assets is to fund the medical costs payable, the rate stabilization fund (RSF) liabilities and other related liabilities associated with this AARP contract, assets under management are classified as current assets, consistent with the classification of these liabilities.

The effects of changes in other balance sheet amounts associated with the AARP Program also accrue to the overall benefit of the AARP policyholders through the RSF balance. Accordingly, the Company excludes the effect of such changes in its Consolidated Statements of Cash Flows.

Other Current Receivables

Other current receivables include amounts due from pharmaceutical manufacturers for rebates and other miscellaneous amounts due to the Company.

The Company's pharmacy care services businesses contract with pharmaceutical manufacturers, some of which provide rebates based on use of the manufacturers' products by its affiliated and non-affiliated clients. The Company accrues rebates as they are earned by its clients on a monthly basis based on the terms of the applicable

contracts, historical data and current estimates. The pharmacy care services businesses bill these rebates to the manufacturers on a monthly or quarterly basis depending on the contractual terms and record rebates attributable to affiliated clients as a reduction to medical costs. The Company generally receives rebates two to five months after billing. As of December 31, 2018 and 2017, total pharmaceutical manufacturer rebates receivable included in other receivables in the Consolidated Balance Sheets amounted to $4.2 billion and $3.8 billion, respectively.

Property, Equipment and Capitalized Software

Property, equipment and capitalized software are stated at cost, net of accumulated depreciation and amortization. Capitalized software consists of certain costs incurred in the development of internal-use software, including external direct costs of materials and services and applicable payroll costs of employees devoted to specific software development.

The Company calculates depreciation and amortization using the straight-line method over the estimated useful lives of the assets. The useful lives for property, equipment and capitalized software are:

Furniture, fixtures and equipment	3 to 10 years
Buildings	35 to 40 years
Capitalized software	3 to 5 years

Leasehold improvements are depreciated over the shorter of the remaining lease term or their estimated useful economic life.

Goodwill

To determine whether goodwill is impaired, annually or more frequently if needed, the Company performs a multi-step impairment test. The Company may first assess qualitative factors to determine if it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value. The Company may also elect to skip the qualitative testing and proceed directly to the quantitative testing. When performing quantitative testing, the Company first estimates the fair values of its reporting units using discounted cash flows. To determine fair values, the Company must make assumptions about a wide variety of internal and external factors. Significant assumptions used in the impairment analysis include financial projections of free cash flow (including significant assumptions about operations, capital requirements and income taxes), long-term growth rates for determining terminal value and discount rates. Comparative market multiples are used to corroborate the results of the discounted cash flow test. If the fair value is less than the carrying value of the reporting unit, then the implied value of goodwill would be calculated and compared to the carrying amount of goodwill to determine whether goodwill is impaired.

There was no impairment of goodwill during the year ended December 31, 2018.

Intangible Assets

The Company’s intangible assets are subject to impairment tests when events or circumstances indicate that an intangible asset (or asset group) may be impaired. The Company’s indefinite-lived intangible assets are also tested for impairment annually. There was no impairment of intangible assets during the year ended December 31, 2018.

Other Current Liabilities

Other current liabilities include health savings account deposits ($7.5 billion and $6.4 billion as of December 31, 2018 and 2017, respectively), deposits under the Medicare Part D program, the RSF associated with the AARP Program, accruals for premium rebate payments under the ACA, the current portion of future policy benefits and customer balances.

Policy Acquisition Costs

The Company's short duration health insurance contracts typically have a one-year term and may be canceled by the customer with at least 30 days' notice. Costs related to the acquisition and renewal of short duration customer contracts are primarily charged to expense as incurred.

Redeemable Noncontrolling Interests

Redeemable noncontrolling interests in the Company's subsidiaries whose redemption is outside the control of the Company are classified as temporary equity. The following table provides details of the Company's redeemable noncontrolling interests' activity for the years ended December 31, 2018 and 2017:

(in millions)	2018	2017
Redeemable noncontrolling interests, beginning of period	$2,189	$2,012
Net earnings	123	71
Acquisitions	102	565
Redemptions	(90)	(309)
Distributions	(53)	(38)
Fair value and other adjustments	(363)	(112)
Redeemable noncontrolling interests, end of period	$1,908	$2,189

Share-Based Compensation

The Company recognizes compensation expense for share-based awards, including stock options, stock-settled stock appreciation rights (SARs) and restricted stock and restricted stock units (collectively, restricted shares), on a straight-line basis over the related service period (generally the vesting period) of the award, or to an employee's eligible retirement date under the award agreement, if earlier. Restricted shares vest ratably, primarily over two to five years and compensation expense related to restricted shares is based on the share price on the date of grant. Stock options and SARs vest ratably primarily over four years and may be exercised up to 10 years from the date of grant. Compensation expense related to stock options and SARs is based on the fair value at the date of grant, which is estimated on the date of grant using a binomial option-pricing model. Under the Company's Employee Stock Purchase Plan (ESPP), eligible employees are allowed to purchase the Company's stock at a discounted price, which is 85% of the lower market price of the Company's common stock at the beginning or at the end of the six-month purchase period. Share-based compensation expense for all programs is recognized in operating costs in the Consolidated Statements of Operations.

Net Earnings Per Common Share

The Company computes basic earnings per common share attributable to UnitedHealth Group common shareholders by dividing net earnings attributable to UnitedHealth Group common shareholders by the weighted-average number of common shares outstanding during the period. The Company determines diluted net earnings per common share attributable to UnitedHealth Group common shareholders using the weighted-average number of common shares outstanding during the period, adjusted for potentially dilutive shares associated with stock options, SARs, restricted shares and the ESPP (collectively, common stock equivalents), using the treasury stock method. The treasury stock method assumes a hypothetical issuance of shares to settle the share-based awards, with the assumed proceeds used to purchase common stock at the average market price for the period. Assumed proceeds include the amount the employee must pay upon exercise and the average unrecognized compensation cost. The difference between the number of shares assumed issued and number of shares assumed purchased represents the dilutive shares.

Health Insurance Industry Tax

The ACA includes an annual, nondeductible insurance industry tax (Health Insurance Industry Tax) to be levied proportionally across the insurance industry for risk-based health insurance products. A one year moratorium on the collection of the Health Insurance Industry Tax will occur in 2019.

The Company estimates its liability for the Health Insurance Industry Tax based on a ratio of the Company's applicable net premiums written compared to the U.S. health insurance industry total applicable net premiums, both for the previous calendar year. The Company records in full the estimated liability for the Health Insurance Industry Tax at the beginning of the calendar year with a corresponding deferred cost that is amortized to operating costs on the Consolidated Statements of Operations using a straight-line method over the calendar year. The liability is recorded in accounts payable and accrued liabilities and the corresponding deferred cost is recorded in prepaid expenses and other current assets on the Consolidated Balance Sheets.

Recently Issued Accounting Standards

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standard Update (ASU) No. 2016-02, "Leases (Topic 842)" as modified by ASUs 2018-01, 2018-10, 2018-11 and 2018-20 (collectively, ASU 2016-02). Under ASU 2016-02, an entity is required to recognize assets and liabilities for the rights and obligations created by leases on the entity's balance sheet for both finance and operating leases. For leases with a term of 12 months or less, the Company elected to not recognize lease assets and lease liabilities and expense the leases over a straight-line basis for the term of those leases. ASU 2016-02 requires new disclosures that depict the amount, timing and uncertainty of cash flows pertaining to an entity's leases. The Company adopted ASU 2016-02 on January 1, 2019, using the cumulative effect upon adoption approach. The adoption resulted in no material impact to the Company's balance sheet, results of operations, equity or cash flows.

Recently Adopted Accounting Standards

In January 2016, the FASB issued ASU 2016-01, "Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities" (ASU 2016-01). Most notably, the new guidance requires that equity investments, with certain exemptions, be measured at fair value with changes in fair value recognized in net income as opposed to other comprehensive income. The Company adopted ASU 2016-01 on a prospective basis effective January 1, 2018, as required, and reclassified $24 million from accumulated other comprehensive income to retained earnings.

The Company has determined that there have been no other recently adopted or issued accounting standards that had, or will have, a material impact on its Consolidated Financial Statements.

3. Investments

A summary of debt securities by major security type is as follows:

(in millions)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2018				
Debt securities — available-for-sale:				
U.S. government and agency obligations	$ 3,434	$ 13	$ (42)	$ 3,405
State and municipal obligations	7,117	61	(57)	7,121
Corporate obligations	15,366	14	(218)	15,162
U.S. agency mortgage-backed securities	4,947	11	(106)	4,852
Non-U.S. agency mortgage-backed securities	1,376	2	(20)	1,358
Total debt securities — available-for-sale	32,240	101	(443)	31,898
Debt securities — held-to-maturity:				
U.S. government and agency obligations	255	1	(2)	254
State and municipal obligations	11	—	—	11
Corporate obligations	355	—	—	355
Total debt securities — held-to-maturity	621	1	(2)	620
Total debt securities	$ 32,861	$ 102	$ (445)	$ 32,518
December 31, 2017				
Debt securities — available-for-sale:				
U.S. government and agency obligations	$ 2,673	$ 1	$ (30)	$ 2,644
State and municipal obligations	7,596	99	(35)	7,660
Corporate obligations	13,181	57	(44)	13,194
U.S. agency mortgage-backed securities	3,942	7	(38)	3,911
Non-U.S. agency mortgage-backed securities	1,018	3	(6)	1,015
Total debt securities — available-for-sale	28,410	167	(153)	28,424
Debt securities — held-to-maturity:				
U.S. government and agency obligations	254	1	(1)	254
State and municipal obligations	2	—	—	2
Corporate obligations	280	—	—	280
Total debt securities — held-to-maturity	536	1	(1)	536
Total debt securities	$ 28,946	$ 168	$ (154)	$ 28,960

Nearly all of the Company's investments in mortgage-backed securities were rated AAA as of December 31, 2018.

The Company held $2.0 billion of equity securities as of December 31, 2018 and December 31, 2017. The Company's investments in equity securities primarily consist of employee savings plan related investments, Brazilian real denominated fixed-income funds and dividend paying stocks, with readily determinable fair values. Additionally, the Company's investments included $1.5 billion and $0.9 billion of equity method investments in operating businesses in the health care sector, as of December 31, 2018 and 2017, respectively.

The amortized cost and fair value of debt securities as of December 31, 2018, by contractual maturity, were as follows:

(in millions)	Available-for-Sale		Held-to-Maturity	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Due in one year or less	$ 3,560	$ 3,551	$ 150	$150
Due after one year through five years	12,432	12,297	213	212
Due after five years through ten years	7,362	7,270	129	129
Due after ten years	2,563	2,570	129	129
U.S. agency mortgage-backed securities	4,947	4,852	—	—
Non-U.S. agency mortgage-backed securities	1,376	1,358	—	—
Total debt securities	$32,240	$31,898	$ 621	$620

The fair value of available-for-sale investments with gross unrealized losses by major security type and length of time that individual securities have been in a continuous unrealized loss position were as follows:

(in millions)	Less Than 12 Months		12 Months or Greater		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
December 31, 2018						
Debt securities — available-for-sale:						
U.S. government and agency obligations	$ 998	$ (7)	$ 1,425	$ (35)	$ 2,423	$ (42)
State and municipal obligations	1,334	(11)	2,491	(46)	3,825	(57)
Corporate obligations	8,105	(109)	4,239	(109)	12,344	(218)
U.S. agency mortgage-backed securities	1,296	(22)	2,388	(84)	3,684	(106)
Non-U.S. agency mortgage-backed securities	622	(7)	459	(13)	1,081	(20)
Total debt securities — available-for-sale	$12,355	$ (156)	$11,002	$ (287)	$23,357	$ (443)
December 31, 2017						
Debt securities — available-for-sale:						
U.S. government and agency obligations	$ 1,249	$ (8)	$ 1,027	$ (22)	$ 2,276	$ (30)
State and municipal obligations	2,599	(21)	866	(14)	3,465	(35)
Corporate obligations	5,901	(23)	1,242	(21)	7,143	(44)
U.S. agency mortgage-backed securities	1,657	(12)	1,162	(26)	2,819	(38)
Non-U.S. agency mortgage-backed securities	411	(3)	144	(3)	555	(6)
Total debt securities — available-for-sale	$11,817	$ (67)	$ 4,441	$ (86)	$16,258	$ (153)

The Company's unrealized losses from all securities as of December 31, 2018 were generated from approximately 19,000 positions out of a total of 31,000 positions. The Company believes that it will collect the principal and interest due on its debt securities that have an amortized cost in excess of fair value. The unrealized losses were primarily caused by interest rate increases and not by unfavorable changes in the credit quality associated with these securities. At each reporting period, the Company evaluates securities for impairment when the fair value of the investment is less than its amortized cost. The Company evaluated the underlying credit quality and credit ratings of the issuers, noting no significant deterioration since purchase. As of December 31, 2018, the Company did not have the intent to sell any of the securities in an unrealized loss position. Therefore, the Company believes these losses to be temporary.

4. Fair Value

Certain assets and liabilities are measured at fair value in the Consolidated Financial Statements or have fair values disclosed in the Notes to the Consolidated Financial Statements. These assets and liabilities are classified into one of three levels of a hierarchy defined by GAAP. In instances in which the inputs used to measure fair value fall into different levels of the fair value hierarchy, the fair value measurement is categorized in its entirety based on the lowest level input that is significant to the fair value measurement in its entirety. The Company's assessment of the significance of a particular item to the fair value measurement in its entirety requires judgment, including the consideration of inputs specific to the asset or liability.

The fair value hierarchy is summarized as follows:

Level 1 — Quoted prices (unadjusted) for identical assets/liabilities in active markets.

Level 2 — Other observable inputs, either directly or indirectly, including:

- Quoted prices for similar assets/liabilities in active markets;
- Quoted prices for identical or similar assets/liabilities in inactive markets (e.g., few transactions, limited information, noncurrent prices, high variability over time);
- Inputs other than quoted prices that are observable for the asset/liability (e.g., interest rates, yield curves, implied volatilities, credit spreads); and
- Inputs that are corroborated by other observable market data.

Level 3 — Unobservable inputs that cannot be corroborated by observable market data.

There was no transfers in or out of Level 3 financial assets or liabilities during the year ended December 31, 2018 or 2017.

Nonfinancial assets and liabilities or financial assets and liabilities that are measured at fair value on a nonrecurring basis are subject to fair value adjustments only in certain circumstances, such as when the Company records an impairment. There were no significant fair value adjustments for these assets and liabilities recorded during the year ended December 31, 2018 or 2017.

The following methods and assumptions were used to estimate the fair value and determine the fair value hierarchy classification of each class of financial instrument included in the tables below:

Cash and Cash Equivalents. The carrying value of cash and cash equivalents approximates fair value as maturities are less than three months. Fair values of cash equivalent instruments that do not trade on a regular basis in active markets are classified as Level 2.

Debt and Equity Securities. Fair values of debt and equity securities are based on quoted market prices, where available. The Company obtains one price for each security primarily from a third-party pricing service (pricing service), which generally uses quoted or other observable inputs for the determination of fair value. The pricing service normally derives the security prices through recently reported trades for identical or similar securities, and, if necessary, makes adjustments through the reporting date based upon available observable market information. For securities not actively traded, the pricing service may use quoted market prices of comparable instruments or discounted cash flow analyses, incorporating inputs that are currently observable in the markets for similar securities. Inputs that are often used in the valuation methodologies include, but are not limited to, benchmark yields, credit spreads, default rates, prepayment speeds and nonbinding broker quotes. As the Company is responsible for the determination of fair value, it performs quarterly analyses on the prices received from the pricing service to determine whether the prices are reasonable estimates of fair value. Specifically, the Company compares the prices received from the pricing service to prices reported by a secondary pricing source, such as its custodian, its investment consultant and third-party investment advisors. Additionally, the Company

compares changes in the reported market values and returns to relevant market indices to test the reasonableness of the reported prices. The Company's internal price verification procedures and reviews of fair value methodology documentation provided by independent pricing services have not historically resulted in adjustment in the prices obtained from the pricing service.

Fair values of debt securities that do not trade on a regular basis in active markets but are priced using other observable inputs are classified as Level 2.

Fair value estimates for Level 1 and Level 2 equity securities are based on quoted market prices for actively traded equity securities and/or other market data for the same or comparable instruments and transactions in establishing the prices.

The fair values of Level 3 investments in corporate bonds are estimated using valuation techniques that rely heavily on management assumptions and qualitative observations.

Throughout the procedures discussed above in relation to the Company's processes for validating third-party pricing information, the Company validates the understanding of assumptions and inputs used in security pricing and determines the proper classification in the hierarchy based on that understanding.

Assets Under Management. Assets under management consists of debt securities and other investments held to fund costs associated with the AARP Program and are priced and classified using the same methodologies as the Company's investments in debt and equity securities.

Long-Term Debt. The fair values of the Company's long-term debt are estimated and classified using the same methodologies as the Company's investments in debt securities.

The following table presents a summary of fair value measurements by level and carrying values for items measured at fair value on a recurring basis in the Consolidated Balance Sheets:

(in millions)	Quoted Prices in Active Markets (Level 1)	Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)	Total Fair and Carrying Value
December 31, 2018				
Cash and cash equivalents	$ 10,757	$ 109	$ —	$10,866
Debt securities — available-for-sale:				
U.S. government and agency obligations	3,060	345	—	3,405
State and municipal obligations	—	7,121	—	7,121
Corporate obligations	39	14,950	173	15,162
U.S. agency mortgage-backed securities	—	4,852	—	4,852
Non-U.S. agency mortgage-backed securities	—	1,358	—	1,358
Total debt securities — available-for-sale	3,099	28,626	173	31,898
Equity securities	1,832	13	—	1,845
Assets under management	1,086	1,938	8	3,032
Total assets at fair value	$ 16,774	$ 30,686	$ 181	$47,641
Percentage of total assets at fair value	35%	65%	—%	100%
December 31, 2017				
Cash and cash equivalents	$ 11,718	$ 263	$ —	$11,981
Debt securities — available-for-sale:				
U.S. government and agency obligations	2,428	216	—	2,644
State and municipal obligations	—	7,660	—	7,660
Corporate obligations	65	12,989	140	13,194
U.S. agency mortgage-backed securities	—	3,911	—	3,911
Non-U.S. agency mortgage-backed securities	—	1,015	—	1,015
Total debt securities — available-for-sale	2,493	25,791	140	28,424
Equity securities	1,784	14	194	1,992
Assets under management	1,117	1,984	—	3,101
Total assets at fair value	$ 17,112	$ 28,052	$ 334	$45,498
Percentage of total assets at fair value	38%	61%	1%	100%

The following table presents a summary of fair value measurements by level and carrying values for certain financial instruments not measured at fair value on a recurring basis in the Consolidated Balance Sheets:

(in millions)	Quoted Prices in Active Markets (Level 1)	Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)	Total Fair Value	Total Carrying Value
December 31, 2018					
Debt securities — held-to-maturity	$ 260	$ 65	$ 295	$ 620	$ 621
Long-term debt and other financing obligations	$ —	$ 37,944	$ —	$ 37,944	$ 36,554
December 31, 2017					
Debt securities — held-to-maturity	$ 267	$ 4	$ 265	$ 536	$ 536
Long-term debt and other financing obligations	$ —	$ 34,504	$ —	$ 34,504	$ 31,542

The carrying amounts reported on the Consolidated Balance Sheets for other current financial assets and liabilities approximate fair value because of their short-term nature. These assets and liabilities are not listed in the table above.

5. Property, Equipment and Capitalized Software

A summary of property, equipment and capitalized software is as follows:

(in millions)	December 31, 2018	December 31, 2017
Land and improvements	$ 566	$ 405
Buildings and improvements	4,470	3,664
Computer equipment	1,984	1,829
Furniture and fixtures	1,525	1,208
Less accumulated depreciation	(2,787)	(2,488)
Property and equipment, net	5,758	4,618
Capitalized software	4,054	3,601
Less accumulated amortization	(1,354)	(1,206)
Capitalized software, net	2,700	2,395
Total property, equipment and capitalized software, net	$ 8,458	$ 7,013

Depreciation expense for property and equipment for the years ended December 31, 2018, 2017 and 2016 was $924 million, $799 million and $698 million, respectively. Amortization expense for capitalized software for the years ended December 31, 2018, 2017 and 2016 was $606 million, $550 million and $475 million, respectively.

6. Goodwill and Other Intangible Assets

Changes in the carrying amount of goodwill, by reportable segment, were as follows:

(in millions)	UnitedHealthcare	OptumHealth	OptumInsight	OptumRx	Consolidated
Balance at January 1, 2017	$ 23,854	$ 6,322	$ 4,449	$12,959	$ 47,584
Acquisitions	690	5,189	1,221	—	7,100
Foreign currency effects and adjustments, net	(60)	(23)	4	(49)	(128)
Balance at December 31, 2017	24,484	11,488	5,674	12,910	54,556
Acquisitions	2,723	471	106	1,881	5,181
Foreign currency effects and adjustments, net	(807)	(12)	(8)	—	(827)
Balance at December 31, 2018	$ 26,400	$ 11,947	$ 5,772	$14,791	$ 58,910

The gross carrying value, accumulated amortization and net carrying value of other intangible assets were as follows:

	December 31, 2018			December 31, 2017		
(in millions)	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Customer-related	$11,622	$ (3,908)	$7,714	$10,832	$ (3,743)	$7,089
Trademarks and technology	1,122	(512)	610	1,054	(432)	622
Trademarks and other indefinite-lived	745	—	745	561	—	561
Other	428	(172)	256	351	(134)	217
Total	$13,917	$ (4,592)	$9,325	$12,798	$ (4,309)	$8,489

The acquisition date fair values and weighted-average useful lives assigned to finite-lived intangible assets acquired in business combinations consisted of the following by year of acquisition:

	2018		2017	
(in millions, except years)	Fair Value	Weighted-Average Useful Life	Fair Value	Weighted-Average Useful Life
Customer-related	$1,355	17 years	$324	13 years
Trademarks and technology	122	4 years	367	11 years
Other	97	9 years	82	6 years
Total acquired finite-lived intangible assets	$1,574	16 years	$773	11 years

Estimated full year amortization expense relating to intangible assets for each of the next five years ending December 31 is as follows:

(in millions)	
2019	$889
2020	795
2021	724
2022	632
2023	593

Amortization expense relating to intangible assets for the years ended December 31, 2018, 2017 and 2016 was $898 million, $896 million and $882 million, respectively.

7. Medical Costs Payable

The following table shows the components of the change in medical costs payable for the years ended December 31:

(in millions)	2018	2017	2016
Medical costs payable, beginning of period	$ 17,871	$ 16,391	$ 14,330
Acquisitions	339	83	—
Reported medical costs:			
Current year	145,723	130,726	117,258
Prior years	(320)	(690)	(220)
Total reported medical costs	145,403	130,036	117,038
Medical payments:			
Payments for current year	(127,155)	(113,811)	(101,696)
Payments for prior years	(16,567)	(14,828)	(13,281)
Total medical payments	(143,722)	(128,639)	(114,977)
Medical costs payable, end of period	$ 19,891	$ 17,871	$ 16,391

For the years ended December 31, 2018 and 2016, no individual factors significantly impacted medical cost reserve development. For the year ended December 31, 2017, medical cost reserve development was primarily driven by lower than expected health system utilization levels.

Medical costs payable included IBNR of $13.2 billion and $12.3 billion at December 31, 2018 and 2017, respectively. Substantially all of the IBNR balance as of December 31, 2018 relates to the current year. The following is information about incurred and paid medical cost development as of December 31, 2018:

(in millions)	Net Incurred Medical Costs For the Years ended December 31,	
Year	2017	2018
2017	$ 130,726	$ 130,441
2018		145,723
Total		$ 276,164

(in millions)	Net Cumulative Medical Payments For the Years ended December 31,	
Year	2017	2018
2017	$ (113,811)	$ (129,778)
2018		(127,155)
Total		(256,933)
Net remaining outstanding liabilities prior to 2017		660
Total medical costs payable		$ 19,891

8. Commercial Paper and Long-Term Debt

Commercial paper and senior unsecured long-term debt consisted of the following:

(in millions, except percentages)	December 31, 2018			December 31, 2017		
	Par Value	Carrying Value	Fair Value	Par Value	Carrying Value	Fair Value
Commercial paper	$ —	$ —	$ —	$ 150	$ 150	$ 150
6.000% notes due February 2018	—	—	—	1,100	1,101	1,106
1.900% notes due July 2018	—	—	—	1,500	1,499	1,501
1.700% notes due February 2019	750	750	749	750	749	747
1.625% notes due March 2019	500	500	499	500	501	497
2.300% notes due December 2019	500	494	497	500	495	501
2.700% notes due July 2020	1,500	1,498	1,494	1,500	1,496	1,517
Floating rate notes due October 2020	300	299	298	300	299	300
3.875% notes due October 2020	450	443	456	450	446	467
1.950% notes due October 2020	900	897	884	900	895	892
4.700% notes due February 2021	400	398	412	400	403	425
2.125% notes due March 2021	750	747	734	750	746	744
Floating rate notes due June 2021	350	349	347	—	—	—
3.150% notes due June 2021	400	399	400	—	—	—
3.375% notes due November 2021	500	489	503	500	493	516
2.875% notes due December 2021	750	735	748	750	741	760
2.875% notes due March 2022	1,100	1,051	1,091	1,100	1,054	1,114
3.350% notes due July 2022	1,000	997	1,005	1,000	996	1,033
2.375% notes due October 2022	900	894	872	900	893	891
0.000% notes due November 2022	15	12	13	15	12	12
2.750% notes due February 2023	625	602	611	625	606	626
2.875% notes due March 2023	750	750	739	750	762	759
3.500% notes due June 2023	750	746	756	—	—	—
3.500% notes due February 2024	750	745	755	—	—	—
3.750% notes due July 2025	2,000	1,989	2,025	2,000	1,987	2,108
3.700% notes due December 2025	300	298	303	—	—	—
3.100% notes due March 2026	1,000	995	965	1,000	995	1,007
3.450% notes due January 2027	750	746	742	750	745	776
3.375% notes due April 2027	625	619	611	625	618	642
2.950% notes due October 2027	950	938	898	950	937	947
3.850% notes due June 2028	1,150	1,142	1,163	—	—	—
3.875% notes due December 2028	850	842	861	—	—	—
4.625% notes due July 2035	1,000	992	1,060	1,000	991	1,165
5.800% notes due March 2036	850	838	1,003	850	837	1,105
6.500% notes due June 2037	500	492	638	500	491	698
6.625% notes due November 2037	650	641	841	650	641	923
6.875% notes due February 2038	1,100	1,076	1,437	1,100	1,075	1,596
5.700% notes due October 2040	300	296	355	300	296	389
5.950% notes due February 2041	350	345	426	350	345	466
4.625% notes due November 2041	600	588	627	600	588	685
4.375% notes due March 2042	502	484	503	502	483	555
3.950% notes due October 2042	625	607	596	625	607	650
4.250% notes due March 2043	750	734	744	750	734	822
4.750% notes due July 2045	2,000	1,973	2,116	2,000	1,972	2,362
4.200% notes due January 2047	750	738	745	750	738	808
4.250% notes due April 2047	725	717	719	725	717	798
3.750% notes due October 2047	950	933	869	950	933	969
4.250% notes due June 2048	1,350	1,329	1,349	—	—	—
4.450% notes due December 2048	1,100	1,087	1,132	—	—	—
Total commercial paper and long-term debt	$35,667	$35,234	$36,591	$31,417	$31,067	$34,029

The Company's long-term debt obligations also included $1.3 billion and $625 million of other financing obligations, of which $229 million and $107 million were current as of December 31, 2018 and 2017, respectively.

Maturities of long-term debt for the years ending December 31 are as follows:

(in millions)	
2019	$ 1,973
2020	3,350
2021	3,350
2022	3,215
2023	2,325
Thereafter	22,775

Commercial Paper and Revolving Bank Credit Facilities

Commercial paper consists of short-duration, senior unsecured debt privately placed on a discount basis through broker-dealers.

The Company has $3.5 billion five-year, $3.5 billion three-year and $3.0 billion 364-day revolving bank credit facilities with 26 banks, which mature in December 2023, December 2021 and December 2019, respectively. These facilities provide liquidity support for the Company's commercial paper program and are available for general corporate purposes. As of December 31, 2018, no amounts had been drawn on any of the bank credit facilities. The annual interest rates, which are variable based on term, are calculated based on the London Interbank Offered Rate (LIBOR) plus a credit spread based on the Company's senior unsecured credit ratings. If amounts had been drawn on the bank credit facilities as of December 31, 2018, annual interest rates would have ranged from 3.2% to 3.6%.

Debt Covenants

The Company's bank credit facilities contain various covenants, including requiring the Company to maintain a debt to debt-plus-shareholders' equity ratio of not more than 60%. The Company was in compliance with its debt covenants as of December 31, 2018.

9. Income Taxes

The current income tax provision reflects the tax consequences of revenues and expenses currently taxable or deductible on various income tax returns for the year reported. The deferred income tax provision or benefit generally reflects the net change in deferred income tax assets and liabilities during the year, excluding any deferred income tax assets and liabilities of acquired businesses. The components of the provision for income taxes for the years ended December 31 are as follows:

(in millions)	2018	2017	2016
Current Provision:			
Federal	$2,897	$3,597	$4,302
State and local	219	314	312
Foreign	404	254	95
Total current provision	3,520	4,165	4,709
Deferred provision (benefit)	42	(965)	81
Total provision for income taxes	$3,562	$3,200	$4,790

The reconciliation of the tax provision at the U.S. federal statutory rate to the provision for income taxes and the effective tax rate for the years ended December 31 is as follows:

(in millions, except percentages)	2018		2017		2016	
Tax provision at the U.S. federal statutory rate	$3,348	21.0%	$4,908	35.0%	$4,152	35.0%
Change in tax law	—	—	(1,199)	(8.6)	—	—
State income taxes, net of federal benefit	168	1.0	197	1.4	205	1.7
Share-based awards — excess tax benefit	(161)	(1.0)	(319)	(2.3)	(158)	(1.3)
Non-deductible compensation	117	0.7	175	1.3	128	1.1
Health insurance industry tax	552	3.5	—	—	645	5.4
Foreign rate differential	(203)	(1.3)	(282)	(2.0)	(105)	(0.9)
Other, net	(259)	(1.6)	(280)	(2.0)	(77)	(0.6)
Provision for income taxes	$3,562	22.3%	$3,200	22.8%	$4,790	40.4%

Deferred income tax assets and liabilities are recognized for the differences between the financial and income tax reporting bases of assets and liabilities based on enacted tax rates and laws. The components of deferred income tax assets and liabilities as of December 31 are as follows:

(in millions)	2018	2017
Deferred income tax assets:		
Accrued expenses and allowances	$ 551	$ 544
U.S. federal and state net operating loss carryforwards	190	216
Share-based compensation	91	97
Nondeductible liabilities	184	169
Non-U.S. tax loss carryforwards	426	445
Other-domestic	306	167
Other-non-U.S.	337	198
Subtotal	2,085	1,836
Less: valuation allowances	(84)	(64)
Total deferred income tax assets	2,001	1,772
Deferred income tax liabilities:		
U.S. federal and state intangible assets	(2,131)	(1,998)
Non-U.S. goodwill and intangible assets	(709)	(602)
Capitalized software	(603)	(530)
Depreciation and amortization	(266)	(236)
Prepaid expenses	(152)	(223)
Outside basis in partnerships	(300)	(279)
Other-non-U.S.	(314)	(86)
Total deferred income tax liabilities	(4,475)	(3,954)
Net deferred income tax liabilities	$(2,474)	$(2,182)

Valuation allowances are provided when it is considered more likely than not that deferred tax assets will not be realized. The valuation allowances primarily relate to future tax benefits on certain federal, state and non-U.S. net operating loss carryforwards. Federal net operating loss carryforwards of $99 million expire beginning in 2022 through 2037 and $17 million have an indefinite carryforward period; state net operating loss carryforwards expire beginning in 2019 through 2038. Substantially all of the non-U.S. tax loss carryforwards have indefinite carryforward periods.

As of December 31, 2018, the Company's undistributed earnings from non-U.S. subsidiaries are intended to be indefinitely reinvested in non-U.S. operations, and therefore no U.S. deferred taxes have been recorded. Taxes payable on the remittance of such earnings would be minimal.

A reconciliation of the beginning and ending amount of unrecognized tax benefits as of December 31 is as follows:

(in millions)	2018	2017	2016
Gross unrecognized tax benefits, beginning of period	$ 598	$ 263	$ 224
Gross increases:			
Current year tax positions	487	356	37
Prior year tax positions	87	40	24
Gross decreases:			
Prior year tax positions	(84)	(33)	(4)
Settlements	(20)	(24)	(6)
Statute of limitations lapses	(12)	(4)	(12)
Gross unrecognized tax benefits, end of period	$1,056	$ 598	$ 263

The Company believes it is reasonably possible that its liability for unrecognized tax benefits will decrease in the next twelve months by $118 million as a result of audit settlements and the expiration of statutes of limitations.

The Company classifies interest and penalties associated with uncertain income tax positions as income taxes within its Consolidated Statements of Operations. During the years ended December 31, 2018, 2017 and 2016, the Company recognized $6 million, $14 million and $11 million of interest and penalties, respectively. The Company had $95 million and $84 million of accrued interest and penalties for uncertain tax positions as of December 31, 2018 and 2017, respectively. These amounts are not included in the reconciliation above. As of December 31, 2018, there were $716 million of unrecognized tax benefits that, if recognized, would affect the effective tax rate.

The Company currently files income tax returns in the United States, various states and localities and non-U.S. jurisdictions. The U.S. Internal Revenue Service (IRS) has completed exams on the consolidated income tax returns for fiscal years 2016 and prior. The Company's 2018 and 2017 tax years are under review by the IRS under its Compliance Assurance Program. With the exception of a few states, the Company is no longer subject to income tax examinations prior to the 2012 tax year. In general, the Company is subject to examination in non-U.S. jurisdictions for years 2013 and forward.

10. Shareholders' Equity

Regulatory Capital and Dividend Restrictions

The Company's regulated insurance and HMO subsidiaries in the United States are subject to regulations and standards in their respective jurisdictions. These standards, among other things, require these subsidiaries to maintain specified levels of statutory capital, as defined by each jurisdiction, and restrict the timing and amount of dividends and other distributions that may be paid to their parent companies. In the United States, most of these regulations and standards are generally consistent with model regulations established by the National Association of Insurance Commissioners. These standards generally permit dividends to be paid from statutory unassigned surplus of the regulated subsidiary and are limited based on the regulated subsidiary's level of statutory net income and statutory capital and surplus. These dividends are referred to as "ordinary dividends" and generally may be paid without prior regulatory approval. If the dividend, together with other dividends paid within the preceding twelve months, exceeds a specified statutory limit or is paid from sources other than earned surplus, it is generally considered an "extraordinary dividend" and must receive prior regulatory approval.

For both the years ended December 31, 2018 and 2017, the Company's regulated subsidiaries paid their parent companies dividends of $3.7 billion, including $1.1 billion of extraordinary dividends.

The Company's regulated subsidiaries had estimated aggregate statutory capital and surplus of $23.7 billion as of December 31, 2018. The estimated statutory capital and surplus necessary to satisfy regulatory requirements of the Company's regulated subsidiaries was approximately $10.3 billion as of December 31, 2018.

Optum Bank must meet minimum capital requirements of the Federal Deposit Insurance Corporation (FDIC) to be considered "Well Capitalized" under the capital adequacy rules to which it is subject. At December 31, 2018, the Company believes that Optum Bank met the FDIC requirements to be considered "Well Capitalized."

Share Repurchase Program

Under its Board of Directors' authorization, the Company maintains a share repurchase program. The objectives of the share repurchase program are to optimize the Company's capital structure and cost of capital, thereby improving returns to shareholders, as well as to offset the dilutive impact of share-based awards. Repurchases may be made from time to time in open market purchases or other types of transactions (including prepaid or structured share repurchase programs), subject to certain Board restrictions. In June 2018, the Board renewed the Company's share repurchase program with an authorization to repurchase up to 100 million shares of its common stock.

A summary of common share repurchases for the years ended December 31, 2018 and 2017 is as follows:

	Years Ended December 31,	
(in millions, except per share data)	**2018**	**2017**
Common share repurchases, shares	19	9
Common share repurchases, average price per share	$236.72	$173.54
Common share repurchases, aggregate cost	$ 4,500	$ 1,500
Board authorized shares remaining	94	42

Dividends

In June 2018, the Company's Board of Directors increased the Company's annual dividend rate to shareholders to $3.60 per share compared to $3.00 per share, which the Company had paid since June 2017. Declaration and payment of future quarterly dividends is at the discretion of the Board and may be adjusted as business needs or market conditions change.

11. Share-Based Compensation

The Company's outstanding share-based awards consist mainly of non-qualified stock options, SARs and restricted shares. As of December 31, 2018, the Company had 42 million shares available for future grants of share-based awards under the Plan. As of December 31, 2018, there were also 7 million shares of common stock available for issuance under the ESPP.

Stock Options and SARs

Stock option and SAR activity for the year ended December 31, 2018 is summarized in the table below:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life	Aggregate Intrinsic Value
	(in millions)		(in years)	(in millions)
Outstanding at beginning of period	37	$ 102		
Granted	7	229		
Exercised	(8)	78		
Forfeited	(1)	162		
Outstanding at end of period	35	131	6.5	$ 4,114
Exercisable at end of period	16	87	5.0	2,560
Vested and expected to vest, end of period	34	129	6.5	4,072

Restricted Shares

Restricted share activity for the year ended December 31, 2018 is summarized in the table below:

(shares in millions)	Shares	Weighted-Average Grant Date Fair Value per Share
Nonvested at beginning of period	7	$ 128
Granted	2	229
Vested	(3)	119
Nonvested at end of period	6	163

Other Share-Based Compensation Data

	For the Years Ended December 31,		
(in millions, except per share amounts)	2018	2017	2016
Stock Options and SARs			
Weighted-average grant date fair value of shares granted, per share	$ 43	$ 29	$ 20
Total intrinsic value of stock options and SARs exercised	1,431	1,473	595
Restricted Shares			
Weighted-average grant date fair value of shares granted, per share	229	163	115
Total fair value of restricted shares vested	$ 521	$ 460	$274
Employee Stock Purchase Plan			
Number of shares purchased	2	2	2
Share-Based Compensation Items			
Share-based compensation expense, before tax	$ 638	$ 597	$485
Share-based compensation expense, net of tax effects	587	531	417
Income tax benefit realized from share-based award exercises	239	431	236

(in millions, except years)	December 31, 2018
Unrecognized compensation expense related to share awards	$ 628
Weighted-average years to recognize compensation expense	1.3

Share-Based Compensation Recognition and Estimates

The principal assumptions the Company used in calculating grant-date fair value for stock options and SARs were as follows:

	For the Years Ended December 31,		
	2018	2017	2016
Risk-free interest rate	2.6% - 3.1%	1.9% - 2.1%	1.2% - 1.4%
Expected volatility	18.7% - 19.3%	18.5% - 20.7%	20.8% - 22.5%
Expected dividend yield	1.3% - 1.5%	1.4% - 1.6%	1.8%
Forfeiture rate	5.0%	5.0%	5.0%
Expected life in years	5.6	5.7	5.6 - 5.9

Risk-free interest rates are based on U.S. Treasury yields in effect at the time of grant. Expected volatilities are based on the historical volatility of the Company's common stock and the implied volatility from exchange-traded options on the Company's common stock. Expected dividend yields are based on the per share cash dividend paid by the Company. The Company uses historical data to estimate option and SAR exercises and forfeitures within the valuation model. The expected lives of options and SARs granted represents the period of time that the awards granted are expected to be outstanding based on historical exercise patterns.

Other Employee Benefit Plans

The Company offers a 401(k) plan for its employees. Compensation expense related to this plan was not material for 2018, 2017 and 2016.

In addition, the Company maintains non-qualified, deferred compensation plans, which allow certain members of senior management and executives to defer portions of their salary or bonus and receive certain Company contributions on such deferrals, subject to plan limitations. The deferrals are recorded within long-term investments with an approximately equal amount in other liabilities in the Consolidated Balance Sheets. The total deferrals are distributable based upon termination of employment or other periods, as elected under each plan and were $988 million and $865 million as of December 31, 2018 and 2017, respectively.

12. Commitments and Contingencies

The Company leases facilities and equipment under long-term operating leases that are non-cancelable and expire on various dates. Rent expense under all operating leases for the years ended December 31, 2018, 2017 and 2016 was $751 million, $710 million and $608 million, respectively.

As of December 31, 2018, future minimum annual lease payments, net of sublease income, under all non-cancelable operating leases were as follows:

(in millions)	Future Minimum Lease Payments
2019	$ 669
2020	592
2021	511
2022	423
2023	338
Thereafter	1,343

The Company provides guarantees related to its service level under certain contracts. If minimum standards are not met, the Company may be financially at risk up to a stated percentage of the contracted fee or a stated dollar amount. None of the amounts accrued, paid or charged to income for service level guarantees were material as of December 31, 2018, 2017 or 2016.

As of December 31, 2018, the Company had outstanding, undrawn letters of credit with financial institutions of $83 million and surety bonds outstanding with insurance companies of $1.3 billion, primarily to bond contractual performance.

Pending Acquisition

In December 2017, the Company entered into an agreement to acquire a company in the health care sector for a total of approximately $4.3 billion.

Legal Matters

Because of the nature of its businesses, the Company is frequently made party to a variety of legal actions and regulatory inquiries, including class actions and suits brought by members, care providers, consumer advocacy organizations, customers and regulators, relating to the Company's businesses, including management and administration of health benefit plans and other services. These matters include medical malpractice, employment, intellectual property, antitrust, privacy and contract claims and claims related to health care benefits coverage and other business practices.

The Company records liabilities for its estimates of probable costs resulting from these matters where appropriate. Estimates of costs resulting from legal and regulatory matters involving the Company are inherently difficult to predict, particularly where the matters: involve indeterminate claims for monetary damages or may involve fines, penalties or punitive damages; present novel legal theories or represent a shift in regulatory policy; involve a large number of claimants or regulatory bodies; are in the early stages of the proceedings; or could result in a change in business practices. Accordingly, the Company is often unable to estimate the losses or ranges of losses for those matters where there is a reasonable possibility or it is probable that a loss may be incurred.

Government Investigations, Audits and Reviews

The Company has been involved or is currently involved in various governmental investigations, audits and reviews. These include routine, regular and special investigations, audits and reviews by CMS, state insurance and health and welfare departments, state attorneys general, the Office of the Inspector General, the Office of Personnel Management, the Office of Civil Rights, the Government Accountability Office, the Federal Trade Commission, U.S. Congressional committees, the U.S. Department of Justice, the SEC, the Internal Revenue Service, the U.S. Drug Enforcement Administration, the U.S. Department of Labor, the Federal Deposit Insurance Corporation, the Defense Contract Audit Agency and other governmental authorities. Similarly, our international businesses are also subject to investigations, audits and reviews by applicable foreign governments, including South American and other non-U.S. governmental authorities. Certain of the Company's businesses have been reviewed or are currently under review, including for, among other matters, compliance with coding and other requirements under the Medicare risk-adjustment model. CMS has selected certain of the Company's local plans for risk adjustment data validation (RADV) audits to validate the coding practices of and supporting documentation maintained by health care providers and such audits may result in retrospective adjustments to payments made to the Company's health plans.

On February 14, 2017, the Department of Justice (DOJ) announced its decision to pursue certain claims within a lawsuit initially asserted against the Company and filed under seal by a whistleblower in 2011. The whistleblower's complaint, which was unsealed on February 15, 2017, alleges that the Company made improper risk adjustment submissions and violated the False Claims Act. On February 12, 2018, the court granted in part and denied in part the Company's motion to dismiss. In May 2018, DOJ moved to dismiss the Company's counterclaims, which were filed in March 2018, and moved for partial summary judgment. Those motions were argued in September 2018. The Company cannot reasonably estimate the outcome that may result from this matter given its procedural status.

13. Segment Financial Information

Factors used to determine the Company's reportable segments include the nature of operating activities, economic characteristics, existence of separate senior management teams and the type of information used by the Company's chief operating decision maker to evaluate its results of operations. Reportable segments with similar economic characteristics, products and services, customers, distribution methods and operational processes that operate in a similar regulatory environment are combined.

The following is a description of the types of products and services from which each of the Company's four reportable segments derives its revenues:

- *UnitedHealthcare* includes the combined results of operations of UnitedHealthcare Employer & Individual, UnitedHealthcare Medicare & Retirement, UnitedHealthcare Community & State and UnitedHealthcare Global. The U.S. businesses share significant common assets, including a contracted network of physicians, health care professionals, hospitals and other facilities, information technology and consumer engagement infrastructure and other resources. UnitedHealthcare Employer & Individual offers an array of consumer-oriented health benefit plans and services for large national employers, public sector employers, mid-sized employers, small businesses and individuals nationwide. UnitedHealthcare Medicare & Retirement provides health care coverage and health and well-being services to individuals age 50 and older, addressing their unique needs for preventive and acute health care services as well as services dealing with chronic disease and other specialized issues for older individuals. UnitedHealthcare Community & State's primary customers oversee Medicaid plans, the Children's Health Insurance Program and other federal, state and community health care programs. UnitedHealthcare Global is a diversified global health services business with a variety of offerings, including international commercial health and dental benefits and health care delivery.
- *OptumHealth* focuses on care delivery, care management, wellness and consumer engagement, and health financial services. OptumHealth serves the physical, emotional and health-related financial needs of individuals, enabling population health through programs offered by employers, payers, government entities and directly with the care delivery system. OptumHealth offers access to networks of care provider specialists, health management services, care delivery, consumer engagement and financial services.
- *OptumInsight* provides services, technology and health care expertise to major participants in the health care industry. Hospital systems, physicians, health plans, governments, life sciences companies and other organizations that comprise the health care industry depend on OptumInsight to help them improve performance, achieve efficiency, reduce costs, meet compliance mandates and modernize their core operating systems to meet the changing needs of the health system.
- *OptumRx* offers pharmacy care services and programs, including retail network contracting, home delivery, specialty and compounding pharmacy services, purchasing and clinical capabilities, and develops programs in areas such as step therapy, formulary management, drug adherence and disease/drug therapy management.

The Company's accounting policies for reportable segment operations are consistent with those described in the Summary of Significant Accounting Policies (see Note 2). Transactions between reportable segments principally consist of sales of pharmacy care products and services to UnitedHealthcare customers by OptumRx, certain product offerings and care management and local care delivery services sold to UnitedHealthcare by OptumHealth, and health information and technology solutions, consulting and other services sold to UnitedHealthcare by OptumInsight. These transactions are recorded at management's estimate of fair value. Intersegment transactions are eliminated in consolidation. Assets and liabilities that are jointly used are assigned to each reportable segment using estimates of pro-rata usage. Cash and investments are assigned such that each reportable segment has working capital and/or at least minimum specified levels of regulatory capital.

As a percentage of the Company's total consolidated revenues, premium revenues from CMS were 30%, 28% and 25% for 2018, 2017 and 2016, respectively, most of which were generated by UnitedHealthcare Medicare & Retirement and included in the UnitedHealthcare segment. U.S. customer revenue represented approximately 96%, 96% and 97% of consolidated total revenues for 2018, 2017 and 2016, respectively. Long-lived fixed assets located in the United States represented approximately 76% and 77% of the total long-lived fixed assets as of December 31, 2018 and 2017, respectively. The non-U.S. revenues and fixed assets are primarily related to UnitedHealthcare Global.

The following table presents the reportable segment financial information:

(in millions)	UnitedHealthcare	Optum					Corporate and Eliminations	Consolidated
		OptumHealth	OptumInsight	OptumRx	Optum Eliminations	Optum		
2018								
Revenues — unaffiliated customers:								
Premiums	$ 174,282	$ 3,805	$ —	$ —	$ —	$ 3,805	$ —	$ 178,087
Products	—	52	111	29,438	—	29,601	—	29,601
Services	8,366	4,925	3,280	612	—	8,817	—	17,183
Total revenues — unaffiliated customers	182,648	8,782	3,391	30,050	—	42,223	—	224,871
Total revenues — affiliated customers	—	14,882	5,596	39,440	(1,409)	58,509	(58,509)	—
Investment and other income	828	481	21	46	—	548	—	1,376
Total revenues	$ 183,476	$ 24,145	$ 9,008	$ 69,536	$ (1,409)	$101,280	$ (58,509)	$ 226,247
Earnings from operations	$ 9,113	$ 2,430	$ 2,243	$ 3,558	$ —	$ 8,231	$ —	$ 17,344
Interest expense	—	—	—	—	—	—	(1,400)	(1,400)
Earnings before income taxes	$ 9,113	$ 2,430	$ 2,243	$ 3,558	$ —	$ 8,231	$ (1,400)	$ 15,944
Total assets	$ 82,938	$ 29,837	$ 11,039	$ 33,912	$ —	$ 74,788	$ (5,505)	$ 152,221
Purchases of property, equipment and capitalized software	761	593	517	192	—	1,302	—	2,063
Depreciation and amortization	845	439	654	490	—	1,583	—	2,428
2017								
Revenues — unaffiliated customers:								
Premiums	$ 154,709	$ 3,744	$ —	$ —	$ —	$ 3,744	$ —	$ 158,453
Products	—	44	106	26,216	—	26,366	—	26,366
Services	7,890	4,013	2,849	565	—	7,427	—	15,317
Total revenues — unaffiliated customers	162,599	7,801	2,955	26,781	—	37,537	—	200,136
Total revenues — affiliated customers	—	12,429	5,127	36,954	(1,227)	53,283	(53,283)	—
Investment and other income	658	340	5	20	—	365	—	1,023
Total revenues	$ 163,257	$ 20,570	$ 8,087	$ 63,755	$ (1,227)	$ 91,185	$ (53,283)	$ 201,159
Earnings from operations	$ 8,498	$ 1,823	$ 1,770	$ 3,118	$ —	$ 6,711	$ —	$ 15,209
Interest expense	—	—	—	—	—	—	(1,186)	(1,186)
Earnings before income taxes	$ 8,498	$ 1,823	$ 1,770	$ 3,118	$ —	$ 6,711	$ (1,186)	$ 14,023
Total assets	$ 76,676	$ 26,931	$ 11,273	$ 29,551	$ —	$ 67,755	$ (5,373)	$ 139,058
Purchases of property, equipment and capitalized software	737	510	588	188	—	1,286	—	2,023
Depreciation and amortization	758	380	614	493	—	1,487	—	2,245
2016								
Revenues — unaffiliated customers:								
Premiums	$ 140,455	$ 3,663	$ —	$ —	$ —	$ 3,663	$ —	$ 144,118
Products	1	48	103	26,506	—	26,657	—	26,658
Services	7,514	2,498	2,670	554	—	5,722	—	13,236
Total revenues — unaffiliated customers	147,970	6,209	2,773	27,060	—	36,042	—	184,012
Total revenues — affiliated customers	—	10,491	4,559	33,372	(1,088)	47,334	(47,334)	—
Investment and other income	611	208	1	8	—	217	—	828
Total revenues	$ 148,581	$ 16,908	$ 7,333	$ 60,440	$ (1,088)	$ 83,593	$ (47,334)	$ 184,840
Earnings from operations	$ 7,307	$ 1,428	$ 1,513	$ 2,682	$ —	$ 5,623	$ —	$ 12,930
Interest expense	—	—	—	—	—	—	(1,067)	(1,067)
Earnings before income taxes	$ 7,307	$ 1,428	$ 1,513	$ 2,682	$ —	$ 5,623	$ (1,067)	$ 11,863
Total assets	$ 70,505	$ 18,656	$ 9,017	$ 29,066	$ —	$ 56,739	$ (4,434)	$ 122,810
Purchases of property, equipment and capitalized software	640	345	571	149	—	1,065	—	1,705
Depreciation and amortization	724	297	559	475	—	1,331	—	2,055

14. Quarterly Financial Data (Unaudited)

Selected quarterly financial information for all quarters of 2018 and 2017 is as follows:

	For the Quarter Ended			
(in millions, except per share data)	**March 31**	**June 30**	**September 30**	**December 31**
2018				
Revenues	$ 55,188	$ 56,086	$ 56,556	$ 58,417
Operating costs	51,135	51,882	51,966	53,920
Earnings from operations	4,053	4,204	4,590	4,497
Net earnings	2,924	3,010	3,284	3,164
Net earnings attributable to UnitedHealth Group common shareholders	2,836	2,922	3,188	3,040
Net earnings per share attributable to UnitedHealth Group common shareholders:				
Basic	2.94	3.04	3.31	3.16
Diluted	2.87	2.98	3.24	3.10
2017				
Revenues	$ 48,723	$ 50,053	$ 50,322	$ 52,061
Operating costs	45,310	46,322	46,234	48,084
Earnings from operations	3,413	3,731	4,088	3,977
Net earnings	2,191	2,350	2,561	3,721
Net earnings attributable to UnitedHealth Group common shareholders	2,172	2,284	2,485	3,617
Net earnings per share attributable to UnitedHealth Group common shareholders:				
Basic	2.28	2.37	2.57	3.73
Diluted	2.23	2.32	2.51	3.65

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (Exchange Act) that are designed to provide reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in SEC rules and forms; and (ii) accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

In connection with the filing of this Annual Report on Form 10-K, management evaluated, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2018. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2018.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Management on Internal Control Over Financial Reporting as of December 31, 2018

Management of UnitedHealth Group Incorporated and Subsidiaries (the Company) is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. The Company's internal control system is designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles. The Company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2018. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework (2013).* Based on our assessment and the COSO criteria, we believe that, as of December 31, 2018, the Company maintained effective internal control over financial reporting.

The Company's independent registered public accounting firm has audited the Company's internal control over financial reporting as of December 31, 2018, as stated in the Report of Independent Registered Public Accounting Firm, appearing under Item 9A.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of UnitedHealth Group Incorporated and Subsidiaries:

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of UnitedHealth Group Incorporated and Subsidiaries (the "Company") as of December 31, 2018, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control—Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2018, of the Company and our report dated February 12, 2019, expressed an unqualified opinion on those financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control Over Financial Reporting as of December 31, 2018. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 12, 2019

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

DIRECTORS OF THE REGISTRANT

The following sets forth certain information regarding our directors as of February 12, 2019, including their name and principal occupation or employment:

William C. Ballard, Jr.
Former Of Counsel
Bingham Greenebaum Doll LLP

Richard T. Burke
Lead Independent Director
UnitedHealth Group

Timothy P. Flynn
Retired Chair
KPMG International

Stephen J. Hemsley
Executive Chair
UnitedHealth Group

Michele J. Hooper
President and Chief Executive Officer
The Directors' Council

F. William McNabb III
Former Chairman and Chief Executive Officer
The Vanguard Group, Inc.

Valerie Montgomery Rice, M.D
President and Dean
Morehouse School of Medicine

Glenn M. Renwick
Chair
Fiserv, Inc.

David S. Wichmann
Chief Executive Officer
UnitedHealth Group

Gail R. Wilensky, Ph.D.
Senior Fellow
Project HOPE

Pursuant to General Instruction G(3) to Form 10-K and Instruction 3 to Item 401(b) of Regulation S-K, information regarding our executive officers is provided in Item 1 of Part I of this Annual Report on Form 10-K under the caption "Executive Officers of the Registrant."

We have adopted a code of ethics applicable to our principal executive officer and other senior financial officers, who include our principal financial officer, principal accounting officer, controller and persons performing similar functions. The code of ethics, entitled Code of Conduct: Our Principles of Ethics and Integrity, is posted on our website at *www.unitedhealthgroup.com*. For information about how to obtain the Code of Conduct, see Part I, Item 1, "Business." We intend to satisfy the SEC's disclosure requirements regarding amendments to, or waivers of, the code of ethics for our senior financial officers by posting such information on our website indicated above.

The remaining information required by Items 401, 405, 406 and 407(c)(3), (d)(4) and (d)(5) of Regulation S-K will be included under the headings "Corporate Governance," "Proposal 1-Election of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance" in our definitive proxy statement for our 2019 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Items 402, 407(e)(4) and (e)(5) of Regulation S-K will be included under the headings "Executive Compensation," "Director Compensation," "Corporate Governance—Risk Oversight" and

"Compensation Committee Interlocks and Insider Participation" in our definitive proxy statement for our 2019 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS

Equity Compensation Plan Information

The following table sets forth certain information, as of December 31, 2018, concerning shares of common stock authorized for issuance under all of our equity compensation plans:

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(in millions)		(in millions)
Equity compensation plans approved by shareholders [1]	33	$ 135	49[3]
Equity compensation plans not approved by shareholders [2]	—	—	—
Total [2]	33	$ 135	49

(1) Consists of the UnitedHealth Group Incorporated 2011 Stock Incentive Plan, as amended and the UnitedHealth Group 1993 Employee Stock Purchase Plan, as amended.

(2) Excludes 1,676,000 shares underlying stock options assumed by us in connection with acquisitions. These options have a weighted-average exercise price of $59 and an average remaining term of approximately 5 years. These options are administered pursuant to the terms of the plans under which the options originally were granted. No future awards will be granted under these acquired plans.

(3) Includes 7 million shares of common stock available for future issuance under the 1993 Employee Stock Purchase Plan as of December 31, 2018, and 42 million shares available under the 2011 Stock Incentive Plan as of December 31, 2018. Shares available under the 2011 Stock Incentive Plan may become the subject of future awards in the form of stock options, SARs, restricted stock, restricted stock units, performance awards and other stock-based awards.

The information required by Item 403 of Regulation S-K will be included under the heading "Security Ownership of Certain Beneficial Owners and Management" in our definitive proxy statement for our 2019 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Items 404 and 407(a) of Regulation S-K will be included under the headings "Certain Relationships and Transactions" and "Corporate Governance" in our definitive proxy statement for our 2019 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by Item 9(e) of Schedule 14A will be included under the heading "Disclosure of Fees Paid to Independent Registered Public Accounting Firm" in our definitive proxy statement for our 2019 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) 1. *Financial Statements and Supplementary Data*

The financial statements are included under Item 8 of this report:

- Reports of Independent Registered Public Accounting Firm.
- Consolidated Balance Sheets as of December 31, 2018 and 2017.
- Consolidated Statements of Operations for the years ended December 31, 2018, 2017, and 2016.
- Consolidated Statements of Comprehensive Income for the years ended December 31, 2018, 2017, and 2016.
- Consolidated Statements of Changes in Equity for the years ended December 31, 2018, 2017, and 2016.
- Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017, and 2016.
- Notes to the Consolidated Financial Statements.

2. *Financial Statement Schedules*

The following financial statement schedule of the Company is included in Item 15(c):

- Schedule I—Condensed Financial Information of Registrant (Parent Company Only).

All other schedules for which provision is made in the applicable accounting regulations of the SEC are not required under the related instructions, are inapplicable, or the required information is included in the consolidated financial statements, and therefore have been omitted.

(b) The following exhibits are filed or incorporated by reference herein in response to Item 601 of Regulation S-K. The Company files Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K pursuant to the Securities Exchange Act of 1934 under Commission File No. 1-10864.

EXHIBIT INDEX**

3.1	Certificate of Incorporation of UnitedHealth Group Incorporated (incorporated by reference to Exhibit 3.1 to UnitedHealth Group Incorporated's Registration Statement on Form 8-A/A, Commission File No. 1-10864, filed on July 1, 2015)
3.2	Bylaws of UnitedHealth Group Incorporated, effective August 15, 2017 (incorporated by reference to Exhibit 3.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on August 16, 2017)
4.1	Senior Indenture, dated as of November 15, 1998, between United HealthCare Corporation and The Bank of New York (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Registration Statement on Form S-3/A, SEC File Number 333-66013, filed on January 11, 1999)
4.2	Amendment, dated as of November 6, 2000, to Senior Indenture, dated as of November 15, 1998, between the UnitedHealth Group Incorporated and The Bank of New York (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001)

4.3	Instrument of Resignation, Appointment and Acceptance of Trustee, dated January 8, 2007, pursuant to the Senior Indenture, dated as of November 15, 1988, amended as of November 6, 2000, among UnitedHealth Group Incorporated, The Bank of New York and Wilmington Trust Company (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007)
4.4	Indenture, dated as of February 4, 2008, between UnitedHealth Group Incorporated and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Registration Statement on Form S-3, SEC File Number 333-149031, filed on February 4, 2008)
*10.1	UnitedHealth Group Incorporated 2011 Stock Incentive Plan, as amended and restated in 2018
*10.2	Amendment to UnitedHealth Group Incorporated's Stock Option and Stock Appreciation Right Awards, effective November 6, 2014 (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2014)
*10.3	Form of Agreement for Non-Qualified Stock Option Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.4 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.4	Form of Agreement for Non-Qualified Stock Option Award for International Participants under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2013)
*10.5	Form of Addendum for Non-Qualified Stock Option Award Agreement for International Participants under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.37 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2012)
*10.6	Form of Agreement for Restricted Stock Unit Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.5 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.7	Form of Agreement for Restricted Stock Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.5 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
*10.8	Form of Agreement for Stock Appreciation Rights Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.4 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
*10.9	Form of Agreement for Performance-based Restricted Stock Unit Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.6 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.10	Form of Agreement for Initial Deferred Stock Unit Award to Non-Employee Directors under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.7 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
*10.11	Form of Agreement for Deferred Stock Unit Award to Non-Employee Directors under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.6 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)

10.12	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on July 1, 2015)
*10.13	Amended and Restated UnitedHealth Group Incorporated Executive Incentive Plan (2009 Statement), effective as of December 31, 2008 (incorporated by reference to Exhibit 10.12 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.14	Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan, effective as of December 31, 2008 (incorporated by reference to Exhibit 10.13 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.15	Amendment, dated as of December 21, 2012, of Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan (incorporated by reference to Exhibit 10.11 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2012)
*10.16	Second Amendment, dated as of November 5, 2015, of Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.17	UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10(e) of UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2003)
*10.18	First Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 3, 2006)
*10.19	Second Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.13 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2007)
*10.20	Third Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.17 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.21	Fourth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010)
*10.22	Fifth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014)
*10.23	Sixth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.24	Seventh Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.24 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2016)
*10.25	Eighth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 4.9 to UnitedHealth Group Incorporated's Registration Statement on Form S-8, SEC File Number 333-224254, filed on April 12, 2018)
*10.26	Summary of Non-Management Director Compensation, effective as of October 1, 2018

*10.27	UnitedHealth Group Directors' Compensation Deferral Plan (2009 Statement) (incorporated by reference to Exhibit 10.18 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.28	Amendment to the UnitedHealth Group Directors' Compensation Deferral Plan, effective as of January 1, 2010 (incorporated by reference to Exhibit 10.20 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2009)
*10.29	First Amendment to UnitedHealth Group Directors' Compensation Deferral Plan (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010)
*10.30	Catamaran Corporation Third Amended and Restated Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Registration Statement on Form S-8, SEC File Number 333-205824, filed on July 23, 2015)
*10.31	Catalyst Health Solutions, Inc. 2006 Stock Incentive Plan, as amended (incorporated by reference to Exhibit 4.4 to UnitedHealth Group Incorporated's Registration Statement on Form S-8, SEC File Number 333-205824, filed on July 23, 2015)
*10.32	Audax Health Solutions, Inc. 2010 Equity Incentive Plan, as amended (incorporated by reference to Exhibit 4.4 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 to Registration Statement on Form S-8, SEC File Number 333-205826, filed on February 15, 2017)
*10.33	Surgical Care Affiliates, Inc. 2016 Omnibus Long-Term Incentive Plan (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 on Form S-8 to Registration Statement on Form S-4, SEC File Number 333-216153, filed on March 27, 2017)
*10.34	Surgical Care Affiliates, Inc. 2013 Omnibus Long-Term Incentive Plan (incorporated by reference to Exhibit 4.4 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 on Form S-8 to Registration Statement on Form S-4, SEC File Number 333-216153, filed on March 27, 2017)
*10.35	Surgical Care Affiliates, Inc. Management Equity Incentive Plan (incorporated by reference to Exhibit 4.5 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 on Form S-8 to Registration Statement on Form S-4, SEC File Number 333-216153, filed on March 27, 2017)
*10.36	Surgical Care Affiliates, Inc. Directors and Consultants Equity Incentive Plan (incorporated by reference to Exhibit 4.6 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 on Form S-8 to Registration Statement on Form S-4, SEC File Number 333-216153, filed on March 27, 2017)
*10.37	The Advisory Board Company Amended and Restated 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to The Advisory Board Company's Current Report on Form 8-K filed on June 15, 2015)
*10.38	The Advisory Board Company 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to The Advisory Board Company's Current Report on Form 8-K filed on November 17, 2005)
*10.39	Employment Agreement, dated as of November 7, 2006, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 8, 2006)
*10.40	Agreement for Supplemental Executive Retirement Pay, effective April 1, 2004, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10(b) to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2004)

*10.41	Amendment to Agreement for Supplemental Executive Retirement Pay, dated as of November 7, 2006, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit A to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 8, 2006)
*10.42	Amendment to Employment Agreement and Agreement for Supplemental Executive Retirement Pay, effective as of December 31, 2008, between United HealthCare Services, Inc. and Stephen J. Hemsley (incorporated by reference to Exhibit 10.22 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.43	Amendment to Agreement for Supplemental Executive Retirement Pay, dated as of June 7, 2016, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016)
*10.44	Letter Agreement, effective as of February 19, 2008, by and between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.22 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2007)
*10.45	Amendment to Employment Agreement, dated as of December 14, 2010, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on December 15, 2010)
*10.46	Amended and Restated Employment Agreement, effective as of December 1, 2014, between United HealthCare Services, Inc. and David Wichmann (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015)
*10.47	Amendment to Employment Agreement, effective as of August 16, 2017, between United HealthCare Services, Inc. and David Wichmann (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017)
*10.48	Amended and Restated Employment Agreement, dated as of June 7, 2016, between United HealthCare Services, Inc. and John Rex (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016)
*10.49	Amended and Restated Employment Agreement, effective as of March 24, 2015, between United HealthCare Services, Inc. and Steven H. Nelson (incorporated by reference to Exhibit 10.51 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2017)
*10.50	Employment Agreement, effective as of June 3, 2018, between United HealthCare Services, Inc. and Andrew Witty
11.1	Statement regarding computation of per share earnings (incorporated by reference to the information contained under the heading "Net Earnings Per Common Share" in Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data")
21.1	Subsidiaries of UnitedHealth Group Incorporated
23.1	Consent of Independent Registered Public Accounting Firm
24.1	Power of Attorney
31.1	Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

32.1	Certifications pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	The following materials from UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2018, filed on February 12, 2019, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statements of Changes in Equity, (v) Consolidated Statements of Cash Flows, and (vi) Notes to the Consolidated Financial Statements.

---

* Denotes management contracts and compensation plans in which certain directors and named executive officers participate and which are being filed pursuant to Item 601(b)(10)(iii)(A) of Regulation S-K.

** Pursuant to Item 601(b)(4)(iii) of Regulation S-K, copies of instruments defining the rights of certain holders of long-term debt are not filed. The Company will furnish copies thereof to the SEC upon request.

(c) Financial Statement Schedule

Schedule I—Condensed Financial Information of Registrant (Parent Company Only).

Schedule I

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of UnitedHealth Group Incorporated and Subsidiaries:

Opinion on the Financial Statement Schedule

We have audited the consolidated financial statements of UnitedHealth Group Incorporated and subsidiaries (the "Company") as of December 31, 2018 and 2017, and for each of the three years in the period ended December 31, 2018, and the Company's internal control over financial reporting as of December 31, 2018, and have issued our reports thereon dated February 12, 2019; such reports are included elsewhere in this Form 10-K. Our audits also included the financial statement schedule of the Company listed in the Index at Item 15. This financial statement schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statement schedule based on our audits. In our opinion, the financial statement schedule, when considered in relation to the consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 12, 2019

Schedule I

Condensed Financial Information of Registrant
(Parent Company Only)
UnitedHealth Group
Condensed Balance Sheets

(in millions, except per share data)	December 31, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 434	$ 359
Other current assets	197	575
Total current assets	631	934
Equity in net assets of subsidiaries	83,244	76,231
Long-term notes receivable from subsidiaries	4,461	4,278
Other assets	972	839
Total assets	$ 89,308	$ 82,282
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 618	$ 502
Current portion of notes payable to subsidiaries	714	466
Commercial paper and current maturities of long-term debt	1,744	2,749
Total current liabilities	3,076	3,717
Long-term debt, less current maturities	33,490	28,318
Long-term notes payable to subsidiaries	560	1,518
Other liabilities	486	953
Total liabilities	37,612	34,506
Commitments and contingencies (Note 4)		
Shareholders' equity:		
Preferred stock, $0.001 par value -10 shares authorized; no shares issued or outstanding	—	—
Common stock, $0.01 par value — 3,000 shares authorized; 960 and 969 issued and outstanding	10	10
Additional paid-in capital	—	1,703
Retained earnings	55,846	48,730
Accumulated other comprehensive loss	(4,160)	(2,667)
Total UnitedHealth Group shareholders' equity	51,696	47,776
Total liabilities and shareholders' equity	$ 89,308	$ 82,282

See Notes to the Condensed Financial Statements of Registrant

Schedule I

Condensed Financial Information of Registrant
(Parent Company Only)
UnitedHealth Group
Condensed Statements of Comprehensive Income

(in millions)	For the Years Ended December 31, 2018	2017	2016
Revenues:			
Investment and other income	$ 194	$ 527	$ 522
Total revenues	194	527	522
Operating costs:			
Operating costs	35	—	(22)
Interest expense	1,285	1,114	995
Total operating costs	1,320	1,114	973
Loss before income taxes	(1,126)	(587)	(451)
Benefit for income taxes	251	214	165
Loss of parent company	(875)	(373)	(286)
Equity in undistributed income of subsidiaries	12,861	10,931	7,303
Net earnings	11,986	10,558	7,017
Other comprehensive (loss) income	(1,517)	14	653
Comprehensive income	$10,469	$10,572	$7,670

See Notes to the Condensed Financial Statements of Registrant

Schedule I

Condensed Financial Information of Registrant
(Parent Company Only)
UnitedHealth Group
Condensed Statements of Cash Flows

(in millions)	For the Years Ended December 31, 2018	2017	2016
Operating activities			
Cash flows from operating activities	$ 6,099	$ 2,021	$ 4,294
Investing activities			
Issuances of notes to subsidiaries	(1,420)	—	(824)
Repayments of notes to subsidiaries	1,419	2,071	—
Cash paid for acquisitions	(4,066)	(2,313)	(2,292)
Return of capital to parent company	4,196	3,375	2,143
Capital contributions to subsidiaries	(1,259)	(959)	(765)
Other, net	4	—	168
Cash flows (used for) from investing activities	(1,126)	2,174	(1,570)
Financing activities			
Common stock repurchases	(4,500)	(1,500)	(1,280)
Proceeds from common stock issuances	838	688	429
Cash dividends paid	(3,320)	(2,773)	(2,261)
Repayments of commercial paper, net	(201)	(3,508)	(382)
Proceeds from issuance of long-term debt	6,935	5,291	3,968
Repayments of long-term debt	(2,600)	(3,472)	(2,596)
(Repayments) proceeds of notes from subsidiary	(1,127)	1,704	(30)
Other, net	(923)	(446)	(421)
Cash flows used for financing activities	(4,898)	(4,016)	(2,573)
Increase in cash and cash equivalents	75	179	151
Cash and cash equivalents, beginning of period	359	180	29
Cash and cash equivalents, end of period	$ 434	$ 359	$ 180
Supplemental cash flow disclosures			
Cash paid for interest	$ 1,294	$ 1,062	$ 974
Cash paid for income taxes	2,379	3,455	4,557
Supplemental schedule of non-cash investing activities			
Common stock issued for acquisitions	$ —	$ 2,164	$ —
Conversion of note receivable from subsidiaries to equity	—	4,378	—

See Notes to the Condensed Financial Statements of Registrant

Schedule I

Condensed Financial Information of Registrant
(Parent Company Only)
UnitedHealth Group
Notes to Condensed Financial Statements

1. Basis of Presentation

UnitedHealth Group's parent company financial information has been derived from its consolidated financial statements and should be read in conjunction with the consolidated financial statements included in this Form 10-K. The accounting policies for the registrant are the same as those described in Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

2. Subsidiary Transactions

Investment in Subsidiaries. UnitedHealth Group's investment in subsidiaries is stated at cost plus equity in undistributed earnings of subsidiaries.

Dividends and Capital Distributions. Cash dividends received from subsidiaries and included in Cash Flows from Operating Activities in the Condensed Statements of Cash Flows were $5.6 billion, $3.4 billion and $3.7 billion in 2018, 2017 and 2016, respectively. Additionally, $4.2 billion, $3.4 billion and $2.1 billion in cash were received as a return of capital to the parent company during 2018, 2017 and 2016, respectively.

3. Commercial Paper and Long-Term Debt

Discussion of commercial paper and long-term debt can be found in Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data." Long-term debt obligations of the parent company do not include other financing obligations at subsidiaries that totaled $1.3 billion and $625 million at December 31, 2018 and 2017, respectively.

Maturities of commercial paper and long-term debt for the years ending December 31 are as follows:

(in millions)	
2019	$ 1,750
2020	3,150
2021	3,150
2022	3,015
2023	2,125
Thereafter	22,477

4. Commitments and Contingencies

For a summary of commitments and contingencies, see Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data."

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: February 12, 2019

UNITEDHEALTH GROUP INCORPORATED

By /s/ DAVID S. WICHMANN

David S. Wichmann
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ DAVID S. WICHMANN **David S. Wichmann**	Director and Chief Executive Officer (principal executive officer)	February 12, 2019
/s/ JOHN F. REX **John F. Rex**	Executive Vice President and Chief Financial Officer (principal financial officer)	February 12, 2019
/s/ THOMAS E. ROOS **Thomas E. Roos**	Senior Vice President and Chief Accounting Officer (principal accounting officer)	February 12, 2019
* **William C. Ballard, Jr.**	Director	February 12, 2019
* **Richard T. Burke**	Director	February 12, 2019
* **Timothy P. Flynn**	Director	February 12, 2019
* **Stephen J. Hemsley**	Director	February 12, 2019
* **Michele J. Hooper**	Director	February 12, 2019
* **F. William McNabb III**	Director	February 12, 2019
* **Valerie Montgomery Rice**	Director	February 12, 2019
* **Glenn M. Renwick**	Director	February 12, 2019
* **Gail R. Wilensky**	Director	February 12, 2019

*By /s/ MARIANNE D. SHORT

Marianne D. Short,
As Attorney-in-Fact

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2017

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number: 1-10864

UNITEDHEALTH GROUP®

UnitedHealth Group Incorporated
(Exact name of registrant as specified in its charter)

Delaware	**41-1321939**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
UnitedHealth Group Center **9900 Bren Road East** **Minnetonka, Minnesota** **(Address of principal executive offices)**	**55343** **(Zip Code)**

(952) 936-1300
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

COMMON STOCK, $.01 PAR VALUE	**NEW YORK STOCK EXCHANGE, INC.**
(Title of each class)	**(Name of each exchange on which registered)**

Securities registered pursuant to Section 12(g) of the Act: NONE

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one)

Large accelerated filer ☒ Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company) Smaller reporting company ☐
Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the registrant as of June 30, 2017 was $177,882,211,144 (based on the last reported sale price of $185.42 per share on June 30, 2017, on the New York Stock Exchange), excluding only shares of voting stock held beneficially by directors, executive officers and subsidiaries of the registrant.

As of January 31, 2018, there were 967,662,919 shares of the registrant's Common Stock, $.01 par value per share, issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The information required by Part III of this report, to the extent not set forth herein, is incorporated by reference from the registrant's definitive proxy statement relating to its 2018 Annual Meeting of Shareholders. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

UNITEDHEALTH GROUP

Table of Contents

PART I

ITEM 1. BUSINESS

INTRODUCTION

Overview

UnitedHealth Group is a diversified health care company dedicated to helping people live healthier lives and helping make the health system work better for everyone. The terms "we," "our," "us," "its," "UnitedHealth Group," or the "Company" used in this report refer to UnitedHealth Group Incorporated and its subsidiaries.

Through our diversified family of businesses, we leverage core competencies in data and health information; advanced technology; and clinical expertise to help meet the demands of the health system. These core competencies are deployed within our two distinct, but strategically aligned, business platforms: health benefits operating under UnitedHealthcare and health services operating under Optum.

UnitedHealthcare provides health care benefits to an array of customers and markets. UnitedHealthcare Employer & Individual serves employers ranging from sole proprietorships to large, multi-site and national employers, public sector employers and other individuals. UnitedHealthcare Medicare & Retirement delivers health and well-being benefits for Medicare beneficiaries and retirees. UnitedHealthcare Community & State manages health care benefit programs on behalf of state Medicaid and community programs and their participants. UnitedHealthcare Global includes the provision of health and dental benefits and hospital and clinical services to employer groups and individuals in Brazil, and other diversified global health businesses.

Optum is a health services business serving the broad health care marketplace, including payers, care providers, employers, governments, life sciences companies and consumers, through its OptumHealth, OptumInsight and OptumRx businesses. These businesses have dedicated units that help improve overall health system performance through optimizing care quality, reducing costs and improving consumer experience and care provider performance, leveraging distinctive capabilities in data and analytics, pharmacy care services, population health, health care delivery and health care operations.

Through UnitedHealthcare and Optum, in 2017, we processed nearly three-quarters of a trillion dollars in gross billed charges and we managed nearly $250 billion in aggregate health care spending on behalf of the customers and consumers we serve. Our revenues are derived from premiums on risk-based products; fees from management, administrative, technology and consulting services; sales of a wide variety of products and services related to the broad health care industry; and investment and other income. Our two business platforms have four reportable segments:

- UnitedHealthcare, which includes UnitedHealthcare Employer & Individual, UnitedHealthcare Medicare & Retirement, UnitedHealthcare Community & State and UnitedHealthcare Global;
- OptumHealth;
- OptumInsight; and
- OptumRx.

For our financial results and the presentation of certain other financial information by segment, including revenues and long-lived fixed assets by geographic source, see Note 13 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

UnitedHealthcare

Through its health benefits offerings, UnitedHealthcare is enabling better health, helping to control rising health care costs and creating a better health care experience for its customers. UnitedHealthcare's market position is built on:

- strong local market relationships;

- the breadth of product offerings, which are responsive to many distinct market segments in health care;
- service and advanced technology;
- competitive medical and operating cost positions;
- effective clinical engagement;
- extensive expertise in distinct market segments; and
- innovation for customers and consumers.

UnitedHealthcare utilizes Optum's capabilities to help coordinate patient care, improve affordability of medical care, analyze cost trends, manage pharmacy benefits, work with care providers more effectively and create a simpler consumer experience.

In the United States, UnitedHealthcare arranges for discounted access to care through networks that include 1.2 million physicians and other health care professionals and approximately 6,500 hospitals and other facilities.

UnitedHealthcare is subject to extensive government regulation. See further discussion of our regulatory environment below under "Government Regulation" and in Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

UnitedHealthcare Employer & Individual

UnitedHealthcare Employer & Individual offers an array of consumer-oriented health benefit plans and services nationwide for large national employers, public sector employers, mid-sized employers, small businesses, and individuals. UnitedHealthcare Employer & Individual provides access to medical services for over 27 million people on behalf of our customers and alliance partners. This includes more than 230,000 employer customers serving people across all 50 states, the District of Columbia and most U.S. territories. Products are offered through affiliates that are licensed as insurance companies, health maintenance organizations (HMOs), or third-party administrators (TPAs). Large employer groups typically use self-funded arrangements where UnitedHealthcare Employer & Individual earns a service fee. Smaller employer groups and individuals are more likely to purchase risk-based products because they are less willing or unable to bear a greater potential liability for health care expenditures.

Through its risk-based product offerings, UnitedHealthcare Employer & Individual assumes the risk of both medical and administrative costs for its customers in return for a monthly premium, which is typically a fixed rate per individual served for a one-year period. When providing administrative and other management services to customers that elect to self-fund the health care costs of their employees and employees' dependents, UnitedHealthcare Employer & Individual receives a fixed monthly service fee per individual served. These customers retain the risk of financing medical benefits for their employees and employees' dependents, while UnitedHealthcare Employer & Individual provides services such as coordination and facilitation of medical and related services to customers, consumers and health care professionals, administration of transaction processing and access to a contracted network of physicians, hospitals and other health care professionals, including dental and vision.

The consolidated purchasing capacity represented by the individuals served by UnitedHealth Group makes it possible for UnitedHealthcare Employer & Individual to contract for cost-effective access to a large number of conveniently located care professionals and facilities. UnitedHealthcare Employer & Individual has relationships with network care providers that integrate data and analytics, implement value-based payments and care management programs, and enable us to jointly better manage health care and improve quality across populations.

UnitedHealthcare Employer & Individual typically distributes its products through consultants or direct sales in the larger employer and public sector segments. In the smaller group segment of the commercial marketplace,

UnitedHealthcare Employer & Individual's distribution system consists primarily of direct sales and sales through collaboration with brokers and agents. UnitedHealthcare Employer & Individual also distributes products through wholesale agents or agencies that contract with health insurance carriers to distribute individual or group benefits and provide other related services to their customers. In addition, UnitedHealthcare Employer & Individual distributes its products through professional employer organizations, associations and through both multi-carrier and its own proprietary private exchange marketplaces.

UnitedHealthcare Employer & Individual's diverse product portfolio offers employers a continuum of benefit designs, price points and approaches to consumer engagement, which provides the flexibility to meet a full spectrum of their coverage needs.

UnitedHealthcare Employer & Individual's major product families include:

Traditional Products. Traditional products include a full range of medical benefits and network options from managed plans, such as Choice and Options PPO, to more traditional indemnity products. The plans offer a full spectrum of covered services, including preventive care, direct access to specialists and catastrophic protection.

Consumer Engagement Products. Consumer engagement products couple plan design with financial accounts to increase individuals' responsibility for their health and well-being. This suite of products includes high-deductible consumer-driven benefit plans, which include health reimbursement accounts (HRAs), health savings accounts (HSAs) and consumer engagement services such as personalized behavioral incentive programs and consumer education. During 2017, more than 50,000 employer-sponsored benefit plans, including nearly 400 employers in the large group self-funded market, purchased HRA or HSA health benefit products from us.

Clinical and Pharmacy Products. UnitedHealthcare Employer & Individual offers a comprehensive suite of clinical and pharmacy care services products, which complement its service offerings by improving quality of care, engaging members and providing cost-saving options. All UnitedHealthcare Employer & Individual members are provided access to clinical products that help them make better health care decisions and better use of their medical benefits, which contribute to improved health and lowered medical expenses.

Each medical plan has a core set of clinical programs embedded in the offering, with additional services available depending on offering type (risk-based or self-funded), line of business (e.g., small business, key accounts, public sector, national accounts or individuals) and clinical need. UnitedHealthcare Employer & Individual's clinical programs include:

- wellness programs;
- decision support;
- utilization management;
- case and disease management;
- complex condition management;
- on-site programs, including biometrics and flu shots;
- incentives to reinforce positive behavior change;
- mental health/substance use disorder management; and
- employee assistance programs.

UnitedHealthcare Employer & Individual's comprehensive and integrated pharmaceutical care services promote lower costs by using formulary programs to produce better unit costs, encouraging consumers to use drugs that offer improved value and outcomes, helping consumers take actions to improve their health and supporting the appropriate use of drugs based on clinical evidence through physician and consumer education programs.

Specialty Offerings. UnitedHealthcare Employer & Individual also delivers dental, vision, life, critical illness and disability product offerings through an integrated approach, using its network of more than 22,000 vision offices and more than 85,000 dental offices, in private and retail settings.

UnitedHealthcare Military & Veterans. UnitedHealthcare Military & Veterans was the provider of health care services for nearly 3 million active duty and retired military service members and their families under the Department of Defense's (DoD) TRICARE Managed Care Support contract that concluded on January 1, 2018.

UnitedHealthcare Medicare & Retirement

UnitedHealthcare Medicare & Retirement provides health and well-being services to individuals age 50 and older, addressing their unique needs for preventive and acute health care services, as well as services dealing with chronic disease and other specialized issues common among older individuals. UnitedHealthcare Medicare & Retirement is fully dedicated to serving this growing senior market segment, providing products and services in all 50 states, the District of Columbia and most U.S. territories. UnitedHealthcare Medicare & Retirement has distinct pricing, underwriting, clinical program management and marketing capabilities dedicated to health products and services in this market.

UnitedHealthcare Medicare & Retirement offers a selection of products that allow people to obtain the health coverage and services they need as their circumstances change. UnitedHealthcare Medicare & Retirement is positioned to serve seniors who find that affordable, network-based care provided through Medicare Advantage plans meets their unique health care needs. For those who prefer traditional fee-for-service Medicare, UnitedHealthcare Medicare & Retirement offers both Medicare Supplement and Medicare Prescription Drug Benefit (Medicare Part D) prescription drug programs that supplement their government-sponsored Medicare by providing additional benefits and coverage options. Beneficiaries with special needs are served through UnitedHealthcare Medicare & Retirement Dual, Chronic and Institutional Special Needs Plans (SNPs) in many markets. UnitedHealthcare Medicare & Retirement services include care management and clinical management programs, a nurse health line service, 24-hour access to health care information, access to discounted health services from a network of care providers and administrative services.

UnitedHealthcare Medicare & Retirement has extensive distribution capabilities and experience, including direct marketing to consumers on behalf of its key clients: AARP, the nation's largest membership organization dedicated to the needs of people age 50 and over, and state and U.S. government agencies. Products are also offered through employer groups and agent channels.

UnitedHealthcare Medicare & Retirement's major product categories include:

Medicare Advantage. UnitedHealthcare Medicare & Retirement provides health care coverage for seniors and other eligible Medicare beneficiaries primarily through the Medicare Advantage program administered by the Centers for Medicare & Medicaid Services (CMS), including Medicare Advantage HMO plans, preferred provider organization (PPO) plans, Point-of-Service plans, Private-Fee-for-Service plans and SNPs. Under the Medicare Advantage program, UnitedHealthcare Medicare & Retirement provides health insurance coverage in exchange for a fixed monthly premium per member from CMS plus, in some cases, monthly consumer premiums. Premium amounts received from CMS vary based on the geographic areas in which members reside; demographic factors such as age, gender and institutionalized status; and the health status of the individual. Medicare Advantage plans are designed to compete at the local level, taking into account member and care provider preferences, competitor offerings, our quality and cost initiatives, our historical financial results and the long-term payment rate outlook for each geographic area. UnitedHealthcare Medicare & Retirement served 4.4 million people through its Medicare Advantage products as of December 31, 2017.

Built on more than 20 years of experience, UnitedHealthcare Medicare & Retirement's senior-focused care management model operates at a medical cost level below that of traditional Medicare, while helping seniors live

healthier lives. Through UnitedHealth Group's HouseCalls program, nurse practitioners performed nearly 1.3 million in-home preventive care visits in 2017 to address unmet care opportunities and close gaps in care. For high-risk patients in certain care settings and programs, UnitedHealthcare Medicare & Retirement uses proprietary, automated medical record software that enables clinical care teams to capture and track patient data and clinical encounters, creating a comprehensive set of care information that bridges across home, hospital and nursing home care settings. Proprietary predictive modeling tools help identify people at high risk and allow care managers to create individualized care plans that help them obtain the right care, in the right place, at the right time.

Medicare Part D. UnitedHealthcare Medicare & Retirement provides Medicare Part D benefits to beneficiaries throughout the United States and its territories through its Medicare Advantage and stand-alone Medicare Part D plans. The stand-alone Medicare Part D plans address a large spectrum of beneficiaries' needs and preferences for their prescription drug coverage, including low cost prescription options. Each of the plans includes the majority of the drugs covered by Medicare and provides varying levels of coverage to meet the diverse needs of Medicare beneficiaries. As of December 31, 2017, UnitedHealthcare enrolled 8.9 million people in the Medicare Part D programs, including 4.9 million individuals in the stand-alone Medicare Part D plans with the remainder in Medicare Advantage plans incorporating Medicare Part D coverage.

Medicare Supplement. UnitedHealthcare Medicare & Retirement is currently serving 4.9 million seniors nationwide through various Medicare Supplement products in association with AARP. UnitedHealthcare Medicare & Retirement offers a full range of supplemental products at a diversity of price points. These products cover various levels of coinsurance and deductible gaps that seniors are exposed to in the traditional Medicare program.

Premium revenues from CMS represented 28% of UnitedHealth Group's total consolidated revenues for the year ended December 31, 2017, most of which were generated by UnitedHealthcare Medicare & Retirement.

UnitedHealthcare Community & State

UnitedHealthcare Community & State is dedicated to serving state programs that care for the economically disadvantaged, the medically underserved and those without the benefit of employer-funded health care coverage, in exchange for a monthly premium per member from the state program. In some cases, these premiums are subject to experience or risk adjustments. UnitedHealthcare Community & State's primary customers oversee Medicaid plans, Children's Health Insurance Programs (CHIP), SNPs, integrated Medicare-Medicaid plans (MMP) and other federal, state and community health care programs. As of December 31, 2017, UnitedHealthcare Community & State participated in programs in 28 states and the District of Columbia, and served 6.7 million beneficiaries; including more than 1.1 million people through Medicaid expansion programs in 16 states under the Patient Protection and Affordable Care Act (ACA).

States using managed care services for Medicaid beneficiaries select health plans by using a formal bid process or by awarding individual contracts. A number of factors are considered by UnitedHealthcare Community & State when choosing programs for participation, including the state's commitment and consistency of support for its Medicaid managed care program in terms of service, innovation and funding; the eligible population base, both immediate and long term; and the structure of the projected program. UnitedHealthcare Community & State works with its state customers to advocate for actuarially sound rates, commensurate with medical cost trends.

The primary categories of eligibility for the programs served by UnitedHealthcare Community & State and its participation are:

- Temporary Assistance to Needy Families, primarily women and children – 26 markets;
- CHIP – 25 markets;
- Aged, Blind and Disabled – 22 markets;

- SNP – 20 markets;
- Medicaid Expansion – 16 markets;
- Long-Term Services and Supports – 14 markets;
- MMP – 2 markets; and
- other programs (e.g., administrative services, childless adults, developmentally disabled) – 9 markets.

These health plans and care programs offered are designed to address the complex needs of the populations they serve, including the chronically ill, those with disabilities and people with a higher risk of medical, behavioral and social conditions. UnitedHealthcare Community & State administers benefits for the unique needs of children, pregnant women, adults, seniors and those who are institutionalized or are nursing home eligible. These individuals often live in areas that are medically underserved and are less likely to have a consistent relationship with the medical community or a care provider. These individuals also tend to face significant social and economic challenges.

UnitedHealthcare Community & State leverages the national capabilities of UnitedHealth Group locally, supporting effective care management, strong regulatory partnerships, greater administrative efficiency, improved clinical outcomes and the ability to adapt to a changing national and local market environment. UnitedHealthcare Community & State coordinates resources among family, physicians, other health care providers, and government and community-based agencies and organizations to facilitate continuous and effective care and often addresses other social determinants that can impact people's health status and health system usage.

Approximately 75% of the people in state Medicaid programs are served by managed care, but this population represents only 40% of total Medicaid spending. UnitedHealthcare Community & State's business development opportunities include entering fee-for-service markets converting to managed care, which represents a population of nearly 8 million people; and growing in existing managed care markets, including state expansions to populations with more complex needs requiring more sophisticated models of care. This expansion includes integrated management of physical, behavioral, long-term care services and supports, and social services by applying strong data analytics and community-based collaboration.

UnitedHealthcare Community & State continues to evolve its clinical model to enhance quality and the clinical experience for the people it serves. The model allows UnitedHealthcare Community & State to quickly identify the people who could benefit most from more highly coordinated care; typically, the 5% of members who are most at risk and drive over 50% of states' medical costs.

UnitedHealthcare Global

UnitedHealthcare Global serves more than 4 million people with medical benefits and 2 million with dental benefits, residing principally in Brazil, but also in more than 130 other countries. UnitedHealthcare Global owns and operates nearly 150 hospitals, specialty centers, primary care and emergency services clinics in Brazil and Portugal. UnitedHealthcare Global provides a comprehensive range of health and mobilization capabilities and supports the health systems of individual nations with support for improving health care financing and delivery. Clients include multi-national and local businesses, governments and individuals around the world.

Global Markets. UnitedHealthcare Global serves local populations in select markets around the world, primarily in Brazil and Portugal, by touching nearly every aspect of health care and leveraging expertise in clinical care management and health care data to improve outcomes, raise quality and constrain costs.

In Brazil, Amil provides health benefits to 4 million people through a broad network of owned and affiliated clinics, hospitals and care providers. Dental benefits are also provided to 2 million people. Amil's members have

access to both an owned care delivery system, as well as a contracted provider network of nearly 21,000 physicians and other health care professionals, approximately 1,800 hospitals and nearly 7,000 laboratories and diagnostic imaging centers. Americas Serviços Médicos offers health care delivery in Brazil through hospitals, ambulatory clinics and surgery centers to Amil members and the external payer market.

Lusíadas Saúde provides clinical services in Portugal through an owned network of hospitals and outpatient clinics.

Global Solutions. UnitedHealthcare Global includes other diversified global health services with a variety of offerings for international customers, including:

- Global Insurance, which offers expatriate insurance solution for globally mobile employees and their families;
- Assistance and Risk provides a global medical network and evacuation services;
- Global Medical provides remote medical services, telemedicine, supplies and equipment, and end-to-end remote medical services; and
- U.S. Networks assists foreign insurers and employers navigating the U.S. health care system.

Optum

Optum is a health services business serving the broad health care marketplace, including:

- Those who need care: the consumers who need the right support, information, resources and products to achieve their health goals.
- Those who provide care: pharmacies, hospitals, physicians, practices and other health care facilities seeking to modernize the health system and support the best possible patient care and experiences.
- Those who pay for care: employers, health plans, and state, federal and municipal agencies devoted to ensuring the populations they sponsor receive high-quality care, administered and delivered efficiently and effectively.
- Those who innovate for care: global life sciences organizations dedicated to developing more effective approaches to care, enabling technologies and medicines that improve care delivery and health outcomes.

Optum operates three business segments leveraging distinctive capabilities in data and analytics, pharmacy care services, population health, health care delivery and health care operations:

- OptumHealth focuses on care delivery, care management, wellness and consumer engagement, and health financial services;
- OptumInsight specializes in data and analytics and other health care information technology services, and delivers operational services and support; and
- OptumRx provides pharmacy care services.

OptumHealth

OptumHealth is a diversified health and wellness business serving the physical, emotional and health-related financial needs of 91 million unique individuals. OptumHealth enables population health management through programs offered by employers, payers, government entities and directly with the care delivery system. OptumHealth products and services deliver value by improving quality and patient satisfaction while lowering cost. OptumHealth builds high-performing networks and centers of excellence across the care continuum, by working directly with physicians to advance population health management and by coordinating care for the most medically complex patients.

OptumHealth serves patients and care providers through its local ambulatory care services business and delivers care through a physician-led, patient-centric and data-driven organization comprised of more than 30,000 employed, managed and contracted physicians. OptumHealth also enables care providers' transition from traditional, fee-for-service care delivery to performance-based delivery and payment models that put patient health and outcomes first, such as those emerging through accountable care organizations (ACOs) and local care provider partnerships. Through strategic partnerships, alliances and ownership arrangements OptumHealth helps care providers adopt new approaches and technologies that improve the coordination of care across all providers involved in patient care. MedExpress' over 240 neighborhood care centers provide urgent and walk-in care services with a consumer-friendly approach and Surgical Care Affiliates' 200 independent ambulatory surgical centers and surgical hospitals provide high-value surgical services at a lower cost than a traditional in-patient hospital setting.

OptumHealth's mobile care delivery business delivers occupational health and medical services to government customers, with a particular focus on the U.S. military.

OptumHealth serves people through population health management services that meet both the preventive care and health intervention needs of consumers across the care continuum—physical health and wellness, mental health, complex medical conditions, disease management, hospitalization and post-acute care. This includes offering access to proprietary networks of provider specialists in many clinical specialties, including behavioral health, organ transplant, chiropractic and physical therapy. OptumHealth engages consumers in managing their health, including guidance, tools and programs that help them achieve their health goals and maintain healthy lifestyles.

Optum Financial Services, through Optum Bank, a wholly-owned subsidiary, serves consumers through 4.8 million health savings and other accounts with over $8 billion in assets under management as of December 31, 2017. During 2017, Optum Bank processed nearly $150 billion in medical payments to physicians and other health care providers. Organizations across the health system rely on Optum to manage and improve payment flows through its highly automated, scalable, electronic payment systems.

OptumHealth offers its products on a risk basis, where it assumes responsibility for health care costs in exchange for a monthly premium per individual served, on an administrative fee basis, under which it manages or administers delivery of the products or services in exchange for a fixed monthly fee per individual served, or on a fee-for-service basis, where it delivers medical services to patients in exchange for a contracted fee. For its financial services offerings, OptumHealth charges fees and earns investment income on managed funds.

OptumHealth sells its products primarily through its direct sales force, strategic collaborations and external producers in three markets: employers (which includes the sub-markets of large, mid-sized and small employers), payers (which includes the sub-markets of health plans, TPAs, underwriter/stop-loss carriers and individual market intermediaries) and government entities (which includes states, CMS, DoD, the Veterans Administration and other federal procurement agencies).

OptumInsight

OptumInsight provides services, technology and health care expertise to major participants in the health care industry. OptumInsight's capabilities are focused on data and analytics, technology and information that help improve the quality of care and drive greater efficiency in the health care system. Hospital systems, physicians, health plans, governments, life sciences companies and other organizations that comprise the health care industry depend on OptumInsight to help them improve performance, achieve efficiency, reduce costs, advance quality, meet compliance mandates and modernize their core operating systems to meet the changing needs of the health system.

Many of OptumInsight's software and information products and professional services are delivered over extended periods, often several years. OptumInsight maintains an order backlog to track unearned revenues under

these long-term arrangements. The backlog consists of estimated revenue from signed contracts, other legally binding agreements and anticipated contract renewals based on historical experience with OptumInsight's customers. OptumInsight's aggregate backlog at December 31, 2017, was $15.0 billion, of which $8.3 billion is expected to be realized within the next 12 months. This includes $5.4 billion related to intersegment agreements, all of which are in the current portion of the backlog. OptumInsight's aggregate backlog at December 31, 2016, was $12.6 billion. OptumInsight cannot provide any assurance that it will be able to realize all of the revenues included in the backlog due to uncertainties with regard to the timing and scope of services and the potential for cancellation, non-renewal or early termination of service arrangements.

OptumInsight's products and services are sold primarily through a direct sales force. OptumInsight's products are also supported and distributed through an array of alliances and business partnerships with other technology vendors, who integrate and interface OptumInsight's products with their applications.

OptumInsight believes it is well positioned to address the needs of four primary market segments: care providers (e.g., physicians and hospital systems), health plans, governments and life sciences companies.

Care Providers. Serving more than four out of five U.S. hospitals and more than 100,000 physicians, OptumInsight assists care providers in meeting their challenge to improve patient outcomes and care amid changing payment models and pressures. OptumInsight brings a broad array of solutions to help care providers meet these challenges, with particular focus on clinical performance and quality improvement, population health management, data management and analytics, revenue management, cost containment, compliance, cloud-enabled collaboration and consumer engagement.

Health Plans. OptumInsight serves approximately 300 health plans through cost-effective, technology-enabled solutions that help them improve efficiency, understand and optimize growth while managing risk, deliver on clinical performance and compliance goals, and build and manage strong networks of care.

Governments. OptumInsight provides services tailored to government payers, including data and analytics technology, claims management and payment accuracy services, and strategic consulting.

Life Sciences. OptumInsight provides services to global life sciences companies. These companies look to OptumInsight for data, analytics and expertise in core areas of health economics and outcomes research, market access consulting, integrated clinical and health care claims data and informatics services, epidemiology and drug safety, and patient reported outcomes.

OptumRx

OptumRx provides a full spectrum of pharmacy care services to more than 65 million people in the United States through its network of more than 67,000 retail pharmacies, multiple home delivery and specialty pharmacies and through the provision of home infusion services. OptumRx's comprehensive whole-person approach to pharmacy care services integrates demographic, medical, laboratory, pharmaceutical and other clinical data and applies analytics to drive clinical care insight to support care treatments and compliance, benefiting clients and individuals through enhanced services, elevated clinical quality and cost trend management.

In 2017, OptumRx managed approximately $85 billion in pharmaceutical spending, including $35 billion in specialty pharmaceutical spending.

OptumRx provides pharmacy care services to a number of health plans, including a substantial majority of UnitedHealthcare members, large national employer plans, unions and trusts and government entities. OptumRx's distribution system consists primarily of health insurance brokers and other health care consultants and direct sales.

As of December 31, 2017, OptumRx operated four home delivery pharmacies in the United States, which provides patients with access to maintenance medications and enables OptumRx to manage clients' drug costs through operating efficiencies and economies of scale. As of December 31, 2017, OptumRx's specialty pharmacy operations included 16 specialty mail order pharmacies located throughout the United States that are used for delivery of advanced medications to individuals with chronic or genetic diseases and disorders.

OptumRx offers multiple clinical programs and services to help clients manage overall pharmacy and health care costs in a clinically appropriate manner, which are designed to promote good health outcomes, and to help target inappropriate utilization and non-adherence to medication, each of which may result in adverse medical events that negatively impact member health and client pharmacy and medical spend. OptumRx provides various utilization management, medication management, quality assurance, adherence and counseling programs to complement the client's plan design and clinical strategies. OptumRx offers a distinctive approach to integrating the management of medical and pharmaceutical care, using data and advanced analytics to help improve comprehensive decision-making, elevate quality, close gaps in care and reduce costs for customers and members.

GOVERNMENT REGULATION

Most of our businesses are subject to comprehensive federal, state and international laws and regulations. We are regulated by federal, state and international regulatory agencies that generally have discretion to issue regulations and interpret and enforce laws and rules. The regulations can vary significantly from jurisdiction to jurisdiction and the interpretation of existing laws and rules also may change periodically. Domestic and international governments continue to enact and consider various legislative and regulatory proposals that could materially impact certain aspects of the health care system. New laws, regulations and rules, or changes in the interpretation of existing laws, regulations and rules, including as a result of changes in the political climate, could adversely affect our business.

If we fail to comply with, or fail to respond quickly and appropriately to changes in, applicable laws, regulations and rules, our business, results of operations, financial position and cash flows could be materially and adversely affected. See Part I, Item 1A, "Risk Factors" for a discussion of the risks related to our compliance with federal, state and international laws and regulations.

Federal Laws and Regulation

We are subject to various levels of U.S. federal regulation. For example, when we contract with the federal government, we are subject to federal laws and regulations relating to the award, administration and performance of U.S. government contracts. CMS regulates our UnitedHealthcare businesses and certain aspects of our Optum businesses. Payments by CMS to our businesses are subject to regulations, including those governing fee-for-service and the submission of information relating to the health status of enrollees for purposes of determining the amounts of certain payments to us. CMS also has the right to audit our performance to determine our compliance with CMS contracts and regulations and the quality of care we provide to Medicare beneficiaries. Our commercial business is further subject to CMS audits related to medical loss ratios (MLRs) and risk adjustment data.

UnitedHealthcare Community & State has Medicaid and CHIP contracts that are subject to federal regulations regarding services to be provided to Medicaid enrollees, payment for those services and other aspects of these programs. There are many regulations affecting Medicare and Medicaid compliance and the regulatory environment with respect to these programs is complex. We are also subject to federal law and regulations relating to the administration of contracts with federal agencies. In addition, our business is subject to laws and regulations relating to consumer protection, anti-fraud and abuse, anti-kickbacks, false claims, prohibited referrals, inappropriately reducing or limiting health care services, anti-money laundering, securities and antitrust.

The Tax Cuts and Jobs Act. On December 22, 2017, the U.S. federal government enacted a tax bill (Tax Cuts and Jobs Act or Tax Reform). The Tax Cuts and Jobs Act changed existing United States tax law and includes numerous provisions that will affect our results of operations, financial position and cash flows. For instance, Tax Reform reduced the U.S. corporate income tax rate and changed business-related exclusions and deductions and credits.

Privacy, Security and Data Standards Regulation. The administrative simplification provisions of the Health Insurance Portability and Accountability Act of 1996, as amended (HIPAA), apply to both the group and individual health insurance markets, including self-funded employee benefit plans. Federal regulations related to HIPAA contain minimum standards for electronic transactions and code sets and for the privacy and security of protected health information.

The Health Information Technology for Economic and Clinical Health Act (HITECH) imposed requirements on uses and disclosures of health information; included contracting requirements for HIPAA business associate agreements; extended parts of HIPAA privacy and security provisions to business associates; added federal data breach notification requirements for covered entities and business associates and reporting requirements to the U.S. Department of Health and Human Services (HHS) and the Federal Trade Commission and, in some cases, to the local media; strengthened enforcement and imposed higher financial penalties for HIPAA violations and, in certain cases, imposed criminal penalties for individuals, including employees. In the conduct of our business, depending on the circumstances, we may act as either a covered entity or a business associate. Federal consumer protection laws may also apply in some instances to privacy and security practices related to personally identifiable information.

The use and disclosure of individually identifiable health data by our businesses is also regulated in some instances by other federal laws, including the Gramm-Leach-Bliley Act (GLBA) or state statutes implementing GLBA. These federal laws and state statutes generally require insurers to provide customers with notice regarding how their non-public personal health and financial information is used and the opportunity to “opt out” of certain disclosures before the insurer shares such information with a third party, and generally require safeguards for the protection of personal information. Neither the GLBA nor HIPAA privacy regulations preempt more stringent state laws and regulations that may apply to us, as discussed below.

ERISA. The Employee Retirement Income Security Act of 1974, as amended (ERISA), regulates how our services are provided to or through certain types of employer-sponsored health benefit plans. ERISA is a set of laws and regulations that is subject to periodic interpretation by the U.S. Department of Labor (DOL) as well as the federal courts. ERISA sets forth standards on how our business units may do business with employers who sponsor employee health benefit plans, particularly those that maintain self-funded plans. Regulations established by the DOL subject us to additional requirements for administration of benefits, claims payment and member appeals under health care plans governed by ERISA.

State Laws and Regulation

Health Care Regulation. Our insurance and HMO subsidiaries must be licensed by the jurisdictions in which they conduct business. All of the states in which our subsidiaries offer insurance and HMO products regulate those products and operations. The states require periodic financial reports and establish minimum capital or restricted cash reserve requirements. The National Association of Insurance Commissioners has adopted model regulations that, where adopted by states, require expanded governance practices and risk and solvency assessment reporting. Most states have adopted these or similar measures to expand the scope of regulations relating to corporate governance and internal control activities of HMOs and insurance companies. We are required to maintain a risk management framework and file a confidential self-assessment report with state insurance regulators. Reports are filed annually with Connecticut, our lead regulator, and with New York, as required by that state’s regulation. Certain states have also adopted their own regulations for minimum MLRs with which health plans must comply. In addition, a number of state legislatures have enacted or are

contemplating significant reforms of their health insurance markets, either independent of or to comply with or be eligible for grants or other incentives in connection with the ACA, which may affect our operations and our financial results.

Health plans and insurance companies are regulated under state insurance holding company regulations. Such regulations generally require registration with applicable state departments of insurance and the filing of reports that describe capital structure, ownership, financial condition, certain intercompany transactions and general business operations. Most state insurance holding company laws and regulations require prior regulatory approval of acquisitions and material intercompany transfers of assets, as well as transactions between the regulated companies and their parent holding companies or affiliates. These laws may restrict the ability of our regulated subsidiaries to pay dividends to our holding companies.

Some of our business activity is subject to other health care-related regulations and requirements, including PPO, Managed Care Organization (MCO), utilization review (UR), TPA, pharmacy care services, durable medical equipment or care provider-related regulations and licensure requirements. These regulations differ from state to state and may contain network, contracting, product and rate, licensing and financial and reporting requirements. There are laws and regulations that set specific standards for delivery of services, appeals, grievances and payment of claims, adequacy of health care professional networks, fraud prevention, protection of consumer health information, pricing and underwriting practices and covered benefits and services. State health care anti-fraud and abuse prohibitions encompass a wide range of activities, including kickbacks for referral of members, billing for unnecessary medical services and improper marketing. Certain of our businesses are subject to state general agent, broker and sales distributions laws and regulations. UnitedHealthcare Community & State and certain of our Optum businesses are subject to regulation by state Medicaid agencies that oversee the provision of benefits to our Medicaid and CHIP beneficiaries and to our dually eligible (for Medicare and Medicaid) beneficiaries. We also contract with state governmental entities and are subject to state laws and regulations relating to the award, administration and performance of state government contracts.

State Privacy and Security Regulations. A number of states have adopted laws and regulations that may affect our privacy and security practices, such as state laws that govern the use, disclosure and protection of social security numbers and protected health information or that are designed to implement GLBA or protect credit card account data. State and local authorities increasingly focus on the importance of protecting individuals from identity theft, with a significant number of states enacting laws requiring businesses to meet minimum cyber-security standards and notify individuals of security breaches involving personal information. State consumer protection laws may also apply to privacy and security practices related to personally identifiable information, including information related to consumers and care providers. Different approaches to state privacy and insurance regulation and varying enforcement philosophies in the different states may materially and adversely affect our ability to standardize our products and services across state lines. See Part I, Item 1A, “Risk Factors” for a discussion of the risks related to compliance with state privacy and security regulations.

Corporate Practice of Medicine and Fee-Splitting Laws. Certain of our businesses function as direct medical service providers and, as such, are subject to additional laws and regulations. Some states have corporate practice of medicine laws that prohibit specific types of entities from practicing medicine or employing physicians to practice medicine. Moreover, some states prohibit certain entities from sharing in the fees or revenues of a professional practice (fee-splitting). These prohibitions may be statutory or regulatory, or may be imposed through judicial or regulatory interpretation. The laws, regulations and interpretations in certain states have been subject to limited judicial and regulatory interpretation and are subject to change.

Pharmacy and PBM Regulations

OptumRx’s businesses include home delivery and specialty pharmacies that must be licensed as pharmacies in the states in which they are located. Certain of our home delivery and specialty pharmacies must also register with the U.S. Drug Enforcement Administration (DEA) and individual state controlled substance authorities to

dispense controlled substances. In addition to the laws and regulations in the states where our home delivery and specialty pharmacies are located, laws and regulations in non-resident states where we deliver pharmaceuticals may also apply, including those requiring us to register with the board of pharmacy in the non-resident state. These non-resident states generally expect our home delivery and specialty pharmacies to follow the laws of the state in which the pharmacies are located, but some states also require us to comply with the laws of that non-resident state when pharmaceuticals are delivered there. As certain of our home delivery and specialty pharmacies maintain eligibility as Medicare and state Medicaid providers, their participation in the programs requires them to comply with the applicable Medicare and Medicaid provider rules and regulations. Other laws and regulations affecting our home delivery and specialty pharmacies include federal and state statutes and regulations governing the labeling, packaging, advertising and adulteration of prescription drugs and dispensing of controlled substances. See Part I, Item 1A, “Risk Factors” for a discussion of the risks related to our pharmacy care services businesses.

Legislation seeking to regulate PBM activities introduced or enacted in a number of states could impact our business practices. Additionally, organizations like the National Association of Insurance Commissioners periodically issue model regulations and credentialing organizations, like the National Committee for Quality Assurance (NCQA) and the Utilization Review Accreditation Commission (URAC), may establish standards that impact PBM, mail or specialty pharmacy activities. While these model regulations and standards do not have the force of law, they may influence states to adopt their recommendations and impact the services we deliver to our clients. There is both federal and state legislation affecting the ability to limit access to a pharmacy provider network or remove network providers. Additionally, many states limit our ability to manage and establish maximum allowable costs for generic prescription drugs. With respect to formulary services, a number of government entities, including CMS, HHS and state departments of insurance, regulate the administration of prescription drug benefits offered through federal or state exchanges. Many states also regulate the scope of prescription drug coverage, as well as the delivery channels to receive such prescriptions, for insurers, MCOs and Medicaid managed care plans. These regulations could limit or preclude (i) certain plan designs, (ii) limited networks, (iii) requirements to use particular care providers or distribution channel, (iv) copayment differentials among providers and (v) formulary tiering practices.

Consumer Protection Laws

Certain of our businesses participate in direct-to-consumer activities and are subject to regulations applicable to on-line communications and other general consumer protection laws and regulations such as the Federal Tort Claims Act, the Federal Postal Service Act and the Federal Trade Commission‘s (FTC) Telemarketing Sales Rule. Most states also have similar consumer protection laws.

Certain laws, such as the Telephone Consumer Protection Act, give the FTC, Federal Communications Commission (“FCC”) and state attorneys general the ability to regulate, and bring enforcement actions relating to, telemarketing practices and certain automated outbound contacts such as phone calls, texts or emails. Under certain circumstances, these laws may provide consumers with a private right of action. Violations of these laws could result in substantial statutory penalties and other sanctions.

Banking Regulation

Optum Bank is subject to regulation by federal banking regulators, including the Federal Deposit Insurance Corporation, which performs annual examinations to ensure that the bank is operating in accordance with federal safety and soundness requirements, and the Consumer Financial Protection Bureau, which may perform periodic examinations to ensure that the bank is in compliance with applicable consumer protection statutes, regulations and agency guidelines. Optum Bank is also subject to supervision and regulation by the Utah State Department of Financial Institutions, which carries out annual examinations to ensure that the bank is operating in accordance with state safety and soundness requirements and performs periodic examinations of the bank’s compliance with applicable state banking statutes, regulations and agency guidelines. In the event of unfavorable examination

results from any of these agencies, the bank could become subject to increased operational expenses and capital requirements, enhanced governmental oversight and monetary penalties.

International Regulation

Certain of our businesses operate internationally and are subject to regulation in the jurisdictions in which they are organized or conduct business. These regulatory regimes vary from jurisdiction to jurisdiction. In addition, our non-U.S. businesses and operations are subject to U.S. laws that regulate the conduct and activities of U.S.-based businesses operating abroad, such as the Foreign Corrupt Practices Act (FCPA), which prohibits offering, promising, providing or authorizing others to give anything of value to a foreign government official to obtain or retain business or otherwise secure a business advantage.

COMPETITION

As a diversified health care company, we operate in highly competitive markets. Our competitors include managed health care companies, insurance companies, HMOs, TPAs, PBMs and business services outsourcing companies, health care professionals that have formed networks to contract directly with employers or with CMS, specialty benefit providers, government entities, population health management companies and various health information and consulting companies. For our UnitedHealthcare businesses, our competitors include Aetna Inc., Anthem, Inc., Centene Corporation, Cigna Corporation, Humana Inc., Kaiser Permanente, numerous for-profit and not-for-profit organizations operating under licenses from the Blue Cross Blue Shield Association and, with respect to our Brazilian operations, several established competitors in Brazil and other enterprises that serve more limited geographic areas. For our OptumRx businesses, our competitors include CVS Health Corporation, Express Scripts, Inc. and Prime Therapeutics LLC. New entrants into the markets in which we compete, as well as consolidation within these markets, also contribute to a competitive environment. We compete on the basis of the sales, marketing and pricing of our products and services; product innovation; consumer engagement and satisfaction; the level and quality of products and services; care delivery; network and clinical management capabilities; market share; product distribution systems; efficiency of administration operations; financial strength; and marketplace reputation. If we fail to compete effectively to maintain or increase our market share, including by maintaining or increasing enrollments in businesses providing health benefits, our results of operations, financial position and cash flows could be materially and adversely affected. See Part I, Item 1A, “Risk Factors,” for additional discussion of our risks related to competition.

INTELLECTUAL PROPERTY RIGHTS

We have obtained trademark registration for the UnitedHealth Group, UnitedHealthcare and Optum names and logos. We own registrations for certain of our other trademarks in the United States and abroad. We hold a portfolio of patents and have patent applications pending from time to time. We are not substantially dependent on any single patent or group of related patents.

Unless otherwise noted, trademarks appearing in this report are trademarks owned by us. We disclaim any proprietary interest in the marks and names of others.

EMPLOYEES

As of December 31, 2017, we employed 260,000 individuals.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following sets forth certain information regarding our executive officers as of February 13, 2018, including the business experience of each executive officer during the past five years:

Name	Age	Position
Stephen J. Hemsley	65	Executive Chair of the Board
David S. Wichmann	55	Chief Executive Officer
Steven H. Nelson	58	Executive Vice President; Chief Executive Officer of UnitedHealthcare
Larry C. Renfro	64	Vice Chairman; Chief Executive Officer of Optum
John F. Rex	55	Executive Vice President; Chief Financial Officer
Thomas E. Roos	45	Senior Vice President; Chief Accounting Officer
Marianne D. Short	66	Executive Vice President; Chief Legal Officer
D. Ellen Wilson	60	Executive Vice President, Human Capital

Our Board of Directors elects executive officers annually. Our executive officers serve until their successors are duly elected and qualified, or until their earlier death, resignation, removal or disqualification.

Mr. Hemsley is Executive Chair of the Board of UnitedHealth Group and has served in that capacity since September 2017. Mr. Hemsley previously served as Chief Executive Officer from 2006 to August 2017. He has been a member of the Board of Directors since 2000.

Mr. Wichmann is Chief Executive Officer of UnitedHealth Group and a member of the Board of Directors and has served in that capacity since September 2017. Mr. Wichmann previously served as President of UnitedHealth Group from November 2014 to August 2017. Mr. Wichmann also served as Chief Financial Officer of UnitedHealth Group from January 2011 to June 2016. From April 2008 to November 2014, Mr. Wichmann served as Executive Vice President of UnitedHealth Group and President of UnitedHealth Group Operations.

Mr. Nelson is Executive Vice President of UnitedHealth Group and Chief Executive Officer of UnitedHealthcare and has served in that capacity since August 2017. Mr. Nelson served as Chief Executive Officer of UnitedHealthcare's Medicare & Retirement, from March 2014 to August 2017. He served as Chief Executive Officer of UnitedHealthcare Community & State from August 2012 to March 2014. From January 2008 to July 2012 he served as President of UnitedHealthcare Community & State and then Chief Executive Officer of UnitedHealthcare Employer & Individual's West Region business.

Mr. Renfro is Vice Chairman of UnitedHealth Group and Chief Executive Officer of Optum. Mr. Renfro has served as Vice Chairman of UnitedHealth Group since November 2014 and Chief Executive Officer of Optum since July 2011. From January 2011 to July 2011, Mr. Renfro served as Executive Vice President of UnitedHealth Group.

Mr. Rex is Executive Vice President and Chief Financial Officer of UnitedHealth Group and has served in that capacity since June 2016. From March 2012 to June 2016, Mr. Rex served as Executive Vice President and Chief Financial Officer of Optum. Prior to joining Optum in 2012, Mr. Rex spent over a decade at JP Morgan, a global financial services firm, and its predecessors, concluding his tenure as a Managing Director.

Mr. Roos is Senior Vice President and Chief Accounting Officer of UnitedHealth Group and has served in that capacity since August 2015. Prior to joining UnitedHealth Group, Mr. Roos was a Partner at Deloitte & Touche LLP, an independent registered accounting firm, from September 2007 to August 2015.

Ms. Short is Executive Vice President and Chief Legal Officer of UnitedHealth Group and has served in that capacity since January 2013. Prior to joining UnitedHealth Group, Ms. Short served as the Managing Partner at Dorsey & Whitney LLP, an international law firm, from January 2007 to December 2012.

Ms. Wilson is Executive Vice President, Human Capital of UnitedHealth Group and has served in that capacity since June 2013. From January 2012 to May 2013, Ms. Wilson served as Chief Administrative Officer of Optum. Prior to joining Optum, Ms. Wilson served for 17 years at Fidelity Investments, concluding her tenure there as head of Human Resources.

Additional Information

UnitedHealth Group Incorporated was incorporated in January 1977 in Minnesota. On July 1, 2015, UnitedHealth Group Incorporated changed its state of incorporation from Minnesota to Delaware pursuant to a plan of conversion. Our executive offices are located at UnitedHealth Group Center, 9900 Bren Road East, Minnetonka, Minnesota 55343; our telephone number is (952) 936-1300.

You can access our website at *www.unitedhealthgroup.com* to learn more about our company. From that site, you can download and print copies of our annual reports to shareholders, annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, along with amendments to those reports. You can also download from our website our certificate of incorporation, bylaws and corporate governance policies, including our Principles of Governance, Board of Directors Committee Charters and Code of Conduct. We make periodic reports and amendments available, free of charge, on our website, as soon as reasonably practicable after we file or furnish these reports to the Securities and Exchange Commission (SEC). We will also provide a copy of any of our corporate governance policies published on our website free of charge, upon request. To request a copy of any of these documents, please submit your request to: UnitedHealth Group Incorporated, 9900 Bren Road East, Minnetonka, MN 55343, Attn: Corporate Secretary. Information on or linked to our website is neither part of nor incorporated by reference into this Annual Report on Form 10-K or any other SEC filings.

Our transfer agent, Wells Fargo Shareowner Services, can help you with a variety of shareholder-related services, including change of address, lost stock certificates, transfer of stock to another person and other administrative services. You can write to our transfer agent at: Wells Fargo Shareowner Services, P.O. Box 64854, St. Paul, Minnesota 55164-0854, email *stocktransfer@wellsfargo.com*, or telephone (800) 468-9716 or (651) 450-4064.

ITEM 1A. RISK FACTORS

CAUTIONARY STATEMENTS

The statements, estimates, projections or outlook contained in this Annual Report on Form 10-K include forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (PSLRA). When used in this Annual Report on Form 10-K and in future filings by us with the SEC, in our news releases, presentations to securities analysts or investors, and in oral statements made by or with the approval of one of our executive officers, the words “believe,” “expect,” “intend,” “estimate,” “anticipate,” “forecast,” “outlook,” “plan,” “project,” “should” or similar words or phrases are intended to identify such forward-looking statements. These statements are intended to take advantage of the “safe harbor” provisions of the PSLRA. These forward-looking statements involve risks and uncertainties that may cause our actual results to differ materially from the expectations expressed or implied in the forward-looking statements. Any forward-looking statement in this report speaks only as of the date of this report and, except as required by law; we undertake no obligation to update any forward-looking statement to reflect events or circumstances, including unanticipated events, after the date of this report.

The following discussion contains cautionary statements regarding our business that investors and others should consider. We do not undertake to address in future filings or communications regarding our business or results of operations how any of these factors may have caused our results to differ from discussions or information contained in previous filings or communications. In addition, any of the matters discussed below may have affected past, as well as current, forward-looking statements about future results. Any or all forward-looking statements in this Annual Report on Form 10-K and in any other public filings or statements we make may turn

out to be wrong. Our forward-looking statements can be affected by inaccurate assumptions we might make or by known or unknown risks and uncertainties. Many factors discussed below will be important in determining our future results. By their nature, forward-looking statements are not guarantees of future performance or results and are subject to risks, uncertainties and assumptions that are difficult to predict or quantify.

If we fail to estimate, price for and manage our medical costs in an effective manner, the profitability of our risk-based products and services could decline and could materially and adversely affect our results of operations, financial position and cash flows.

Through our risk-based benefit products, we assume the risk of both medical and administrative costs for our customers in return for monthly premiums. Premium revenues from risk-based benefits products comprise nearly 80% of our total consolidated revenues. We generally use approximately 80% to 85% of our premium revenues to pay the costs of health care services delivered to these customers. The profitability of our products depends in large part on our ability to predict, price for and effectively manage medical costs. In this regard, federal and state regulatory requirements obligate our commercial, Medicare Advantage and certain state-based Medicaid health plans to maintain minimum MLRs, which could make it more difficult for us to obtain price increases for our products. In addition, our OptumHealth business negotiates capitation arrangements with commercial third-party payers. Under the typical capitation arrangement, the health care provider receives a fixed percentage of a third-party payer's premiums to cover all or a defined portion of the medical costs provided to the capitated member. If we fail to predict accurately, price for or manage the costs of providing care to our capitated members, our results of operations could be materially and adversely affected.

We manage medical costs through underwriting criteria, product design, negotiation of favorable provider contracts and care management programs. Total medical costs are affected by the number of individual services rendered, the cost of each service and the type of service rendered. Our premium revenue on commercial policies and Medicaid contracts are typically based on a fixed monthly rate per individual served for a 12-month period and is generally priced one to six months before the contract commences. Our revenue on Medicare policies is based on bids submitted to CMS in June the year before the contract year. Although we base the commercial and Medicaid premiums we charge and our Medicare bids on our estimates of future medical costs over the fixed contract period, many factors may cause actual costs to exceed those estimated and reflected in premiums or bids. These factors may include medical cost inflation, increased use of services, increased cost of individual services, natural catastrophes or other large-scale medical emergencies, epidemics, the introduction of new or costly drugs, treatments and technology, new treatment guidelines, new mandated benefits (such as the expansion of essential benefits coverage) or other regulatory changes and insured population characteristics. Relatively small differences between predicted and actual medical costs or utilization rates as a percentage of revenues can result in significant changes in our financial results. For example, if our 2017 medical costs for commercial insured products were 1% higher, without proportionally higher revenues from such products, our annual net earnings for 2017 would have been reduced by approximately $235 million, excluding any offsetting impact from risk adjustment or from reduced premium rebates due to minimum MLRs.

In addition, the financial results we report for any particular period include estimates of costs that have been incurred for which claims are still outstanding. These estimates involve an extensive degree of judgment. If these estimates prove inaccurate, our results of operations could be materially and adversely affected.

Our business activities are highly regulated and new laws or regulations or changes in existing laws or regulations or their enforcement or application could materially and adversely affect our business.

We are regulated by federal, state and local governments in the United States and other countries where we do business. Our insurance and HMO subsidiaries must be licensed by and are subject to regulation in the jurisdictions in which they conduct business. For example, states require periodic financial reports and enforce minimum capital or restricted cash reserve requirements. Health plans and insurance companies are also regulated under state insurance holding company regulations and some of our activities may be subject to other

health care-related regulations and requirements, including those relating to PPOs, MCOs, UR and TPA-related regulations and licensure requirements. Some of our UnitedHealthcare and Optum businesses hold government contracts or provide services related to government contracts and are subject to U.S. federal and state and non-U.S. self-referral, anti-kickback, medical necessity, risk adjustment, false claims and other laws and regulations governing government contractors and the use of government funds. In addition, under state guaranty association laws, certain insurance companies can be assessed (up to prescribed limits) for certain obligations to the policyholders and claimants of impaired or insolvent insurance companies that write the same line or similar lines of business. Some states have similar laws relating to HMOs and other payers such as consumer operated and oriented plans (co-ops) established under the ACA. Any such assessment could expose our insurance entities and other insurers to the risk of paying a portion of an impaired or insolvent insurance company's claims through state guaranty associations.

Certain of our businesses provide products or services to various government agencies. Our relationships with these government agencies are subject to the terms of contracts that we hold with the agencies and to laws and regulations regarding government contracts. Among others, certain laws and regulations restrict or prohibit companies from performing work for government agencies that might be viewed as an actual or potential conflict of interest. These laws may limit our ability to pursue and perform certain types of work, thereby materially and adversely affecting our results of operations, financial position and cash flows.

Certain of our Optum businesses are also subject to regulations that are distinct from those faced by our insurance and HMO subsidiaries, including, for example, state telemedicine regulations; debt collection laws; banking regulations; distributor and producer licensing requirements; state corporate practice of medicine doctrines; fee-splitting rules; and health care facility licensure and certificate of need requirements, some of which could impact our relationships with physicians, hospitals and customers. These risks and uncertainties may materially and adversely affect our ability to market or provide our products and services, or to do so at targeted operating margins, or may increase the regulatory burdens under which we operate.

The laws and rules governing our businesses and interpretations of those laws and rules are subject to frequent change. For example, legislative, administrative and public policy changes to the ACA are being debated, and we cannot predict if the ACA will be further modified or repealed or replaced. Additionally, the integration into our businesses of entities that we acquire may affect the way in which existing laws and rules apply to us, including subjecting us to laws and rules that did not previously apply to us. The broad latitude given to the agencies administering, interpreting and enforcing current and future regulations governing our businesses could force us to change how we do business, restrict revenue and enrollment growth, increase our health care and administrative costs and capital requirements, or expose us to increased liability in courts for coverage determinations, contract interpretation and other actions.

We also must obtain and maintain regulatory approvals to market many of our products and services, increase prices for certain regulated products and services and complete certain acquisitions and dispositions or integrate certain acquisitions. For example, premium rates for our health insurance and managed care products are subject to regulatory review or approval in many states and by the federal government. Additionally, we must submit data on all proposed rate increases on many of our products to HHS for monitoring purposes. Geographic and product expansions may be subject to state and federal regulatory approvals. Delays in obtaining necessary approvals or our failure to obtain or maintain adequate approvals could materially and adversely affect our results of operations, financial position and cash flows.

Certain of our businesses operate internationally and are subject to regulation in the jurisdictions in which they are organized or conduct business. These regulatory regimes encompass, among other matters, local and cross-border taxation, licensing, tariffs, intellectual property, investment, capital (including minimum solvency margin and reserve requirements), management control, labor, anti-fraud, anti-corruption and privacy and data protection regulations (including requirements for cross-border data transfers) that vary by jurisdiction. We currently operate outside of the United States and in the future may acquire or commence additional businesses based

outside of the United States, increasing our exposure to non-U.S. regulatory regimes. For example, our UnitedHealthcare Brazil business subjects us to Brazilian laws and regulations affecting hospitals, managed care and insurance industries and to regulation by Brazilian regulators, including the national regulatory agency for private health insurance and plans, the Agência Nacional de Saúde Suplementar, whose approach to the interpretation, implementation and enforcement of industry regulations could differ from the approach taken by U.S. regulators. In addition, our non-U.S. businesses and operations are subject to U.S. laws that regulate the conduct and activities of U.S.-based businesses operating abroad, such as the FCPA, which prohibits offering, promising, providing or authorizing others to give anything of value to a foreign government official to obtain or retain business or otherwise secure a business advantage. Our failure to comply with U.S. or non-U.S. laws and regulations governing our conduct outside the United States or to establish constructive relations with non-U.S. regulators could adversely affect our ability to market our products and services, or to do so at targeted operating margins, which may have a material adverse effect on our business, financial condition and results of operations.

The health care industry is also regularly subject to negative publicity, including as a result of governmental investigations, adverse media coverage and political debate surrounding industry regulation. Negative publicity may adversely affect our stock price and damage our reputation in various markets.

As a result of our participation in various government health care programs, both as a payer and as a service provider to payers, we are exposed to additional risks associated with program funding, enrollments, payment adjustments, audits and government investigations that could materially and adversely affect our business, results of operations, financial position and cash flows.

We participate in various federal, state and local government health care benefit programs, including as a payer in Medicare Advantage, Medicare Part D, various Medicaid programs and CHIP, and receive substantial revenues from these programs. Certain of our Optum businesses also provide services to payers participating in government health care programs. A reduction or less than expected increase, or a protracted delay, in government funding for these programs or change in allocation methodologies, or, as is a typical feature of many government contracts, termination of the contract at the option of the government, may materially and adversely affect our results of operations, financial position and cash flows.

The government health care programs in which we participate generally are subject to frequent changes, including changes that may reduce the number of persons enrolled or eligible for coverage, reduce the amount of reimbursement or payment levels, reduce our participation in certain service areas or markets, or increase our administrative or medical costs under such programs. Revenues for these programs depend on periodic funding from the federal government or applicable state governments and allocation of the funding through various payment mechanisms. Funding for these government programs depends on many factors outside of our control, including general economic conditions and budgetary constraints at the federal or applicable state level. For example CMS has in the past reduced or frozen Medicare Advantage benchmarks, and additional cuts to Medicare Advantage benchmarks are possible. In addition, from time to time, CMS makes changes to the way it calculates Medicare Advantage risk adjustment payments. Although we have adjusted members' benefits and premiums on a selective basis, ceased to offer benefit plans in certain counties, and intensified both our medical and operating cost management in response to the benchmark reductions and other funding pressures, these or other strategies may not fully address the funding pressures in the Medicare Advantage program. In addition, payers in the Medicare Advantage program may be subject to reductions in payments from CMS as a result of decreased funding or recoupment pursuant to government audit.

Under the Medicaid managed care program, state Medicaid agencies seek bids from eligible health plans to continue their participation in the acute care Medicaid health programs. If we are not successful in obtaining renewals of state Medicaid managed care contracts, we risk losing the members that were enrolled in those Medicaid plans. Under the Medicare Part D program, to qualify for automatic enrollment of low income members, our bids must result in an enrollee premium below a regional benchmark, which is calculated by the government after all regional bids are submitted. If the enrollee premium is not below the government

benchmark, we risk losing the members who were auto-assigned to us and will not have additional members auto-assigned to us. In general, our bids are based upon certain assumptions regarding enrollment, utilization, medical costs and other factors. If any of these assumptions is materially incorrect, either as a result of unforeseen changes to the programs on which we bid, or submission by our competitors at lower rates than our bids, our results of operations, financial position and cash flows could be materially and adversely affected.

Many of the government health care coverage programs in which we participate are subject to the prior satisfaction of certain conditions or performance standards or benchmarks. For example, as part of the ACA, CMS has a system that provides various quality bonus payments to Medicare Advantage plans that meet certain quality star ratings at the local plan level. The star rating system considers various measures adopted by CMS, including, among others, quality of care, preventive services, chronic illness management and customer satisfaction. Plans must have a rating of four stars or higher to qualify for bonus payments. If we do not maintain or continue to improve our star ratings, our plans may not be eligible for quality bonuses and we may experience a negative impact on our revenues and the benefits that our plans can offer, which could materially and adversely affect the marketability of our plans, our membership levels, results of operations, financial position and cash flows. Any changes in standards or care delivery models that apply to government health care programs, including Medicare and Medicaid, or our inability to improve our quality scores and star ratings to meet government performance requirements or to match the performance of our competitors could result in limitations to our participation in or exclusion from these or other government programs, which in turn could materially and adversely affect our results of operations, financial position and cash flows.

CMS uses various payment mechanisms to allocate funding for Medicare programs, including adjustment of monthly capitation payments to Medicare Advantage plans and Medicare Part D plans according to the predicted health status of each beneficiary as supported by data from health care providers for Medicare Advantage plans, as well as, for Medicare Part D plans, risk-sharing provisions based on a comparison of costs predicted in our annual bids to actual prescription drug costs. Some state Medicaid programs utilize a similar process. For example, our UnitedHealthcare Medicare & Retirement and UnitedHealthcare Community & State businesses submit information relating to the health status of enrollees to CMS or state agencies for purposes of determining the amount of certain payments to us. CMS and the Office of Inspector General for HHS periodically perform risk adjustment data validation (RADV) audits of selected Medicare health plans to validate the coding practices of and supporting documentation maintained by health care providers. Certain of our local plans have been selected for such audits, which have in the past resulted and could in the future result in retrospective adjustments to payments made to our health plans, fines, corrective action plans or other adverse action by CMS.

We have been and may in the future become involved in routine, regular and special governmental investigations, audits, reviews and assessments. For example, various governmental agencies have conducted investigations into certain PBM practices, which have resulted in other PBMs agreeing to civil penalties, including the payment of money and corporate integrity agreements. Additionally, such investigations, audits or reviews sometimes arise out of or prompt claims by private litigants or whistleblowers that, among other allegations, we failed to disclose certain business practices or, as a government contractor, submitted false or erroneous claims to the government. Governmental investigations, audits, reviews and assessments could lead to government actions, which could result in adverse publicity, the assessment of damages, civil or criminal fines or penalties, or other sanctions, including restrictions or changes in the way we conduct business, loss of licensure or exclusion from participation in government programs, any of which could have a material adverse effect on our business, results of operations, financial position and cash flows.

If we sustain cyber-attacks or other privacy or data security incidents that result in security breaches that disrupt our operations or result in the unintended dissemination of protected personal information or proprietary or confidential information, we could suffer a loss of revenue and increased costs, exposure to significant liability, reputational harm and other serious negative consequences.

We routinely process, store and transmit large amounts of data in our operations, including protected personal information as well as proprietary or confidential information relating to our business or third-parties. Some of

the data we process, store and transmit may be outside of the United States due to our information technology systems and international business operations. We are regularly the target of attempted cyber-attacks and other security threats and may be subject to breaches of the information technology systems we use. We have programs in place to detect, contain and respond to data security incidents and provide employee awareness training around phishing, malware and other cyber risks to protect, to the greatest extent possible, against cyber risks and security breaches. However, because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently and may be difficult to detect for long periods of time, we may be unable to anticipate these techniques or implement adequate preventive measures. Experienced computer programmers and hackers may be able to penetrate our layered security controls and misappropriate or compromise protected personal information or proprietary or confidential information or that of third-parties, create system disruptions or cause system shutdowns. They also may be able to develop and deploy viruses, worms and other malicious software programs that attack our systems or otherwise exploit any security vulnerabilities. Hardware, software, or applications we develop or procure from third parties may contain defects in design or manufacture or other problems that could unexpectedly compromise information security. Our facilities may also be vulnerable to security incidents or security attacks; acts of vandalism or theft; coordinated attacks by activist entities; misplaced or lost data; human errors; or other similar events that could negatively affect our systems and our customer's data.

The costs to eliminate or address the foregoing security threats and vulnerabilities before or after a cyber-incident could be material. Our remediation efforts may not be successful and could result in interruptions, delays, or cessation of service and loss of existing or potential customers. In addition, breaches of our security measures and the unauthorized dissemination of sensitive personal information, proprietary information or confidential information about us or our customers or other third-parties, could expose our customers' private information and our customers to the risk of financial or medical identity theft, or expose us or other third-parties to a risk of loss or misuse of this information, result in litigation and potential liability for us, damage our brand and reputation, or otherwise harm our business.

If we fail to comply with applicable privacy, security and data laws, regulations and standards, including with respect to third-party service providers that utilize protected personal information on our behalf, our business, reputation, results of operations, financial position and cash flows could be materially and adversely affected.

The collection, maintenance, protection, use, transmission, disclosure and disposal of protected personal information are regulated at the federal, state, international and industry levels and requirements are imposed on us by contracts with customers. These laws, rules and requirements are subject to change. Compliance with new privacy and security laws, regulations and requirements may result in increased operating costs, and may constrain or require us to alter our business model or operations. For example, the HITECH amendments to HIPAA imposed further restrictions on our ability to collect, disclose and use protected personal information and imposed additional compliance requirements on our business.

Internationally, many of the jurisdictions in which we operate have established their own data security and privacy legal framework with which we or our customers must comply. We expect that there will continue to be new proposed laws, regulations and industry standards concerning privacy, data protection and information security in the European Union and other jurisdictions, and we cannot yet determine the impacts such future laws, regulations and standards may have on our businesses or the businesses of our customers. For example, in May 2018, the European Union's General Data Protection Regulation will overhaul data protection laws in the European Union. The new regulation will supersede current European Union data protection legislation, may impose more stringent European Union data protection requirements on us or our customers, and may prescribe greater penalties for noncompliance.

Many of our businesses are also subject to the Payment Card Industry Data Security Standard, which is a multifaceted security standard that is designed to protect credit card account data as mandated by payment card industry entities.

HIPAA requires business associates as well as covered entities to comply with certain privacy and security requirements. While we provide for appropriate protections through our contracts with our third-party service providers and in certain cases assess their security controls, we have limited oversight or control over their actions and practices. Several of our businesses act as business associates to their covered entity customers and, as a result, collect, use, disclose and maintain protected personal information in order to provide services to these customers. HHS has announced that it will continue its audit program to assess HIPAA compliance efforts by covered entities and expand it to include business associates. An audit resulting in findings or allegations of noncompliance could have a material adverse effect on our results of operations, financial position and cash flows.

Through our Optum businesses, including our Optum Labs business, we maintain a database of administrative and clinical data that is statistically de-identified in accordance with HIPAA standards. Noncompliance or findings of noncompliance with applicable laws, regulations or requirements, or the occurrence of any privacy or security breach involving the misappropriation, loss or other unauthorized disclosure of protected personal information, whether by us or by one of our third-party service providers, could have a material adverse effect on our reputation and business, including mandatory disclosure to the media, loss of existing or new customers, significant increases in the cost of managing and remediating privacy or security incidents and material fines, penalties and litigation awards, among other consequences, any of which could have a material and adverse effect on our results of operations, financial position and cash flows.

Our businesses providing pharmacy care services face regulatory and operational risks and uncertainties that may differ from the risks of our other businesses.

We provide pharmacy care services through our OptumRx and UnitedHealthcare businesses. Each business is subject to federal and state anti-kickback beneficiary inducement and other laws that govern the relationships of the business with pharmaceutical manufacturers, physicians, pharmacies, customers and consumers. As a provider of pharmacy benefit management services, OptumRx is also subject to an increasing number of licensure, registration and other laws and accreditation standards that impact the business practices of a pharmacy benefit manager. OptumRx also conducts business through home delivery, specialty pharmacies and home infusion, which subjects it to extensive federal, state and local laws and regulations, including those of the DEA and individual state controlled substance authorities, the FDA and Boards of Pharmacy. In addition, federal and state legislatures regularly consider new regulations for the industry that could materially and adversely affect current industry practices, including potential new legislation and regulations regarding the receipt or disclosure of rebates and other fees from pharmaceutical companies, the development and use of formularies and other utilization management tools, the use of average wholesale prices or other pricing benchmarks, pricing for specialty pharmaceuticals, limited access to networks and pharmacy network reimbursement methodologies.

We could face potential claims in connection with purported errors by our home delivery or specialty pharmacies or the provision of home infusion services, including in connection with the risks inherent in the packaging and distribution of pharmaceuticals and other health care products. Disruptions from any of our home delivery, specialty pharmacy or home infusion services could materially and adversely affect our results of operations, financial position and cash flows.

In addition, our pharmacy care services businesses provide services to sponsors of health benefit plans that are subject to ERISA. A private party or the DOL, which is the agency that enforces ERISA, could assert that the fiduciary obligations imposed by the statute apply to some or all of the services provided by our pharmacy care services businesses even where our pharmacy care services businesses are not contractually obligated to assume fiduciary obligations. If a court were to determine that fiduciary obligations apply to our pharmacy care services businesses in connection with services for which our pharmacy care services businesses are not contractually obligated to assume fiduciary obligations, we could be subject to claims for breaches of fiduciary obligations or claims that we entered into certain prohibited transactions.

If we fail to compete effectively to maintain or increase our market share, including maintaining or increasing enrollments in businesses providing health benefits, our results of operations, financial position and cash flows could be materially and adversely affected.

Our businesses compete throughout the United States, South America and other foreign markets and face significant competition in all of the geographic markets in which we operate. In particular markets, our competitors, compared to us, may have greater capabilities, resources or market share; a more established reputation; superior supplier or health care professional arrangements; better existing business relationships; lower profit margin or financial return expectations; or other factors that give such competitors a competitive advantage. Our competitive position may also be adversely affected by significant merger and acquisition activity that has occurred in the industries in which we operate, both among our competitors and suppliers (including hospitals, physician groups and other health care professionals). Consolidation may make it more difficult for us to retain or increase our customer base, improve the terms on which we do business with our suppliers, or maintain or increase profitability. In addition, new direct-to-consumer business models from competing businesses may make it more difficult for us to directly engage consumers in the selection and management of their health care benefits and health care usage, and we may face challenges from new technologies and market entrants that could disrupt our existing relationship with health plan enrollees in these areas. Our business, results of operations, financial position and cash flows could be materially and adversely affected if we do not compete effectively in our markets, if we set rates too high or too low in highly competitive markets, if we do not design and price our products properly and competitively, if we are unable to innovate and deliver products and services that demonstrate value to our customers, if we do not provide a satisfactory level of services, if membership or demand for other services does not increase as we expect or declines, or if we lose accounts with more profitable products while retaining or increasing membership in accounts with less profitable products.

If we fail to develop and maintain satisfactory relationships with physicians, hospitals and other service providers, our business could be materially and adversely affected.

Our results of operations and prospects are substantially dependent on our continued ability to contract with physicians, hospitals, pharmaceutical benefit service providers, pharmaceutical manufacturers and other service providers at competitive prices. Any failure by us to develop and maintain satisfactory relationships with health care providers, whether in-network or out-of-network, could materially and adversely affect our business, results of operations, financial position and cash flows. In addition, certain activities related to network design, provider participation in networks and provider payments could result in disputes that may be costly, divert management's attention from our operations and result in negative publicity.

In any particular market, physicians and health care providers could refuse to contract, demand higher payments, or take other actions that could result in higher medical costs, less desirable products for customers or difficulty meeting regulatory or accreditation requirements. In some markets, certain health care providers, particularly hospitals, physician/hospital organizations or multi-specialty physician groups, may have significant market positions or near monopolies that could result in diminished bargaining power on our part. In addition, accountable care organizations; practice management companies (which aggregate physician practices for administrative efficiency) and other organizational structures that physicians, hospitals and other care providers choose may change the way in which these providers do business with us and may change the competitive landscape. Such organizations or groups of physicians may compete directly with us, which could adversely affect our operations, and our results of operations, financial position and cash flows by impacting our relationships with these providers or affecting the way that we price our products and estimate our costs, which might require us to incur costs to change our operations. In addition, if these providers refuse to contract with us, use their market position to negotiate favorable contracts or place us at a competitive disadvantage, our ability to market products or to be profitable in those areas could be materially and adversely affected.

We have capitation arrangements with some physicians, hospitals and other health care providers. Capitation arrangements limit our exposure to the risk of increasing medical costs, but expose us to risk related to the

adequacy of the financial and medical care resources of the health care provider. To the extent that a capitated health care provider organization faces financial difficulties or otherwise is unable to perform its obligations under the capitation arrangement, we may be held responsible for unpaid health care claims that should have been the responsibility of the capitated health care provider and for which we have already paid the provider, under the capitation arrangement. Further, payment or other disputes between a primary care provider and specialists with whom the primary care provider contracts could result in a disruption in the provision of services to our members or a reduction in the services available to our members. Health care providers with which we contract may not properly manage the costs of services, maintain financial solvency or avoid disputes with other providers. Any of these events could have a material adverse effect on the provision of services to our members and our operations.

Some providers that render services to our members do not have contracts with us. In those cases, we do not have a pre-established understanding about the amount of compensation that is due to the provider for services rendered to our members. In some states, the amount of compensation due to these out-of-network providers is defined by law or regulation, but in most instances the amount is either not defined or is established by a standard that does not clearly specify dollar terms. In some instances, providers may believe that they are underpaid for their services and may either litigate or arbitrate their dispute with us or try to recover from our members the difference between what we have paid them and the amount they charged us.

The success of some of our businesses, including OptumHealth and UnitedHealthcare Brazil, depend on maintaining satisfactory physician relationships as employees, independent contractors or joint venture partners. The physicians that practice medicine or contract with our affiliated physician organizations could terminate their provider contracts or otherwise become unable or unwilling to continue practicing medicine or contracting with us. There is and will likely be heightened competition in the markets where we operate to acquire or manage physician practices or to employ or contract with individual physicians. If we are unable to maintain or grow satisfactory relationships with physicians, or to acquire, recruit or, in some instances, employ physicians, or to retain enrollees following the departure of a physician, our revenues could be materially and adversely affected. In addition, our affiliated physician organizations contract with health insurance and HMO competitors of UnitedHealthcare. Our businesses could suffer if our affiliated physician organizations fail to maintain relationships with these health insurance or HMO companies, or fail to adequately price their contracts with these third-party payers.

In addition, physicians, hospitals, pharmaceutical benefit service providers, pharmaceutical manufacturers and certain health care providers are customers of our Optum businesses. Physicians also provide medical services at facilities owned by our Optum businesses. Given the importance of health care providers and other constituents to our businesses, failure to maintain satisfactory relationships with them could materially and adversely affect our results of operations, financial position and cash flows.

We are routinely subject to various litigation actions due to the nature of our business, which could damage our reputation and, if resolved unfavorably, could result in substantial penalties or monetary damages and materially and adversely affect our results of operations, financial position and cash flows.

We are routinely made party to a variety of legal actions related to, among other matters, the design, management and delivery of our product and service offerings. These matters have included or could in the future include matters related to health care benefits coverage and payment claims (including disputes with enrollees, customers and contracted and non-contracted physicians, hospitals and other health care professionals), tort claims (including claims related to the delivery of health care services, such as medical malpractice by staff at our affiliates' facilities, or by health care practitioners who are employed by us, have contractual relationships with us, or serve as providers to our managed care networks), whistleblower claims (including claims under the False Claims Act or similar statutes), contract and labor disputes, tax claims and claims related to disclosure of certain business practices. We are also party to certain class action lawsuits brought by health care professional groups and consumers. In addition, we operate in jurisdictions outside of the United States, where contractual rights, tax

positions and applicable regulations may be subject to interpretation or uncertainty to a greater degree than in the United States, and therefore subject to dispute by customers, government authorities or others. We are largely self-insured with regard to litigation risks. While we maintain excess liability insurance with outside insurance carriers for claims in excess of our self-insurance, certain types of damages, such as punitive damages in some circumstances, are not covered by insurance. Although we record liabilities for our estimates of the probable costs resulting from self-insured matters, it is possible that the level of actual losses will significantly exceed the liabilities recorded.

We cannot predict the outcome of significant legal actions in which we are involved and are incurring expenses in resolving these matters. The legal actions we face or may face in the future could further increase our cost of doing business and materially and adversely affect our results of operations, financial position and cash flows. In addition, certain legal actions could result in adverse publicity, which could damage our reputation and materially and adversely affect our ability to retain our current business or grow our market share in some markets and businesses.

Any failure by us to manage successfully our strategic alliances or complete, manage or integrate acquisitions and other significant strategic transactions or relationships domestically or outside the United States could materially and adversely affect our business, prospects, results of operations, financial position and cash flows.

As part of our business strategy, we frequently engage in discussions with third parties regarding possible investments, acquisitions, divestitures, strategic alliances, joint ventures and outsourcing transactions and often enter into agreements relating to such transactions. For example, we have a strategic alliance with AARP under which we provide AARP-branded Medicare Supplement insurance to AARP members and other AARP-branded products and services to Medicare beneficiaries. If we fail to meet the needs of our alliance or joint venture partners, including by developing additional products and services, providing high levels of service, pricing our products and services competitively or responding effectively to applicable federal and state regulatory changes, our alliances and joint ventures could be damaged or terminated, which in turn could adversely impact our reputation, business and results of operations. Further, if we fail to identify and successfully complete transactions that further our strategic objectives, we may be required to expend resources to develop products and technology internally, we may be placed at a competitive disadvantage or we may be adversely affected by negative market perceptions, any of which may have a material adverse effect on our results of operations, financial position or cash flows.

Success in completing acquisitions is also dependent on efficiently integrating the acquired business into our existing operations, including our internal control environment, or otherwise leveraging its operations, which may present challenges that are different from those presented by organic growth and that may be difficult for us to manage. If we cannot successfully integrate these acquisitions and realize contemplated revenue growth opportunities and cost savings, our business, prospects, results of operations, financial position and cash flows could be materially and adversely affected.

As we expand and operate our business outside of the United States, we are presented with challenges that differ from those presented by acquisitions of domestic businesses, including challenges in adapting to new markets, languages, business, labor and cultural practices and regulatory environments. Adapting to these challenges could require us to devote significant senior management and other resources to the acquired businesses before we realize anticipated synergies or other benefits from the acquired businesses. These challenges vary widely by country and may include political instability, government intervention, discriminatory regulation and currency exchange controls or other restrictions that could prevent us from transferring funds from these operations out of the countries in which our acquired businesses operate or converting local currencies that we hold into U.S. dollars or other currencies. If we are unable to manage successfully our non-U.S. acquisitions, our business, prospects, results of operations and financial position could be materially and adversely affected.

Foreign currency exchange rates and fluctuations may have an impact on our shareholders' equity from period to period, which could adversely affect our debt to debt-plus-equity ratio, and our future revenues, costs and cash flows from international operations. Any measures we may implement to reduce the effect of volatile currencies may be costly or ineffective.

Our sales performance will suffer if we do not adequately attract, retain and provide support to a network of independent producers and consultants.

Our products and services are sold in part through nonexclusive producers and consultants for whose services and allegiance we must compete intensely. Our sales would be materially and adversely affected if we are unable to attract, retain and support such independent producers and consultants or if our sales strategy is not appropriately aligned across distribution channels. Our relationships with producers could be materially and adversely impacted by changes in our business practices and the nature of our relationships to address these pressures, including potential reductions in commission levels.

A number of investigations have been conducted regarding the marketing practices of producers selling health care products and the payments they receive and have resulted in enforcement actions against companies in our industry and producers marketing and selling those companies' products. If we were subjected to similar investigations and enforcement actions, such actions could result in penalties and the imposition of corrective action plans, which could materially and adversely impact our ability to market our products.

Unfavorable economic conditions could materially and adversely affect our revenues and our results of operations.

Unfavorable economic conditions may impact demand for certain of our products and services. For example, high unemployment can cause lower enrollment or lower rates of renewal in our employer group plans. Unfavorable economic conditions also have caused and could continue to cause employers to stop offering certain health care coverage as an employee benefit or elect to offer this coverage on a voluntary, employee-funded basis as a means to reduce their operating costs. In addition, unfavorable economic conditions could adversely impact our ability to increase premiums or result in the cancellation by certain customers of our products and services. These conditions could lead to a decrease in our membership levels and premium and fee revenues and could materially and adversely affect our results of operations, financial position and cash flows.

During a prolonged unfavorable economic environment, state and federal budgets could be materially and adversely affected, resulting in reduced reimbursements or payments in our federal and state government health care coverage programs, including Medicare, Medicaid and CHIP. A reduction in state Medicaid reimbursement rates could be implemented retrospectively to apply to payments already negotiated or received from the government and could materially and adversely affect our results of operations, financial position and cash flows. In addition, state and federal budgetary pressures could cause the affected governments to impose new or a higher level of taxes or assessments for our commercial programs, such as premium taxes on insurance companies and HMOs and surcharges or fees on select fee-for-service and capitated medical claims. Any of these developments or actions could materially and adversely affect our results of operations, financial position and cash flows.

A prolonged unfavorable economic environment also could adversely impact the financial position of hospitals and other care providers, which could materially and adversely affect our contracted rates with these parties and increase our medical costs or materially and adversely affect their ability to purchase our service offerings. Further, unfavorable economic conditions could adversely impact the customers of our Optum businesses, including health plans, HMOs, hospitals, care providers, employers and others, which could, in turn, materially and adversely affect Optum's financial results.

Our investment portfolio may suffer losses, which could adversely affect our results of operations, financial position and cash flows.

Market fluctuations could impair our profitability and capital position. Volatility in interest rates affects our interest income and the market value of our investments in debt securities of varying maturities, which constitute the vast majority of the fair value of our investments as of December 31, 2017. Relatively low interest rates on investments, such as those experienced during recent years, have adversely impacted our investment income, and the continuation of the current low interest rate environment could further adversely affect our investment income. In addition, a delay in payment of principal or interest by issuers, or defaults by issuers (primarily issuers of our investments in corporate and municipal bonds), could reduce our investment income and require us to write down the value of our investments, which could adversely affect our profitability and equity.

There can be no assurance that our investments will produce total positive returns or that we will not sell investments at prices that are less than their carrying values. Changes in the value of our investment assets, as a result of interest rate fluctuations, changes in issuer financial conditions, illiquidity or otherwise, could have an adverse effect on our equity. In addition, if it became necessary for us to liquidate our investment portfolio on an accelerated basis, such an action could have an adverse effect on our results of operations and the capital position of regulated subsidiaries.

If the value of our intangible assets is materially impaired, our results of operations, equity and credit ratings could be materially and adversely affected.

As of December 31, 2017, goodwill and other intangible assets had a carrying value of $63 billion, representing 45% of our total consolidated assets. We periodically evaluate our goodwill and other intangible assets to determine whether all or a portion of their carrying values may be impaired, in which case a charge to earnings may be necessary. The value of our goodwill may be materially and adversely impacted if businesses that we acquire perform in a manner that is inconsistent with our assumptions. In addition, from time to time we divest businesses, and any such divestiture could result in significant asset impairment and disposition charges, including those related to goodwill and other intangible assets. Any future evaluations requiring an impairment of our goodwill and other intangible assets could materially and adversely affect our results of operations and equity in the period in which the impairment occurs. A material decrease in equity could, in turn, adversely impact our credit ratings and potentially impact our compliance with the covenants in our bank credit facilities.

If we fail to maintain properly the integrity or availability of our data or successfully consolidate, integrate, upgrade or expand our existing information systems, or if our technology products do not operate as intended, our business could be materially and adversely affected.

Our ability to price adequately our products and services, to provide effective service to our customers in an efficient and uninterrupted fashion, and to report accurately our results of operations depends on the integrity of the data in our information systems. We periodically consolidate, integrate, upgrade and expand our information systems capabilities as a result of technology initiatives and recently enacted regulations, changes in our system platforms and integration of new business acquisitions. In addition, recent trends toward greater consumer engagement in health care require new and enhanced technologies, including more sophisticated applications for mobile devices. Our information systems require an ongoing commitment of significant resources to maintain, protect and enhance existing systems and develop new systems to keep pace with continuing changes in information processing technology, evolving systems and regulatory standards and changing customer preferences. If the information we rely upon to run our businesses is found to be inaccurate or unreliable or if we fail to maintain or protect our information systems and data integrity effectively, we could lose existing customers, have difficulty attracting new customers, experience problems in determining medical cost estimates and establishing appropriate pricing, have difficulty preventing, detecting and controlling fraud, have disputes with customers, physicians and other health care professionals, become subject to regulatory sanctions or penalties, incur increases in operating expenses or suffer other adverse consequences. Our process of consolidating the number of systems we operate, upgrading and expanding our information systems capabilities, enhancing our systems and developing new systems to keep pace with continuing changes in information processing technology may not be successful. Failure to protect, consolidate and integrate our systems

successfully could result in higher than expected costs and diversion of management's time and energy, which could materially and adversely affect our results of operations, financial position and cash flows.

Certain of our businesses sell and install software products that may contain unexpected design defects or may encounter unexpected complications during installation or when used with other technologies utilized by the customer. Connectivity among competing technologies is becoming increasingly important in the health care industry. A failure of our technology products to operate as intended and in a seamless fashion with other products could materially and adversely affect our results of operations, financial position and cash flows.

Uncertain and rapidly evolving U.S. federal and state, non-U.S. and international laws and regulations related to the health information technology market may present compliance challenges and could materially and adversely affect the configuration of our information systems and platforms, and our ability to compete in this market.

If we are not able to protect our proprietary rights to our databases, software and related products, our ability to market our knowledge and information-related businesses could be hindered and our results of operations, financial position and cash flows could be materially and adversely affected.

We rely on our agreements with customers, confidentiality agreements with employees and third parties, and our trademarks, trade secrets, copyrights and patents to protect our proprietary rights. These legal protections and precautions may not prevent misappropriation of our proprietary information. In addition, substantial litigation regarding intellectual property rights exists in the software industry, and we expect software products to be increasingly subject to third-party infringement claims as the number of products and competitors in this industry segment grows. Such litigation and misappropriation of our proprietary information could hinder our ability to market and sell products and services and our results of operations, financial position and cash flows could be materially and adversely affected.

Restrictions on our ability to obtain funds from our regulated subsidiaries could materially and adversely affect our results of operations, financial position and cash flows.

Because we operate as a holding company, we are dependent on dividends and administrative expense reimbursements from our subsidiaries to fund our obligations. Many of these subsidiaries are regulated by departments of insurance or similar regulatory authorities. We are also required by law or regulation to maintain specific prescribed minimum amounts of capital in these subsidiaries. The levels of capitalization required depend primarily on the volume of premium revenues generated by the applicable subsidiary. In most states, we are required to seek approval by state regulatory authorities before we transfer money or pay dividends from our regulated subsidiaries that exceed specified amounts. An inability of our regulated subsidiaries to pay dividends to their parent companies in the desired amounts or at the time of our choosing could adversely affect our ability to reinvest in our business through capital expenditures or business acquisitions, as well as our ability to maintain our corporate quarterly dividend payment, repurchase shares of our common stock and repay our debt. If we are unable to obtain sufficient funds from our subsidiaries to fund our obligations, our results of operations, financial position and cash flows could be materially and adversely affected.

Any downgrades in our credit ratings could adversely affect our business, financial condition and results of operations.

Claims paying ability, financial strength and debt ratings by Nationally Recognized Statistical Rating Organizations are important factors in establishing the competitive position of insurance companies. Ratings information is broadly disseminated and generally used by customers and creditors. We believe our claims paying ability and financial strength ratings are important factors in marketing our products to certain of our customers. Our credit ratings impact both the cost and availability of future borrowings. Each of the credit rating agencies reviews its ratings periodically. Our ratings reflect each credit rating agency's opinion of our financial strength, operating performance and ability to meet our debt obligations or obligations to policyholders. There

can be no assurance that our current credit ratings will be maintained in the future. Any downgrades in our credit ratings could materially increase our costs of or ability to access funds in the debt capital markets and otherwise materially increase our operating costs.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

To support our business operations in the United States and other countries we own and lease real properties. Our various reportable segments use these facilities for their respective business purposes, and we believe these current facilities are suitable for their respective uses and are adequate for our anticipated future needs.

ITEM 3. LEGAL PROCEEDINGS

The information required by this Item 3 is incorporated herein by reference to the information set forth under the captions “Legal Matters” and “Governmental Investigations, Audits and Reviews” in Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, “Financial Statements.”

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

MARKET PRICES AND HOLDERS

Our common stock is traded on the New York Stock Exchange (NYSE) under the symbol UNH. On January 31, 2018, there were 12,418 registered holders of record of our common stock. The high and low per share common stock sales prices reported by the NYSE and cash dividends declared for our last two fiscal years were as follows:

	High	Low	Cash Dividends Declared
2017			
First quarter	$172.14	$156.09	$0.625
Second quarter	$188.66	$164.25	$0.750
Third quarter	$200.76	$183.86	$0.750
Fourth quarter	$231.77	$186.00	$0.750
2016			
First quarter	$131.10	$107.51	$0.500
Second quarter	$141.31	$125.26	$0.625
Third quarter	$144.48	$132.39	$0.625
Fourth quarter	$164.00	$133.03	$0.625

DIVIDEND POLICY

In June 2017, our Board of Directors increased the Company's quarterly cash dividend to shareholders to an annual dividend rate of $3.00 per share compared to the annual dividend rate of $2.50 per share, which the Company had paid since June 2016. Declaration and payment of future quarterly dividends is at the discretion of the Board and may be adjusted as business needs or market conditions change.

ISSUER PURCHASES OF EQUITY SECURITIES

In November 1997, our Board of Directors adopted a share repurchase program, which the Board evaluates periodically. There is no established expiration date for the program. During the fourth quarter 2017, we repurchased 1.6 million shares at an average price of $210.97 per share. As of December 31, 2017, we had Board authorization to purchase up to 42 million shares of our common stock.

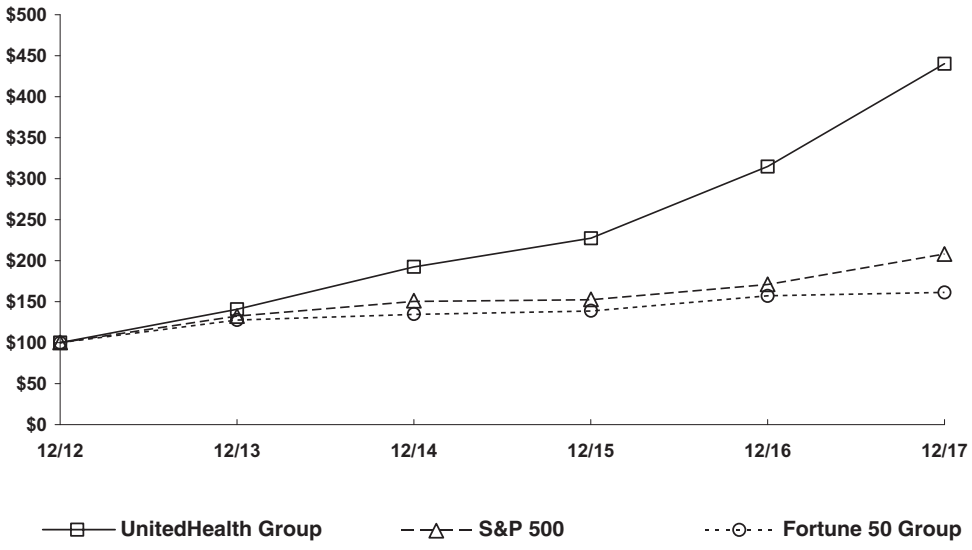
PERFORMANCE GRAPH

The following performance graph compares the cumulative five-year total return to shareholders on our common stock relative to the cumulative total returns of the S&P 500 index and a customized peer group of certain Fortune 50 companies (the "*Fortune 50 Group*") for the five-year period ended December 31, 2017. We are not included in the *Fortune 50* Group index. In calculating the cumulative total shareholder return of the indexes, the shareholder returns of the *Fortune 50* Group companies are weighted according to the stock market capitalizations of the companies at January 1 of each year. The comparisons assume the investment of $100 on December 31, 2012 in our common stock and in each index, and that dividends were reinvested when paid.

The *Fortune 50* Group consists of the following companies: American International Group, Inc., Berkshire Hathaway Inc., Cardinal Health, Inc., Citigroup Inc., General Electric Company, International Business Machines Corporation and Johnson & Johnson. Although there are differences among the companies in terms of size and industry, like UnitedHealth Group, all of these companies are large multi-segment companies using a well-defined operating model in one or more broad sectors of the economy.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

Among UnitedHealth Group, the S&P 500 Index,
and Fortune 50 Group



	12/12	12/13	12/14	12/15	12/16	12/17
UnitedHealth Group	**$100.00**	**$141.03**	**$192.45**	**$227.59**	**$314.99**	**$440.44**
S&P 500 Index	**100.00**	**132.39**	**150.51**	**152.59**	**170.84**	**208.14**
Fortune 50 Group	**100.00**	**127.82**	**134.63**	**139.01**	**157.63**	**161.63**

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

ITEM 6. SELECTED FINANCIAL DATA

(in millions, except percentages and per share data)	For the Year Ended December 31, 2017 (a)	2016	2015 (b)	2014	2013
Consolidated operating results					
Revenues	$201,159	$184,840	$157,107	$130,474	$122,489
Earnings from operations	15,209	12,930	11,021	10,274	9,623
Net earnings attributable to UnitedHealth Group common shareholders	10,558	7,017	5,813	5,619	5,625
Return on equity (c)	24.4%	19.4%	17.7%	17.3%	17.7%
Basic earnings per share attributable to UnitedHealth Group common shareholders	$ 10.95	$ 7.37	$ 6.10	$ 5.78	$ 5.59
Diluted earnings per share attributable to UnitedHealth Group common shareholders	10.72	7.25	6.01	5.70	5.50
Cash dividends declared per common share	2.8750	2.3750	1.8750	1.4050	1.0525
Consolidated cash flows from (used for)					
Operating activities	$ 13,596	$ 9,795	$ 9,740	$ 8,051	$ 6,991
Investing activities	(8,599)	(9,355)	(18,395)	(2,534)	(3,089)
Financing activities	(3,441)	(1,011)	12,239	(5,293)	(4,946)
Consolidated financial condition (as of December 31)					
Cash and investments	$ 43,831	$ 37,143	$ 31,703	$ 28,063	$ 28,818
Total assets	139,058	122,810	111,254	86,300	81,800
Total commercial paper and long-term debt	31,692	32,970	31,965	17,324	16,778
Redeemable noncontrolling interests	2,189	2,012	1,736	1,388	1,175
Total equity	49,833	38,177	33,725	32,454	32,149

(a) Includes the impact of the revaluation of our net deferred tax liabilities due to Tax Reform enacted in December 2017.

(b) Includes the effects of the July 2015 acquisition of Catamaran Corporation (Catamaran) and related debt issuances.

(c) Return on equity is calculated as net earnings divided by average equity. Average equity is calculated using the equity balance at the end of the preceding year and the equity balances at the end of each of the four quarters of the year presented.

Financial Highlights should be read with the accompanying "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 and the Consolidated Financial Statements and Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read together with the accompanying Consolidated Financial Statements and Notes to the Consolidated Financial Statements thereto included in Item 8, "Financial Statements." Readers are cautioned that the statements, estimates, projections or outlook contained in this report, including discussions regarding financial prospects, economic conditions, trends and uncertainties contained in this Item 7, may constitute forward-looking statements within the meaning of the PSLRA. These forward-looking statements involve risks and uncertainties that may cause our actual results to differ materially from the expectations expressed or implied in the forward-looking statements. A description of some of the risks and uncertainties can be found further below in this Item 7 and in Part I, Item 1A, "Risk Factors."

EXECUTIVE OVERVIEW

General

UnitedHealth Group is a diversified health care company dedicated to helping people live healthier lives and helping make the health system work better for everyone. Through our diversified family of businesses, we leverage core competencies in advanced, enabling technology; health care data; information and intelligence; and clinical care delivery, management and coordination to help meet the demands of the health system. These core competencies are deployed within our two distinct, but strategically aligned, business platforms: health benefits operating under UnitedHealthcare and health services operating under Optum.

We have four reportable segments across our two business platforms, UnitedHealthcare and Optum:

- UnitedHealthcare, which includes UnitedHealthcare Employer & Individual, UnitedHealthcare Medicare & Retirement, UnitedHealthcare Community & State and UnitedHealthcare Global;
- OptumHealth;
- OptumInsight; and
- OptumRx.

Further information on our business and reportable segments is presented in Part I, Item 1, “Business” and in Note 13 of Notes to the Consolidated Financial Statements included in Part II, Item 8, “Financial Statements.”

Business Trends

Our businesses participate in the United States, South America and certain other international health markets. In the United States, health care spending has grown consistently for many years and comprises approximately 18% of gross domestic product. We expect overall spending on health care to continue to grow in the future, due to inflation, medical technology and pharmaceutical advancement, regulatory requirements, demographic trends in the population and national interest in health and well-being. The rate of market growth may be affected by a variety of factors, including macro-economic conditions and regulatory changes, which have impacted and could further impact our results of operations.

Pricing Trends. To price our health care benefit products, we start with our view of expected future costs. We frequently evaluate and adjust our approach in each of the local markets we serve, considering all relevant factors, such as product positioning, price competitiveness and environmental, competitive, legislative and regulatory considerations, including minimum MLR thresholds. We will continue seeking to balance growth and profitability across all of these dimensions.

The commercial risk market remains highly competitive in both the small group and large group segments. We expect broad-based competition to continue as the industry adapts to individual and employer needs amid reform changes. The ACA included an annual, nondeductible insurance industry tax (Health Insurance Industry Tax) to be levied proportionally across the insurance industry for risk-based health insurance products. A provision in the 2016 Federal Budget imposed a one year moratorium for 2017 on the collection of the Health Insurance Industry Tax. Pricing for contracts that cover a portion of calendar year 2018 reflected the impact of the returning Health Insurance Industry Tax. Conversely, the industry has continued to experience favorable medical cost trends due to moderated utilization, which has impacted the competitive pricing environment.

Medicare Advantage funding continues to be pressured, as discussed below in “Regulatory Trends and Uncertainties.”

We expect continued Medicaid revenue growth due to anticipated increases in the number of people we serve; we also believe that the payment rate environment creates the risk of downward pressure on Medicaid margin

percentages. We continue to take a prudent, market-sustainable posture for both new business and maintenance of existing relationships. We advocate for actuarially sound rates that are commensurate with our medical cost trends and we remain dedicated to partnering with those states that are committed to the long-term viability of their programs.

Medical Cost Trends. Our medical cost trends primarily relate to changes in unit costs, health system utilization and prescription drug costs. We endeavor to mitigate those increases by engaging physicians and consumers with information and helping them make clinically sound choices, with the objective of helping them achieve high quality, affordable care.

Delivery System and Payment Modernization. The health care market continues to change based on demographic shifts, new regulations, political forces and both payer and patient expectations. Health plans and care providers are being called upon to work together to close gaps in care and improve overall care quality, improve the health of populations and reduce costs. We continue to see a greater number of people enrolled in plans with underlying incentive-based care provider payment models that reward high-quality, affordable care and foster collaboration. We work together with clinicians to leverage our data and analytics to provide the necessary information to close gaps in care and improve overall health outcomes for patients.

We are increasingly rewarding care providers for delivering improvements in quality and cost-efficiency. As of December 31, 2017, we served nearly 16 million people through some form of aligned contractual arrangement, including full-risk, shared-risk and bundled episode-of-care and performance incentive payment approaches. As of December 31, 2017, our contracts with value-based elements total nearly $65 billion in annual spending.

This trend is creating needs for health management services that can coordinate care around the primary care physician, including new primary care channels, and for investments in new clinical and administrative information and management systems, which we believe provide growth opportunities for our Optum business platform.

Regulatory Trends and Uncertainties

Following is a summary of management's view of the trends and uncertainties related to some of the key provisions of the ACA and other regulatory matters. For additional information regarding the ACA and regulatory trends and uncertainties, see Part I, Item 1 "Business — Government Regulation" and Item 1A, "Risk Factors."

Medicare Advantage Rates. Final 2018 Medicare Advantage rates resulted in an increase in industry base rates of approximately 0.45%, well short of the industry forward medical cost trend of 3%, as well as the return of the Health Insurance Industry Tax in 2018, described below, which creates continued pressure in the Medicare Advantage program. The impact of this funding shortfall in Medicare Advantage is partially mitigated by reductions in provider payments for those care providers with rates indexed to Medicare Advantage revenues or Medicare fee-for-service payment rates. These factors can affect our plan benefit designs, pricing, growth prospects and earnings expectations for our Medicare Advantage plans.

The ongoing pressure on Medicare Advantage funding places continued importance on effective medical management and ongoing improvements in administrative efficiency. There are a number of adjustments we have made to partially offset these rate pressures and reductions. In some years, these adjustments will impact the majority of the seniors we serve through Medicare Advantage. For example, we seek to intensify our medical and operating cost management, make changes to the size and composition of our care provider networks, and adjust members' benefits, implement or increase the member premiums that supplement the monthly payments we receive from the government. Additionally, we decide annually on a county-by-county basis where we will offer Medicare Advantage plans.

As Medicare Advantage payments change, other products may become relatively more attractive to Medicare beneficiaries and increase the demand for other senior health benefits products such as our market-leading Medicare Supplement and stand-alone Medicare Part D insurance offerings.

Our Medicare Advantage rates are currently enhanced by CMS quality bonuses in certain counties based on our local plans' Star ratings. The level of Star ratings from CMS, based upon specified clinical and operational performance standards, will impact future quality bonuses. In addition, Star ratings affect the amount of savings a plan can use to offer supplemental benefits, which ultimately may affect the plan's membership and revenue. For the 2017 payment year, approximately 80% of our Medicare Advantage members were in plans rated four stars or higher. We expect that at least 85% of our Medicare Advantage members will be in plans rated four stars or higher for payment year 2018. We continue to dedicate substantial resources to advance our quality scores and Star ratings to strengthen our local market programs and further improve our performance.

Tax Reform. Tax Reform was enacted by the U.S federal government in December 2017, changing existing United States tax law including reducing the U.S. corporate income tax rate. The Company re-measured deferred taxes as of the date of enactment, which resulted in a $1.2 billion reduction to the net deferred tax liability and corresponding increase to earnings in 2017. With Tax Reform, we expect that our effective tax rate in 2018 will be approximately 24%.

Health Insurance Industry Tax. A provision in the 2016 Federal Budget imposed a one year moratorium for 2017 on the collection of the Health Insurance Industry Tax. In 2018, the industry-wide amount of the Health Insurance Industry Tax will be $14.3 billion and we expect our portion to be approximately $2.8 billion. A one year moratorium on the collection of the Health Insurance Industry Tax will occur in 2019.

RESULTS SUMMARY

The following table summarizes our consolidated results of operations and other financial information:

(in millions, except percentages and per share data)	For the Years Ended December 31, 2017	2016	2015	Change 2017 vs. 2016		Change 2016 vs. 2015	
Revenues:							
Premiums	$158,453	$144,118	$127,163	$14,335	10%	$16,955	13%
Products	26,366	26,658	17,312	(292)	(1)	9,346	54
Services	15,317	13,236	11,922	2,081	16	1,314	11
Investment and other income	1,023	828	710	195	24	118	17
Total revenues	201,159	184,840	157,107	16,319	9	27,733	18
Operating costs:							
Medical costs	130,036	117,038	103,875	12,998	11	13,163	13
Operating costs	29,557	28,401	24,312	1,156	4	4,089	17
Cost of products sold	24,112	24,416	16,206	(304)	(1)	8,210	51
Depreciation and amortization	2,245	2,055	1,693	190	9	362	21
Total operating costs	185,950	171,910	146,086	14,040	8	25,824	18
Earnings from operations	15,209	12,930	11,021	2,279	18	1,909	17
Interest expense	(1,186)	(1,067)	(790)	(119)	11	(277)	35
Earnings before income taxes	14,023	11,863	10,231	2,160	18	1,632	16
Provision for income taxes	(3,200)	(4,790)	(4,363)	1,590	(33)	(427)	10
Net earnings	10,823	7,073	5,868	3,750	53	1,205	21
Earnings attributable to noncontrolling interests	(265)	(56)	(55)	(209)	373	(1)	2
Net earnings attributable to UnitedHealth Group common shareholders	$ 10,558	$ 7,017	$ 5,813	$ 3,541	50%	$ 1,204	21%
Diluted earnings per share attributable to UnitedHealth Group common shareholders	$ 10.72	$ 7.25	$ 6.01	$ 3.47	48%	$ 1.24	21%
Medical care ratio (a)	82.1%	81.2%	81.7%	0.9%		(0.5)%	
Operating cost ratio	14.7	15.4	15.5	(0.7)		(0.1)	
Operating margin	7.6	7.0	7.0	0.6		—	
Tax rate	22.8	40.4	42.6	(17.6)		(2.2)	
Net earnings margin (b)	5.2	3.8	3.7	1.4		0.1	
Return on equity (c)	24.4%	19.4%	17.7%	5.0%		1.7%	

(a) Medical care ratio is calculated as medical costs divided by premium revenue.
(b) Net earnings margin attributable to UnitedHealth Group shareholders.
(c) Return on equity is calculated as annualized net earnings divided by average equity. Average equity is calculated using the equity balance at the end of the preceding year and the equity balances at the end of each of the four quarters in the year presented.

SELECTED OPERATING PERFORMANCE AND OTHER SIGNIFICANT ITEMS

The following represents a summary of select 2017 year-over-year operating comparisons to 2016 and other 2017 significant items.

- Consolidated revenues increased by 9%, UnitedHealthcare revenues increased 10% and Optum revenues grew 9%.

- UnitedHealthcare grew to serve an additional 1.1 million people domestically.
- Earnings from operations increased by 18%, including increases of 16% at UnitedHealthcare and 19% at Optum.
- Diluted earnings per common share increased 48% to $10.72, including $1.22 per share due to the impact of Tax Reform.
- Cash flows from operations were $13.6 billion, an increase of 39%.

2017 RESULTS OF OPERATIONS COMPARED TO 2016 RESULTS.

Consolidated Financial Results

Revenue

The increase in revenue was primarily driven by organic growth in the number of individuals served across our UnitedHealthcare benefits businesses and growth across the Optum business. The increase was partially offset by revenue decreases due to the withdrawals of the ACA-compliant products in the individual market and the effects of the Health Insurance Industry Tax moratorium.

Medical Costs and MCR

Medical costs increased due to risk-based membership growth and medical cost trends. The MCR increased due to the effects of the Health Insurance Industry Tax moratorium, offset primarily by the reduction in individual ACA business, medical management initiatives and an increase in favorable medical cost reserve development.

Income Tax Rate

Our effective tax rate decreased primarily due to the impact of Tax Reform and the Health Insurance Tax moratorium. The provision for income taxes included the $1.2 billion benefit from the revaluation of net deferred tax liabilities.

Reportable Segments

See Note 13 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements" for more information on our segments. The following table presents a summary of the reportable segment financial information:

(in millions, except percentages)	For the Years Ended December 31, 2017	2016	2015	Change 2017 vs. 2016		Change 2016 vs. 2015	
Revenues							
UnitedHealthcare	$163,257	$148,581	$131,343	$14,676	10%	$17,238	13%
OptumHealth	20,570	16,908	13,927	3,662	22	2,981	21
OptumInsight	8,087	7,333	6,196	754	10	1,137	18
OptumRx	63,755	60,440	48,272	3,315	5	12,168	25
Optum eliminations	(1,227)	(1,088)	(791)	(139)	13	(297)	38
Optum	91,185	83,593	67,604	7,592	9	15,989	24
Eliminations	(53,283)	(47,334)	(41,840)	(5,949)	13	(5,494)	13
Consolidated revenues	$201,159	$184,840	$157,107	$16,319	9%	$27,733	18%
Earnings from operations							
UnitedHealthcare	$ 8,498	$ 7,307	$ 6,754	$ 1,191	16%	$ 553	8%
OptumHealth	1,823	1,428	1,240	395	28	188	15
OptumInsight	1,770	1,513	1,278	257	17	235	18
OptumRx	3,118	2,682	1,749	436	16	933	53
Optum	6,711	5,623	4,267	1,088	19	1,356	32
Consolidated earnings from operations	$ 15,209	$ 12,930	$ 11,021	$ 2,279	18%	$ 1,909	17%
Operating margin							
UnitedHealthcare	5.2%	4.9%	5.1%	0.3%		(0.2)%	
OptumHealth	8.9	8.4	8.9	0.5		(0.5)	
OptumInsight	21.9	20.6	20.6	1.3		—	
OptumRx	4.9	4.4	3.6	0.5		0.8	
Optum	7.4	6.7	6.3	0.7		0.4	
Consolidated operating margin	7.6%	7.0%	7.0%	0.6%		—%	

UnitedHealthcare

The following table summarizes UnitedHealthcare revenues by business:

(in millions, except percentages)	For the Years Ended December 31, 2017	2016	2015	Change 2017 vs. 2016		Change 2016 vs. 2015	
UnitedHealthcare Employer & Individual	$ 52,066	$ 53,084	$ 47,194	$ (1,018)	(2)%	$ 5,890	12%
UnitedHealthcare Medicare & Retirement	65,995	56,329	49,735	9,666	17	6,594	13
UnitedHealthcare Community & State	37,443	32,945	28,911	4,498	14	4,034	14
UnitedHealthcare Global	7,753	6,223	5,503	1,530	25	720	13
Total UnitedHealthcare revenues	$163,257	$148,581	$131,343	$14,676	10%	$17,238	13%

The following table summarizes the number of individuals served by our UnitedHealthcare businesses, by major market segment and funding arrangement:

	December 31,			Change		Change	
(in thousands, except percentages)	2017	2016	2015	2017 vs. 2016		2016 vs. 2015	
Commercial risk-based — group	7,935	7,470	7,095	465	6%	375	5%
Commercial risk-based — individual	485	1,350	1,190	(865)	(64)	160	13
Commercial fee-based	18,595	18,900	18,565	(305)	(2)	335	2
Fee-based TRICARE	2,850	2,860	2,880	(10)	—	(20)	(1)
Total commercial	29,865	30,580	29,730	(715)	(2)	850	3
Medicare Advantage	4,430	3,630	3,235	800	22	395	12
Medicaid	6,705	5,890	5,305	815	14	585	11
Medicare Supplement (Standardized)	4,445	4,265	4,035	180	4	230	6
Total public and senior	15,580	13,785	12,575	1,795	13	1,210	10
Total UnitedHealthcare — domestic medical	45,445	44,365	42,305	1,080	2	2,060	5
International	4,080	4,220	4,090	(140)	(3)	130	3
Total UnitedHealthcare — medical	49,525	48,585	46,395	940	2%	2,190	5%
Supplemental Data:							
Medicare Part D stand-alone	4,940	4,930	5,060	10	—%	(130)	(3)%

In the commercial group market, broad-based growth was across group sizes and regions, led by gains in services to small groups and resulted in the overall increase in people served through risk-based benefit plans. Fee-based commercial group business declined due to the non-renewal of one public sector customer. Membership in individual business decreased due to our reduced participation in ACA-compliant products in 2017. Medicare Advantage increased year-over-year due to growth in people served through individual and employer-sponsored group Medicare Advantage plans. Medicaid growth was driven by the combination of new state-based awards and growth in established programs. Medicare Supplement growth reflected strong customer retention and new sales.

UnitedHealthcare's revenue increase was due to growth in the number of individuals served across its businesses and price increases for underlying medical cost trends, which were partially offset by the reduction of people served in ACA-compliant individual products and the impact of the Health Insurance Industry Tax moratorium.

The increase in UnitedHealthcare's earnings from operations was led by diversified growth and increased operating margin. The 2016 results included losses in ACA-complaint individual products and guaranty fund assessments.

Optum

Total revenues and earnings from operations increased as each segment reported increased revenues and earnings from operations as a result of the factors discussed below.

The results by segment were as follows:

OptumHealth

Revenue and earnings from operations increased at OptumHealth primarily due to organic and acquisition-related growth in care delivery.

OptumInsight

Revenue and earnings from operations at OptumInsight increased primarily due to growth in revenue management services and business process services.

OptumRx

Revenue and earnings from operations at OptumRx increased primarily due to client and consumer growth. In 2017, OptumRx fulfilled 1.3 billion adjusted scripts compared to 1.2 billion in 2016.

2016 RESULTS OF OPERATIONS COMPARED TO 2015 RESULTS

Our results of operations were affected by our acquisition of Catamaran in the third quarter of 2015.

Consolidated Financial Results

Revenues

The increases in revenues were primarily driven by organic growth in the number of individuals served across our UnitedHealthcare benefits businesses and growth across all of our Optum services businesses.

Medical Costs

Medical costs increased due to risk-based membership growth and medical cost trends, partially offset by medical management initiatives.

Income Tax Rate

Our effective tax rate decreased primarily due to the adoption of "Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting," which we adopted in the first quarter of 2016.

Reportable Segments

UnitedHealthcare

UnitedHealthcare's revenue growth was due to growth in the number of individuals served across its businesses and price increases for underlying medical cost trends.

UnitedHealthcare's operating earnings increased due to diversified growth, offset by guaranty fund assessments recorded in the fourth quarter of 2016.

Optum

Total revenues and operating earnings increased as each reporting segment increased revenues and earnings from operations by double-digit percentages as a result of the factors discussed below.

The results by segment were as follows:

OptumHealth

Revenue and earnings from operations increased at OptumHealth primarily due to growth in its health care delivery businesses as well as expansion of behavioral services into new Medicaid markets. Strong performance in business supporting UnitedHealthcare partially offset by investments in the health care delivery business drove the increase in earnings from operations.

OptumInsight

Revenue and earnings from operations at OptumInsight increased primarily due to growth in revenue management, business process outsourcing and technology services.

OptumRx

Revenue and earnings from operations at OptumRx increased primarily due to the full-year impact of Catamaran and organic growth. In 2016, OptumRx fulfilled 1.2 billion adjusted scripts compared to 932 million in 2015.

LIQUIDITY, FINANCIAL CONDITION AND CAPITAL RESOURCES

Liquidity

Introduction

We manage our liquidity and financial position in the context of our overall business strategy. We continually forecast and manage our cash, investments, working capital balances and capital structure to meet the short-term and long-term obligations of our businesses while seeking to maintain liquidity and financial flexibility. Cash flows generated from operating activities are principally from earnings before noncash expenses.

Our regulated subsidiaries generate significant cash flows from operations and are subject to financial regulations and standards in their respective jurisdictions. These standards, among other things, require these subsidiaries to maintain specified levels of statutory capital, as defined by each jurisdiction, and restrict the timing and amount of dividends and other distributions that may be paid to their parent companies.

In 2017, our U.S. regulated subsidiaries paid their parent companies dividends of $3.7 billion. For the year ended December 31, 2016, our U.S. regulated subsidiaries paid their parent companies dividends of $3.9 billion. See Note 10 of Notes to the Consolidated Financial Statements included in Part II, Item 8, “Financial Statements” for further detail concerning our regulated subsidiary dividends.

Our nonregulated businesses also generate significant cash flows from operations that are available for general corporate use. Cash flows generated by these entities, combined with dividends from our regulated entities and financing through the issuance of long-term debt as well as issuance of commercial paper or the ability to draw under our committed credit facilities, further strengthen our operating and financial flexibility. We use these cash flows to expand our businesses through acquisitions, reinvest in our businesses through capital expenditures, repay debt and return capital to our shareholders through shareholder dividends and/or repurchases of our common stock, depending on market conditions.

Summary of our Major Sources and Uses of Cash and Cash Equivalents

(in millions)	For the Years Ended December 31, 2017	2016	2015	Change 2017 vs. 2016	Change 2016 vs. 2015
Sources of cash:					
Cash provided by operating activities	$ 13,596	$ 9,795	$ 9,740	$ 3,801	$ 55
Issuances of long-term debt and commercial paper, net of repayments	—	990	14,607	(990)	(13,617)
Proceeds from common share issuances	688	429	402	259	27
Customer funds administered	3,172	1,692	768	1,480	924
Other	—	37	—	(37)	37
Total sources of cash	17,456	12,943	25,517		
Uses of cash:					
Cash paid for acquisitions, net of cash assumed	(2,131)	(1,760)	(16,164)	(371)	14,404
Cash dividends paid	(2,773)	(2,261)	(1,786)	(512)	(475)
Common share repurchases	(1,500)	(1,280)	(1,200)	(220)	(80)
Repayments of long-term debt and commercial paper, net of issuances	(2,615)	—	—	(2,615)	—
Purchases of property, equipment and capitalized software	(2,023)	(1,705)	(1,556)	(318)	(149)
Purchases of investments, net of sales and maturities	(4,319)	(5,927)	(531)	1,608	(5,396)
Other	(539)	(581)	(696)	42	115
Total uses of cash	(15,900)	(13,514)	(21,933)		
Effect of exchange rate changes on cash and cash equivalents	(5)	78	(156)	(83)	234
Net increase (decrease) in cash and cash equivalents	$ 1,551	$ (493)	$ 3,428	$ 2,044	$ (3,921)

2017 Cash Flows Compared to 2016 Cash Flows

Increased cash flows provided by operating activities were primarily driven by higher net earnings and changes in working capital accounts, partially offset by the change in net deferred tax liabilities driven by tax reform.

Other significant changes in sources or uses of cash year-over-year included net repayments of debt compared to 2016 net proceeds from debt issuances, which were partially offset by lower net purchases of investments.

2016 Cash Flows Compared to 2015 Cash Flows

Cash flows provided by operating activities increased slightly as higher net earnings were mostly offset by increased CMS receivables and other operating items.

Other significant changes in sources or uses of cash year-over-year included increased net purchases of investments in 2016 and the decreases in cash paid for acquisitions and proceeds from debt issuances due to the 2015 acquisition of Catamaran.

Financial Condition

As of December 31, 2017, our cash, cash equivalent and available-for-sale investment balances of $42.4 billion included $12.0 billion of cash and cash equivalents (of which approximately $800 million was available for

general corporate use), $28.4 billion of debt securities and $2.0 billion of investments in equity securities consisting of investments in non-U.S. dollar fixed-income funds; employee savings plan related investments; and dividend paying stocks. Given the significant portion of our portfolio held in cash equivalents, we do not anticipate fluctuations in the aggregate fair value of our financial assets to have a material impact on our liquidity or capital position. Other sources of liquidity, primarily from operating cash flows and our commercial paper program, which is supported by our bank credit facilities, reduce the need to sell investments during adverse market conditions. See Note 4 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements" for further detail concerning our fair value measurements.

Our available-for-sale debt portfolio had a weighted-average duration of 3.2 years and a weighted-average credit rating of "Double A" as of December 31, 2017. When multiple credit ratings are available for an individual security, the average of the available ratings is used to determine the weighted-average credit rating.

Capital Resources and Uses of Liquidity

In addition to cash flows from operations and cash and cash equivalent balances available for general corporate use, our capital resources and uses of liquidity are as follows:

Commercial Paper and Bank Credit Facilities. Our revolving bank credit facilities provide liquidity support for our commercial paper borrowing program, which facilitates the private placement of senior unsecured debt through third-party broker-dealers, and are available for general corporate purposes. For more information on our commercial paper and bank credit facilities, see Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

Our revolving bank credit facilities contain various covenants, including covenants requiring us to maintain a defined debt to debt-plus-shareholders' equity ratio of not more than 55%. As of December 31, 2017, our debt to debt-plus-shareholders' equity ratio, as defined and calculated under the credit facilities, was approximately 37%.

Long-Term Debt. Periodically, we access capital markets to issue long-term debt for general corporate purposes, such as, to meet our working capital requirements, to refinance debt, to finance acquisitions or for share repurchases. For more information on our debt, see Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8 "Financial Statements."

Credit Ratings. Our credit ratings as of December 31, 2017 were as follows:

	Moody's		S&P Global		Fitch		A.M. Best	
	Ratings	Outlook	Ratings	Outlook	Ratings	Outlook	Ratings	Outlook
Senior unsecured debt	A3	Stable	A+	Negative [(a)]	A-	Stable	bbb+	Stable
Commercial paper	P-2	n/a	A-1	n/a	F1	n/a	AMB-2	n/a

(a) In January 2018, S&P Global affirmed our ratings and changed our outlook to Stable.

The availability of financing in the form of debt or equity is influenced by many factors, including our profitability, operating cash flows, debt levels, credit ratings, debt covenants and other contractual restrictions, regulatory requirements and economic and market conditions. For example, a significant downgrade in our credit ratings or adverse conditions in the capital markets may increase the cost of borrowing for us or limit our access to capital.

Share Repurchase Program. As of December 31, 2017, we had Board authorization to purchase up to 42 million shares of our common stock. For more information on our share repurchase program, see Note 10 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

Dividends. In June 2017, our Board increased our quarterly cash dividend to shareholders by 20% to an annual dividend rate of $3.00 per share. For more information on our dividend, see Note 10 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

CONTRACTUAL OBLIGATIONS AND COMMITMENTS

The following table summarizes future obligations due by period as of December 31, 2017, under our various contractual obligations and commitments:

(in millions)	2018	2019 to 2020	2021 to 2022	Thereafter	Total
Debt (a)	$ 4,006	$ 7,017	$ 7,241	$ 30,609	$ 48,873
Operating leases	538	884	851	809	3,082
Purchase and other obligations (b)	833	866	462	293	2,454
Other liabilities (c)	823	284	284	5,589	6,980
Redeemable noncontrolling interests (d)	1,575	358	25	231	2,189
Total contractual obligations	$ 7,775	$ 9,409	$ 8,863	$ 37,531	$ 63,578

(a) Includes interest coupon payments and maturities at par or put values. The table also assumes amounts are outstanding through their contractual term. See Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements" for more detail.

(b) Includes fixed or minimum commitments under existing purchase obligations for goods and services, including agreements that are cancelable with the payment of an early termination penalty and remaining capital commitments for venture capital funds and other funding commitments. Excludes agreements that are cancelable without penalty and excludes liabilities to the extent recorded in our Consolidated Balance Sheets as of December 31, 2017.

(c) Includes obligations associated with contingent consideration and other payments related to business acquisitions, certain employee benefit programs, amounts accrued for guaranty fund assessments, unrecognized tax benefits, and various other long-term liabilities. Due to uncertainty regarding payment timing, obligations for employee benefit programs, charitable contributions, future settlements and other liabilities have been classified as "Thereafter."

(d) Includes commitments for redeemable shares of our subsidiaries. When the timing of the redemption is indeterminable, the commitment has been classified as "Thereafter."

Pending Acquisitions. In December 2017, we entered into agreements to acquire two companies in the health care sector for a total of approximately $7.7 billion, which are not reflected in the table above. One of the acquisitions closed in January 2018; the other is expected to close later in 2018, subject to regulatory approval and other customary closing conditions.

We do not have other significant contractual obligations or commitments that require cash resources. However, we continually evaluate opportunities to expand our operations, which include internal development of new products, programs and technology applications and may include acquisitions.

OFF-BALANCE SHEET ARRANGEMENTS

As of December 31, 2017, we were not involved in any off-balance sheet arrangements, which have or are reasonably likely to have a material effect on our financial condition, results of operations or liquidity.

RECENTLY ISSUED ACCOUNTING STANDARDS

See Note 2 of Notes to the Consolidated Financial Statements in Part II, Item 8 "Financial Statements" for a discussion of new accounting pronouncements that affect us.

CRITICAL ACCOUNTING ESTIMATES

Critical accounting estimates are those estimates that require management to make challenging, subjective or complex judgments, often because they must estimate the effects of matters that are inherently uncertain and may

change in subsequent periods. Critical accounting estimates involve judgments and uncertainties that are sufficiently sensitive and may result in materially different results under different assumptions and conditions.

Medical Costs Payable

Medical costs and medical costs payable include estimates of our obligations for medical care services that have been rendered on behalf of insured consumers, but for which claims have either not yet been received or processed. Depending on the health care professional and type of service, the typical billing lag for services can be up to 90 days from the date of service. Approximately 90% of claims related to medical care services are known and settled within 90 days from the date of service and substantially all within twelve months. As of December 31, 2017, our days outstanding in medical payables was 50 days, calculated as total medical payables divided by total medical costs times the number of days in the period.

In each reporting period, our operating results include the effects of more completely developed medical costs payable estimates associated with previously reported periods. If the revised estimate of prior period medical costs is less than the previous estimate, we will decrease reported medical costs in the current period (favorable development). If the revised estimate of prior period medical costs is more than the previous estimate, we will increase reported medical costs in the current period (unfavorable development). Medical costs in 2017, 2016 and 2015 included favorable medical cost development related to prior years of $690 million, $220 million and $320 million, respectively.

In developing our medical costs payable estimates, we apply different estimation methods depending on the month for which incurred claims are being estimated. For example, for the most recent two months, we estimate claim costs incurred by applying observed medical cost trend factors to the average per member per month (PMPM) medical costs incurred in prior months for which more complete claim data is available, supplemented by a review of near-term completion factors.

Completion Factors. A completion factor is an actuarial estimate, based upon historical experience and analysis of current trends, of the percentage of incurred claims during a given period that have been adjudicated by us at the date of estimation. Completion factors are the most significant factors we use in developing our medical costs payable estimates for periods prior to the most recent two months. Completion factors include judgments in relation to claim submissions such as the time from date of service to claim receipt, claim inventory levels and claim processing backlogs, as well as other factors. If actual claims submission rates from providers (which can be influenced by a number of factors, including provider mix and electronic versus manual submissions) or our claim processing patterns are different than estimated, our reserve estimates may be significantly impacted.

The following table illustrates the sensitivity of these factors and the estimated potential impact on our medical costs payable estimates for those periods as of December 31, 2017:

Completion Factors (Decrease) Increase in Factors	Increase (Decrease) In Medical Costs Payable
	(in millions)
(0.75)%	$ 486
(0.50)	323
(0.25)	161
0.25	(160)
0.50	(320)
0.75	(478)

Medical Cost Per Member Per Month Trend Factors. Medical cost PMPM trend factors are significant factors we use in developing our medical costs payable estimates for the most recent two months. Medical cost trend factors are developed through a comprehensive analysis of claims incurred in prior months, provider contracting and expected unit costs, benefit design and a review of a broad set of health care utilization indicators, including but not limited to, pharmacy utilization trends, inpatient hospital authorization data and influenza incidence data from the National Centers for Disease Control. We also consider macroeconomic variables such as

gross-domestic product growth, employment and disposable income. A large number of factors can cause the medical cost trend to vary from our estimates, including: our ability and practices to manage medical and pharmaceutical costs, changes in level and mix of services utilized, mix of benefits offered, including the impact of co-pays and deductibles, changes in medical practices, catastrophes and epidemics.

The following table illustrates the sensitivity of these factors and the estimated potential impact on our medical costs payable estimates for the most recent two months as of December 31, 2017:

Medical Cost PMPM Trend Increase (Decrease) in Factors	Increase (Decrease) In Medical Costs Payable
	(in millions)
3%	$ 623
2	415
1	208
(1)	(208)
(2)	(415)
(3)	(623)

The completion factors and medical costs PMPM trend factors analyses above include outcomes that are considered reasonably likely based on our historical experience estimating liabilities for incurred but not reported benefit claims.

Management believes the amount of medical costs payable is reasonable and adequate to cover our liability for unpaid claims as of December 31, 2017; however, actual claim payments may differ from established estimates as discussed above. Assuming a hypothetical 1% difference between our December 31, 2017 estimates of medical costs payable and actual medical costs payable, excluding AARP Medicare Supplement Insurance and any potential offsetting impact from premium rebates, 2017 net earnings would have increased or decreased by $110 million.

For more detail related to our medical cost estimates, see Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, “Financial Statements.”

Revenues

We derive a substantial portion of our revenues from health care insurance premiums. We recognize premium revenues in the period eligible individuals are entitled to receive health care services. Customers are typically billed monthly at a contracted rate per eligible person multiplied by the total number of people eligible to receive services.

Our Medicare Advantage and Medicare Part D premium revenues are subject to periodic adjustment under the CMS risk adjustment payment methodology. The CMS risk adjustment model provides higher per member payments for enrollees diagnosed with certain conditions and lower payments for enrollees who are healthier. We estimate risk adjustment revenues based upon the data submitted and expected to be submitted to CMS. As a result of the variability of factors that determine such estimations, the actual amount of CMS’ retroactive payments could be materially more or less than our estimates. This may result in favorable or unfavorable adjustments to our Medicare premium revenue and, accordingly, our profitability. For more detail on premium revenues, see Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, “Financial Statements.” Risk adjustment data for our plans is subject to review by the federal and state governments, including audit by regulators. See Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, “Financial Statements” for additional information regarding these audits. Our estimates of premiums to be recognized are reduced by any expected premium minimum MLR rebates payable by us.

Goodwill and Intangible Assets

Goodwill. We evaluate goodwill for impairment annually or more frequently when an event occurs or circumstances change that indicate the carrying value may not be recoverable. When testing goodwill for impairment, we may first assess qualitative factors to determine if it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value. During a qualitative analysis, we consider the impact of changes, if any, to the following factors: macroeconomic, industry and market factors, cost factors, changes in overall financial performance, and any other relevant events and uncertainties impacting a reporting unit. If our qualitative assessment indicates that goodwill impairment is more likely than not, we perform additional quantitative analyses. We may also elect to skip the qualitative testing and proceed directly to the quantitative testing. For reporting units where a quantitative analysis is performed, we perform a multi-step test measuring the fair values of the reporting units and comparing them to their aggregate carrying values, including goodwill. If the fair value is less than the carrying value of the reporting unit, then the implied value of goodwill would be calculated and compared to the carrying amount of goodwill to determine whether goodwill is impaired.

We estimate the fair values of our reporting units using discounted cash flows, which include assumptions about a wide variety of internal and external factors. Significant assumptions used in the impairment analysis include financial projections of free cash flow (including significant assumptions about operations, capital requirements and income taxes), long-term growth rates for determining terminal value beyond the discretely forecasted periods and discount rates. For each reporting unit, comparative market multiples are used to corroborate the results of our discounted cash flow test.

Forecasts and long-term growth rates used for our reporting units are consistent with, and use inputs from, our internal long-term business plan and strategies. Key assumptions used in these forecasts include:

- *Revenue trends.* Key revenue drivers for each reporting unit are determined and assessed. Significant factors include: customer and/or membership growth, medical trends and the impact and expectations of regulatory environments. Additional macro-economic assumptions relating to unemployment, GDP growth, interest rates and inflation are also evaluated and incorporated, as appropriate.
- *Medical cost trends.* For further discussion of medical cost trends, see the “Medical Cost Trend” section of Executive Overview-Business Trends above and the discussion in the “Medical Costs Payable” critical accounting estimate above. Similar factors, including historical and expected medical cost trend levels, are considered in estimating our long-term medical trends at the reporting unit level.
- *Operating productivity.* We forecast expected operating cost levels based on historical levels and expectations of future operating cost levels.
- *Capital levels.* The operating and long-term capital requirements for each business are considered.

Discount rates are determined for each reporting unit and include consideration of the implied risk inherent in their forecasts. Our most significant estimate in the discount rate determinations involves our adjustments to the peer company weighted average costs of capital that reflect reporting unit-specific factors. We have not made any adjustments to decrease a discount rate below the calculated peer company weighted average cost of capital for any reporting unit. Company-specific adjustments to discount rates are subjective and thus are difficult to measure with certainty. The passage of time and the availability of additional information regarding areas of uncertainty with respect to the reporting units’ operations could cause these assumptions to change in the future. We completed our annual impairment tests for goodwill as of October 1, 2017. All of our reporting units had fair values substantially in excess of their carrying values.

Intangible Assets. Our finite-lived intangible assets are subject to impairment tests when events or circumstances indicate that an asset’s (or asset group’s) carrying value may exceed its estimated fair value. Consideration is given on a quarterly basis to a number of potential impairment indicators, including: changes in the use of the assets, changes in legal or other business factors that could affect value, experienced or expected operating cash-flow deterioration or losses, adverse changes in customer populations, adverse competitive or technological advances that could impact value and other factors.

Our indefinite-lived intangible assets are tested for impairment on an annual basis, or more frequently if impairment indicators exist. To determine if an indefinite-lived intangible asset is impaired, we compare its estimated fair value to its carrying value. If the carrying value exceeds its estimated fair value, an impairment would be recorded for the amount by which the carrying value exceeds its estimated fair value. Intangible assets were not impaired in 2017.

LEGAL MATTERS

A description of our legal proceedings is presented in Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

CONCENTRATIONS OF CREDIT RISK

Investments in financial instruments such as marketable securities and accounts receivable may subject us to concentrations of credit risk. Our investments in marketable securities are managed under an investment policy authorized by our Board of Directors. This policy limits the amounts that may be invested in any one issuer and generally limits our investments to U.S. government and agency securities, state and municipal securities and corporate debt obligations that are investment grade. Concentrations of credit risk with respect to accounts receivable are limited due to the large number of employer groups and other customers that constitute our client base. As of December 31, 2017, there were no significant concentrations of credit risk.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our primary market risks are exposures to changes in interest rates that impact our investment income and interest expense and the fair value of certain of our fixed-rate investments and debt, as well as foreign currency exchange rate risk of the U.S. dollar primarily to the Brazilian real.

As of December 31, 2017, we had $15 billion of financial assets on which the interest rates received vary with market interest rates, which may materially impact our investment income. Also as of December 31, 2017, $8.5 billion of our financial liabilities, which include commercial paper, debt and deposit liabilities, were at interest rates that vary with market rates, either directly or through the use of related interest rate swap contracts. The fair value of certain of our fixed-rate investments and debt also varies with market interest rates. As of December 31, 2017, $25.9 billion of our investments were fixed-rate debt securities and $28.7 billion of our debt was non-swapped fixed-rate term debt. An increase in market interest rates decreases the market value of fixed-rate investments and fixed-rate debt. Conversely, a decrease in market interest rates increases the market value of fixed-rate investments and fixed-rate debt.

We manage exposure to market interest rates by diversifying investments across different fixed-income market sectors and debt across maturities, as well as by endeavoring to match our floating-rate assets and liabilities over time, either directly or through the use of interest rate swap contracts. Unrealized gains and losses on investments in available-for-sale securities are reported in comprehensive income.

The following tables summarize the impact of hypothetical changes in market interest rates across the entire yield curve by 1% point or 2% points as of December 31, 2017 and 2016 on our investment income and interest expense per annum and the fair value of our investments and debt (in millions, except percentages):

	December 31, 2017			
Increase (Decrease) in Market Interest Rate	Investment Income Per Annum (a)	Interest Expense Per Annum (a)	Fair Value of Financial Assets (b)	Fair Value of Financial Liabilities
2%	$ 300	$ 170	$ (1,958)	$ (4,546)
1	150	85	(933)	(2,460)
(1)	(150)	(85)	950	2,923
(2)	(197)	(133)	1,773	6,414

	December 31, 2016			
Increase (Decrease) in Market Interest Rate	Investment Income Per Annum (a)	Interest Expense Per Annum (a)	Fair Value of Financial Assets (b)	Fair Value of Financial Liabilities
2%	$ 263	$ 245	$ (1,711)	$ (3,470)
1	132	122	(873)	(1,860)
(1)	(105)	(95)	855	2,244
(2)	nm	nm	1,562	4,784

nm = not meaningful

(a) Given the low absolute level of short-term market rates on our floating-rate assets and liabilities as of December 31, 2017 and 2016, the assumed hypothetical change in interest rates does not reflect the full 100 and 200 basis point reduction, respectively, in interest income or interest expense, in 2017 and 2016, respectively, as the rate cannot fall below zero.

(b) As of December 31, 2017 and 2016, some of our investments had interest rates below 2% so the assumed hypothetical change in the fair value of investments does not reflect the full 200 basis point reduction.

We have an exposure to changes in the value of the Brazilian real to the U.S. dollar in translation of UnitedHealthcare Brazil's operating results at the average exchange rate over the accounting period, and UnitedHealthcare Brazil's assets and liabilities at the spot rate at the end of the accounting period. The gains or losses resulting from translating foreign assets and liabilities into U.S. dollars are included in equity and comprehensive income.

An appreciation of the U.S. dollar against the Brazilian real reduces the carrying value of the net assets denominated in Brazilian real. For example, as of December 31, 2017, a hypothetical 10% and 25% increase in the value of the U.S. dollar against the Brazilian real would have caused a reduction in net assets of approximately $500 million and $1.1 billion, respectively. We manage exposure to foreign currency earnings risk primarily by conducting our international business operations in their functional currencies.

As of December 31, 2017, we had $2.0 billion of investments in equity securities, consisting of investments in non-U.S. dollar fixed-income funds; employee savings plan related investments; and dividend paying stocks. Valuations in non-U.S. dollar funds are subject to foreign exchange rates.

ITEM 8. FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and the Board of Directors of UnitedHealth Group Incorporated and Subsidiaries:

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of UnitedHealth Group Incorporated and subsidiaries (the "Company") as of December 31, 2017 and 2016, the related consolidated statements of operations, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2017, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 13, 2018, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinions

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 13, 2018

We have served as the Company's auditor since 2002.

UnitedHealth Group
Consolidated Balance Sheets

(in millions, except per share data)	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 11,981	$ 10,430
Short-term investments	3,509	2,845
Accounts receivable, net of allowances of $641 and $514	9,568	8,152
Other current receivables, net of allowances of $440 and $409	6,262	7,499
Assets under management	3,101	3,105
Prepaid expenses and other current assets	2,663	1,848
Total current assets	37,084	33,879
Long-term investments	28,341	23,868
Property, equipment and capitalized software, net of accumulated depreciation and amortization of $3,694 and $3,749	7,013	5,901
Goodwill	54,556	47,584
Other intangible assets, net of accumulated amortization of $4,309 and $3,847	8,489	8,541
Other assets	3,575	3,037
Total assets	$139,058	$122,810
Liabilities, redeemable noncontrolling interests and equity		
Current liabilities:		
Medical costs payable	$ 17,871	$ 16,391
Accounts payable and accrued liabilities	15,180	13,361
Commercial paper and current maturities of long-term debt	2,857	7,193
Unearned revenues	2,269	1,968
Other current liabilities	12,286	10,339
Total current liabilities	50,463	49,252
Long-term debt, less current maturities	28,835	25,777
Deferred income taxes	2,182	2,761
Other liabilities	5,556	4,831
Total liabilities	87,036	82,621
Commitments and contingencies (Note 12)		
Redeemable noncontrolling interests	2,189	2,012
Equity:		
Preferred stock, $0.001 par value — 10 shares authorized; no shares issued or outstanding	—	—
Common stock, $0.01 par value — 3,000 shares authorized; 969 and 952 issued and outstanding	10	10
Additional paid-in capital	1,703	—
Retained earnings	48,730	40,945
Accumulated other comprehensive loss	(2,667)	(2,681)
Nonredeemable noncontrolling interests	2,057	(97)
Total equity	49,833	38,177
Total liabilities, redeemable noncontrolling interests and equity	$139,058	$122,810

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Consolidated Statements of Operations

(in millions, except per share data)	For the Years Ended December 31, 2017	2016	2015
Revenues:			
Premiums	$158,453	$144,118	$127,163
Products	26,366	26,658	17,312
Services	15,317	13,236	11,922
Investment and other income	1,023	828	710
Total revenues	201,159	184,840	157,107
Operating costs:			
Medical costs	130,036	117,038	103,875
Operating costs	29,557	28,401	24,312
Cost of products sold	24,112	24,416	16,206
Depreciation and amortization	2,245	2,055	1,693
Total operating costs	185,950	171,910	146,086
Earnings from operations	15,209	12,930	11,021
Interest expense	(1,186)	(1,067)	(790)
Earnings before income taxes	14,023	11,863	10,231
Provision for income taxes	(3,200)	(4,790)	(4,363)
Net earnings	10,823	7,073	5,868
Earnings attributable to noncontrolling interests	(265)	(56)	(55)
Net earnings attributable to UnitedHealth Group common shareholders	$ 10,558	$ 7,017	$ 5,813
Earnings per share attributable to UnitedHealth Group common shareholders:			
Basic	$ 10.95	$ 7.37	$ 6.10
Diluted	$ 10.72	$ 7.25	$ 6.01
Basic weighted-average number of common shares outstanding	964	952	953
Dilutive effect of common share equivalents	21	16	14
Diluted weighted-average number of common shares outstanding	985	968	967
Anti-dilutive shares excluded from the calculation of dilutive effect of common share equivalents	5	3	8
Cash dividends declared per common share	$ 2.875	$ 2.375	$ 1.875

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Consolidated Statements of Comprehensive Income

(in millions)	For the Years Ended December 31, 2017	2016	2015
Net earnings	$10,823	$7,073	$ 5,868
Other comprehensive income (loss):			
Gross unrealized gains (losses) on investment securities during the period	209	(73)	(123)
Income tax effect	(72)	26	44
Total unrealized gains (losses), net of tax	137	(47)	(79)
Gross reclassification adjustment for net realized gains included in net earnings	(83)	(166)	(141)
Income tax effect	30	60	53
Total reclassification adjustment, net of tax	(53)	(106)	(88)
Total foreign currency translation (losses) gains	(70)	806	(1,775)
Other comprehensive income (loss)	14	653	(1,942)
Comprehensive income	10,837	7,726	3,926
Comprehensive income attributable to noncontrolling interests	(265)	(56)	(55)
Comprehensive income attributable to UnitedHealth Group common shareholders	$10,572	$7,670	$ 3,871

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Consolidated Statements of Changes in Equity

(in millions)	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss): Net Unrealized Gains (Losses) on Investments	Accumulated Other Comprehensive Income (Loss): Foreign Currency Translation (Losses) Gains	Nonredeemable Noncontrolling Interests	Total Equity
Balance at January 1, 2015	954	$ 10	$ —	$ 33,836	$ 223	$ (1,615)	$ —	$32,454
Net earnings				5,813			26	5,839
Other comprehensive loss					(167)	(1,775)		(1,942)
Issuances of common stock, and related tax effects	10	—	127					127
Share-based compensation, and related tax benefits			589					589
Common share repurchases	(11)	—	(462)	(738)				(1,200)
Cash dividends paid on common shares				(1,786)				(1,786)
Redeemable noncontrolling interests fair value and other adjustments			(225)					(225)
Acquisition of nonredeemable noncontrolling interest							9	9
Distributions to nonredeemable noncontrolling interest							(140)	(140)
Balance at December 31, 2015	953	10	29	37,125	56	(3,390)	(105)	33,725
Adjustment to adopt ASU 2016-09				28				28
Net earnings				7,017			40	7,057
Other comprehensive (loss) income					(153)	806		653
Issuances of common stock, and related tax effects	9	—	191					191
Share-based compensation			455					455
Common share repurchases	(10)	—	(316)	(964)				(1,280)
Cash dividends paid on common shares				(2,261)				(2,261)
Acquisition of redeemable noncontrolling interest shares			(143)					(143)
Redeemable noncontrolling interest fair value and other adjustments			(216)					(216)
Distributions to nonredeemable noncontrolling interest							(32)	(32)
Balance at December 31, 2016	952	10	—	40,945	(97)	(2,584)	(97)	38,177
Net earnings				10,558			194	10,752
Other comprehensive income (loss)					84	(70)		14
Issuances of common stock, and related tax effects	26	—	2,225					2,225
Share-based compensation			582					582
Common share repurchases	(9)	—	(1,500)					(1,500)
Cash dividends paid on common shares				(2,773)				(2,773)
Acquisition of redeemable noncontrolling interest shares			283					283
Redeemable noncontrolling interests fair value and other adjustments			113					113
Acquisition of nonredeemable noncontrolling interests							2,112	2,112
Distributions to nonredeemable noncontrolling interests							(152)	(152)
Balance at December 31, 2017	969	$ 10	$ 1,703	$ 48,730	$ (13)	$ (2,654)	$ 2,057	$49,833

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Consolidated Statements of Cash Flows

(in millions)	For the Years Ended December 31, 2017	2016	2015
Operating activities			
Net earnings	$ 10,823	$ 7,073	$ 5,868
Noncash items:			
Depreciation and amortization	2,245	2,055	1,693
Deferred income taxes	(965)	81	(73)
Share-based compensation	597	485	406
Other, net	217	(82)	(235)
Net change in other operating items, net of effects from acquisitions and changes in AARP balances:			
Accounts receivable	(1,062)	(1,357)	(591)
Other assets	(630)	(1,601)	(1,430)
Medical costs payable	1,284	1,849	2,585
Accounts payable and other liabilities	930	1,494	1,280
Unearned revenues	157	(202)	237
Cash flows from operating activities	13,596	9,795	9,740
Investing activities			
Purchases of investments	(14,588)	(17,547)	(9,939)
Sales of investments	4,623	7,339	6,054
Maturities of investments	5,646	4,281	3,354
Cash paid for acquisitions, net of cash assumed	(2,131)	(1,760)	(16,164)
Purchases of property, equipment and capitalized software	(2,023)	(1,705)	(1,556)
Other, net	(126)	37	(144)
Cash flows used for investing activities	(8,599)	(9,355)	(18,395)
Financing activities			
Common share repurchases	(1,500)	(1,280)	(1,200)
Cash dividends paid	(2,773)	(2,261)	(1,786)
Proceeds from common stock issuances	688	429	402
Repayments of long-term debt	(4,398)	(2,596)	(1,041)
(Repayments of) proceeds from commercial paper, net	(3,508)	(382)	3,666
Proceeds from issuance of long-term debt	5,291	3,968	11,982
Customer funds administered	3,172	1,692	768
Other, net	(413)	(581)	(552)
Cash flows (used for) from financing activities	(3,441)	(1,011)	12,239
Effect of exchange rate changes on cash and cash equivalents	(5)	78	(156)
Increase (decrease) in cash and cash equivalents	1,551	(493)	3,428
Cash and cash equivalents, beginning of period	10,430	10,923	7,495
Cash and cash equivalents, end of period	$ 11,981	$ 10,430	$ 10,923
Supplemental cash flow disclosures			
Cash paid for interest	$ 1,133	$ 1,055	$ 639
Cash paid for income taxes	4,004	4,726	4,401
Supplemental schedule of non-cash investing activities			
Common stock issued for acquisitions	$ 2,164	$ —	$ —

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Notes to the Consolidated Financial Statements

1. Description of Business

UnitedHealth Group Incorporated (individually and together with its subsidiaries, "UnitedHealth Group" and "the Company") is a diversified health care company dedicated to helping people live healthier lives and helping make the health system work better for everyone.

Through its diversified family of businesses, the Company leverages core competencies in data and health information; advanced technology; and clinical expertise to help meet the demands of the health system. These core competencies are deployed within two distinct, but strategically aligned, business platforms: health benefits operating under UnitedHealthcare and health services operating under Optum.

2. Basis of Presentation, Use of Estimates and Significant Accounting Policies

Basis of Presentation

The Company has prepared the Consolidated Financial Statements according to U.S. Generally Accepted Accounting Principles (GAAP) and has included the accounts of UnitedHealth Group and its subsidiaries.

Use of Estimates

These Consolidated Financial Statements include certain amounts based on the Company's best estimates and judgments. The Company's most significant estimates relate to estimates and judgments for medical costs payable and revenues, valuation and impairment analysis of goodwill and other intangible assets and estimates of other current liabilities and other current receivables. Certain of these estimates require the application of complex assumptions and judgments, often because they involve matters that are inherently uncertain and will likely change in subsequent periods. The impact of any change in estimates is included in earnings in the period in which the estimate is adjusted.

Revenues

Premiums

Premium revenues are primarily derived from risk-based health insurance arrangements in which the premium is typically at a fixed rate per individual served for a one-year period, and the Company assumes the economic risk of funding its customers' health care and related administrative costs.

Premium revenues are recognized in the period in which eligible individuals are entitled to receive health care benefits. Health care premium payments received from the Company's customers in advance of the service period are recorded as unearned revenues. Fully insured commercial products of U.S. health plans, Medicare Advantage and Medicare Prescription Drug Benefit (Medicare Part D) plans with medical loss ratios as calculated under the definitions in the Patient Protection and Affordable Care Act (ACA) and related federal and state regulations and implementing regulations, that fall below certain targets are required to rebate ratable portions of their premiums annually. Medicare Advantage premium revenue includes the impact of Centers for Medicare & Medicaid Services (CMS) quality bonuses based on plans' Star ratings.

Premium revenues are recognized based on the estimated premiums earned net of projected rebates because the Company is able to reasonably estimate the ultimate premiums of these contracts. The Company also records premium revenues from capitation arrangements at its OptumHealth businesses.

The Company's Medicare Advantage and Medicare Part D premium revenues are subject to periodic adjustment under CMS' risk adjustment payment methodology. CMS deploys a risk adjustment model that apportions

premiums paid to all health plans according to health severity and certain demographic factors. The CMS risk adjustment model provides higher per member payments for enrollees diagnosed with certain conditions and lower payments for enrollees who are healthier. Under this risk adjustment methodology, CMS calculates the risk adjusted premium payment using diagnosis data from hospital inpatient, hospital outpatient and physician treatment settings. The Company and health care providers collect, capture and submit the necessary and available diagnosis data to CMS within prescribed deadlines. The Company estimates risk adjustment premium revenues based upon the diagnosis data submitted and expected to be submitted to CMS. Risk adjustment data for the Company's plans are subject to review by the government, including audit by regulators. See Note 12 for additional information regarding these audits.

Products and Services

For the Company's OptumRx pharmacy care services business, the majority of revenues are derived from products sold through a contracted network of retail pharmacies or home delivery and specialty pharmacy facilities. Product revenues include ingredient costs (net of rebates), a negotiated dispensing fee and customer co-payments for drugs dispensed through the Company's mail-service pharmacy. In retail pharmacy transactions, revenues recognized exclude the member's applicable co-payment. Pharmacy products are billed to customers based on the number of transactions occurring during the billing period. Product revenues are recognized when the prescriptions are dispensed through the retail network or received by consumers through the Company's mail-service pharmacy. The Company has entered into contracts in which it is primarily obligated to pay its network pharmacy providers for benefits provided to their customers regardless of whether the Company is paid. The Company is also involved in establishing the prices charged by retail pharmacies, determining which drugs will be included in formulary listings and selecting which retail pharmacies will be included in the network offered to plan sponsors' members and accordingly, are reported on a gross basis.

Services revenue consists of fees derived from services performed for customers that self-insure the health care costs of their employees and employees' dependents. Under service fee contracts, the Company receives monthly, a fixed fee per employee, which is recognized as revenue as the Company performs, or makes available the applicable services to the customer. The customers retain the risk of financing health care costs for their employees and employees' dependents, and the Company administers the payment of customer funds to physicians and other health care professionals from customer-funded bank accounts. As the Company has neither the obligation for funding the health care costs, nor the primary responsibility for providing the medical care, the Company does not recognize premium revenue and medical costs for these contracts in its Consolidated Financial Statements. For these fee-based customer arrangements, the Company provides coordination and facilitation of medical services; transaction processing; customer, consumer and care professional services; and access to contracted networks of physicians, hospitals and other health care professionals. These services are performed throughout the contract period.

Revenues are also comprised of a number of services and products sold through Optum. OptumHealth's service revenues include net patient service revenues that are recorded based upon established billing rates, less allowances for contractual adjustments, and are recognized as services are provided. For its financial services offerings, OptumHealth charges fees and earns investment income on managed funds. OptumInsight provides software and information products, advisory consulting arrangements and services outsourcing contracts, which may be delivered over several years. OptumInsight revenues are generally recognized over time and measured each period based on the progress to date as services are performed or made available to customers.

As of December 31, 2017, accounts receivables related to products and services were $3.7 billion. In 2017, the Company had no material bad-debt expense and there were no material contract assets, contract liabilities or deferred contract costs recorded on the Consolidated Balance Sheet as of December 31, 2017.

For the year ended December 31, 2017, revenue recognized from performance obligations related to prior periods (for example, due to changes in transaction price), was not material.

Revenue expected to be recognized in any future year related to remaining performance obligations, excluding revenue pertaining to contracts that have an original expected duration of one year or less, contracts where revenue is recognized as invoiced and contracts with variable consideration related to undelivered performance obligations, is not material.

See Note 13 for disaggregation of revenue by segment and type.

Medical Costs and Medical Costs Payable

The Company's estimate of medical costs payable represents management's best estimate of its liability for unpaid medical costs as of December 31, 2017.

Each period, the Company re-examines previously established medical costs payable estimates based on actual claim submissions and other changes in facts and circumstances. As more complete claim information becomes available, the Company adjusts the amount of the estimates and includes the changes in estimates in medical costs in the period in which the change is identified. Approximately 90% of claims related to medical care services are known and settled within 90 days from the date of service and substantially all within twelve months.

Medical costs and medical costs payable include estimates of the Company's obligations for medical care services that have been rendered on behalf of insured consumers, but for which claims have either not yet been received, processed, or paid. The Company develops estimates for medical care services incurred but not reported (IBNR), which includes estimates for claims that have not been received or fully processed, using an actuarial process that is consistently applied, centrally controlled and automated. The actuarial models consider factors such as time from date of service to claim processing, seasonal variances in medical care consumption, health care professional contract rate changes, medical care utilization and other medical cost trends, membership volume and demographics, the introduction of new technologies, benefit plan changes, and business mix changes related to products, customers and geography.

In developing its medical costs payable estimates, the Company applies different estimation methods depending on which incurred claims are being estimated. For the most recent two months, the Company estimates claim costs incurred by applying observed medical cost trend factors to the average per member per month (PMPM) medical costs incurred in prior months for which more complete claim data are available, supplemented by a review of near-term completion factors (actuarial estimates, based upon historical experience and analysis of current trends, of the percentage of incurred claims during a given period that have been adjudicated by the Company at the date of estimation). For months prior to the most recent two months, the Company applies the completion factors to actual claims adjudicated-to-date to estimate the expected amount of ultimate incurred claims for those months.

Cost of Products Sold

The Company's cost of products sold includes the cost of pharmaceuticals dispensed to unaffiliated customers either directly at its mail and specialty pharmacy locations, or indirectly through its nationwide network of participating pharmacies. Rebates attributable to non-affiliated clients are accrued as rebates receivable and a reduction of cost of products sold with a corresponding payable for the amounts of the rebates to be remitted to those non-affiliated clients in accordance with their contracts and recorded in the Consolidated Statements of Operations as a reduction of product revenue. Cost of products sold also includes the cost of personnel to support the Company's transaction processing services, system sales, maintenance and professional services.

Cash, Cash Equivalents and Investments

Cash and cash equivalents are highly liquid investments that have an original maturity of three months or less. The fair value of cash and cash equivalents approximates their carrying value because of the short maturity of the instruments.

Investments with maturities of less than one year are classified as short-term. Because of regulatory requirements, certain investments are included in long-term investments regardless of their maturity date. The Company classifies these investments as held-to-maturity and reports them at amortized cost. Substantially all other investments are classified as available-for-sale and reported at fair value based on quoted market prices, where available.

The Company excludes unrealized gains and losses on investments in available-for-sale securities from net earnings and reports them as comprehensive income and, net of income tax effects, as a separate component of equity. To calculate realized gains and losses on the sale of investments, the Company specifically identifies the cost of each investment sold.

The Company evaluates an investment for impairment by considering the length of time and extent to which market value has been less than cost or amortized cost, the financial condition and near-term prospects of the issuer as well as specific events or circumstances that may influence the operations of the issuer and the Company's intent to sell the security or the likelihood that it will be required to sell the security before recovery of the entire amortized cost.

New information and the passage of time can change these judgments. The Company manages its investment portfolio to limit its exposure to any one issuer or market sector, and largely limits its investments to investment grade quality. Securities downgraded below policy minimums after purchase will be disposed of in accordance with the Company's investment policy.

Assets Under Management

The Company provides health insurance products and services to members of AARP under a Supplemental Health Insurance Program (the AARP Program) and to AARP members and non-members under separate Medicare Advantage and Medicare Part D arrangements. The products and services under the AARP Program include supplemental Medicare benefits, hospital indemnity insurance, including insurance for individuals between 50 to 64 years of age and other related products.

Pursuant to the Company's agreement, AARP Program assets are managed separately from the Company's general investment portfolio and are used to pay costs associated with the AARP Program. These assets are invested at the Company's discretion, within investment guidelines approved by AARP. The Company does not guarantee any rates of return on these investments and, upon any transfer of the AARP Program contract to another entity, the Company would transfer cash equal in amount to the fair value of these investments at the date of transfer to that entity. Because the purpose of these assets is to fund the medical costs payable, the rate stabilization fund (RSF) liabilities and other related liabilities associated with this AARP contract, assets under management are classified as current assets, consistent with the classification of these liabilities.

The effects of changes in other balance sheet amounts associated with the AARP Program also accrue to the overall benefit of the AARP policyholders through the RSF balance. Accordingly, the Company excludes the effect of such changes in its Consolidated Statements of Cash Flows.

Other Current Receivables

Other current receivables include amounts due from pharmaceutical manufacturers for rebates and Medicare Part D drug discounts and other miscellaneous amounts due to the Company.

The Company's pharmacy care services businesses contract with pharmaceutical manufacturers, some of which provide rebates based on use of the manufacturers' products by its affiliated and non-affiliated clients. The Company accrues rebates as they are earned by its clients on a monthly basis based on the terms of the applicable contracts, historical data and current estimates. The pharmacy care services businesses bill these rebates to the

manufacturers on a monthly or quarterly basis depending on the contractual terms and record rebates attributable to affiliated clients as a reduction to medical costs. The Company generally receives rebates from two to five months after billing. As of December 31, 2017 and 2016, total pharmaceutical manufacturer rebates receivable included in other receivables in the Consolidated Balance Sheets amounted to $3.8 billion and $3.3 billion, respectively.

As of December 31, 2017 and 2016, the Company's Medicare Part D receivables amounted to $0.5 billion and $1.5 billion, respectively.

Property, Equipment and Capitalized Software

Property, equipment and capitalized software are stated at cost, net of accumulated depreciation and amortization. Capitalized software consists of certain costs incurred in the development of internal-use software, including external direct costs of materials and services and applicable payroll costs of employees devoted to specific software development.

The Company calculates depreciation and amortization using the straight-line method over the estimated useful lives of the assets. The useful lives for property, equipment and capitalized software are:

Furniture, fixtures and equipment	3 to 10 years
Buildings	35 to 40 years
Capitalized software	3 to 5 years

Leasehold improvements are depreciated over the shorter of the remaining lease term or their estimated useful economic life.

Goodwill

To determine whether goodwill is impaired, annually or more frequently if needed, the Company performs a multi-step impairment test. The Company may first assess qualitative factors to determine if it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value. The Company may also elect to skip the qualitative testing and proceed directly to the quantitative testing. When performing quantitative testing, the Company first estimates the fair values of its reporting units using discounted cash flows. To determine fair values, the Company must make assumptions about a wide variety of internal and external factors. Significant assumptions used in the impairment analysis include financial projections of free cash flow (including significant assumptions about operations, capital requirements and income taxes), long-term growth rates for determining terminal value and discount rates. Comparative market multiples are used to corroborate the results of the discounted cash flow test. If the fair value is less than the carrying value of the reporting unit, then the implied value of goodwill would be calculated and compared to the carrying amount of goodwill to determine whether goodwill is impaired.

There was no impairment of goodwill during the year ended December 31, 2017.

Intangible Assets

The Company's intangible assets are subject to impairment tests when events or circumstances indicate that an intangible asset (or asset group) may be impaired. The Company's indefinite lived intangible assets are also tested for impairment annually. There was no impairment of intangible assets during the year ended December 31, 2017.

Other Current Liabilities

Other current liabilities include health savings account deposits ($6.4 billion and $5.7 billion as of December 31, 2017 and 2016, respectively), deposits under the Medicare Part D program ($1.6 billion, and $0.7 billion as of

December 31, 2017 and 2016, respectively), the RSF associated with the AARP Program, accruals for premium rebate payments under the ACA, the current portion of future policy benefits and customer balances.

Policy Acquisition Costs

The Company's short duration health insurance contracts typically have a one-year term and may be canceled by the customer with at least 30 days' notice. Costs related to the acquisition and renewal of short duration customer contracts are charged to expense as incurred.

Redeemable Noncontrolling Interests

Redeemable noncontrolling interests in the Company's subsidiaries whose redemption is outside the control of the Company are classified as temporary equity. The following table provides details of the Company's redeemable noncontrolling interests' activity for the years ended December 31, 2017 and 2016:

(in millions)	2017	2016
Redeemable noncontrolling interests, beginning of period	$2,012	$1,736
Net earnings	71	16
Acquisitions	565	34
Redemptions	(309)	(123)
Distributions	(38)	(11)
Fair value and other adjustments	(112)	360
Redeemable noncontrolling interests, end of period	$2,189	$2,012

Share-Based Compensation

The Company recognizes compensation expense for share-based awards, including stock options, stock-settled stock appreciation rights (SARs) and restricted stock and restricted stock units (collectively, restricted shares), on a straight-line basis over the related service period (generally the vesting period) of the award, or to an employee's eligible retirement date under the award agreement, if earlier. Restricted shares vest ratably, primarily over two to five years and compensation expense related to restricted shares is based on the share price on date of grant. Stock options and SARs vest ratably primarily over four years and may be exercised up to 10 years from the date of grant. Compensation expense related to stock options and SARs is based on the fair value at date of grant, which is estimated on the date of grant using a binomial option-pricing model. Under the Company's Employee Stock Purchase Plan (ESPP), eligible employees are allowed to purchase the Company's stock at a discounted price, which is 85% of the lower market price of the Company's common stock at the beginning or at the end of the six-month purchase period. Share-based compensation expense for all programs is recognized in operating costs in the Consolidated Statements of Operations.

Net Earnings Per Common Share

The Company computes basic earnings per common share attributable to UnitedHealth Group common shareholders by dividing net earnings attributable to UnitedHealth Group common shareholders by the weighted-average number of common shares outstanding during the period. The Company determines diluted net earnings per common share attributable to UnitedHealth Group common shareholders using the weighted-average number of common shares outstanding during the period, adjusted for potentially dilutive shares associated with stock options, SARs, restricted shares and the ESPP (collectively, common stock equivalents), using the treasury stock method. The treasury stock method assumes a hypothetical issuance of shares to settle the share-based awards, with the assumed proceeds used to purchase common stock at the average market price for the period. Assumed proceeds include the amount the employee must pay upon exercise and any unrecognized compensation cost. The difference between the number of shares assumed issued and number of shares assumed purchased represents the dilutive shares.

Health Insurance Industry Tax

The ACA includes an annual, nondeductible insurance industry tax (Health Insurance Industry Tax) to be levied proportionally across the insurance industry for risk-based health insurance products.

The Company estimates its liability for the Health Insurance Industry Tax based on a ratio of the Company's applicable net premiums written compared to the U.S. health insurance industry total applicable net premiums, both for the previous calendar year. The Company records in full the estimated liability for the Health Insurance Industry Tax at the beginning of the calendar year with a corresponding deferred cost that is amortized to operating costs on the Consolidated Statements of Operations using a straight-line method over the calendar year. The liability is recorded in accounts payable and accrued liabilities and the corresponding deferred cost is recorded in prepaid expenses and other current assets on the Consolidated Balance Sheets. A provision in the 2016 Federal Budget imposed a one year moratorium for 2017 on the collection of the Health Insurance Industry Tax.

Recently Issued Accounting Standards

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standard Update (ASU) No. 2016-02, "Leases (Topic 842)" (ASU 2016-02). Under ASU 2016-02, an entity will be required to recognize assets and liabilities for the rights and obligations created by leases on the entity's balance sheet for both finance and operating leases. For leases with a term of 12 months or less, an entity may elect to not recognize lease assets and lease liabilities and expense the lease over a straight-line basis for the term of the lease. ASU 2016-02 will require new disclosures that depict the amount, timing and uncertainty of cash flows pertaining to an entity's leases. Companies are currently required to adopt the new standard using a modified retrospective approach for annual and interim periods beginning after December 15, 2018. Early adoption of ASU 2016-02 is permitted. When adopted, the Company does not expect ASU 2016-02 to have a material impact on its results of operations, equity or cash flows. The impact of ASU 2016-02 on the Company's consolidated financial position will be based on leases outstanding at the time of adoption.

In January 2016, the FASB issued ASU 2016-01, "Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities" (ASU 2016-01). The new guidance changes the current accounting related to (i) the classification and measurement of certain equity investments, (ii) the presentation of changes in the fair value of financial liabilities measured under the fair value option that are due to instrument-specific credit risk, and (iii) certain disclosures associated with the fair value of financial instruments. Most notably, ASU 2016-01 requires that equity investments, with certain exemptions, be measured at fair value with changes in fair value recognized in net income as opposed to other comprehensive income. The Company adopted ASU 2016-01 effective January 1, 2018 as required. ASU 2016-01 did not have a material impact on the Company's consolidated financial position, results of operations, equity or cash flows.

Recently Adopted Accounting Standards

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)" as modified by subsequently issued ASUs 2015-14, 2016-08, 2016-10, 2016-12 and 2016-20 (collectively ASU 2014-09). ASU 2014-09 superseded existing revenue recognition standards with a single model unless those contracts are within the scope of other standards (e.g., an insurance entity's insurance contracts). The revenue recognition principle in ASU 2014-09 is that an entity should recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The Company early adopted the new standard effective January 1, 2017, as allowed, using the modified retrospective approach. A significant majority of the Company's revenues are not subject to the new guidance. The adoption of ASU 2014-09 did not have a material impact on the Company's consolidated financial position, results of operations, equity or cash flows as of the adoption date or for the year ended December 31, 2017.

The Company has determined that there have been no other recently adopted or issued accounting standards that had, or will have, a material impact on its Consolidated Financial Statements.

3. Investments

A summary of short-term and long-term investments by major security type is as follows:

(in millions)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2017				
Debt securities — available-for-sale:				
U.S. government and agency obligations	$ 2,673	$ 1	$ (30)	$ 2,644
State and municipal obligations	7,596	99	(35)	7,660
Corporate obligations	13,181	57	(44)	13,194
U.S. agency mortgage-backed securities	3,942	7	(38)	3,911
Non-U.S. agency mortgage-backed securities	1,018	3	(6)	1,015
Total debt securities — available-for-sale	28,410	167	(153)	28,424
Equity securities	2,026	7	(41)	1,992
Debt securities — held-to-maturity:				
U.S. government and agency obligations	254	1	(1)	254
State and municipal obligations	2	—	—	2
Corporate obligations	280	—	—	280
Total debt securities — held-to-maturity	536	1	(1)	536
Total investments	$ 30,972	$ 175	$ (195)	$30,952
December 31, 2016				
Debt securities — available-for-sale:				
U.S. government and agency obligations	$ 2,294	$ 1	$ (31)	$ 2,264
State and municipal obligations	7,120	40	(101)	7,059
Corporate obligations	10,944	41	(58)	10,927
U.S. agency mortgage-backed securities	2,963	7	(43)	2,927
Non-U.S. agency mortgage-backed securities	1,009	3	(10)	1,002
Total debt securities — available-for-sale	24,330	92	(243)	24,179
Equity securities	2,036	52	(47)	2,041
Debt securities — held-to-maturity:				
U.S. government and agency obligations	250	1	—	251
State and municipal obligations	5	—	—	5
Corporate obligations	238	—	—	238
Total debt securities — held-to-maturity	493	1	—	494
Total investments	$ 26,859	$ 145	$ (290)	$26,714

Nearly all of the Company's investments in mortgage-backed securities were rated AAA as of December 31, 2017.

The amortized cost and fair value of debt securities as of December 31, 2017, by contractual maturity, were as follows:

	Available-for-Sale		Held-to-Maturity	
(in millions)	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Due in one year or less	$ 3,630	$ 3,628	$ 155	$ 155
Due after one year through five years	10,658	10,631	131	130
Due after five years through ten years	6,894	6,932	103	103
Due after ten years	2,268	2,307	147	148
U.S. agency mortgage-backed securities	3,942	3,911	—	—
Non-U.S. agency mortgage-backed securities	1,018	1,015	—	—
Total debt securities	$ 28,410	$28,424	$ 536	$ 536

The fair value of available-for-sale investments with gross unrealized losses by major security type and length of time that individual securities have been in a continuous unrealized loss position were as follows:

	Less Than 12 Months		12 Months or Greater		Total	
(in millions)	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
December 31, 2017						
Debt securities — available-for-sale:						
U.S. government and agency obligations	$ 1,249	$ (8)	$1,027	$ (22)	$ 2,276	$ (30)
State and municipal obligations	2,599	(21)	866	(14)	3,465	(35)
Corporate obligations	5,901	(23)	1,242	(21)	7,143	(44)
U.S. agency mortgage-backed securities	1,657	(12)	1,162	(26)	2,819	(38)
Non-U.S. agency mortgage-backed securities	411	(3)	144	(3)	555	(6)
Total debt securities — available-for-sale	$11,817	$ (67)	$4,441	$ (86)	$16,258	$ (153)
Equity securities	$ 97	$ (5)	$ 105	$ (36)	$ 202	$ (41)
December 31, 2016						
Debt securities — available-for-sale:						
U.S. government and agency obligations	$ 1,794	$ (31)	$ —	$ —	$ 1,794	$ (31)
State and municipal obligations	4,376	(101)	—	—	4,376	(101)
Corporate obligations	5,128	(56)	137	(2)	5,265	(58)
U.S. agency mortgage-backed securities	2,247	(40)	79	(3)	2,326	(43)
Non-U.S. agency mortgage-backed securities	544	(7)	97	(3)	641	(10)
Total debt securities — available-for-sale	$14,089	$ (235)	$ 313	$ (8)	$14,402	$ (243)
Equity securities	$ 93	$ (5)	$ 91	$ (42)	$ 184	$ (47)

The Company's unrealized losses from all securities as of December 31, 2017 were generated from approximately 13,000 positions out of a total of 29,000 positions. The Company believes that it will collect the principal and interest due on its debt securities that have an amortized cost in excess of fair value. The unrealized losses were primarily caused by interest rate increases and not by unfavorable changes in the credit quality associated with these securities. At each reporting period, the Company evaluates securities for impairment when the fair value of the investment is less than its amortized cost. The Company evaluated the underlying credit quality and credit ratings of the issuers, noting no significant deterioration since purchase.

As of December 31, 2017, the Company did not have the intent to sell any of the securities in an unrealized loss position. Therefore, the Company believes these losses to be temporary.

The Company's investments in equity securities consist of investments in Brazilian real denominated fixed-income funds, employee savings plan related investments and dividend paying stocks. The Company evaluated its investments in equity securities for severity and duration of unrealized loss, overall market volatility and other market factors. Additionally, as of December 31, 2017, the Company's investments included $898 million of equity method investments in operating businesses in the health care sector.

Net realized gains reclassified out of accumulated other comprehensive income were from the following sources:

	For the Years Ended December 31,		
(in millions)	**2017**	**2016**	**2015**
Total other-than-temporary impairment recognized in earnings	$ (9)	$ (45)	$ (22)
Gross realized losses from sales	(33)	(44)	(28)
Gross realized gains from sales	125	255	191
Net realized gains (included in investment and other income on the Consolidated Statements of Operations)	83	166	141
Income tax effect (included in provision for income taxes on the Consolidated Statements of Operations)	(30)	(60)	(53)
Realized gains, net of taxes	$ 53	$ 106	$ 88

4. Fair Value

Certain assets and liabilities are measured at fair value in the Consolidated Financial Statements or have fair values disclosed in the Notes to the Consolidated Financial Statements. These assets and liabilities are classified into one of three levels of a hierarchy defined by GAAP. In instances in which the inputs used to measure fair value fall into different levels of the fair value hierarchy, the fair value measurement is categorized in its entirety based on the lowest level input that is significant to the fair value measurement in its entirety. The Company's assessment of the significance of a particular item to the fair value measurement in its entirety requires judgment, including the consideration of inputs specific to the asset or liability.

The fair value hierarchy is summarized as follows:

Level 1 — Quoted prices (unadjusted) for identical assets/liabilities in active markets.

Level 2 — Other observable inputs, either directly or indirectly, including:

- Quoted prices for similar assets/liabilities in active markets;
- Quoted prices for identical or similar assets/liabilities in inactive markets (e.g., few transactions, limited information, noncurrent prices, high variability over time);
- Inputs other than quoted prices that are observable for the asset/liability (e.g., interest rates, yield curves, implied volatilities, credit spreads); and
- Inputs that are corroborated by other observable market data.

Level 3 — Unobservable inputs that cannot be corroborated by observable market data.

Transfers between levels, if any, are recorded as of the beginning of the reporting period in which the transfer occurs; there was no transfer between Levels 1, 2 or 3 of any financial assets or liabilities during the year ended December 31, 2017 or 2016.

Nonfinancial assets and liabilities or financial assets and liabilities that are measured at fair value on a nonrecurring basis are subject to fair value adjustments only in certain circumstances, such as when the Company records an impairment. There were no significant fair value adjustments for these assets and liabilities recorded during the year ended December 31, 2017 or 2016.

The following methods and assumptions were used to estimate the fair value and determine the fair value hierarchy classification of each class of financial instrument included in the tables below:

Cash and Cash Equivalents. The carrying value of cash and cash equivalents approximates fair value as maturities are less than three months. Fair values of cash equivalent instruments that do not trade on a regular basis in active markets are classified as Level 2.

Debt and Equity Securities. Fair values of debt and equity securities are based on quoted market prices, where available. The Company obtains one price for each security primarily from a third-party pricing service (pricing service), which generally uses quoted or other observable inputs for the determination of fair value. The pricing service normally derives the security prices through recently reported trades for identical or similar securities, and, if necessary, makes adjustments through the reporting date based upon available observable market information. For securities not actively traded, the pricing service may use quoted market prices of comparable instruments or discounted cash flow analyses, incorporating inputs that are currently observable in the markets for similar securities. Inputs that are often used in the valuation methodologies include, but are not limited to, benchmark yields, credit spreads, default rates, prepayment speeds and nonbinding broker quotes. As the Company is responsible for the determination of fair value, it performs quarterly analyses on the prices received from the pricing service to determine whether the prices are reasonable estimates of fair value. Specifically, the Company compares the prices received from the pricing service to prices reported by a secondary pricing source, such as its custodian, its investment consultant and third-party investment advisors. Additionally, the Company compares changes in the reported market values and returns to relevant market indices to test the reasonableness of the reported prices. The Company's internal price verification procedures and reviews of fair value methodology documentation provided by independent pricing services have not historically resulted in adjustment in the prices obtained from the pricing service.

Fair values of debt securities that do not trade on a regular basis in active markets but are priced using other observable inputs are classified as Level 2.

Fair value estimates for Level 1 and Level 2 equity securities are based on quoted market prices for actively traded equity securities and/or other market data for the same or comparable instruments and transactions in establishing the prices.

The fair values of Level 3 investments in venture capital portfolios are estimated using a market valuation technique that relies heavily on management assumptions and qualitative observations. Under the market approach, the fair values of the Company's various venture capital investments are computed using limited quantitative and qualitative observations of activity for similar companies in the current market. The Company's market modeling utilizes, as applicable, transactions for comparable companies in similar industries that also have similar revenue and growth characteristics and preferences in their capital structure. Key significant unobservable inputs in the market technique include implied earnings before interest, taxes, depreciation and amortization (EBITDA) multiples and revenue multiples. Additionally, the fair values of certain of the Company's venture capital securities are based on recent transactions in inactive markets for identical or similar securities. Significant changes in any of these inputs could result in significantly lower or higher fair value measurements.

Throughout the procedures discussed above in relation to the Company's processes for validating third-party pricing information, the Company validates the understanding of assumptions and inputs used in security pricing and determines the proper classification in the hierarchy based on that understanding.

Assets Under Management. Assets under management consists of debt securities and other investments held to fund costs associated with the AARP Program and are priced and classified using the same methodologies as the Company's investments in debt and equity securities.

Long-Term Debt. The fair values of the Company's long-term debt are estimated and classified using the same methodologies as the Company's investments in debt securities.

The following table presents a summary of fair value measurements by level and carrying values for items measured at fair value on a recurring basis in the Consolidated Balance Sheets:

(in millions)	Quoted Prices in Active Markets (Level 1)	Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)	Total Fair and Carrying Value
December 31, 2017				
Cash and cash equivalents	$ 11,718	$ 263	$ —	$11,981
Debt securities — available-for-sale:				
U.S. government and agency obligations	2,428	216	—	2,644
State and municipal obligations	—	7,660	—	7,660
Corporate obligations	65	12,989	140	13,194
U.S. agency mortgage-backed securities	—	3,911	—	3,911
Non-U.S. agency mortgage-backed securities	—	1,015	—	1,015
Total debt securities — available-for-sale	2,493	25,791	140	28,424
Equity securities	1,784	14	194	1,992
Assets under management	1,117	1,984	—	3,101
Total assets at fair value	$ 17,112	$ 28,052	$ 334	$45,498
Percentage of total assets at fair value	38%	61%	1%	100%
December 31, 2016				
Cash and cash equivalents	$ 10,386	$ 44	$ —	$10,430
Debt securities — available-for-sale:				
U.S. government and agency obligations	2,017	247	—	2,264
State and municipal obligations	—	7,059	—	7,059
Corporate obligations	21	10,804	102	10,927
U.S. agency mortgage-backed securities	—	2,927	—	2,927
Non-U.S. agency mortgage-backed securities	—	1,002	—	1,002
Total debt securities — available-for-sale	2,038	22,039	102	24,179
Equity securities	1,591	13	437	2,041
Assets under management	1,064	2,041	—	3,105
Total assets at fair value	$ 15,079	$ 24,137	$ 539	$39,755
Percentage of total assets at fair value	38%	61%	1%	100%

The following table presents a summary of fair value measurements by level and carrying values for certain financial instruments not measured at fair value on a recurring basis in the Consolidated Balance Sheets:

(in millions)	Quoted Prices in Active Markets (Level 1)	Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)	Total Fair Value	Total Carrying Value
December 31, 2017					
Debt securities — held-to-maturity:					
U.S. government and agency obligations	$ 251	$ 3	$ —	$ 254	$ 254
State and municipal obligations	—	—	2	2	2
Corporate obligations	16	1	263	280	280
Total debt securities — held-to-maturity	$ 267	$ 4	$ 265	$ 536	$ 536
Long-term debt and other financing obligations	$ —	$ 34,504	$ —	$34,504	$31,542
December 31, 2016					
Debt securities — held-to-maturity:					
U.S. government and agency obligations	$ 251	$ —	$ —	$ 251	$ 250
State and municipal obligations	—	—	5	5	5
Corporate obligations	20	8	210	238	238
Total debt securities — held-to-maturity	$ 271	$ 8	$ 215	$ 494	$ 493
Long-term debt and other financing obligations	$ —	$ 31,295	$ —	$31,295	$29,337

The carrying amounts reported on the Consolidated Balance Sheets for other current financial assets and liabilities approximate fair value because of their short-term nature. These assets and liabilities are not listed in the table above.

5. Property, Equipment and Capitalized Software

A summary of property, equipment and capitalized software is as follows:

(in millions)	December 31, 2017	December 31, 2016
Land and improvements	$ 405	$ 324
Buildings and improvements	3,664	3,148
Computer equipment	1,829	2,021
Furniture and fixtures	1,208	999
Less accumulated depreciation	(2,488)	(2,621)
Property and equipment, net	4,618	3,871
Capitalized software	3,601	3,158
Less accumulated amortization	(1,206)	(1,128)
Capitalized software, net	2,395	2,030
Total property, equipment and capitalized software, net	$ 7,013	$ 5,901

Depreciation expense for property and equipment for the years ended December 31, 2017, 2016 and 2015 was $799 million, $698 million and $613 million, respectively. Amortization expense for capitalized software for the years ended December 31, 2017, 2016 and 2015 was $550 million, $475 million and $430 million, respectively.

6. Goodwill and Other Intangible Assets

Changes in the carrying amount of goodwill, by reportable segment, were as follows:

(in millions)	UnitedHealthcare	OptumHealth	OptumInsight	OptumRx	Consolidated
Balance at January 1, 2016	$ 22,925	$ 5,660	$ 4,296	$ 11,572	$ 44,453
Acquisitions	526	683	—	1,387	2,596
Foreign currency effects and adjustments, net	403	(21)	153	—	535
Balance at December 31, 2016	23,854	6,322	4,449	12,959	47,584
Acquisitions	690	5,189	1,221	—	7,100
Foreign currency effects and adjustments, net	(60)	(23)	4	(49)	(128)
Balance at December 31, 2017	$ 24,484	$ 11,488	$ 5,674	$ 12,910	$ 54,556

The gross carrying value, accumulated amortization and net carrying value of other intangible assets were as follows:

	December 31, 2017			December 31, 2016		
(in millions)	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Customer-related	$10,832	$ (3,743)	$ 7,089	$10,942	$ (3,416)	$7,526
Trademarks and technology	1,054	(432)	622	720	(323)	397
Trademarks and other indefinite-lived	561	—	561	468	—	468
Other	351	(134)	217	258	(108)	150
Total	$12,798	$ (4,309)	$ 8,489	$12,388	$ (3,847)	$8,541

The acquisition date fair values and weighted-average useful lives assigned to finite-lived intangible assets acquired in business combinations consisted of the following by year of acquisition:

	2017		2016	
(in millions, except years)	Fair Value	Weighted-Average Useful Life	Fair Value	Weighted-Average Useful Life
Customer-related	$324	13 years	$785	17 years
Trademarks and technology	367	11 years	82	4 years
Other	82	6 years	22	5 years
Total acquired finite-lived intangible assets	$773	11 years	$889	16 years

Estimated full year amortization expense relating to intangible assets for each of the next five years ending December 31 is as follows:

(in millions)	
2018	$833
2019	756
2020	665
2021	600
2022	528

Amortization expense relating to intangible assets for the years ended December 31, 2017, 2016 and 2015 was $896 million, $882 million and $650 million, respectively.

7. Medical Costs Payable

The following table shows the components of the change in medical costs payable for the years ended December 31:

(in millions)	2017	2016	2015
Medical costs payable, beginning of period	$ 16,391	$ 14,330	$ 12,040
Acquisitions	83	—	—
Reported medical costs:			
Current year	130,726	117,258	104,195
Prior years	(690)	(220)	(320)
Total reported medical costs	130,036	117,038	103,875
Medical payments:			
Payments for current year	(113,811)	(101,696)	(90,630)
Payments for prior years	(14,828)	(13,281)	(10,955)
Total medical payments	(128,639)	(114,977)	(101,585)
Medical costs payable, end of period	$ 17,871	$ 16,391	$ 14,330

For the year ended December 31, 2017, medical cost reserve development was primarily driven by lower than expected health system utilization levels. For the years ended December 31, 2016 and 2015, no individual factors were significant.

Medical costs payable included IBNR of $12.3 billion and $11.6 billion at December 31, 2017 and 2016, respectively. Substantially all of the IBNR balance as of December 31, 2017 relates to the current year. The following is information about incurred and paid medical cost development as of December 31, 2017:

(in millions)	Net Incurred Medical Costs For the Years ended December 31,	
Year	2016	2017
2016	$ 117,258	$ 116,622
2017		130,726
Total		$ 247,348

(in millions)	Net Cumulative Medical Payments For the Years ended December 31,	
Year	2016	2017
2016	$ (101,696)	$ (116,187)
2017		(113,811)
Total		(229,998)
Net remaining outstanding liabilities prior to 2016		521
Total medical costs payable		$ 17,871

8. Commercial Paper and Long-Term Debt

Commercial paper and senior unsecured long-term debt consisted of the following:

(in millions, except percentages)	December 31, 2017			December 31, 2016		
	Par Value	Carrying Value	Fair Value	Par Value	Carrying Value	Fair Value
Commercial paper	$ 150	$ 150	$ 150	$ 3,633	$ 3,633	$ 3,633
Floating rate notes due January 2017	—	—	—	750	750	750
6.000% notes due June 2017	—	—	—	441	446	450
1.450% notes due July 2017	—	—	—	750	750	751
1.400% notes due October 2017	—	—	—	625	624	626
6.000% notes due November 2017	—	—	—	156	159	163
1.400% notes due December 2017	—	—	—	750	751	750
6.000% notes due February 2018	1,100	1,101	1,106	1,100	1,107	1,153
1.900% notes due July 2018	1,500	1,499	1,501	1,500	1,496	1,507
1.700% notes due February 2019	750	749	747	750	748	748
1.625% notes due March 2019	500	501	497	500	501	498
2.300% notes due December 2019	500	495	501	500	498	504
2.700% notes due July 2020	1,500	1,496	1,517	1,500	1,495	1,523
Floating rate notes due October 2020	300	299	300	—	—	—
3.875% notes due October 2020	450	446	467	450	450	474
1.950% notes due October 2020	900	895	892	—	—	—
4.700% notes due February 2021	400	403	425	400	409	433
2.125% notes due March 2021	750	746	744	750	745	741
3.375% notes due November 2021	500	493	516	500	497	519
2.875% notes due December 2021	750	741	760	750	748	760
2.875% notes due March 2022	1,100	1,054	1,114	1,100	1,057	1,114
3.350% notes due July 2022	1,000	996	1,033	1,000	995	1,030
2.375% notes due October 2022	900	893	891	—	—	—
0.000% notes due November 2022	15	12	12	15	11	12
2.750% notes due February 2023	625	606	626	625	609	622
2.875% notes due March 2023	750	762	759	750	771	753
3.750% notes due July 2025	2,000	1,987	2,108	2,000	1,986	2,070
3.100% notes due March 2026	1,000	995	1,007	1,000	994	986
3.450% notes due January 2027	750	745	776	750	745	762
3.375% notes due April 2027	625	618	642	—	—	—
2.950% notes due October 2027	950	937	947	—	—	—
4.625% notes due July 2035	1,000	991	1,165	1,000	991	1,090
5.800% notes due March 2036	850	837	1,105	850	837	1,034
6.500% notes due June 2037	500	491	698	500	491	643
6.625% notes due November 2037	650	641	923	650	640	850
6.875% notes due February 2038	1,100	1,075	1,596	1,100	1,075	1,497
5.700% notes due October 2040	300	296	389	300	296	366
5.950% notes due February 2041	350	345	466	350	345	437
4.625% notes due November 2041	600	588	685	600	588	634
4.375% notes due March 2042	502	483	555	502	483	509
3.950% notes due October 2042	625	607	650	625	606	609
4.250% notes due March 2043	750	734	822	750	734	765
4.750% notes due July 2045	2,000	1,972	2,362	2,000	1,972	2,203
4.200% notes due January 2047	750	738	808	750	737	759
4.250% notes due April 2047	725	717	798	—	—	—
3.750% notes due October 2047	950	933	969	—	—	—
Total commercial paper and long-term debt	$31,417	$31,067	$34,029	$33,022	$32,770	$34,728

In 2017, the Company repaid $926 million in debt assumed in connection with an acquisition. The Company's long-term debt obligations also included $625 million and $200 million of other financing obligations, of which $107 million and $80 million were current as of December 31, 2017 and 2016, respectively.

Maturities of commercial paper and long-term debt for the years ending December 31 are as follows:

(in millions)	
2018	$ 2,857
2019	1,850
2020	3,250
2021	2,500
2022	3,115
Thereafter	18,470

Commercial Paper and Revolving Bank Credit Facilities

Commercial paper consists of short-duration, senior unsecured debt privately placed on a discount basis through broker-dealers. As of December 31, 2017, the Company's outstanding commercial paper had a weighted-average annual interest rate of 1.5%.

The Company has $3.0 billion five-year, $3.0 billion three-year and $4.0 billion 364-day revolving bank credit facilities with 26 banks, which mature in December 2022, December 2020 and December 2018, respectively. These facilities provide liquidity support for the Company's commercial paper program and are available for general corporate purposes. As of December 31, 2017, no amounts had been drawn on any of the bank credit facilities. The annual interest rates, which are variable based on term, are calculated based on the London Interbank Offered Rate (LIBOR) plus a credit spread based on the Company's senior unsecured credit ratings. If amounts had been drawn on the bank credit facilities as of December 31, 2017, annual interest rates would have ranged from 2.4% to 2.7%.

Debt Covenants

The Company's bank credit facilities contain various covenants, including requiring the Company to maintain a debt to debt-plus-shareholders' equity ratio of not more than 55%. The Company was in compliance with its debt covenants as of December 31, 2017.

9. Income Taxes

The current income tax provision reflects the tax consequences of revenues and expenses currently taxable or deductible on various income tax returns for the year reported. The deferred income tax provision or benefit generally reflects the net change in deferred income tax assets and liabilities during the year, excluding any deferred income tax assets and liabilities of acquired businesses. The components of the provision for income taxes for the years ended December 31 are as follows:

(in millions)	2017	2016	2015
Current Provision:			
Federal	$3,597	$4,302	$4,109
State and local	314	312	281
Foreign	254	95	46
Total current provision	4,165	4,709	4,436
Deferred (benefit) provision	(965)	81	(73)
Total provision for income taxes	$3,200	$4,790	$4,363

The reconciliation of the tax provision at the U.S. federal statutory rate to the provision for income taxes and the effective tax rate for the years ended December 31 is as follows:

(in millions, except percentages)	2017		2016		2015	
Tax provision at the U.S. federal statutory rate	$ 4,908	35.0%	$4,152	35.0%	$3,581	35.0%
Change in tax law	(1,199)	(8.6)	—	—	—	—
State income taxes, net of federal benefit	197	1.4	205	1.7	145	1.4
Share-based awards — excess tax benefit	(319)	(2.3)	(158)	(1.3)	—	—
Non-deductible compensation	175	1.3	128	1.1	103	1.0
Health insurance industry tax	—	—	645	5.4	627	6.1
Foreign rate differential	(282)	(2.0)	(105)	(0.9)	(34)	(0.3)
Other, net	(280)	(2.0)	(77)	(0.6)	(59)	(0.6)
Provision for income taxes	$ 3,200	22.8%	$4,790	40.4%	$4,363	42.6%

Deferred income tax assets and liabilities are recognized for the differences between the financial and income tax reporting bases of assets and liabilities based on enacted tax rates and laws. The components of deferred income tax assets and liabilities as of December 31 are as follows:

(in millions)	2017	2016
Deferred income tax assets:		
Accrued expenses and allowances	$ 544	$ 820
U.S. federal and state net operating loss carryforwards	216	147
Share-based compensation	97	126
Nondeductible liabilities	169	236
Non-U.S. tax loss carryforwards	445	434
Other-domestic	167	476
Other-non-U.S.	198	175
Subtotal	1,836	2,414
Less: valuation allowances	(64)	(55)
Total deferred income tax assets	1,772	2,359
Deferred income tax liabilities:		
U.S. federal and state intangible assets	(1,998)	(3,055)
Non-U.S. goodwill and intangible assets	(602)	(584)
Capitalized software	(530)	(707)
Depreciation and amortization	(236)	(332)
Prepaid expenses	(223)	(228)
Outside basis in partnerships	(279)	(132)
Other-non-U.S.	(86)	(82)
Total deferred income tax liabilities	(3,954)	(5,120)
Net deferred income tax liabilities	$(2,182)	$(2,761)

On December 22, 2017, the U.S. federal government enacted a tax bill, H.R.1, An Act to Provide for Reconciliation Pursuant to Titles II and V of the Concurrent Resolution on the Budget for Fiscal Year 2018 (Tax Reform). Tax Reform changed existing United States tax law, including a reduction of the U.S. corporate income tax rate. The Company re-measured deferred taxes as of the date of enactment, which resulted in the $1.2 billion reduction of net deferred income tax liabilities. The Company's measurement of the income tax effects of Tax Reform for the year ended December 31, 2017 is reasonably estimated and, therefore, included in these financial statements in accordance with SEC Staff Accounting Bulletin No. 118.

Valuation allowances are provided when it is considered more likely than not that deferred tax assets will not be realized. The valuation allowances primarily relate to future tax benefits on certain federal, state and non-U.S. net operating loss carryforwards. Federal net operating loss carryforwards of $235 million expire beginning in 2022 through 2037; state net operating loss carryforwards expire beginning in 2018 through 2037. Substantially all of the non-U.S. tax loss carryforwards have indefinite carryforward periods.

As of December 31, 2017, the Company's undistributed earnings from non-U.S. subsidiaries are intended to be indefinitely reinvested in non-U.S. operations, and therefore no U.S. deferred taxes have been recorded. Taxes payable on the remittance of such earnings would be minimal.

A reconciliation of the beginning and ending amount of unrecognized tax benefits as of December 31 is as follows:

(in millions)	2017	2016	2015
Gross unrecognized tax benefits, beginning of period	$263	$224	$ 92
Gross increases:			
Current year tax positions	356	37	—
Prior year tax positions	40	24	55
Acquired reserves	—	—	89
Gross decreases:			
Prior year tax positions	(33)	(4)	(2)
Settlements	(24)	(6)	(1)
Statute of limitations lapses	(4)	(12)	(9)
Gross unrecognized tax benefits, end of period	$598	$263	$224

The Company believes it is reasonably possible that its liability for unrecognized tax benefits will decrease in the next twelve months by $210 million as a result of audit settlements and the expiration of statutes of limitations.

The Company classifies interest and penalties associated with uncertain income tax positions as income taxes within its Consolidated Statements of Operations. During the years ended December 31, 2017, 2016 and 2015, the Company recognized $14 million, $11 million and $11 million of interest and penalties, respectively. The Company had $84 million and $70 million of accrued interest and penalties for uncertain tax positions as of December 31, 2017 and 2016, respectively. These amounts are not included in the reconciliation above. As of December 31, 2017, there were $472 million of unrecognized tax benefits that, if recognized, would affect the effective tax rate.

The Company currently files income tax returns in the United States, various states and localities and non-U.S. jurisdictions. The U.S. Internal Revenue Service (IRS) has completed exams on the consolidated income tax returns for fiscal years 2016 and prior. The Company's 2017 tax year is under advance review by the IRS under its Compliance Assurance Program. With the exception of a few states, the Company is no longer subject to income tax examinations prior to the 2011 tax year. In general, the Company is subject to examination in non-U.S. jurisdictions for years 2012 and forward.

10. Shareholders' Equity

Regulatory Capital and Dividend Restrictions

The Company's regulated insurance and HMO subsidiaries in the United States are subject to regulations and standards in their respective jurisdictions. These standards, among other things, require these subsidiaries to maintain specified levels of statutory capital, as defined by each jurisdiction, and restrict the timing and amount of dividends and other distributions that may be paid to their parent companies. In the United States, most of these regulations and standards are generally consistent with model regulations established by the National

Association of Insurance Commissioners. These standards generally permit dividends to be paid from statutory unassigned surplus of the regulated subsidiary and are limited based on the regulated subsidiary's level of statutory net income and statutory capital and surplus. These dividends are referred to as "ordinary dividends" and generally may be paid without prior regulatory approval. If the dividend, together with other dividends paid within the preceding twelve months, exceeds a specified statutory limit or is paid from sources other than earned surplus, it is generally considered an "extraordinary dividend" and must receive prior regulatory approval.

For the year ended December 31, 2017, the Company's regulated subsidiaries paid their parent companies dividends of $3.7 billion, including $1.1 billion of extraordinary dividends. For the year ended December 31, 2016, the Company's regulated subsidiaries paid their parent companies dividends of $3.9 billion, including $3.3 billion of extraordinary dividends.

The Company's regulated subsidiaries had estimated aggregate statutory capital and surplus of $20.7 billion as of December 31, 2017. The estimated statutory capital and surplus necessary to satisfy regulatory requirements of the Company's regulated subsidiaries was approximately $12.2 billion as of December 31, 2017.

Optum Bank must meet minimum requirements for Tier 1 leverage capital, Tier 1 risk-based capital, common equity Tier 1 risk-based capital and total risk-based capital of the Federal Deposit Insurance Corporation (FDIC) to be considered "Well Capitalized" under the capital adequacy rules to which it is subject. At December 31, 2017, the Company believes that Optum Bank met the FDIC requirements to be considered "Well Capitalized."

Share Repurchase Program

Under its Board of Directors' authorization, the Company maintains a share repurchase program. The objectives of the share repurchase program are to optimize the Company's capital structure and cost of capital, thereby improving returns to shareholders, as well as to offset the dilutive impact of share-based awards. Repurchases may be made from time to time in open market purchases or other types of transactions (including prepaid or structured share repurchase programs), subject to certain Board restrictions. In June 2014, the Board renewed the Company's share repurchase program with an authorization to
repurchase up to 100 million shares of its common stock.

A summary of common share repurchases for the years ended December 31, 2017 and 2016 is as follows:

	Years Ended December 31,	
(in millions, except per share data)	**2017**	**2016**
Common share repurchases, shares	9	10
Common share repurchases, average price per share	$173.54	$128.97
Common share repurchases, aggregate cost	$ 1,500	$ 1,280
Board authorized shares remaining	42	51

Dividends

In June 2017, the Company's Board of Directors increased the Company's quarterly cash dividend to shareholders to equal an annual dividend rate of $3.00 per share compared to the annual dividend rate of $2.50 per share, which the Company had paid since June 2016. Declaration and payment of future quarterly dividends is at the discretion of the Board and may be adjusted as business needs or market conditions change.

11. Share-Based Compensation

The Company's outstanding share-based awards consist mainly of non-qualified stock options, SARs and restricted shares. As of December 31, 2017, the Company had 51 million shares available for future grants of share-based awards under the Plan. As of December 31, 2017, there were also 9 million shares of common stock available for issuance under the ESPP.

Stock Options and SARs

Stock option and SAR activity for the year ended December 31, 2017 is summarized in the table below:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life	Aggregate Intrinsic Value
	(in millions)		(in years)	(in millions)
Outstanding at beginning of period	36	$ 84		
Granted	15	111		
Exercised	(12)	55		
Forfeited	(2)	125		
Outstanding at end of period	37	102	6.6	$ 4,443
Exercisable at end of period	16	67	4.8	2,412
Vested and expected to vest, end of period	36	101	6.6	4,363

Restricted Shares

Restricted share activity for the year ended December 31, 2017 is summarized in the table below:

(shares in millions)	Shares	Weighted-Average Grant Date Fair Value per Share
Nonvested at beginning of period	7	$ 96
Granted	3	163
Vested	(3)	84
Nonvested at end of period	7	128

Other Share-Based Compensation Data

	For the Years Ended December 31,		
(in millions, except per share amounts)	2017	2016	2015
Stock Options and SARs			
Weighted-average grant date fair value of shares granted, per share	$ 29	$ 20	$ 22
Total intrinsic value of stock options and SARs exercised	1,473	595	482
Restricted Shares			
Weighted-average grant date fair value of shares granted, per share	163	115	110
Total fair value of restricted shares vested	$ 460	$274	$460
Employee Stock Purchase Plan			
Number of shares purchased	2	2	2
Share-Based Compensation Items			
Share-based compensation expense, before tax	$ 597	$485	$406
Share-based compensation expense, net of tax effects	531	417	348
Income tax benefit realized from share-based award exercises	431	236	247

(in millions, except years)	December 31, 2017
Unrecognized compensation expense related to share awards	$ 593
Weighted-average years to recognize compensation expense	1.3

Share-Based Compensation Recognition and Estimates

The principal assumptions the Company used in calculating grant-date fair value for stock options and SARs were as follows:

	For the Years Ended December 31,		
	2017	2016	2015
Risk-free interest rate	1.9% -2.1%	1.2% -1.4%	1.6% -1.7%
Expected volatility	18.5% -20.7%	20.8% -22.5%	22.3% -24.1%
Expected dividend yield	1.4% - 1.6%	1.8%	1.4% - 1.7%
Forfeiture rate	5.0%	5.0%	5.0%
Expected life in years	5.7	5.6 - 5.9	5.5 - 6.1

Risk-free interest rates are based on U.S. Treasury yields in effect at the time of grant. Expected volatilities are based on the historical volatility of the Company's common stock and the implied volatility from exchange-traded options on the Company's common stock. Expected dividend yields are based on the per share cash dividend paid by the Company. The Company uses historical data to estimate option and SAR exercises and forfeitures within the valuation model. The expected lives of options and SARs granted represents the period of time that the awards granted are expected to be outstanding based on historical exercise patterns.

Other Employee Benefit Plans

The Company offers a 401(k) plan for its employees. Compensation expense related to this plan was not material for 2017, 2016 and 2015.

In addition, the Company maintains non-qualified, deferred compensation plans, which allow certain members of senior management and executives to defer portions of their salary or bonus and receive certain Company contributions on such deferrals, subject to plan limitations. The deferrals are recorded within long-term investments with an approximately equal amount in other liabilities in the Consolidated Balance Sheets. The total deferrals are distributable based upon termination of employment or other periods, as elected under each plan and were $865 million and $672 million as of December 31, 2017 and 2016, respectively.

12. Commitments and Contingencies

The Company leases facilities and equipment under long-term operating leases that are non-cancelable and expire on various dates. Rent expense under all operating leases for the years ended December 31, 2017, 2016 and 2015 was $710 million, $608 million and $555 million, respectively.

As of December 31, 2017, future minimum annual lease payments, net of sublease income, under all non-cancelable operating leases were as follows:

(in millions)	Future Minimum Lease Payments
2018	$ 538
2019	470
2020	414
2021	350
2022	501
Thereafter	809

The Company provides guarantees related to its service level under certain contracts. If minimum standards are not met, the Company may be financially at risk up to a stated percentage of the contracted fee or a stated dollar amount. None of the amounts accrued, paid or charged to income for service level guarantees were material as of December 31, 2017, 2016 or 2015.

As of December 31, 2017, the Company had outstanding, undrawn letters of credit with financial institutions of $72 million and surety bonds outstanding with insurance companies of $1.4 billion, primarily to bond contractual performance.

Pending Acquisition

In December 2017, the Company entered into agreements to acquire two companies in the health care sector for a total of approximately $7.7 billion. One of the acquisitions closed in January 2018; the other is expected to close later in 2018, subject to regulatory approval and other customary closing conditions.

Legal Matters

Because of the nature of its businesses, the Company is frequently made party to a variety of legal actions and regulatory inquiries, including class actions and suits brought by members, care providers, consumer advocacy organizations, customers and regulators, relating to the Company's businesses, including management and administration of health benefit plans and other services. These matters include medical malpractice, employment, intellectual property, antitrust, privacy and contract claims and claims related to health care benefits coverage and other business practices.

The Company records liabilities for its estimates of probable costs resulting from these matters where appropriate. Estimates of costs resulting from legal and regulatory matters involving the Company are inherently difficult to predict, particularly where the matters: involve indeterminate claims for monetary damages or may involve fines, penalties or punitive damages; present novel legal theories or represent a shift in regulatory policy; involve a large number of claimants or regulatory bodies; are in the early stages of the proceedings; or could result in a change in business practices. Accordingly, the Company is often unable to estimate the losses or ranges of losses for those matters where there is a reasonable possibility or it is probable that a loss may be incurred.

Government Investigations, Audits and Reviews

The Company has been involved or is currently involved in various governmental investigations, audits and reviews. These include routine, regular and special investigations, audits and reviews by the CMS, state insurance and health and welfare departments, the Brazilian national regulatory agency for private health insurance and plans (the Agência Nacional de Saúde Suplementar), state attorneys general, the Office of the Inspector General, the Office of Personnel Management, the Office of Civil Rights, the Government Accountability Office, the Federal Trade Commission, U.S. Congressional committees, the U.S. Department of Justice, the SEC, the Internal Revenue Service, the U.S. Drug Enforcement Administration, the Brazilian federal revenue service (the Secretaria da Receita Federal), the U.S. Department of Labor, the Federal Deposit Insurance Corporation, the Defense Contract Audit Agency and other governmental authorities. Certain of the Company's businesses have been reviewed or are currently under review, including for, among other matters, compliance with coding and other requirements under the Medicare risk-adjustment model. CMS has selected certain of the Company's local plans for risk adjustment data validation (RADV) audits to validate the coding practices of and supporting documentation maintained by health care providers and such audits may result in retrospective adjustments to payments made to the Company's health plans.

On February 14, 2017, the Department of Justice (DOJ) announced its decision to pursue certain claims within a lawsuit initially asserted against the Company and filed under seal by a whistleblower in 2011. The whistleblower's complaint, which was unsealed on February 15, 2017, alleges that the Company, along with a number of other Medicare Advantage plans, made improper risk adjustment submissions and violated the False Claims Act. On March 24, 2017, DOJ intervened in a separate lawsuit initially asserted against the Company and filed by a whistleblower in 2009 concerning risk adjustment submissions by Medicare Advantage plans. On October 5, 2017, in one of the cases, the district court dismissed certain of DOJ's claims with prejudice, and

dismissed all of DOJ's remaining claims with leave to file a further amended complaint; on October 12, the DOJ filed a notice of dismissal without prejudice of the case. The other case is now pending in the U.S. District Court for the Central District of California. The Company cannot reasonably estimate the outcome that may result from this remaining matter given its current posture.

13. Segment Financial Information

Factors used to determine the Company's reportable segments include the nature of operating activities, economic characteristics, existence of separate senior management teams and the type of information used by the Company's chief operating decision maker to evaluate its results of operations. Reportable segments with similar economic characteristics, products and services, customers, distribution methods and operational processes that operate in a similar regulatory environment are combined.

The following is a description of the types of products and services from which each of the Company's four reportable segments derives its revenues:

- *UnitedHealthcare* includes the combined results of operations of UnitedHealthcare Employer & Individual, UnitedHealthcare Medicare & Retirement, UnitedHealthcare Community & State and UnitedHealthcare Global. The U.S. businesses share significant common assets, including a contracted network of physicians, health care professionals, hospitals and other facilities, information technology infrastructure and other resources. UnitedHealthcare Employer & Individual offers an array of consumer-oriented health benefit plans and services for large national employers, public sector employers, mid-sized employers, small businesses and individuals nationwide. UnitedHealthcare Medicare & Retirement provides health care coverage and health and well-being services to individuals age 50 and older, addressing their unique needs for preventive and acute health care services as well as services dealing with chronic disease and other specialized issues for older individuals. UnitedHealthcare Community & State's primary customers oversee Medicaid plans, the Children's Health Insurance Program and other federal, state and community health care programs. UnitedHealthcare Global is a diversified global health services business with a variety of offerings, including international commercial health and dental benefits and health care delivery.
- *OptumHealth* serves the physical, emotional and health-related financial needs of individuals, enabling population health management through programs offered by employers, payers, government entities and directly with the care delivery system. OptumHealth offers access to networks of care provider specialists, health management services, care delivery, consumer engagement and financial services.
- *OptumInsight* provides services, technology and health care expertise to major participants in the health care industry. Hospital systems, physicians, health plans, governments, life sciences companies and other organizations that comprise the health care industry depend on OptumInsight to help them improve performance, achieve efficiency, reduce costs, meet compliance mandates and modernize their core operating systems to meet the changing needs of the health system.
- *OptumRx* offers pharmacy care services and programs, including retail network contracting, home delivery and specialty pharmacy services, purchasing and clinical capabilities, and develops programs in areas such as step therapy, formulary management, drug adherence and disease/drug therapy management.

The Company's accounting policies for reportable segment operations are consistent with those described in the Summary of Significant Accounting Policies (see Note 2). Transactions between reportable segments principally consist of sales of pharmacy care products and services to UnitedHealthcare customers by OptumRx, certain product offerings and care management and local care delivery services sold to UnitedHealthcare by OptumHealth, and health information and technology solutions, consulting and other services sold to UnitedHealthcare by OptumInsight. These transactions are recorded at management's estimate of fair value. Intersegment transactions are eliminated in consolidation. Assets and liabilities that are jointly used are assigned to each reportable segment using estimates of pro-rata usage. Cash and investments are assigned such that each reportable segment has working capital and/or at least minimum specified levels of regulatory capital.

As a percentage of the Company's total consolidated revenues, premium revenues from CMS were 28%, 25% and 26% for 2017, 2016 and 2015, respectively, most of which were generated by UnitedHealthcare Medicare & Retirement and included in the UnitedHealthcare segment. U.S. customer revenue represented approximately 96%, 97% and 96% of consolidated total revenues for 2017, 2016 and 2015, respectively. Long-lived fixed assets located in the United States represented approximately 77% and 75% of the total long-lived fixed assets as of December 31, 2017 and 2016, respectively. The non-U.S. revenues and fixed assets are primarily related to UnitedHealthcare Global.

The following table presents the reportable segment financial information:

(in millions)	UnitedHealthcare	Optum: OptumHealth	Optum: OptumInsight	Optum: OptumRx	Optum: Optum Eliminations	Optum: Optum	Corporate and Eliminations	Consolidated
2017								
Revenues — unaffiliated customers:								
Premiums	$ 154,709	$ 3,744	$ —	$ —	$ —	$ 3,744	$ —	$ 158,453
Products	—	44	106	26,216	—	26,366	—	26,366
Services	7,890	4,013	2,849	565	—	7,427	—	15,317
Total revenues — unaffiliated customers	162,599	7,801	2,955	26,781	—	37,537	—	200,136
Total revenues — affiliated customers	—	12,429	5,127	36,954	(1,227)	53,283	(53,283)	—
Investment and other income	658	340	5	20	—	365	—	1,023
Total revenues	$ 163,257	$ 20,570	$ 8,087	$ 63,755	$ (1,227)	$91,185	$ (53,283)	$ 201,159
Earnings from operations	$ 8,498	$ 1,823	$ 1,770	$ 3,118	$ —	$ 6,711	$ —	$ 15,209
Interest expense	—	—	—	—	—	—	(1,186)	(1,186)
Earnings before income taxes	$ 8,498	$ 1,823	$ 1,770	$ 3,118	$ —	$ 6,711	$ (1,186)	$ 14,023
Total assets	$ 76,676	$ 26,931	$ 11,273	$ 29,551	$ —	$67,755	$ (5,373)	$ 139,058
Purchases of property, equipment and capitalized software	737	510	588	188	—	1,286	—	2,023
Depreciation and amortization	758	380	614	493	—	1,487	—	2,245
2016								
Revenues — unaffiliated customers:								
Premiums	$ 140,455	$ 3,663	$ —	$ —	$ —	$ 3,663	$ —	$ 144,118
Products	1	48	103	26,506	—	26,657	—	26,658
Services	7,514	2,498	2,670	554	—	5,722	—	13,236
Total revenues — unaffiliated customers	147,970	6,209	2,773	27,060	—	36,042	—	184,012
Total revenues — affiliated customers	—	10,491	4,559	33,372	(1,088)	47,334	(47,334)	—
Investment and other income	611	208	1	8	—	217	—	828
Total revenues	$ 148,581	$ 16,908	$ 7,333	$ 60,440	$ (1,088)	$83,593	$ (47,334)	$ 184,840
Earnings from operations	$ 7,307	$ 1,428	$ 1,513	$ 2,682	$ —	$ 5,623	$ —	$ 12,930
Interest expense	—	—	—	—	—	—	(1,067)	(1,067)
Earnings before income taxes	$ 7,307	$ 1,428	$ 1,513	$ 2,682	$ —	$ 5,623	$ (1,067)	$ 11,863
Total assets	$ 70,505	$ 18,656	$ 9,017	$ 29,066	$ —	$56,739	$ (4,434)	$ 122,810
Purchases of property, equipment and capitalized software	640	345	571	149	—	1,065	—	1,705
Depreciation and amortization	724	297	559	475	—	1,331	—	2,055
2015								
Revenues — unaffiliated customers:								
Premiums	$ 124,011	$ 3,152	$ —	$ —	$ —	$ 3,152	$ —	$ 127,163
Products	2	31	108	17,171	—	17,310	—	17,312
Services	6,776	2,375	2,390	381	—	5,146	—	11,922
Total revenues — unaffiliated customers	130,789	5,558	2,498	17,552	—	25,608	—	156,397
Total revenues — affiliated customers	—	8,216	3,697	30,718	(791)	41,840	(41,840)	—
Investment and other income	554	153	1	2	—	156	—	710
Total revenues	$ 131,343	$ 13,927	$ 6,196	$ 48,272	$ (791)	$67,604	$ (41,840)	$ 157,107
Earnings from operations	$ 6,754	$ 1,240	$ 1,278	$ 1,749	$ —	$ 4,267	$ —	$ 11,021
Interest expense	—	—	—	—	—	—	(790)	(790)
Earnings before income taxes	$ 6,754	$ 1,240	$ 1,278	$ 1,749	$ —	$ 4,267	$ (790)	$ 10,231
Total assets	$ 64,212	$ 14,600	$ 8,335	$ 26,844	$ —	$49,779	$ (2,737)	$ 111,254
Purchases of property, equipment and capitalized software	653	252	572	79	—	903	—	1,556
Depreciation and amortization	718	251	492	232	—	975	—	1,693

14. Quarterly Financial Data (Unaudited)

Selected quarterly financial information for all quarters of 2017 and 2016 is as follows:

	For the Quarter Ended			
(in millions, except per share data)	**March 31**	**June 30**	**September 30**	**December 31**
2017				
Revenues	$48,723	$50,053	$50,322	$52,061
Operating costs	45,310	46,322	46,234	48,084
Earnings from operations	3,413	3,731	4,088	3,977
Net earnings	2,191	2,350	2,561	3,721
Net earnings attributable to UnitedHealth Group common shareholders	2,172	2,284	2,485	3,617
Net earnings per share attributable to UnitedHealth Group common shareholders:				
Basic	2.28	2.37	2.57	3.73
Diluted	2.23	2.32	2.51	3.65
2016				
Revenues	$44,527	$46,485	$46,293	$47,535
Operating costs	41,567	43,282	42,713	44,348
Earnings from operations	2,960	3,203	3,580	3,187
Net earnings	1,627	1,760	1,978	1,708
Net earnings attributable to UnitedHealth Group common shareholders	1,611	1,754	1,968	1,684
Net earnings per share attributable to UnitedHealth Group common shareholders:				
Basic	1.69	1.84	2.07	1.77
Diluted	1.67	1.81	2.03	1.74

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (Exchange Act) that are designed to provide reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in SEC rules and forms; and (ii) accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

In connection with the filing of this Annual Report on Form 10-K, management evaluated, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2017. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2017.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Management on Internal Control Over Financial Reporting as of December 31, 2017

Management of UnitedHealth Group Incorporated and Subsidiaries (the Company) is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. The Company's internal control system is designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles. The Company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2017. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework (2013).* Based on our assessment and the COSO criteria, we believe that, as of December 31, 2017, the Company maintained effective internal control over financial reporting.

The Company's independent registered public accounting firm has audited the Company's internal control over financial reporting as of December 31, 2017, as stated in the Report of Independent Registered Public Accounting Firm, appearing under Item 9A.

Report of Independent Registered Public Accounting Firm

To the shareholders and the Board of Directors of UnitedHealth Group Incorporated and Subsidiaries:

Opinions on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of UnitedHealth Group Incorporated and subsidiaries (the "Company") as of December 31, 2017, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control – Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2017, of the Company and our report dated February 13, 2018, expressed an unqualified opinion on consolidated financial statements.

Basis for Opinions

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control Over Financial Reporting as of December 31, 2017. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 13, 2018

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

DIRECTORS OF THE REGISTRANT

The following sets forth certain information regarding our directors as of February 13, 2018, including their name and principal occupation or employment:

William C. Ballard, Jr.
Former Of Counsel
Bingham Greenebaum Doll LLP

Richard T. Burke
Lead Independent Director
UnitedHealth Group

Timothy P. Flynn
Retired Chair
KPMG International

Stephen J. Hemsley
Executive Chair
UnitedHealth Group

Michele J. Hooper
President and Chief Executive Officer
The Directors' Council, a company focused on improving the governance processes of corporate boards

Rodger A. Lawson
Executive Chair
E*TRADE Financial Corporation and
Retired President and Chief Executive Officer
Fidelity Investments – Financial Services

Valerie Montgomery Rice, M.D
President and Dean
Morehouse School of Medicine

Glenn M. Renwick
Chair
Fiserv, Inc.

Kenneth I. Shine, M.D.
Professor of Medicine at the Dell Medical School
University of Texas

David S. Wichmann
Chief Executive Officer
UnitedHealth Group

Gail R. Wilensky, Ph.D.
Senior Fellow
Project HOPE, an international health foundation

Andrew P. Witty
Former Chief Executive Officer
GlaxoSmithKline
Chancellor
University of Nottingham

Pursuant to General Instruction G(3) to Form 10-K and Instruction 3 to Item 401(b) of Regulation S-K, information regarding our executive officers is provided in Item 1 of Part I of this Annual Report on Form 10-K under the caption "Executive Officers of the Registrant."

We have adopted a code of ethics applicable to our principal executive officer and other senior financial officers, who include our principal financial officer, principal accounting officer, controller and persons performing similar functions. The code of ethics, entitled Code of Conduct: Our Principles of Ethics and Integrity, is posted on our website at *www.unitedhealthgroup.com*. For information about how to obtain the Code of Conduct, see Part I, Item 1, "Business." We intend to satisfy the SEC's disclosure requirements regarding amendments to, or waivers of, the code of ethics for our senior financial officers by posting such information on our website indicated above.

The remaining information required by Items 401, 405, 406 and 407(c)(3), (d)(4) and (d)(5) of Regulation S-K will be included under the headings "Corporate Governance," "Proposal 1-Election of Directors" and "Section 16(a) Beneficial Ownership Reporting Compliance" in our definitive proxy statement for our 2018 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Items 402, 407(e)(4) and (e)(5) of Regulation S-K will be included under the headings "Executive Compensation," "Director Compensation," "Corporate Governance—Risk Oversight" and "Compensation Committee Interlocks and Insider Participation" in our definitive proxy statement for our 2018 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS

Equity Compensation Plan Information

The following table sets forth certain information, as of December 31, 2017, concerning shares of common stock authorized for issuance under all of our equity compensation plans:

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(in millions)		(in millions)
Equity compensation plans approved by shareholders [1]	35	$ 106	60[3]
Equity compensation plans not approved by shareholders [2]	–	–	–
Total [2]	35	$ 106	60

(1) Consists of the UnitedHealth Group Incorporated 2011 Stock Incentive Plan, as amended and the UnitedHealth Group 1993 ESPP, as amended.

(2) Excludes 2,818,000 shares underlying stock options assumed by us in connection with acquisitions. These options have a weighted-average exercise price of $61 and an average remaining term of approximately 3 years. The options are administered pursuant to the terms of the plan under which the options originally were granted. No future awards will be granted under this acquired plan.

(3) Includes 9 million shares of common stock available for future issuance under the Employee Stock Purchase Plan as of December 31, 2017, and 51 million shares available under the 2011 Stock Incentive Plan as of December 31, 2017. Shares available under the 2011 Stock Incentive Plan may become the subject of future awards in the form of stock options, SARs, restricted stock, restricted stock units, performance awards and other stock-based awards.

The information required by Item 403 of Regulation S-K will be included under the heading "Security Ownership of Certain Beneficial Owners and Management" in our definitive proxy statement for our 2018 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Items 404 and 407(a) of Regulation S-K will be included under the headings "Certain Relationships and Transactions" and "Corporate Governance" in our definitive proxy statement for our 2018 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by Item 9(e) of Schedule 14A will be included under the heading "Disclosure of Fees Paid to Independent Registered Public Accounting Firm" in our definitive proxy statement for our 2018 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) 1. *Financial Statements*

The financial statements are included under Item 8 of this report:

- Reports of Independent Registered Public Accounting Firm.
- Consolidated Balance Sheets as of December 31, 2017 and 2016.
- Consolidated Statements of Operations for the years ended December 31, 2017, 2016, and 2015.
- Consolidated Statements of Comprehensive Income for the years ended December 31, 2017, 2016, and 2015.
- Consolidated Statements of Changes in Equity for the years ended December 31, 2017, 2016, and 2015.
- Consolidated Statements of Cash Flows for the years ended December 31, 2017, 2016, and 2015.
- Notes to the Consolidated Financial Statements.

2. *Financial Statement Schedules*

The following financial statement schedule of the Company is included in Item 15(c):

- Schedule I – Condensed Financial Information of Registrant (Parent Company Only).

All other schedules for which provision is made in the applicable accounting regulations of the SEC are not required under the related instructions, are inapplicable, or the required information is included in the consolidated financial statements, and therefore have been omitted.

(b) The following exhibits are filed or incorporated by reference herein in response to Item 601 of Regulation S-K. The Company files Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K pursuant to the Securities Exchange Act of 1934 under Commission File No. 1-10864.

EXHIBIT INDEX**

3.1	Certificate of Incorporation of UnitedHealth Group Incorporated (incorporated by reference to Exhibit 3.1 to UnitedHealth Group Incorporated's Registration Statement on Form 8-A/A, Commission File No. 1-10864, filed on July 1, 2015)
3.2	Bylaws of UnitedHealth Group Incorporated, effective August 15, 2017 (incorporated by reference to Exhibit 3.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on August 16, 2017)
4.1	Senior Indenture, dated as of November 15, 1998, between United HealthCare Corporation and The Bank of New York (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Registration Statement on Form S-3/A, SEC File Number 333-66013, filed on January 11, 1999)
4.2	Amendment, dated as of November 6, 2000, to Senior Indenture, dated as of November 15, 1998, between the UnitedHealth Group Incorporated and The Bank of New York (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001)

4.3	Instrument of Resignation, Appointment and Acceptance of Trustee, dated January 8, 2007, pursuant to the Senior Indenture, dated as of November 15, 1988, amended as of November 6, 2000, among UnitedHealth Group Incorporated, The Bank of New York and Wilmington Trust Company (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007)
4.4	Indenture, dated as of February 4, 2008, between UnitedHealth Group Incorporated and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Registration Statement on Form S-3, SEC File Number 333-149031, filed on February 4, 2008)
*10.1	UnitedHealth Group Incorporated 2011 Stock Incentive Plan, as amended and restated in 2015 (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on June 5, 2015)
*10.2	Amendment to UnitedHealth Group Incorporated's Stock Option and Stock Appreciation Right Awards, effective November 6, 2014 (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2014)
*10.3	Form of Agreement for Non-Qualified Stock Option Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.4 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.4	Form of Agreement for Non-Qualified Stock Option Award for International Participants under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2013)
*10.5	Form of Addendum for Non-Qualified Stock Option Award Agreement for International Participants under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.37 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2012)
*10.6	Form of Agreement for Restricted Stock Unit Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.5 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.7	Form of Agreement for Restricted Stock Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.5 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
*10.8	Form of Agreement for Stock Appreciation Rights Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.4 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
*10.9	Form of Agreement for Performance-based Restricted Stock Unit Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.6 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.10	Form of Agreement for Initial Deferred Stock Unit Award to Non-Employee Directors under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.7 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
*10.11	Form of Agreement for Deferred Stock Unit Award to Non-Employee Directors under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.6 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)

10.12	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on July 1, 2015)
*10.13	Amended and Restated UnitedHealth Group Incorporated Executive Incentive Plan (2009 Statement), effective as of December 31, 2008 (incorporated by reference to Exhibit 10.12 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.14	Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan, effective as of December 31, 2008 (incorporated by reference to Exhibit 10.13 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.15	Amendment, dated as of December 21, 2012, of Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan (incorporated by reference to Exhibit 10.11 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2012)
*10.16	Second Amendment, dated as of November 5, 2015, of Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.17	UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10(e) of UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2003)
*10.18	First Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 3, 2006)
*10.19	Second Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.13 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2007)
*10.20	Third Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.17 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.21	Fourth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010)
*10.22	Fifth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014)
*10.23	Sixth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.24	Seventh Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.24 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2016)
*10.25	Summary of Non-Management Director Compensation, effective as of August 15, 2017 (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017)

*10.26	UnitedHealth Group Directors' Compensation Deferral Plan (2009 Statement) (incorporated by reference to Exhibit 10.18 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.27	Amendment to the UnitedHealth Group Directors' Compensation Deferral Plan, effective as of January 1, 2010 (incorporated by reference to Exhibit 10.20 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2009)
*10.28	First Amendment to UnitedHealth Group Directors' Compensation Deferral Plan (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010)
*10.29	Catamaran Corporation Third Amended and Restated Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Registration Statement on Form S-8, SEC File Number 333-205824, filed on July 23, 2015)
*10.30	Catalyst Health Solutions, Inc. 2006 Stock Incentive Plan, as amended (incorporated by reference to Exhibit 4.4 to UnitedHealth Group Incorporated's Registration Statement on Form S-8, SEC File Number 333-205824, filed on July 23, 2015)
*10.31	Audax Health Solutions, Inc. 2010 Equity Incentive Plan, as amended (incorporated by reference to Exhibit 4.4 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 to Registration Statement on Form S-8, SEC File Number 333-205826, filed on February 15, 2017)
*10.32	Surgical Care Affiliates, Inc. 2016 Omnibus Long-Term Incentive Plan (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 on Form S-8 to Registration Statement on Form S-4, SEC File Number 333-216153, filed on March 27, 2017)
*10.33	Surgical Care Affiliates, Inc. 2013 Omnibus Long-Term Incentive Plan (incorporated by reference to Exhibit 4.4 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 on Form S-8 to Registration Statement on Form S-4, SEC File Number 333-216153, filed on March 27, 2017)
*10.34	Surgical Care Affiliates, Inc. Management Equity Incentive Plan (incorporated by reference to Exhibit 4.5 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 on Form S-8 to Registration Statement on Form S-4, SEC File Number 333-216153, filed on March 27, 2017)
*10.35	Surgical Care Affiliates, Inc. Directors and Consultants Equity Incentive Plan (incorporated by reference to Exhibit 4.6 to UnitedHealth Group Incorporated's Post-Effective Amendment No. 1 on Form S-8 to Registration Statement on Form S-4, SEC File Number 333-216153, filed on March 27, 2017)
*10.36	The Advisory Board Company Amended and Restated 2009 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to The Advisory Board Company's Current Report on Form 8-K filed on June 15, 2015)
*10.37	The Advisory Board Company 2005 Stock Incentive Plan (incorporated by reference to Exhibit 10.1 to The Advisory Board Company's Current Report on Form 8-K filed on November 17, 2005)
*10.38	Employment Agreement, dated as of November 7, 2006, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 8, 2006)
*10.39	Agreement for Supplemental Executive Retirement Pay, effective April 1, 2004, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10(b) to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2004)
*10.40	Amendment to Agreement for Supplemental Executive Retirement Pay, dated as of November 7, 2006, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit A to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 8, 2006)

*10.41	Amendment to Employment Agreement and Agreement for Supplemental Executive Retirement Pay, effective as of December 31, 2008, between United HealthCare Services, Inc. and Stephen J. Hemsley (incorporated by reference to Exhibit 10.22 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.42	Amendment to Agreement for Supplemental Executive Retirement Pay, dated as of June 7, 2016, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016)
*10.43	Letter Agreement, effective as of February 19, 2008, by and between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.22 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2007)
*10.44	Amendment to Employment Agreement, dated as of December 14, 2010, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on December 15, 2010)
*10.45	Amended and Restated Employment Agreement, effective as of December 1, 2014, between United HealthCare Services, Inc. and David Wichmann (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015)
*10.46	Amendment to Employment Agreement, effective as of August 16, 2017, between United HealthCare Services, Inc. and David Wichmann (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017)
*10.47	Amended and Restated Employment Agreement, effective as of December 1, 2014, between United HealthCare Services, Inc. and Larry Renfro (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015)
*10.48	Amendment to Employment Agreement, effective as of August 15, 2017, between United HealthCare Services, Inc. and Larry Renfro (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017)
*10.49	Employment Agreement, effective as of January 1, 2013, between United HealthCare Services, Inc. and Marianne D. Short (incorporated by reference to Exhibit 10.34 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2013)
*10.50	Amended and Restated Employment Agreement, dated as of June 7, 2016, between United HealthCare Services, Inc. and John Rex (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016)
*10.51	Amended and Restated Employment Agreement, effective as of March 24, 2015, between United HealthCare Services, Inc. and Steven H. Nelson
11.1	Statement regarding computation of per share earnings (incorporated by reference to the information contained under the heading "Net Earnings Per Common Share" in Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements")
12.1	Computation of Ratio of Earnings to Fixed Charges
21.1	Subsidiaries of UnitedHealth Group Incorporated
23.1	Consent of Independent Registered Public Accounting Firm
24.1	Power of Attorney
31.1	Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

32.1	Certifications pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	The following materials from UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2017, filed on February 13, 2018, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statements of Changes in Equity, (v) Consolidated Statements of Cash Flows, and (vi) Notes to the Consolidated Financial Statements.

---

* Denotes management contracts and compensation plans in which certain directors and named executive officers participate and which are being filed pursuant to Item 601(b)(10)(iii)(A) of Regulation S-K.

** Pursuant to Item 601(b)(4)(iii) of Regulation S-K, copies of instruments defining the rights of certain holders of long-term debt are not filed. The Company will furnish copies thereof to the SEC upon request.

(c) Financial Statement Schedule

Schedule I – Condensed Financial Information of Registrant (Parent Company Only).

Schedule I

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of UnitedHealth Group Incorporated and Subsidiaries:

Opinion on the Financial Statement Schedule

We have audited the consolidated financial statements of UnitedHealth Group Incorporated and subsidiaries (the "Company") as of December 31, 2017 and 2016, and for each of the three years in the period ended December 31, 2017, and the Company's internal control over financial reporting as of December 31, 2017, and have issued our reports thereon dated February 13, 2018; such reports are included elsewhere in this Form 10-K. Our audits also included the financial statement schedule of the Company listed in the Index at Item 15. This financial statement schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statement schedule based on our audits. In our opinion, the financial statement schedule, when considered in relation to the consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 13, 2018

Schedule I

Condensed Financial Information of Registrant
(Parent Company Only)
UnitedHealth Group
Condensed Balance Sheets

(in millions, except per share data)	December 31, 2017	December 31, 2016
Assets		
Current assets:		
Cash and cash equivalents	$ 359	$ 180
Short-term notes receivable from subsidiaries	—	755
Other current assets	575	140
Total current assets	934	1,075
Equity in net assets of subsidiaries	76,231	60,593
Long-term notes receivable from subsidiaries	4,278	9,912
Other assets	839	248
Total assets	$ 82,282	$ 71,828
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 502	$ 452
Current portion of notes payable to subsidiaries	466	280
Commercial paper and current maturities of long-term debt	2,749	7,113
Total current liabilities	3,717	7,845
Long-term debt, less current maturities	28,318	25,657
Long-term notes payable to subsidiaries	1,518	—
Other liabilities	953	52
Total liabilities	34,506	33,554
Commitments and contingencies (Note 4)		
Shareholders' equity:		
Preferred stock, $0.001 par value - 10 shares authorized; no shares issued or outstanding	—	—
Common stock, $0.01 par value — 3,000 shares authorized; 969 and 952 issued and outstanding	10	10
Additional paid-in capital	1,703	—
Retained earnings	48,730	40,945
Accumulated other comprehensive loss	(2,667)	(2,681)
Total UnitedHealth Group shareholders' equity	47,776	38,274
Total liabilities and shareholders' equity	$ 82,282	$ 71,828

See Notes to the Condensed Financial Statements of Registrant

Schedule I

Condensed Financial Information of Registrant
(Parent Company Only)
UnitedHealth Group
Condensed Statements of Comprehensive Income

(in millions)	For the Years Ended December 31, 2017	2016	2015
Revenues:			
Investment and other income	$ 527	$ 522	$ 396
Total revenues	527	522	396
Operating costs:			
Operating costs	—	(22)	(17)
Interest expense	1,114	995	717
Total operating costs	1,114	973	700
Loss before income taxes	(587)	(451)	(304)
Benefit for income taxes	214	165	111
Loss of parent company	(373)	(286)	(193)
Equity in undistributed income of subsidiaries	10,931	7,303	6,006
Net earnings	10,558	7,017	5,813
Other comprehensive income (loss)	14	653	(1,942)
Comprehensive income	$10,572	$ 7,670	$ 3,871

See Notes to the Condensed Financial Statements of Registrant

Schedule I

Condensed Financial Information of Registrant
(Parent Company Only)
UnitedHealth Group
Condensed Statements of Cash Flows

(in millions)	For the Years Ended December 31, 2017	2016	2015
Operating activities			
Cash flows from operating activities	$ 2,021	$ 4,294	$ 1,727
Investing activities			
Repayments (issuances) of notes to subsidiaries	2,071	(824)	(5,064)
Cash paid for acquisitions	(2,313)	(2,292)	(12,270)
Return of capital to parent company	3,375	2,143	4,375
Capital contributions to subsidiaries	(959)	(765)	(1,109)
Other, net	—	168	140
Cash flows from (used for) investing activities	2,174	(1,570)	(13,928)
Financing activities			
Common stock repurchases	(1,500)	(1,280)	(1,200)
Proceeds from common stock issuances	688	429	402
Cash dividends paid	(2,773)	(2,261)	(1,786)
(Repayments of) proceeds from commercial paper, net	(3,508)	(382)	3,666
Proceeds from issuance of long-term debt	5,291	3,968	11,982
Repayments of long-term debt	(3,472)	(2,596)	(1,041)
Proceeds (repayments) of notes from subsidiary	1,704	(30)	95
Other, net	(446)	(421)	(447)
Cash flows (used for) from financing activities	(4,016)	(2,573)	11,671
Increase (decrease) in cash and cash equivalents	179	151	(530)
Cash and cash equivalents, beginning of period	180	29	559
Cash and cash equivalents, end of period	$ 359	$ 180	$ 29
Supplemental cash flow disclosures			
Cash paid for interest	$ 1,062	$ 974	$ 573
Cash paid for income taxes	3,455	4,557	4,294
Supplemental schedule of non-cash investing activities			
Common stock issued for acquisitions	$ 2,164	$ —	$ —
Conversion of note receivable from subsidiaries to equity	4,378	—	—

See Notes to the Condensed Financial Statements of Registrant

Schedule I

Condensed Financial Information of Registrant
(Parent Company Only)
UnitedHealth Group
Notes to Condensed Financial Statements

1. Basis of Presentation

UnitedHealth Group's parent company financial information has been derived from its consolidated financial statements and should be read in conjunction with the consolidated financial statements included in this Form 10-K. The accounting policies for the registrant are the same as those described in Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

2. Subsidiary Transactions

Investment in Subsidiaries. UnitedHealth Group's investment in subsidiaries is stated at cost plus equity in undistributed earnings of subsidiaries.

Dividends and Capital Distributions. Cash dividends received from subsidiaries and included in Cash Flows from Operating Activities in the Condensed Statements of Cash Flows were $3.4 billion, $3.7 billion and $4.8 billion in 2017, 2016 and 2015, respectively. Additionally, $3.4 billion, $2.1 billion and $4.4 billion in cash were received as a return of capital to the parent company during 2017, 2016 and 2015, respectively.

3. Commercial Paper and Long-Term Debt

Discussion of commercial paper and long-term debt can be found in Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements." Long-term debt obligations of the parent company do not include other financing obligations at subsidiaries that totaled $625 million and $200 million at December 31, 2017 and 2016, respectively.

Maturities of commercial paper and long-term debt for the years ending December 31 are as follows:

(in millions)	
2018	$ 2,750
2019	1,750
2020	3,150
2021	2,400
2022	3,015
Thereafter	18,352

4. Commitments and Contingencies

For a summary of commitments and contingencies, see Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: February 13, 2018

UNITEDHEALTH GROUP INCORPORATED

By /s/ DAVID S. WICHMANN
David S. Wichmann
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ DAVID S. WICHMANN **David S. Wichmann**	Director and Chief Executive Officer (principal executive officer)	February 13, 2018
/s/ JOHN F. REX **John F. Rex**	Executive Vice President and Chief Financial Officer (principal financial officer)	February 13, 2018
/s/ THOMAS E. ROOS **Thomas E. Roos**	Senior Vice President and Chief Accounting Officer (principal accounting officer)	February 13, 2018
* **William C. Ballard, Jr.**	Director	February 13, 2018
* **Richard T. Burke**	Director	February 13, 2018
* **Timothy P. Flynn**	Director	February 13, 2018
* **Stephen J. Hemsley**	Director	February 13, 2018
* **Michele J. Hooper**	Director	February 13, 2018
* **Rodger A. Lawson**	Director	February 13, 2018
* **Valerie Montgomery Rice**	Director	February 13, 2018
* **Glenn M. Renwick**	Director	February 13, 2018
* **Kenneth I. Shine**	Director	February 13, 2018
* **Gail R. Wilensky**	Director	February 13, 2018
* **Andrew P. Witty**	Director	February 13, 2018

*By /s/ MARIANNE D. SHORT
Marianne D. Short,
As Attorney-in-Fact

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2016

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission file number: 1-10864

UNITEDHEALTH GROUP®

UnitedHealth Group Incorporated
(Exact name of registrant as specified in its charter)

Delaware	**41-1321939**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
UnitedHealth Group Center **9900 Bren Road East** **Minnetonka, Minnesota**	**55343**
(Address of principal executive offices)	**(Zip Code)**

(952) 936-1300
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

COMMON STOCK, $.01 PAR VALUE	**NEW YORK STOCK EXCHANGE, INC.**
(Title of each class)	**(Name of each exchange on which registered)**

Securities registered pursuant to Section 12(g) of the Act: NONE

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☒

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one)

Large accelerated filer ☒	Accelerated filer ☐
Non-accelerated filer ☐	Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of voting stock held by non-affiliates of the registrant as of June 30, 2016 was $132,269,813,351 (based on the last reported sale price of $141.20 per share on June 30, 2016, on the New York Stock Exchange), excluding only shares of voting stock held beneficially by directors, executive officers and subsidiaries of the registrant.

As of January 31, 2017, there were 951,165,192 shares of the registrant's Common Stock, $.01 par value per share, issued and outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The information required by Part III of this report, to the extent not set forth herein, is incorporated by reference from the registrant's definitive proxy statement relating to its 2017 Annual Meeting of Shareholders. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates.

UNITEDHEALTH GROUP

Table of Contents

PART I

ITEM 1. BUSINESS

INTRODUCTION

Overview

UnitedHealth Group is a diversified health and well-being company dedicated to helping people live healthier lives and helping to make the health system work better for everyone. The terms "we," "our," "us," "its," "UnitedHealth Group," or the "Company" used in this report refer to UnitedHealth Group Incorporated and its subsidiaries.

Through our diversified family of businesses, we leverage core competencies in advanced, enabling technology; health care data, information and intelligence; and clinical care management and coordination to help meet the demands of the health system. These core competencies are deployed within our two distinct, but strategically aligned, business platforms: health benefits operating under UnitedHealthcare and health services operating under Optum.

UnitedHealthcare provides health care benefits to an array of customers and markets. UnitedHealthcare Employer & Individual serves employers ranging from sole proprietorships to large, multi-site and national employers, public sector employers and other individuals. UnitedHealthcare Medicare & Retirement delivers health and well-being benefits for Medicare beneficiaries and retirees. UnitedHealthcare Community & State manages health care benefit programs on behalf of state Medicaid and community programs and their participants. UnitedHealthcare Global includes UnitedHealthcare Brazil, a health care company providing health and dental benefits and hospital and clinical services to employer groups and individuals in Brazil, and other diversified global health businesses.

Optum is a health services business serving the broad health care marketplace, including payers, care providers, employers, governments, life sciences companies and consumers, through its OptumHealth, OptumInsight and OptumRx businesses. These businesses have dedicated units that help improve overall health system performance through optimizing care quality, reducing costs and improving consumer experience and care provider performance leveraging distinctive capabilities in data and analytics, pharmacy care services, population health, health care delivery and health care operations.

Through UnitedHealthcare and Optum, in 2016, we processed more than one half trillion dollars in gross billed charges and we managed more than $200 billion in aggregate health care spending on behalf of the customers and consumers we serve. Our revenues are derived from premiums on risk-based products; fees from management, administrative, technology and consulting services; sales of a wide variety of products and services related to the broad health and well-being industry; and investment and other income. Our two business platforms have four reportable segments:

- UnitedHealthcare, which includes UnitedHealthcare Employer & Individual, UnitedHealthcare Medicare & Retirement, UnitedHealthcare Community & State and UnitedHealthcare Global;
- OptumHealth;
- OptumInsight; and
- OptumRx.

For our financial results and the presentation of certain other financial information by segment, including revenues and long-lived fixed assets by geographic source, see Note 13 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

UnitedHealthcare

Through its health benefits offerings, UnitedHealthcare is enabling better health, helping to control rising health care costs and creating a better health care experience for its customers. UnitedHealthcare's market position is built on:

- strong local market relationships;
- the breadth of product offerings, which are responsive to many distinct market segments in health care;
- service and advanced technology;
- competitive medical and operating cost positions;
- effective clinical engagement;
- extensive expertise in distinct market segments; and
- innovation for customers and consumers.

UnitedHealthcare utilizes Optum's capabilities to help coordinate patient care, improve affordability of medical care, analyze cost trends, manage pharmacy benefits, work with care providers more effectively and create a simpler consumer experience.

In the United States, UnitedHealthcare arranges for discounted access to care through networks that include 1 million physicians and other health care professionals and approximately 6,000 hospitals and other facilities.

UnitedHealthcare is subject to extensive government regulation. See further discussion of our regulatory environment below under "Government Regulation" and in Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

UnitedHealthcare Employer & Individual

UnitedHealthcare Employer & Individual offers an array of consumer-oriented health benefit plans and services nationwide for large national employers, public sector employers, mid-sized employers, small businesses, and individuals. UnitedHealthcare Employer & Individual provides access to medical services for over 30 million people on behalf of our customers and alliance partners. This includes more than 200,000 employer customers across all 50 states. Products are offered through affiliates that are licensed as insurance companies, health maintenance organizations (HMOs), or third-party administrators (TPAs). Large employer groups typically use self-funded arrangements where UnitedHealthcare Employer & Individual earns a service fee. Smaller employer groups and individuals are more likely to purchase risk-based products because they are less willing or unable to bear a greater potential liability for health care expenditures.

Through its risk-based product offerings, UnitedHealthcare Employer & Individual assumes the risk of both medical and administrative costs for its customers in return for a monthly premium, which is typically a fixed rate per individual served for a one-year period. When providing administrative and other management services to customers that elect to self-fund the health care costs of their employees and employees' dependents, UnitedHealthcare Employer & Individual receives a fixed monthly service fee per individual served. These customers retain the risk of financing medical benefits for their employees and employees' dependents, while UnitedHealthcare Employer & Individual provides services such as coordination and facilitation of medical and related services to customers, consumers and health care professionals, administration of transaction processing and access to a contracted network of physicians, hospitals and other health care professionals, including dental and vision.

The consolidated purchasing capacity represented by the individuals served by UnitedHealth Group makes it possible for UnitedHealthcare Employer & Individual to contract for cost-effective access to a large number of conveniently located care professionals and facilities. UnitedHealthcare Employer & Individual has relationships with network care providers that integrate data and analytics, implement value-based payments and care management programs, and enable us to jointly better manage health care across populations.

UnitedHealthcare Employer & Individual typically distributes its products through consultants or direct sales in the larger employer and public sector segments. In the smaller group segment of the commercial marketplace, UnitedHealthcare Employer & Individual's distribution system consists primarily of direct sales and sales through collaboration with brokers and agents. UnitedHealthcare Employer & Individual also distributes products through wholesale agents or agencies that contract with health insurance carriers to distribute individual or group benefits and provide other related services to their customers.

UnitedHealthcare Employer & Individual also distributes its products through professional employer organizations, associations and, increasingly, through both multi-carrier and its own proprietary private exchange marketplaces. Direct-to-consumer sales are supported by participation in multi-carrier health insurance marketplaces for individuals and small groups through exchanges. In 2017, UnitedHealthcare Employer & Individual will participate in individual public exchanges in three states, a reduction from 34 states in 2016.

UnitedHealthcare Employer & Individual's diverse product portfolio offers a continuum of benefit designs, price points and approaches to consumer engagement, which provides the flexibility to meet the coverage needs of employers of all sizes. The market for health benefit products is shifting, with benefit and network offerings shaped, at least in part, by the requirements and effects of the Patient Protection and Affordable Care Act (ACA) and related federal and state regulations, increased employer focus on quality and employee engagement and the urgent need to align the system around value. Cost pressures are stimulating demand for improved health care affordability and more coordinated care. UnitedHealthcare Employer & Individual is responding to this demand with medical network and contracting constructs (such as performance incentives and benefit designs that direct more patients to higher-performing care providers), alternative access to affordable and convenient care (such as through telehealth appointments with registered nurses and physicians) and a consumer-responsive service called Advocate4Me.

UnitedHealthcare Employer & Individual offers affordable products and actionable information to enable better health outcomes and to help employers attract and retain talent. UnitedHealthcare Employer & Individual's major product families include:

Traditional Products. Traditional products include a full range of medical benefits and network options from managed plans, such as Choice and Options PPO, to more traditional indemnity products. The plans offer a full spectrum of covered services, including preventive care, direct access to specialists and catastrophic protection.

Consumer Engagement Products. Consumer engagement products couple plan design with financial accounts to increase individuals' responsibility for their health and well-being. This suite of products includes high-deductible consumer-driven benefit plans, which include health reimbursement accounts (HRAs), health savings accounts (HSAs) and consumer engagement services such as personalized behavioral incentive programs and consumer education. During 2016, more than 40,000 employer-sponsored benefit plans, including nearly 400 employers in the large group self-funded market, purchased HRA or HSA products from us.

Clinical and Pharmacy Products. UnitedHealthcare Employer & Individual offers a comprehensive suite of clinical and pharmacy care services products, which complement its service offerings by improving quality of care, engaging members and providing cost-saving options. All UnitedHealthcare Employer & Individual members are provided access to clinical products that help them make better health care decisions and better use of their medical benefits, which contribute to improved health and lowered medical expenses.

Each medical plan has a core set of clinical programs embedded in the offering, with additional services available depending on offering type (risk-based or self-funded), line of business (e.g., small business, key accounts, public sector, national accounts or individuals) and clinical need. UnitedHealthcare Employer & Individual's clinical programs include:

- wellness programs;
- decision support;

- utilization management;
- case and disease management;
- complex condition management;
- on-site programs, including biometrics and flu shots;
- incentives to reinforce positive behavior change;
- mental health/substance use disorder management; and
- employee assistance programs.

UnitedHealthcare Employer & Individual's comprehensive and integrated pharmaceutical care services promote lower costs by using formulary programs to produce better unit costs, encouraging consumers to use drugs that offer improved value and outcomes, helping consumers take actions to improve their health and supporting the appropriate use of drugs based on clinical evidence through physician and consumer education programs.

Specialty Offerings. UnitedHealthcare Employer & Individual also delivers dental, vision, life, critical illness and disability product offerings through an integrated approach, including a network of more than 20,000 vision offices and more than 80,000 dental offices, in private and retail settings.

UnitedHealthcare Military & Veterans. UnitedHealthcare Military & Veterans is the provider of health care services for nearly 3 million active duty and retired military service members and their families in 21 states under the Department of Defense's (DoD) TRICARE Managed Care Support contract. The contract that began on April 1, 2013 is scheduled to conclude in 2017 and has not been renewed.

UnitedHealthcare Medicare & Retirement

UnitedHealthcare Medicare & Retirement provides health and well-being services to individuals age 50 and older, addressing their unique needs for preventive and acute health care services, as well as services dealing with chronic disease and other specialized issues common among older individuals. UnitedHealthcare Medicare & Retirement is fully dedicated to serving this growing senior market segment, providing products and services in all 50 states, the District of Columbia and most U.S. territories. UnitedHealthcare Medicare & Retirement has distinct pricing, underwriting, clinical program management and marketing capabilities dedicated to health products and services in this market.

UnitedHealthcare Medicare & Retirement offers a selection of products that allow people to obtain the health coverage and services they need as their circumstances change. UnitedHealthcare Medicare & Retirement is positioned to serve seniors who find that affordable, network-based care provided through Medicare Advantage plans meets their unique health care needs. For those who prefer traditional fee-for-service Medicare, UnitedHealthcare Medicare & Retirement offers both Medicare Supplement and Medicare Prescription Drug Benefit (Medicare Part D) prescription drug programs that supplement their government-sponsored Medicare by providing additional benefits and coverage options. Beneficiaries with special needs are served through UnitedHealthcare Medicare & Retirement Dual, Chronic and Institutional Special Needs Plans (SNPs) in many markets. UnitedHealthcare Medicare & Retirement services include care management and clinical management programs, a nurse health line service, 24-hour access to health care information, access to discounted health services from a network of care providers and administrative services.

UnitedHealthcare Medicare & Retirement has extensive distribution capabilities and experience, including direct marketing to consumers on behalf of its key clients: AARP, the nation's largest membership organization dedicated to the needs of people age 50 and over, and state and U.S. government agencies. Products are also offered through employer groups and agent channels.

UnitedHealthcare Medicare & Retirement's major product categories include:

Medicare Advantage. UnitedHealthcare Medicare & Retirement provides health care coverage for seniors and other eligible Medicare beneficiaries primarily through the Medicare Advantage program administered by CMS, including Medicare Advantage HMO plans, preferred provider organization (PPO) plans, Point-of-Service plans, Private-Fee-for-Service plans and SNPs. Under the Medicare Advantage program, UnitedHealthcare Medicare & Retirement provides health insurance coverage in exchange for a fixed monthly premium per member from CMS plus, in some cases, monthly consumer premiums. Premium amounts received from CMS vary based on the geographic areas in which members reside; demographic factors such as age, gender and institutionalized status; and the health status of the individual. Medicare Advantage plans are designed to compete at the local level, taking into account member and care provider preferences, competitor offerings, our quality and cost initiatives, our historical financial results and the long-term payment rate outlook for each geographic area. UnitedHealthcare Medicare & Retirement served 3.6 million people through its Medicare Advantage products as of December 31, 2016.

Built on more than 20 years of experience, UnitedHealthcare Medicare & Retirement's senior-focused care management model operates at a medical cost level below that of traditional Medicare, while helping seniors live healthier lives. Through UnitedHealth Group's HouseCalls program, nurse practitioners performed more than 1 million in-home preventative care visits in 2016 to address unmet care opportunities and close gaps in care. For high-risk patients in certain care settings and programs, UnitedHealthcare Medicare & Retirement uses proprietary, automated medical record software that enables clinical care teams to capture and track patient data and clinical encounters, creating a comprehensive set of care information that bridges across home, hospital and nursing home care settings. Proprietary predictive modeling tools help identify members at high risk and allow care managers to reach out to those members and create individualized care plans that help them obtain the right care, in the right place, at the right time.

Medicare Part D. UnitedHealthcare Medicare & Retirement provides Medicare Part D benefits to beneficiaries throughout the United States and its territories through its Medicare Advantage and stand-alone Medicare Part D plans. The stand-alone Medicare Part D plans address a large spectrum of beneficiaries' needs and preferences for their prescription drug coverage, including low cost prescription options. Each of the plans includes the majority of the drugs covered by Medicare and provides varying levels of coverage to meet the diverse needs of Medicare beneficiaries. As of December 31, 2016, UnitedHealthcare enrolled 8.6 million people in the Medicare Part D programs, including 4.9 million individuals in the stand-alone Medicare Part D plans with the remainder in Medicare Advantage plans incorporating Medicare Part D coverage.

Medicare Supplement. UnitedHealthcare Medicare & Retirement is currently serving 4.7 million seniors nationwide through various Medicare Supplement products in association with AARP. UnitedHealthcare Medicare & Retirement offers a full range of supplemental products at diverse price points. These products cover the various levels of coinsurance and deductible gaps that seniors are exposed to in the traditional Medicare program.

Premium revenues from the Centers for Medicare & Medicaid Services (CMS) represented 25% of UnitedHealth Group's total consolidated revenues for the year ended December 31, 2016, most of which were generated by UnitedHealthcare Medicare & Retirement.

UnitedHealthcare Community & State

UnitedHealthcare Community & State is dedicated to serving state programs that care for the economically disadvantaged, the medically underserved and those without the benefit of employer-funded health care coverage, in exchange for a monthly premium per member from the state program. In some cases, these premiums are subject to experience or risk adjustments. UnitedHealthcare Community & State's primary customers oversee Medicaid plans, Children's Health Insurance Programs (CHIP), SNPs, integrated Medicare-Medicaid plans (MMP) and other federal, state and community health care programs. As of December 31, 2016,

UnitedHealthcare Community & State participated in programs in 24 states and the District of Columbia, and served 5.9 million beneficiaries. The Affordable Care Act provided for optional Medicaid expansion effective January 1, 2014. As of December 31, 2016, UnitedHealthcare Community & State served more than 1 million people through Medicaid expansion programs in 15 states.

States using managed care services for Medicaid beneficiaries select health plans by using a formal bid process or by awarding individual contracts. A number of factors are considered by UnitedHealthcare Community & State when choosing programs for participation, including the state's commitment and consistency of support for its Medicaid managed care program in terms of service, innovation and funding; the eligible population base, both immediate and long term; and the structure of the projected program. UnitedHealthcare Community & State works with its state customers to advocate for actuarially sound rates that are commensurate with medical cost trends.

The primary categories of eligibility for the programs served by UnitedHealthcare Community & State and its participation are:

- Temporary Assistance to Needy Families, primarily women and children – 22 markets;
- CHIP – 21 markets;
- Aged, Blind and Disabled – 20 markets;
- SNP – 15 markets;
- Medicaid Expansion – 15 markets;
- Long-Term Services and Supports – 12 markets;
- childless adult programs for the uninsured – 2 markets;
- other programs (e.g., developmentally disabled, rehabilitative services) – 5 markets; and
- MMP – 2 markets.

These health plans and care programs offered are designed to address the complex needs of the populations they serve, including the chronically ill, those with disabilities and people with a higher risk of medical, behavioral and social conditions. UnitedHealthcare Community & State administers benefits for the unique needs of children, pregnant women, adults, seniors and those who are institutionalized or are nursing home eligible. These individuals often live in areas that are medically underserved and are less likely to have a consistent relationship with the medical community or a care provider. These individuals also tend to face significant social and economic challenges.

UnitedHealthcare Community & State leverages the national capabilities of UnitedHealth Group locally, supporting effective care management, strong regulatory partnerships, greater administrative efficiency, improved clinical outcomes and the ability to adapt to a changing national and local market environment. UnitedHealthcare Community & State coordinates resources among family, physicians, other health care providers, and government and community-based agencies and organizations to facilitate continuous and effective care.

Approximately 75% of the people in state Medicaid programs are served by managed care, but this population represents only 40% of total Medicaid spending. UnitedHealthcare Community & State's business development opportunities include entering fee-for-service markets converting to managed care, which represents a population of nearly 8 million people; and growing in existing managed care markets, including state-carve-ins of populations with more complex needs requiring more sophisticated models of care. This expansion includes integrated management of physical, behavioral, long-term care services and supports and social services by applying strong data analytics and community-based collaboration.

UnitedHealthcare Community & State continues to evolve its clinical model to enhance quality and the clinical experience for the people it serves. The model allows UnitedHealthcare Community & State to quickly identify the people who could benefit most from more highly coordinated care; typically, the 5% of members who are most at risk and drive over 50% of states' medical costs.

UnitedHealthcare Global

UnitedHealthcare Global participates in international markets through national "in country" and cross-border strategic approaches. UnitedHealthcare Global's cross-border health care business provides comprehensive health benefits, care management and care delivery for multinational employers, governments and individuals around the world. UnitedHealthcare Global's goal is to create health care business solutions that are based on local expertise, infrastructure, culture and needs. As of December 31, 2016, UnitedHealthcare Global provided medical benefits to 4.2 million people, principally in Brazil, but also residing in more than 125 other countries.

UnitedHealthcare Brazil. UnitedHealthcare Brazil provides medical and dental benefits to nearly 6 million people. UnitedHealthcare Brazil owns and operates more than 40 acute hospitals and more than 50 specialty, primary care and emergency services clinics across Brazil, principally for the benefit of its members. UnitedHealthcare Brazil's patients are also treated in its contracted provider network of nearly 22,000 physicians and other health care professionals, approximately 1,900 hospitals and nearly 7,000 laboratories and diagnostic imaging centers. UnitedHealthcare Brazil offers a diversified product portfolio with a wide range of product offerings, benefit designs, price points and value, including indemnity products. UnitedHealthcare Brazil's products include various administrative services such as network access and administration, care management and personal health services and claims processing.

Other Global Offerings. UnitedHealthcare Global includes other diversified global health services with a variety of offerings for international customers, including:

- network access and care coordination in the United States and overseas;
- TPA products and services for health plans and TPAs;
- brokerage services;
- practice management services for care providers;
- government and corporate consulting services for improving quality and efficiency; and
- global expatriate insurance solutions.

Optum

Optum is a health services business serving the broad health care marketplace, including:

- Those who need care: the consumers who need the right support, information, resources and products to achieve their health goals.
- Those who provide care: pharmacies, hospitals, physicians, practices and other health care facilities seeking to modernize the health system and support the best possible patient care and experiences.
- Those who pay for care: employers, health plans, and state, federal and municipal agencies devoted to ensuring the populations they sponsor receive high-quality care, administered and delivered efficiently and effectively.
- Those who innovate for care: global life sciences organizations dedicated to developing more effective approaches to care, enabling technologies and medicines that improve care delivery and health outcomes.

Optum operates three reportable segments leveraging distinctive capabilities in data and analytics, pharmacy care services, population health, health care delivery and health care operations:

- OptumHealth focuses on care delivery, care management, wellness and consumer engagement, and health financial services;
- OptumInsight specializes in data and analytics and other health care information technology services, and delivers operational services and support; and
- OptumRx provides pharmacy care services.

OptumHealth

OptumHealth is a diversified health and wellness business serving the physical, emotional and health-related financial needs of 83 million unique individuals. OptumHealth enables population health management through programs offered by employers, payers, government entities and directly with the care delivery system. OptumHealth products and services deliver value by improving quality and patient satisfaction while lowering cost. OptumHealth builds high-performing networks and centers of excellence across the care continuum, by working directly with physicians to advance population health management and by coordinating care for the most medically complex patients.

OptumHealth offers its products on a risk basis, where it assumes responsibility for health care costs in exchange for a monthly premium per individual served, on an administrative fee basis, under which it manages or administers delivery of the products or services in exchange for a fixed monthly fee per individual served, or on a fee-for-service basis, where it delivers medical services to patients in exchange for a contracted fee. For its financial services offerings, OptumHealth charges fees and earns investment income on managed funds.

OptumHealth sells its products primarily through its direct sales force, strategic collaborations and external producers in three markets: employers (which includes the sub-markets of large, mid-sized and small employers), payers (which includes the sub-markets of health plans, TPAs, underwriter/stop-loss carriers and individual market intermediaries) and government entities (which includes states, CMS, DoD, the Veterans Administration and other federal procurement agencies).

OptumHealth serves patients and care providers through its local ambulatory care services business and delivers care through a physician-led, patient-centric and data-driven organization comprised of over 20,000 employed, managed and contracted physicians. OptumHealth also enables care providers' transition from traditional, fee-for-service care delivery to performance-based delivery and payment models that put patient health and outcomes first, such as those emerging through accountable care organizations (ACOs) and local care provider partnerships. Through OptumHealth's strategic partnerships, alliances and ownership arrangements it helps care providers adopt new approaches and technologies that improve the coordination of care across all providers involved in patient care.

MedExpress' nearly 200 neighborhood care centers provide urgent and walk-in care services with a consumer-friendly approach.

The HouseCalls program provides in-home health assessments that engage individuals, understand their health status and needs, and close gaps in care. In 2016, HouseCalls conducted more than 1 million in-home health assessments.

OptumHealth's mobile care delivery business delivers occupational health and medical services to government customers, with a particular focus on the U.S. military.

OptumHealth serves people through population health management services that meet both the preventative care and health intervention needs of consumers across the care continuum — physical health and wellness, mental health, complex medical conditions, disease management, hospitalization and post-acute care. This includes offering access to proprietary networks of provider specialists in many clinical specialties, including behavioral health, organ transplant, chiropractic and physical therapy. OptumHealth engages consumers in managing their health, including guidance, tools and programs that help them achieve their health goals and maintain healthy lifestyles.

Optum Financial Services, through Optum Bank, a wholly-owned subsidiary, serves consumers through over 4.6 million health savings and other accounts with $7 billion in assets under management as of December 31,

2016. During 2016, Optum Bank processed over $100 billion in medical payments to physicians and other health care providers. Organizations across the health system rely on Optum to manage and improve payment flows through its highly automated, scalable, electronic payment systems.

OptumInsight

OptumInsight provides services, technology and health care expertise to major participants in the health care industry. OptumInsight's capabilities are focused on data and analytics, technology and information that help improve the quality of care and drive greater efficiency in the health care system. Hospital systems, physicians, health plans, governments, life sciences companies and other organizations that comprise the health care industry depend on OptumInsight to help them improve performance, achieve efficiency, reduce costs, meet compliance mandates and modernize their core operating systems to meet the changing needs of the health system.

Many of OptumInsight's software and information products and professional services are delivered over extended periods, often several years. OptumInsight maintains an order backlog to track unearned revenues under these long-term arrangements. The backlog consists of estimated revenue from signed contracts, other legally binding agreements and anticipated contract renewals based on historical experience with OptumInsight's customers. OptumInsight's aggregate backlog at December 31, 2016, was $12.6 billion, of which $6.9 billion is expected to be realized within the next 12 months. This includes $4.5 billion related to intersegment agreements, all of which are in the current portion of the backlog. OptumInsight's aggregate backlog at December 31, 2015, was $10.4 billion. OptumInsight cannot provide any assurance that it will be able to realize all of the revenues included in the backlog due to uncertainties with regard to the timing and scope of services and the potential for cancellation, non-renewal or early termination of service arrangements.

OptumInsight's products and services are sold primarily through a direct sales force. OptumInsight's products are also supported and distributed through an array of alliances and business partnerships with other technology vendors, who integrate and interface OptumInsight's products with their applications.

OptumInsight believes it is well positioned to address the needs of four primary market segments: care providers (e.g., physicians and hospital systems), health plans, governments and life sciences companies.

Care Providers. Serving more than four out of five U.S. hospitals and tens of thousands of physicians, OptumInsight assists care providers in meeting their challenge to improve patient outcomes and care amid changing payment models and pressures. OptumInsight brings a broad array of solutions to help care providers meet these challenges, with particular focus on clinical performance and quality improvement, population health management, data management and analytics, revenue management, cost containment, compliance, cloud-enabled collaboration and consumer engagement.

Health Plans. OptumInsight serves approximately 300 health plans through cost-effective, technology-enabled solutions that help them improve efficiency, understand and optimize growth while managing risk, deliver on clinical performance and compliance goals, and build and manage strong networks of care.

Governments. OptumInsight provides services tailored to government payers, including data and analytics technology, claims management and payment accuracy services, and strategic consulting.

Life Sciences. OptumInsight provides services to global life sciences companies. These companies look to OptumInsight for data, analytics and expertise in core areas of health economics and outcomes research, market access consulting, integrated clinical and health care claims data and informatics services, epidemiology and drug safety, and patient reported outcomes.

OptumRx

OptumRx provides a full spectrum of pharmacy care services to more than 65 million people in the United States through its network of more than 67,000 retail pharmacies and multiple home delivery facilities throughout the country. In 2016, OptumRx managed more than $80 billion in pharmaceutical spending, including more than $30 billion in specialty pharmaceutical spending. OptumRx provides retail network contracting, purchasing and clinical capabilities and works with customers to develop an optimal set of programs in areas such as step therapy, formulary management, drug adherence and disease/drug therapy management to achieve a high-quality, low-cost pharmacy offering. OptumRx's comprehensive whole-person approach to pharmacy care services integrates demographic, medical, laboratory, pharmaceutical and other clinical data and applies analytics to drive clinical care insight to support care treatments and compliance, benefiting clients and individuals through enhanced services and cost trend management.

OptumRx provides pharmacy care services to non-affiliated clients, including a number of health plans, large national employer plans, unions and trusts and government entities; as well as a substantial majority of UnitedHealthcare members. Additionally, OptumRx manages specialty pharmacy care services, including patient support and clinical programs designed to ensure quality and deliver value for consumers. OptumRx's distribution system consists primarily of health insurance brokers and other health care consultants and direct sales.

GOVERNMENT REGULATION

Most of our health and well-being businesses are subject to comprehensive federal, state and international laws and regulations. We are regulated by federal, state and international regulatory agencies that generally have discretion to issue regulations and interpret and enforce laws and rules. The regulations can vary significantly from jurisdiction to jurisdiction and the interpretation of existing laws and rules also may change periodically. Domestic and international governments continue to enact and consider various legislative and regulatory proposals that could materially impact certain aspects of the health care system. New laws, regulations and rules, or changes in the interpretation of existing laws, regulations and rules, including as a result of changes in the political climate, could adversely affect our business.

If we fail to comply with, or fail to respond quickly and appropriately to changes in, applicable laws, regulations and rules, our business, results of operations, financial position and cash flows could be materially and adversely affected. See Part I, Item 1A, "Risk Factors" for a discussion of the risks related to our compliance with federal, state and international laws and regulations.

Federal Laws and Regulation

We are subject to various levels of U.S. federal regulation. For example, when we contract with the federal government, we are subject to federal laws and regulations relating to the award, administration and performance of U.S. government contracts. CMS regulates our UnitedHealthcare businesses and certain aspects of our Optum businesses. Payments by CMS to our businesses are subject to regulations, including those governing fee-for-service and the submission of information relating to the health status of enrollees for purposes of determining the amounts of certain payments to us. CMS also has the right to audit our performance to determine our compliance with CMS contracts and regulations and the quality of care we provide to Medicare beneficiaries. Our commercial business is further subject to CMS audits related to medical loss ratios (MLRs), risk adjustment and reinsurance data.

UnitedHealthcare Community & State has Medicaid and CHIP contracts that are subject to federal regulations regarding services to be provided to Medicaid enrollees, payment for those services and other aspects of these programs. There are many regulations affecting Medicare and Medicaid compliance and the regulatory environment with respect to these programs is complex. We are also subject to federal law and regulations

relating to the administration of contracts with federal agencies. Our business is also subject to laws and regulations relating to consumer protection, anti-fraud and abuse, anti-kickbacks, false claims, prohibited referrals, inappropriately reducing or limiting health care services, anti-money laundering, securities and antitrust.

Affordable Care Act. The ACA expanded access to coverage and modified aspects of the commercial insurance market, as well as the Medicaid and Medicare programs, CHIP and other aspects of the health care system.

Among other requirements, the ACA expanded dependent coverage to age 26, expanded benefit requirements, eliminated certain annual and lifetime maximum limits, eliminated certain pre-existing condition limits, required coverage for preventative services without cost to members, required premium rebates if certain MLRs are not satisfied, granted members new and additional appeal rights, created new premium rate review processes, established a system of state and federal exchanges through which consumers can purchase health coverage, imposed new requirements on the format and content of communications (such as explanations of benefits) between health insurers and their members, introduced new risk sharing programs, reduced the Medicare Part D coverage gap and reduced payments to private plans offering Medicare Advantage.

The ACA is affecting how we do business and could impact our results of operations, financial position and cash flows. See also Part I, Item 1A, “Risk Factors” for a discussion of the risks related to the ACA and related matters.

Privacy, Security and Data Standards Regulation. The administrative simplification provisions of the Health Insurance Portability and Accountability Act of 1996, as amended (HIPAA), apply to both the group and individual health insurance markets, including self-funded employee benefit plans. Federal regulations related to HIPAA contain minimum standards for electronic transactions and code sets and for the privacy and security of protected health information.

The Health Information Technology for Economic and Clinical Health Act (HITECH) imposed requirements on uses and disclosures of health information; included contracting requirements for HIPAA business associate agreements; extended parts of HIPAA privacy and security provisions to business associates; added federal data breach notification requirements for covered entities and business associates and reporting requirements to the U.S. Department of Health and Human Services (HHS) and the Federal Trade Commission and, in some cases, to the local media; strengthened enforcement and imposed higher financial penalties for HIPAA violations and, in certain cases, imposed criminal penalties for individuals, including employees. In the conduct of our business, depending on the circumstances, we may act as either a covered entity or a business associate. Federal consumer protection laws may also apply in some instances to privacy and security practices related to personally identifiable information.

The use and disclosure of individually identifiable health data by our businesses is also regulated in some instances by other federal laws, including the Gramm-Leach-Bliley Act (GLBA) or state statutes implementing GLBA. These federal laws and state statutes generally require insurers to provide customers with notice regarding how their non-public personal health and financial information is used and the opportunity to “opt out” of certain disclosures before the insurer shares such information with a third party, and generally require safeguards for the protection of personal information. Neither the GLBA nor HIPAA privacy regulations preempt more stringent state laws and regulations that may apply to us, as discussed below.

ERISA. The Employee Retirement Income Security Act of 1974, as amended (ERISA), regulates how our services are provided to or through certain types of employer-sponsored health benefit plans. ERISA is a set of laws and regulations that is subject to periodic interpretation by the U.S. Department of Labor (DOL) as well as the federal courts. ERISA sets forth standards on how our business units may do business with employers who sponsor employee health benefit plans, particularly those that maintain self-funded plans. Regulations established by the DOL subject us to additional requirements for claims payment and member appeals under health care plans governed by ERISA.

State Laws and Regulation

Health Care Regulation. Our insurance and HMO subsidiaries must be licensed by the jurisdictions in which they conduct business. All of the states in which our subsidiaries offer insurance and HMO products regulate those products and operations. The states require periodic financial reports and establish minimum capital or restricted cash reserve requirements. The National Association of Insurance Commissioners has adopted model regulations that, where implemented by states, require expanded governance practices and risk and solvency assessment reporting. Most states have adopted these or similar measures to expand the scope of regulations relating to corporate governance and internal control activities of HMOs and insurance companies. We are required to maintain a risk management framework and file a confidential self-assessment report with state insurance regulators. Reports are filed annually with Connecticut, our lead regulator, and with New York, as required by that state's regulation. Certain states have also adopted their own regulations for minimum MLRs with which health plans must comply. In addition, a number of state legislatures have enacted or are contemplating significant reforms of their health insurance markets, either independent of or to comply with or be eligible for grants or other incentives in connection with the ACA, which may affect our operations and our financial results.

Health plans and insurance companies are regulated under state insurance holding company regulations. Such regulations generally require registration with applicable state departments of insurance and the filing of reports that describe capital structure, ownership, financial condition, certain intercompany transactions and general business operations. Most state insurance holding company laws and regulations require prior regulatory approval of acquisitions and material intercompany transfers of assets, as well as transactions between the regulated companies and their parent holding companies or affiliates. These laws may restrict the ability of our regulated subsidiaries to pay dividends to our holding companies.

Some of our business activity is subject to other health care-related regulations and requirements, including PPO, Managed Care Organization (MCO), utilization review (UR), TPA, pharmacy care services, durable medical equipment or care provider-related regulations and licensure requirements. These regulations differ from state to state and may contain network, contracting, product and rate, licensing and financial and reporting requirements. There are laws and regulations that set specific standards for delivery of services, appeals, grievances and payment of claims, adequacy of health care professional networks, fraud prevention, protection of consumer health information, pricing and underwriting practices and covered benefits and services. State health care anti-fraud and abuse prohibitions encompass a wide range of activities, including kickbacks for referral of members, billing for unnecessary medical services and improper marketing. Certain of our businesses are subject to state general agent, broker and sales distributions laws and regulations. UnitedHealthcare Community & State and certain of our Optum businesses are subject to regulation by state Medicaid agencies that oversee the provision of benefits to our Medicaid and CHIP beneficiaries and to our dually eligible (for Medicare and Medicaid) beneficiaries. We also contract with state governmental entities and are subject to state laws and regulations relating to the award, administration and performance of state government contracts.

Guaranty Fund Assessments. Under state guaranty association laws, certain insurance companies can be assessed (up to prescribed limits) for certain obligations to the policyholders and claimants of impaired or insolvent insurance companies that write the same line or similar lines of business. Some states have similar laws relating to HMOs and other payers such as consumer operated and oriented plans (co-ops) established under the ACA. Assessments are generally based on a formula relating to our premiums in the state compared to the premiums of other insurers and could be spread out over a period of years. Some states permit member insurers to recover assessments paid through full or partial premium tax offsets or through premiums. Any such assessment could expose our insurance entities and other insurers to the risk of paying a portion of an impaired or insolvent insurance company's claims through state guaranty associations.

Pharmacy Regulation. OptumRx's businesses include home delivery and specialty pharmacies that must be licensed as pharmacies in the states in which they are located. Certain of our home delivery and specialty pharmacies must also register with the U.S. Drug Enforcement Administration (DEA) and individual state controlled substance authorities to dispense controlled substances. In addition to the laws and regulations in the

states where our home delivery and specialty pharmacies are located, laws and regulations in non-resident states where we deliver pharmaceuticals may also apply, including the requirement to register with the board of pharmacy in the non-resident state. These non-resident states generally expect our home delivery and specialty pharmacies to follow the laws of the state in which the pharmacies are located, but some states also require us to comply with the laws of that non-resident state when pharmaceuticals are delivered there. As certain of our home delivery and specialty pharmacies maintain eligibility as Medicare and state Medicaid providers, their participation in the programs requires them to comply with the applicable Medicare and Medicaid provider rules and regulations. Other laws and regulations affecting our home delivery and specialty pharmacies include federal and state statutes and regulations governing the labeling, packaging, advertising and adulteration of prescription drugs and dispensing of controlled substances. See Part I, Item 1A, "Risk Factors" for a discussion of the risks related to our pharmacy care services businesses.

State Privacy and Security Regulations. A number of states have adopted laws and regulations that may affect our privacy and security practices, such as state laws that govern the use, disclosure and protection of social security numbers and sensitive health information or that are designed to implement GLBA or protect credit card account data. State and local authorities increasingly focus on the importance of protecting individuals from identity theft, with a significant number of states enacting laws requiring businesses to notify individuals of security breaches involving personal information. State consumer protection laws may also apply to privacy and security practices related to personally identifiable information, including information related to consumers and care providers. Additionally, different approaches to state privacy and insurance regulation and varying enforcement philosophies in the different states may materially and adversely affect our ability to standardize our products and services across state lines. See Part I, Item 1A, "Risk Factors" for a discussion of the risks related to compliance with state privacy and security regulations.

Corporate Practice of Medicine and Fee-Splitting Laws. Certain of our businesses function as direct medical service providers and, as such, are subject to additional laws and regulations. Some states have corporate practice of medicine laws that prohibit specific types of entities from practicing medicine or employing physicians to practice medicine. Moreover, some states prohibit certain entities from sharing in the fees or revenues of a professional practice (fee-splitting). These prohibitions may be statutory or regulatory, or may be imposed through judicial or regulatory interpretation. The laws, regulations and interpretations in certain states have been subject to limited judicial and regulatory interpretation and are subject to change.

Consumer Protection Laws. Certain of our businesses participate in direct-to-consumer activities and are subject to regulations applicable to on-line communications and other general consumer protection laws and regulations.

Banking Regulation

Optum Bank is subject to regulation by federal banking regulators, including the Federal Deposit Insurance Corporation, which performs annual examinations to ensure that the bank is operating in accordance with federal safety and soundness requirements, and the Consumer Financial Protection Bureau, which may perform periodic examinations to ensure that the bank is in compliance with applicable consumer protection statutes, regulations and agency guidelines. Optum Bank is also subject to supervision and regulation by the Utah State Department of Financial Institutions, which carries out annual examinations to ensure that the bank is operating in accordance with state safety and soundness requirements and performs periodic examinations of the bank's compliance with applicable state banking statutes, regulations and agency guidelines. In the event of unfavorable examination results from any of these agencies, the bank could become subject to increased operational expenses and capital requirements, enhanced governmental oversight and monetary penalties.

International Regulation

Certain of our businesses operate internationally and are subject to regulation in the jurisdictions in which they are organized or conduct business. These regulatory regimes vary from jurisdiction to jurisdiction. In addition, our non-U.S. businesses and operations are subject to U.S. laws that regulate the conduct and activities of U.S.-based businesses operating abroad, such as the Foreign Corrupt Practices Act (FCPA), which prohibits offering,

promising, providing or authorizing others to give anything of value to a foreign government official to obtain or retain business or otherwise secure a business advantage.

COMPETITION

As a diversified health and well-being services company, we operate in highly competitive markets. Our competitors include managed health care companies, insurance companies, HMOs, TPAs and business services outsourcing companies, health care professionals that have formed networks to contract directly with employers or with CMS, specialty benefit providers, government entities, population health management companies and various health information and consulting companies. For our UnitedHealthcare businesses, our competitors include Aetna Inc., Anthem, Inc., Centene Corporation, Cigna Corporation, Humana Inc., Kaiser Permanente, numerous for-profit and not-for-profit organizations operating under licenses from the Blue Cross Blue Shield Association and, with respect to our Brazilian operations, several established competitors in Brazil and other enterprises that serve more limited geographic areas. For our OptumRx businesses, our competitors include CVS Health Corporation, Express Scripts, Inc. and Prime Therapeutics LLC. New entrants into the markets in which we compete, as well as consolidation within these markets, also contribute to a competitive environment. We compete on the basis of the sales, marketing and pricing of our products and services; product innovation; consumer engagement and satisfaction; the level and quality of products and services; care delivery; network and clinical management capabilities; market share; product distribution systems; efficiency of administration operations; financial strength; and marketplace reputation. If we fail to compete effectively to maintain or increase our market share, including by maintaining or increasing enrollments in businesses providing health benefits, our results of operations, financial position and cash flows could be materially and adversely affected. See Part I, Item 1A, “Risk Factors,” for additional discussion of our risks related to competition.

INTELLECTUAL PROPERTY RIGHTS

We have obtained trademark registration for the UnitedHealth Group, UnitedHealthcare and Optum names and logos. We own registrations for certain of our other trademarks in the United States and abroad. We hold a portfolio of patents and have patent applications pending from time to time. We are not substantially dependent on any single patent or group of related patents.

Unless otherwise noted, trademarks appearing in this report are trademarks owned by us. We disclaim any proprietary interest in the marks and names of others.

EMPLOYEES

As of December 31, 2016, we employed more than 230,000 individuals.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following sets forth certain information regarding our executive officers as of February 8, 2017, including the business experience of each executive officer during the past five years:

Name	Age	Position
Stephen J. Hemsley	64	Chief Executive Officer
David S. Wichmann	54	President
Larry C. Renfro	63	Vice Chairman of UnitedHealth Group and Chief Executive Officer of Optum
John F. Rex	54	Executive Vice President and Chief Financial Officer
Thomas E. Roos	44	Senior Vice President and Chief Accounting Officer
Marianne D. Short	65	Executive Vice President and Chief Legal Officer
D. Ellen Wilson	59	Executive Vice President, Human Capital

Our Board of Directors elects executive officers annually. Our executive officers serve until their successors are duly elected and qualified, or until their earlier death, resignation, removal or disqualification.

Mr. Hemsley is Chief Executive Officer of UnitedHealth Group, has served in that capacity since November 2006, and has been a member of the Board of Directors since February 2000. From May 1999 to November 2014, Mr. Hemsley also served as President of UnitedHealth Group.

Mr. Wichmann is President of UnitedHealth Group. Mr. Wichmann has served as President of UnitedHealth Group since November 2014. From January 2011 to June 2016, Mr. Wichmann also served as Chief Financial Officer. From April 2008 to November 2014, Mr. Wichmann also served as Executive Vice President of UnitedHealth Group and President of UnitedHealth Group Operations.

Mr. Renfro is Vice Chairman of UnitedHealth Group and Chief Executive Officer of Optum. Mr. Renfro has served as Vice Chairman of UnitedHealth Group since November 2014 and Chief Executive Officer of Optum since July 2011. From January 2011 to July 2011, Mr. Renfro served as Executive Vice President of UnitedHealth Group.

Mr. Rex is Executive Vice President and Chief Financial Officer of UnitedHealth Group and has served in that capacity since June 2016. From March 2012 to June 2016, Mr. Rex served as Executive Vice President and Chief Financial Officer of Optum. Prior to joining Optum in 2012, Mr. Rex spent over a decade at JP Morgan, a global financial services firm, and its predecessors, concluding his tenure as a Managing Director.

Mr. Roos is Senior Vice President and Chief Accounting Officer of UnitedHealth Group and has served in that capacity since August 2015. Prior to joining UnitedHealth Group, Mr. Roos was a Partner at Deloitte & Touche LLP, an independent registered accounting firm, from September 2007 to August 2015.

Ms. Short is Executive Vice President and Chief Legal Officer of UnitedHealth Group and has served in that capacity since January 2013. Prior to joining UnitedHealth Group, Ms. Short served as the Managing Partner at Dorsey & Whitney LLP, an international law firm, from January 2007 to December 2012.

Ms. Wilson is Executive Vice President, Human Capital of UnitedHealth Group and has served in that capacity since June 2013. From January 2012 to May 2013, Ms. Wilson served as Chief Administrative Officer of Optum. Prior to joining Optum, Ms. Wilson served for 17 years at Fidelity Investments concluding her tenure there as head of Human Resources.

Additional Information

UnitedHealth Group Incorporated was incorporated in January 1977 in Minnesota. On July 1, 2015, UnitedHealth Group Incorporated changed its state of incorporation from Minnesota to Delaware pursuant to a plan of conversion. Our executive offices are located at UnitedHealth Group Center, 9900 Bren Road East, Minnetonka, Minnesota 55343; our telephone number is (952) 936-1300.

You can access our website at *www.unitedhealthgroup.com* to learn more about our Company. From that site, you can download and print copies of our annual reports to shareholders, annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, along with amendments to those reports. You can also download from our website our certificate of incorporation, bylaws and corporate governance policies, including our Principles of Governance, Board of Directors Committee Charters and Code of Conduct. We make periodic reports and amendments available, free of charge, as soon as reasonably practicable after we file or furnish these reports to the Securities and Exchange Commission (SEC). We will also provide a copy of any of our corporate governance policies published on our website free of charge, upon request. To request a copy of any of these documents, please submit your request to: UnitedHealth Group Incorporated, 9900 Bren Road East, Minnetonka, MN 55343, Attn: Corporate Secretary. Information on or linked to our website is neither part of nor incorporated by reference into this Annual Report on Form 10-K or any other SEC filings.

Our transfer agent, Wells Fargo Shareowner Services, can help you with a variety of shareholder-related services, including change of address, lost stock certificates, transfer of stock to another person and other administrative services. You can write to our transfer agent at: Wells Fargo Shareowner Services, P.O. Box 64854, St. Paul, Minnesota 55164-0854, email *stocktransfer@wellsfargo.com*, or telephone (800) 468-9716 or (651) 450-4064.

ITEM 1A. RISK FACTORS

CAUTIONARY STATEMENTS

The statements, estimates, projections or outlook contained in this Annual Report on Form 10-K include forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 (PSLRA). When used in this Annual Report on Form 10-K and in future filings by us with the SEC, in our news releases, presentations to securities analysts or investors, and in oral statements made by or with the approval of one of our executive officers, the words "believe," "expect," "intend," "estimate," "anticipate," "forecast," "outlook," "plan," "project," "should" or similar words or phrases are intended to identify such forward-looking statements. These statements are intended to take advantage of the "safe harbor" provisions of the PSLRA. These forward-looking statements involve risks and uncertainties that may cause our actual results to differ materially from the expectations expressed or implied in the forward-looking statements. Any forward-looking statement speaks only as of the date of this report and, except as required by law; we undertake no obligation to update any forward-looking statement to reflect events or circumstances, including unanticipated events, after the date of this report.

The following discussion contains cautionary statements regarding our business that investors and others should consider. We do not undertake to address in future filings or communications regarding our business or results of operations how any of these factors may have caused our results to differ from discussions or information contained in previous filings or communications. In addition, any of the matters discussed below may have affected past, as well as current, forward-looking statements about future results. Any or all forward-looking statements in this Annual Report on Form 10-K and in any other public filings or statements we make may turn out to be wrong. Our forward-looking statements can be affected by inaccurate assumptions we might make or by known or unknown risks and uncertainties. Many factors discussed below will be important in determining our future results. By their nature, forward-looking statements are not guarantees of future performance or results and are subject to risks, uncertainties and assumptions that are difficult to predict or quantify.

If we fail to estimate, price for and manage our medical costs in an effective manner, the profitability of our risk-based products and services could decline and could materially and adversely affect our results of operations, financial position and cash flows.

Through our risk-based benefit products, we assume the risk of both medical and administrative costs for our customers in return for monthly premiums. Premium revenues from risk-based benefits products comprise nearly 80% of our total consolidated revenues. We generally use approximately 80% to 85% of our premium revenues to pay the costs of health care services delivered to these customers. The profitability of our products depends in large part on our ability to predict, price for, and effectively manage medical costs. In this regard, federal and state regulatory requirements obligate our commercial, Medicare Advantage and certain state-based Medicaid health plans to maintain minimum MLRs, which could make it more difficult for us to obtain price increases for our products. In addition, our OptumHealth business negotiates capitation arrangements with commercial third-party payers. Under the typical capitation arrangement, the health care provider receives a fixed percentage of a third-party payer's premiums to cover all or a defined portion of the medical costs provided to the capitated member. If we fail to predict accurately, price for or manage the costs of providing care to our capitated members, our results of operations could be materially and adversely affected.

We manage medical costs through underwriting criteria, product design, negotiation of favorable provider contracts and care management programs. Total medical costs are affected by the number of individual services rendered, the cost of each service and the type of service rendered. Our premium revenue on commercial policies is typically at a fixed monthly rate per individual served for a 12-month period and is generally priced one to six

months before the contract commences. Our revenue on Medicare policies is based on bids submitted in June the year before the contract year. Although we base the premiums we charge and our Medicare bids on our estimates of future medical costs over the fixed contract period, many factors may cause actual costs to exceed those estimated and reflected in premiums or bids. These factors may include medical cost inflation, increased use of services, increased cost of individual services, natural catastrophes or other large-scale medical emergencies, epidemics, the introduction of new or costly drugs, treatments and technology, new mandated benefits (such as the expansion of essential benefits coverage) or other regulatory changes and insured population characteristics. Relatively small differences between predicted and actual medical costs or utilization rates as a percentage of revenues can result in significant changes in our financial results. For example, if our 2016 medical costs for commercial insured products were 1% higher, without proportionally higher revenues from such products, our annual net earnings for 2016 would have been reduced by approximately $240 million, excluding any offsetting impact from risk adjustment, reinsurance or from reduced premium rebates due to minimum MLRs.

In addition, the financial results we report for any particular period include estimates of costs that have been incurred for which claims are still outstanding. These estimates involve an extensive degree of judgment. If these estimates prove inaccurate, our results of operations could be materially and adversely affected.

Our business activities are highly regulated and new laws or regulations or changes in existing laws or regulations or their enforcement or application could materially and adversely affect our business.

We are regulated by federal, state and local governments in the United States and other countries where we do business. Our insurance and HMO subsidiaries must be licensed by and are subject to regulation in the jurisdictions in which they conduct business. For example, states require periodic financial reports and enforce minimum capital or restricted cash reserve requirements. Health plans and insurance companies are also regulated under state insurance holding company regulations and some of our activities may be subject to other health care-related regulations and requirements, including those relating to PPOs, MCOs, UR and TPA-related regulations and licensure requirements. Some of our UnitedHealthcare and Optum businesses hold or provide services related to government contracts and are subject to U.S. federal and state and non-U.S. self-referral, anti-kickback, medical necessity, risk adjustment, false claims and other laws and regulations governing government contractors and the use of government funds. In addition, under state guaranty association laws, certain insurance companies can be assessed (up to prescribed limits) for certain obligations to the policyholders and claimants of impaired or insolvent insurance companies that write the same line or similar lines of business. Some states have similar laws relating to HMOs and other payers such as consumer operated and oriented plans (co-ops) established under the ACA. Any such assessment could expose our insurance entities and other insurers to the risk of paying a portion of an impaired or insolvent insurance company’s claims through state guaranty associations.

Certain of our businesses provide products or services to various government agencies. Our relationships with these government agencies are subject to the terms of contracts that we hold with the agencies and to laws and regulations regarding government contracts. Among others, certain laws and regulations restrict or prohibit companies from performing work for government agencies that might be viewed as an actual or potential conflict of interest. These laws may limit our ability to pursue and perform certain types of work, thereby materially and adversely affecting our results of operations, financial position and cash flows.

Certain of our Optum businesses are also subject to regulations, which are distinct from those faced by our insurance and HMO subsidiaries, including, for example, state telemedicine regulations, debt collection laws, banking regulations, distributor and producer licensing requirements, state corporate practice of medicine doctrines, fee-splitting rules, health care facility licensure and certificate of need requirements, some of which could impact our relationships with physicians, hospitals and customers. These risks and uncertainties may materially and adversely affect our ability to market our products and services, or to do so at targeted margins, or may increase the regulatory burdens under which we operate.

The laws and rules governing our business and interpretations of those laws and rules are subject to frequent change, and the integration into our businesses of entities that we acquire may affect the way in which existing

laws and rules apply to us, including subjecting us to laws and rules that did not previously apply to us. The broad latitude given to the agencies administering, interpreting and enforcing current and future regulations governing our business could force us to change how we do business, restrict revenue and enrollment growth, increase our health care and administrative costs and capital requirements, or expose us to increased liability in courts for coverage determinations, contract interpretation and other actions.

We must also obtain and maintain regulatory approvals to market many of our products and services, increase prices for certain regulated products and services and complete certain acquisitions and dispositions or integrate certain acquisitions. For example, premium rates for our health insurance and managed care products are subject to regulatory review or approval in many states and by the federal government. Additionally, we must submit data on all proposed rate increases to HHS for monitoring purposes on many of our products. Geographic and product expansions may be subject to state and federal regulatory approvals. Delays in obtaining necessary approvals or our failure to obtain or maintain adequate approvals could materially and adversely affect our results of operations, financial position and cash flows.

Certain of our businesses operate internationally and are subject to regulation in the jurisdictions in which they are organized or conduct business. These regulatory regimes encompass, among other matters, local and cross-border taxation, licensing, tariffs, intellectual property, investment, capital (including minimum solvency margin and reserve requirements), management control, labor, anti-fraud, anti-corruption and privacy and data protection regulations (including requirements for cross-border data transfers) that vary by jurisdiction. We currently operate outside of the United States and in the future may acquire or commence additional businesses based outside of the United States, increasing our exposure to non-U.S. regulatory regimes. For example, our UnitedHealthcare Brazil business subjects us to Brazilian laws and regulations affecting hospitals, managed care and insurance industries and to regulation by Brazilian regulators, including the national regulatory agency for private health insurance and plans, the Agência Nacional de Saúde Suplementar, whose approach to the interpretation, implementation and enforcement of industry regulations could differ from the approach taken by U.S. regulators. In addition, our non-U.S. businesses and operations are subject to U.S. laws that regulate the conduct and activities of U.S.-based businesses operating abroad, such as the FCPA, which prohibits offering, promising, providing or authorizing others to give anything of value to a foreign government official to obtain or retain business or otherwise secure a business advantage. Our failure to comply with U.S. or non-U.S. laws and regulations governing our conduct outside the United States or to establish constructive relations with non-U.S. regulators could adversely affect our ability to market our products and services, or to do so at targeted operating margins, which may have a material adverse effect on our business, financial condition and results of operations.

The health care industry is also regularly subject to negative publicity, including as a result of governmental investigations, adverse media coverage and political debate surrounding industry regulation. Negative publicity may adversely affect our stock price and damage our reputation in various markets.

The ACA could materially and adversely affect the manner in which we conduct business and our results of operations, financial position and cash flows.

Due to its complexity and continued uncertainty, the ACA's impact remains difficult to predict and could adversely affect us. The ACA includes specific reforms for the individual and small group marketplace, including guaranteed availability of coverage, adjusted community rating requirements (which include elimination of health status and gender rating factors), essential health benefit requirements (resulting in benefit changes for many members) and actuarial value requirements resulting in expanded benefits or reduced member cost sharing (or a combination of both) for many policyholders. In addition, if we do not maintain certain MLRs, we are required to rebate ratable portions of our premiums to our customers. These requirements can cause significant disruptions in local health care markets and adjustments to our business, all of which could materially and adversely affect our results of operations, financial position and cash flows.

Our results of operations, financial position and cash flows could be materially and adversely affected if the number of individuals who gain coverage under the ACA varies from our expectations, if the demand for the ACA related products and capabilities offered by our Optum businesses is less than anticipated or if our costs are greater than anticipated.

The Trump Administration and Congressional Leaders have expressed their intentions to repeal and replace the ACA. We cannot predict if the ACA will be modified, repealed or replaced, but changes to this law could materially impact our operating results, require us to revise the ways in which we conduct business or put us at risk for loss of business.

As a result of our participation in various government health care programs, both as a payer and as a service provider to payers, we are exposed to additional risks associated with program funding, enrollments, payment adjustments, audits and government investigations that could materially and adversely affect our business, results of operations, financial position and cash flows.

We participate in various federal, state and local government health care benefit programs, including as a payer in Medicare Advantage, Medicare Part D, various Medicaid programs, CHIP and our TRICARE contract with the DoD, and receive substantial revenues from these programs. Certain of our Optum businesses also provide services to payers participating in government health care programs. A reduction or less than expected increase, or a protracted delay, in government funding for these programs or change in allocation methodologies, or, as is a typical feature of many government contracts, termination of the contract at the option of the government, may materially and adversely affect our results of operations, financial position and cash flows.

The government health care programs in which we participate generally are subject to frequent changes, including changes that may reduce the number of persons enrolled or eligible for coverage, reduce the amount of reimbursement or payment levels, reduce our participation in certain service areas or markets, or increase our administrative or medical costs under such programs. Revenues for these programs depend on periodic funding from the federal government or applicable state governments and allocation of the funding through various payment mechanisms. Funding for these government programs depends on many factors outside of our control, including general economic conditions and budgetary constraints at the federal or applicable state level. For example CMS has in the past reduced or frozen Medicare Advantage benchmarks, and additional cuts to Medicare Advantage benchmarks are possible. In addition, from time to time, CMS makes changes to the way it calculates Medicare Advantage risk adjustment payments. Although we have adjusted members' benefits and premiums on a selective basis, ceased to offer benefit plans in certain counties, and intensified both our medical and operating cost management in response to the benchmark reductions and other funding pressures, these or other strategies may not fully address the funding pressures in the Medicare Advantage program. In addition, payers in the Medicare Advantage program may be subject to reductions in payments from CMS as a result of decreased funding or recoupment pursuant to government audit.

Under the Medicaid managed care program, state Medicaid agencies seek bids from eligible health plans to continue their participation in the acute care Medicaid health programs. If we are not successful in obtaining renewals of state Medicaid managed care contracts, we risk losing the members that were enrolled in those Medicaid plans. Under the Medicare Part D program, to qualify for automatic enrollment of low income members, our bids must result in an enrollee premium below a regional benchmark, which is calculated by the government after all regional bids are submitted. If the enrollee premium is not below the government benchmark, we risk losing the members who were auto-assigned to us and will not have additional members auto-assigned to us. In general, our bids are based upon certain assumptions regarding enrollment, utilization, medical costs and other factors. In the event any of these assumptions is materially incorrect, either as a result of unforeseen changes to the programs on which we bid, or submission by our competitors at lower rates than our bids, our results of operations, financial position and cash flows could be materially and adversely affected.

Many of the government health care coverage programs in which we participate are subject to the prior satisfaction of certain conditions or performance standards or benchmarks. For example, as part of the ACA,

CMS has a system that provides various quality bonus payments to Medicare Advantage plans that meet certain quality star ratings at the local plan level. The star rating system considers various measures adopted by CMS, including, among other things, quality of care, preventative services, chronic illness management and customer satisfaction. Plans must have a rating of four stars or higher to qualify for bonus payments. If we do not maintain or continue to improve our star ratings, our plans may not be eligible for quality bonuses and we may experience a negative impact on our revenues and the benefits that our plans can offer, which could materially and adversely affect our membership levels, results of operations, financial position and cash flows. In addition, under the ACA, Congress authorized CMS and the states to implement MMP managed care demonstration programs to serve dually eligible beneficiaries to improve the coordination of their care. Health plan participation in these demonstration programs is subject to CMS approval of specified care delivery models and the satisfaction of conditions to participation, including meeting certain performance requirements. Any changes in standards or care delivery models that apply to government health care programs, including Medicare, Medicaid and the MMP demonstration programs for dually eligible beneficiaries, or our inability to improve our quality scores and star ratings to meet government performance requirements or to match the performance of our competitors could result in limitations to our participation in or exclusion from these or other government programs, which in turn could materially and adversely affect our results of operations, financial position and cash flows.

CMS uses various payment mechanisms to allocate funding for Medicare programs, including adjusting monthly capitation payments to Medicare Advantage plans and Medicare Part D plans according to the predicted health status of each beneficiary as supported by data from health care providers for Medicare Advantage plans, as well as, for Medicare Part D plans, risk-sharing provisions based on a comparison of costs predicted in our annual bids to actual prescription drug costs. Some state Medicaid programs utilize a similar process. For example, our UnitedHealthcare Medicare & Retirement and UnitedHealthcare Community & State businesses submit information relating to the health status of enrollees to CMS or state agencies for purposes of determining the amount of certain payments to us. CMS and the Office of Inspector General for HHS periodically perform risk adjustment data validation (RADV) audits of selected Medicare health plans to validate the coding practices of and supporting documentation maintained by health care providers, and certain of our local plans have been selected for audit. Such audits have in the past resulted and could in the future result in retrospective adjustments to payments made to our health plans, fines, corrective action plans or other adverse action by CMS.

We have been and may in the future become involved in routine, regular and special governmental investigations, audits, reviews and assessments. Certain of our businesses have been reviewed or are currently under review, including for compliance with coding and other requirements under the Medicare risk-adjustment model, our chart review programs and related processes. Such investigations, audits or reviews sometimes arise out of or prompt claims by private litigants or whistleblowers that, among other allegations, we failed to disclose certain business practices or, as a government contractor, submitted false claims to the government. Governmental investigations, audits, reviews and assessments could lead to government actions, which could result in adverse publicity, the assessment of damages, civil or criminal fines or penalties, or other sanctions, including restrictions or changes in the way we conduct business, loss of licensure or exclusion from participation in government programs, any of which could have a material adverse effect on our business, results of operations, financial position and cash flows.

If we fail to comply with applicable privacy, security and data laws, regulations and standards, including with respect to third-party service providers that utilize sensitive personal information on our behalf, our business, reputation, results of operations, financial position and cash flows could be materially and adversely affected.

The collection, maintenance, protection, use, transmission, disclosure and disposal of sensitive personal information are regulated at the federal, state, international and industry levels and requirements are imposed on us by contracts with customers. These laws, rules and requirements are subject to change. Compliance with new privacy and security laws, regulations and requirements may result in increased operating costs, and may constrain or require us to alter our business model or operations. For example, the HITECH amendments to

HIPAA imposed further restrictions on our ability to collect, disclose and use sensitive personal information and imposed additional compliance requirements on our business. In addition, the General Data Protection Regulation of the European Union imposes higher potential penalties and more stringent compliance and data security requirements on our ability to collect, process and transfer personal data relating to our European businesses.

Many of our businesses are also subject to the Payment Card Industry Data Security Standard, which is a multifaceted security standard that is designed to protect credit card account data as mandated by payment card industry entities.

HIPAA requires business associates as well as covered entities to comply with certain privacy and security requirements. While we provide for appropriate protections through our contracts with our third-party service providers and in certain cases assess their security controls, we have limited oversight or control over their actions and practices. Several of our businesses act as business associates to their covered entity customers and, as a result, collect, use, disclose and maintain sensitive personal information in order to provide services to these customers. HHS has announced that it will continue its audit program to assess HIPAA compliance efforts by covered entities and expand it to include business associates. An audit resulting in findings or allegations of noncompliance could have a material adverse effect on our results of operations, financial position and cash flows.

Through our Optum businesses, including our Optum Labs business, we maintain a database of administrative and clinical data that is statistically de-identified in accordance with HIPAA standards. Noncompliance or findings of noncompliance with applicable laws, regulations or requirements, or the occurrence of any privacy or security breach involving the misappropriation, loss or other unauthorized disclosure of sensitive personal information, whether by us or by one of our third-party service providers, could have a material adverse effect on our reputation and business, including mandatory disclosure to the media, loss of existing or new customers, significant increases in the cost of managing and remediating privacy or security incidents and material fines, penalties and litigation awards, among other consequences, any of which could have a material and adverse effect on our results of operations, financial position and cash flows.

Our businesses providing pharmacy care services face regulatory and operational risks and uncertainties that may differ from the risks of our other businesses.

We provide pharmacy care services through our OptumRx and UnitedHealthcare businesses. Each business is subject to federal and state anti-kickback and other laws that govern the relationships of the business with pharmaceutical manufacturers, physicians, pharmacies, customers and consumers. OptumRx also conducts business through home delivery and specialty pharmacies, which subjects it to extensive federal, state and local laws and regulations, including those of the DEA and individual state controlled substance authorities. In addition, federal and state legislatures regularly consider new regulations for the industry that could materially and adversely affect current industry practices, including potential new regulations regarding the receipt or disclosure of rebates from pharmaceutical companies, the development and use of formularies, the use of average wholesale prices or other pricing benchmarks, pricing for specialty pharmaceuticals and pharmacy network reimbursement methodologies.

Our pharmacy care services businesses would be materially and adversely affected by our inability to contract on favorable terms with pharmaceutical manufacturers and other suppliers, and could face potential claims in connection with purported errors by our home delivery or specialty pharmacies, including in connection with the risks inherent in the packaging and distribution of pharmaceuticals and other health care products. Disruptions at any of our home delivery or specialty pharmacies due to an accident or an event that is beyond our control could affect our ability to process and dispense prescriptions in a timely manner and could materially and adversely affect our results of operations, financial position and cash flows.

In addition, our pharmacy care services businesses provide services to sponsors of health benefit plans that are subject to ERISA. A private party or the DOL, which is the agency that enforces ERISA, could assert that the

fiduciary obligations imposed by the statute apply to some or all of the services provided by our pharmacy care services businesses even where our pharmacy care services businesses are not contractually obligated to assume fiduciary obligations. In the event a court were to determine that fiduciary obligations apply to our pharmacy care services businesses in connection with services for which our pharmacy care services businesses are not contractually obligated to assume fiduciary obligations, we could be subject to claims for breaches of fiduciary obligations or claims that we entered into certain prohibited transactions.

If we fail to compete effectively to maintain or increase our market share, including maintaining or increasing enrollments in businesses providing health benefits, our results of operations, financial position and cash flows could be materially and adversely affected.

Our businesses compete throughout the United States, Brazil and other foreign markets and face significant competition in all of the geographic markets in which we operate. In particular markets, our competitors, compared to us, may have greater capabilities, resources or market share; a more established reputation; superior supplier or health care professional arrangements; better existing business relationships; lower profit margin or financial return expectations; or other factors that give such competitors a competitive advantage. In addition, our competitive position may be adversely affected by significant merger and acquisition activity that has occurred in the industries in which we operate, both among our competitors and suppliers (including hospitals, physician groups and other care professionals). Consolidation may make it more difficult for us to retain or increase our customer base, improve the terms on which we do business with our suppliers, or maintain or increase profitability. Additionally, new direct-to-consumer business models from competing businesses may make it more difficult for us to directly engage consumers in the selection and management of their health care benefits, health care usage, and in the effective navigation of the health care system we may be challenged by new technologies and market entrants that could disrupt our existing relationship with health plan enrollees in these areas. Our business, results of operations, financial position and cash flows could be materially and adversely affected if we do not compete effectively in our markets, if we set rates too high or too low in highly competitive markets, if we do not design and price our products properly and competitively, if we are unable to innovate and deliver products and services that demonstrate value to our customers, if we do not provide a satisfactory level of services, if membership or demand for other services does not increase as we expect or declines, or if we lose accounts with more profitable products while retaining or increasing membership in accounts with less profitable products.

If we fail to develop and maintain satisfactory relationships with physicians, hospitals and other service providers, our business could be materially and adversely affected.

Our results of operations and prospects are substantially dependent on our continued ability to contract with physicians, hospitals, pharmaceutical benefit service providers, pharmaceutical manufacturers and other service providers at competitive prices. Any failure to develop and maintain satisfactory relationships with health care providers, whether in-network or out-of-network, could materially and adversely affect our business, results of operations, financial position and cash flows. In addition, certain activities related to network design, provider participation in networks and provider payments could result in disputes that may be costly, distract managements' attention and result in negative publicity.

In any particular market, physicians and health care providers could refuse to contract, demand higher payments, or take other actions that could result in higher medical costs, less desirable products for customers or difficulty meeting regulatory or accreditation requirements. In some markets, certain health care providers, particularly hospitals, physician/hospital organizations or multi-specialty physician groups, may have significant market positions or near monopolies that could result in diminished bargaining power on our part. In addition, accountable care organizations; practice management companies (which aggregate physician practices for administrative efficiency); and other organizational structures that physicians, hospitals and other care providers choose may change the way in which these providers interact with us and may change the competitive landscape. Such organizations or groups of physicians may compete directly with us, which could adversely affect our

operations, and our results of operations, financial position and cash flows by impacting our relationships with these providers or affecting the way that we price our products and estimate our costs, which might require us to incur costs to change our operations. In addition, if these providers refuse to contract with us, use their market position to negotiate favorable contracts or place us at a competitive disadvantage, our ability to market products or to be profitable in those areas could be materially and adversely affected.

We have capitation arrangements with some physicians, hospitals and other health care providers. Capitation arrangements limit our exposure to the risk of increasing medical costs, but expose us to risk related to the adequacy of the financial and medical care resources of the health care provider. To the extent that a capitated health care provider organization faces financial difficulties or otherwise is unable to perform its obligations under the capitation arrangement, we may be held responsible for unpaid health care claims that should have been the responsibility of the capitated health care provider and for which we have already paid the provider, under the capitation arrangement. Further, payment or other disputes between a primary care provider and specialists with whom the primary care provider contracts could result in a disruption in the provision of services to our members or a reduction in the services available to our members. Health care providers with whom we contract may not properly manage the costs of services, maintain financial solvency or avoid disputes with other providers. Any of these events could have a material adverse effect on the provision of services to our members and our operations.

Some providers that render services to our members do not have contracts with us. In those cases, we do not have a pre-established understanding about the amount of compensation that is due to the provider for services rendered to our members. In some states, the amount of compensation due to these out-of-network providers is defined by law or regulation, but in most instances, the amount is either not defined or is established by a standard that does not clearly specify dollar terms. In some instances, providers may believe that they are underpaid for their services and may either litigate or arbitrate their dispute with us or try to recover from our members the difference between what we have paid them and the amount they charged us.

The success of certain businesses, including OptumHealth and UnitedHealthcare Brazil, depend on maintaining satisfactory physician employment relationships. The physicians that practice medicine or contract with our affiliated physician organizations could terminate their provider contracts or otherwise become unable or unwilling to continue practicing medicine or contracting with us. There is and will likely be heightened competition in the markets where we operate to acquire or manage physician practices or to employ or contract with individual physicians. If we are unable to maintain or grow satisfactory relationships with physicians, or to acquire, recruit or, in some instances, employ physicians, or to retain enrollees following the departure of a physician, our revenues could be materially and adversely affected. In addition, our affiliated physician organizations contract with health insurance and HMO competitors of UnitedHealthcare. Our business could suffer if our affiliated physician organizations fail to maintain relationships with these health insurance or HMO companies, or adequately price their contracts with these third-party payers.

In addition, physicians, hospitals, pharmaceutical benefit service providers, pharmaceutical manufacturers and certain health care providers are customers of our Optum businesses. Given the importance of health care providers and other constituents to our businesses, failure to maintain satisfactory relationships with them could materially and adversely affect our results of operations, financial position and cash flows.

We are routinely subject to various litigation actions due to the nature of our business, which could damage our reputation and, if resolved unfavorably, could result in substantial penalties or monetary damages and materially and adversely affect our results of operations, financial position and cash flows.

We are routinely made party to a variety of legal actions related to, among other matters, the design, management and delivery of our product and service offerings. These matters have included or could in the future include matters related to health care benefits coverage and payment claims (including disputes with enrollees, customers and contracted and non-contracted physicians, hospitals and other health care professionals), tort claims

(including claims related to the delivery of health care services, such as medical malpractice by health care practitioners who are employed by us, have contractual relationships with us, or serve as providers to our managed care networks), whistleblower claims (including claims under the False Claims Act or similar statutes), contract and labor disputes, tax claims and claims related to disclosure of certain business practices. We are also party to certain class action lawsuits brought by health care professional groups and consumers. In addition, we operate in jurisdictions outside of the United States, where contractual rights, tax positions and applicable regulations may be subject to interpretation or uncertainty to a greater degree than in the United States, and therefore subject to dispute by customers, government authorities or others. We are largely self-insured with regard to litigation risks. Although we maintain excess liability insurance with outside insurance carriers for claims in excess of our self-insurance, certain types of damages, such as punitive damages in some circumstances, are not covered by insurance. Although we record liabilities for our estimates of the probable costs resulting from self-insured matters, it is possible that the level of actual losses will significantly exceed the liabilities recorded.

We cannot predict the outcome of significant legal actions in which we are involved and are incurring expenses in resolving these matters. The legal actions we face or may face in the future could further increase our cost of doing business and materially and adversely affect our results of operations, financial position and cash flows. In addition, certain legal actions could result in adverse publicity, which could damage our reputation and materially and adversely affect our ability to retain our current business or grow our market share in some markets and businesses.

Any failure by us to manage successfully our strategic alliances or complete, manage or integrate acquisitions and other significant strategic transactions or relationships could materially and adversely affect our business, prospects, results of operations, financial position and cash flows.

As part of our business strategy, we frequently engage in discussions with third parties regarding possible investments, acquisitions, divestitures, strategic alliances, joint ventures and outsourcing transactions and often enter into agreements relating to such transactions. For example, we have a strategic alliance with AARP under which we provide AARP-branded Medicare Supplement insurance to AARP members and other AARP-branded products and services to Medicare beneficiaries. If we fail to meet the needs of our alliance or joint venture partners, including by developing additional products and services, providing high levels of service, pricing our products and services competitively or responding effectively to applicable federal and state regulatory changes, our alliances and joint ventures could be damaged or terminated, which in turn could adversely impact our reputation, business and results of operations. Further, if we fail to identify and successfully complete transactions that further our strategic objectives, we may be required to expend resources to develop products and technology internally, we may be placed at a competitive disadvantage or we may be adversely affected by negative market perceptions, any of which may have a material adverse effect on our results of operations, financial position or cash flows. Success in completing acquisitions is also dependent upon efficiently integrating the acquired business into our existing operations, including our internal control environment, or otherwise leveraging its operations, which may present challenges that are different from those presented by organic growth and that may be difficult for us to manage. If we cannot successfully integrate these acquisitions and realize contemplated revenue growth opportunities and cost savings, our business, prospects, results of operations, financial position and cash flows could be materially and adversely affected.

As we expand and operate our business outside of the United States, we are presented with challenges that differ from those presented by acquisitions of domestic businesses, including challenges in adapting to new markets, business, labor and cultural practices and regulatory environments. Adapting to these challenges could require us to devote significant senior management and other resources to the acquired businesses before we realize anticipated synergies or other benefits from the acquired businesses. These challenges vary widely by country and may include political instability, government intervention, discriminatory regulation and currency exchange controls or other restrictions that could prevent us from transferring funds from these operations out of the countries in which our acquired businesses operate or converting local currencies that we hold into U.S. dollars

or other currencies. If we are unable to manage successfully our non-U.S. acquisitions, our business, prospects, results of operations and financial position could be materially and adversely affected.

Foreign currency exchange rates and fluctuations may have an impact on our equity from period to period, which could adversely affect our debt to debt-plus-equity ratio, and our future revenues, costs and cash flows from international operations. Any measures we may implement to reduce the effect of volatile currencies may be costly or ineffective.

Our sales performance will suffer if we do not adequately attract, retain and provide support to a network of independent producers and consultants.

Our products and services are sold in part through independent producers and consultants with whom we do not have exclusive contracts and for whose services and allegiance we must compete intensely. Our sales would be materially and adversely affected if we were unable to attract, retain and support such independent producers and consultants or if our sales strategy is not appropriately aligned across distribution channels. Our relationships with producers could be materially and adversely impacted by changes in our business practices and the nature of our relationships to address these pressures, including potential reductions in commissions.

A number of investigations have been conducted regarding the marketing practices of producers selling health care products and the payments they receive and have resulted in enforcement actions against companies in our industry and producers marketing and selling those companies' products. If we were subjected to similar investigations and enforcement actions, they could result in penalties and the imposition of corrective action plans, which could materially and adversely impact our ability to market our products.

Unfavorable economic conditions could materially and adversely affect our revenues and our results of operations.

Unfavorable economic conditions may impact demand for certain of our products and services. For example, high unemployment can cause lower enrollment or lower rates of renewal in our employer group plans. Unfavorable economic conditions have also caused and could continue to cause employers to stop offering certain health care coverage as an employee benefit or elect to offer this coverage on a voluntary, employee-funded basis as a means to reduce their operating costs. In addition, unfavorable economic conditions could adversely impact our ability to increase premiums or result in the cancellation by certain customers of our products and services. These conditions could lead to a decrease in our membership levels and premium and fee revenues and could materially and adversely affect our results of operations, financial position and cash flows.

During a prolonged unfavorable economic environment, state and federal budgets could be materially and adversely affected, resulting in reduced reimbursements or payments in our federal and state government health care coverage programs, including Medicare, Medicaid and CHIP. A reduction in state Medicaid reimbursement rates could be implemented retrospectively to apply to payments already negotiated or received from the government and could materially and adversely affect our results of operations, financial position and cash flows. In addition, state and federal budgetary pressures could cause the affected governments to impose new or a higher level of taxes or assessments for our commercial programs, such as premium taxes on insurance companies and HMOs and surcharges or fees on select fee-for-service and capitated medical claims. Any of these developments or actions could materially and adversely affect our results of operations, financial position and cash flows.

A prolonged unfavorable economic environment also could adversely impact the financial position of hospitals and other care providers, which could materially and adversely affect our contracted rates with these parties and increase our medical costs or materially and adversely affect their ability to purchase our service offerings. Further, unfavorable economic conditions could adversely impact the customers of our Optum businesses, including health plans, HMOs, hospitals, care providers, employers and others, which could, in turn, materially and adversely affect Optum's financial results.

Our investment portfolio may suffer losses, which could materially and adversely affect our results of operations, financial position and cash flows.

Market fluctuations could impair our profitability and capital position. Volatility in interest rates affects our interest income and the market value of our investments in debt securities of varying maturities, which constitute the vast majority of the fair value of our investments as of December 31, 2016. Relatively low interest rates on investments, such as those experienced during recent years, have adversely impacted our investment income, and the continuation of the current low interest rate environment could further adversely affect our investment income. In addition, a delay in payment of principal or interest by issuers, or defaults by issuers (primarily from investments in corporate and municipal bonds), could reduce our investment income and require us to write down the value of our investments, which could materially and adversely affect our profitability and equity.

There can be no assurance that our investments will produce total positive returns or that we will not sell investments at prices that are less than their carrying values. Changes in the value of our investment assets, as a result of interest rate fluctuations, changes in issuer financial conditions, illiquidity or otherwise, could have an adverse effect on our equity. In addition, if it became necessary for us to liquidate our investment portfolio on an accelerated basis, such an action could have a material adverse effect on our results of operations and the capital position of regulated subsidiaries.

If the value of our intangible assets is materially impaired, our results of operations, equity and credit ratings could be materially and adversely affected.

As of December 31, 2016, goodwill and other intangible assets had a carrying value of $56 billion, representing 46% of our total consolidated assets. We periodically evaluate our goodwill and other intangible assets to determine whether all or a portion of their carrying values may be impaired, in which case a charge to earnings may be necessary. The value of our goodwill may be materially and adversely impacted if businesses that we acquire perform in a manner that is inconsistent with our assumptions. In addition, from time to time we divest businesses, and any such divestiture could result in significant asset impairment and disposition charges, including those related to goodwill and other intangible assets. Any future evaluations requiring an impairment of our goodwill and other intangible assets could materially and adversely affect our results of operations and equity in the period in which the impairment occurs. A material decrease in equity could, in turn, adversely impact our credit ratings and potentially impact our compliance with the covenants in our bank credit facilities.

If we fail to maintain properly the integrity or availability of our data or successfully consolidate, integrate, upgrade or expand our existing information systems, or if our technology products do not operate as intended, our business could be materially and adversely affected.

Our ability to price adequately our products and services, to provide effective service to our customers in an efficient and uninterrupted fashion, and to report accurately our results of operations depends on the integrity of the data in our information systems. We periodically consolidate, integrate, upgrade and expand our information systems capabilities as a result of technology initiatives and recently enacted regulations, changes in our system platforms and integration of new business acquisitions. In addition, recent trends toward greater consumer engagement in health care require new and enhanced technologies, including more sophisticated applications for mobile devices. Our information systems require an ongoing commitment of significant resources to maintain, protect and enhance existing systems and develop new systems to keep pace with continuing changes in information processing technology, evolving systems and regulatory standards and changing customer preferences. If the information we rely upon to run our businesses is found to be inaccurate or unreliable or if we fail to maintain or protect our information systems and data integrity effectively, we could lose existing customers, have difficulty attracting new customers, experience problems in determining medical cost estimates and establishing appropriate pricing, have difficulty preventing, detecting and controlling fraud, have disputes with customers, physicians and other health care professionals, become subject to regulatory sanctions or penalties, incur increases in operating expenses or suffer other adverse consequences. Our process of

consolidating the number of systems we operate, upgrading and expanding our information systems capabilities, enhancing our systems and developing new systems to keep pace with continuing changes in information processing technology may not be successful. Failure to protect, consolidate and integrate our systems successfully could result in higher than expected costs and diversion of management's time and energy, which could materially and adversely affect our results of operations, financial position and cash flows.

Certain of our businesses sell and install software products that may contain unexpected design defects or may encounter unexpected complications during installation or when used with other technologies utilized by the customer. Connectivity among competing technologies is becoming increasingly important in the health care industry. A failure of our technology products to operate as intended and in a seamless fashion with other products could materially and adversely affect our results of operations, financial position and cash flows.

Uncertain and rapidly evolving U.S. federal and state, non-U.S. and international laws and regulations related to the health information technology market may present compliance challenges and could materially and adversely affect the configuration of our information systems and platforms, and our ability to compete in this market.

If we sustain cyber-attacks or other privacy or data security incidents, that result in security breaches that disrupt our operations or result in the unintended dissemination of sensitive personal information or proprietary or confidential information, we could suffer a loss of revenue and increased costs, exposure to significant liability, reputational harm and other serious negative consequences.

We routinely process, store and transmit large amounts of data in our operations, including sensitive personal information as well as proprietary or confidential information relating to our business or third-parties. Some of the data we process, store and transmit may be outside of the United States due to our information technology systems and international business operations. We may be subject to breaches of the information technology systems we use. Experienced computer programmers and hackers may be able to penetrate our layered security controls and misappropriate or compromise sensitive personal information or proprietary or confidential information or that of third-parties, create system disruptions or cause shutdowns. They also may be able to develop and deploy viruses, worms and other malicious software programs that attack our systems or otherwise exploit any security vulnerabilities. Our facilities may also be vulnerable to security incidents or security attacks; acts of vandalism or theft; coordinated attacks by activist entities; misplaced or lost data; human errors; or other similar events that could negatively affect our systems and our and our customer's data.

The costs to eliminate or address the foregoing security threats and vulnerabilities before or after a cyber-incident could be significant. Our remediation efforts may not be successful and could result in interruptions, delays, or cessation of service and loss of existing or potential customers. In addition, breaches of our security measures and the unauthorized dissemination of sensitive personal information or proprietary information or confidential information about us or our customers or other third-parties, could expose our customers' private information and our customers to the risk of financial or medical identity theft, or expose us or other third-parties to a risk of loss or misuse of this information, result in litigation and potential liability for us, damage our brand and reputation, or otherwise harm our business.

If we are not able to protect our proprietary rights to our databases, software and related products, our ability to market our knowledge and information-related businesses could be hindered and our results of operations, financial position and cash flows could be materially and adversely affected.

We rely on our agreements with customers, confidentiality agreements with employees and third parties, and our trademarks, trade secrets, copyrights and patents to protect our proprietary rights. These legal protections and precautions may not prevent misappropriation of our proprietary information. In addition, substantial litigation regarding intellectual property rights exists in the software industry, and we expect software products to be increasingly subject to third-party infringement claims as the number of products and competitors in this industry

segment grows. Such litigation and misappropriation of our proprietary information could hinder our ability to market and sell products and services and our results of operations, financial position and cash flows could be materially and adversely affected.

Restrictions on our ability to obtain funds from our regulated subsidiaries could materially and adversely affect our results of operations, financial position and cash flows.

Because we operate as a holding company, we are dependent upon dividends and administrative expense reimbursements from our subsidiaries to fund our obligations. Many of these subsidiaries are regulated by departments of insurance or similar regulatory authorities. We are also required by law or regulation to maintain specific prescribed minimum amounts of capital in these subsidiaries. The levels of capitalization required depend primarily upon the volume of premium revenues generated by the applicable subsidiary. In most states, we are required to seek prior approval by state regulatory authorities before we transfer money or pay dividends from our regulated subsidiaries that exceed specified amounts. An inability of our regulated subsidiaries to pay dividends to their parent companies in the desired amounts or at the time of our choosing could adversely affect our ability to reinvest in our business through capital expenditures or business acquisitions, as well as our ability to maintain our corporate quarterly dividend payment, repurchase shares of our common stock and repay our debt. If we are unable to obtain sufficient funds from our subsidiaries to fund our obligations, our results of operations, financial position and cash flows could be materially and adversely affected.

Any downgrades in our credit ratings could adversely affect our business, financial condition and results of operations.

Claims paying ability, financial strength and debt ratings by Nationally Recognized Statistical Rating Organizations are important factors in establishing the competitive position of insurance companies. Ratings information is broadly disseminated and generally used by customers and creditors. We believe our claims paying ability and financial strength ratings are important factors in marketing our products to certain of our customers. Our credit ratings impact both the cost and availability of future borrowings. Each of the credit rating agencies reviews its ratings periodically. Our ratings reflect each credit rating agency's opinion of our financial strength, operating performance and ability to meet our debt obligations or obligations to policyholders. There can be no assurance that our current credit ratings will be maintained in the future. Downgrades in our credit ratings, should they occur, could materially increase our costs of or ability to access funds in the debt and capital markets and otherwise materially increase our operating costs.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

To support our business operations in the United States and other countries we own and lease real properties. Our various reportable segments use these facilities for their respective business purposes, and we believe these current facilities are suitable for their respective uses and are adequate for our anticipated future needs.

ITEM 3. LEGAL PROCEEDINGS

The information required by this Item 3 is incorporated herein by reference to the information set forth under the captions "Litigation Matters" and "Governmental Investigations, Audits and Reviews" in Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

ITEM 4. MINE SAFETY DISCLOSURES

Not Applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED SHAREHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

MARKET PRICES AND HOLDERS

Our common stock is traded on the New York Stock Exchange (NYSE) under the symbol UNH. On January 31, 2017, there were 13,035 registered holders of record of our common stock. The high and low per share common stock sales prices reported by the NYSE and cash dividends declared for our last two fiscal years were as follows:

	High	Low	Cash Dividends Declared
2016			
First quarter	$131.10	$107.51	$ 0.500
Second quarter	$141.31	$125.26	$ 0.625
Third quarter	$144.48	$132.39	$ 0.625
Fourth quarter	$164.00	$133.03	$ 0.625
2015			
First quarter	$123.76	$ 98.46	$ 0.375
Second quarter	$124.11	$111.12	$ 0.500
Third quarter	$126.21	$ 95.00	$ 0.500
Fourth quarter	$125.99	$109.61	$ 0.500

DIVIDEND POLICY

In June 2016, our Board of Directors increased the Company's quarterly cash dividend to shareholders to an annual dividend rate of $2.50 per share compared to the annual dividend rate of $2.00 per share, which the Company had paid since June 2015. Declaration and payment of future quarterly dividends is at the discretion of the Board and may be adjusted as business needs or market conditions change.

ISSUER PURCHASES OF EQUITY SECURITIES

In November 1997, our Board of Directors adopted a share repurchase program, which the Board evaluates periodically. There is no established expiration date for the program. During the fourth quarter 2016, we repurchased approximately 1 million shares at an average price of $141.54 per share. As of December 31, 2016, we had Board authorization to purchase up to 51 million shares of our common stock.

PERFORMANCE GRAPHS

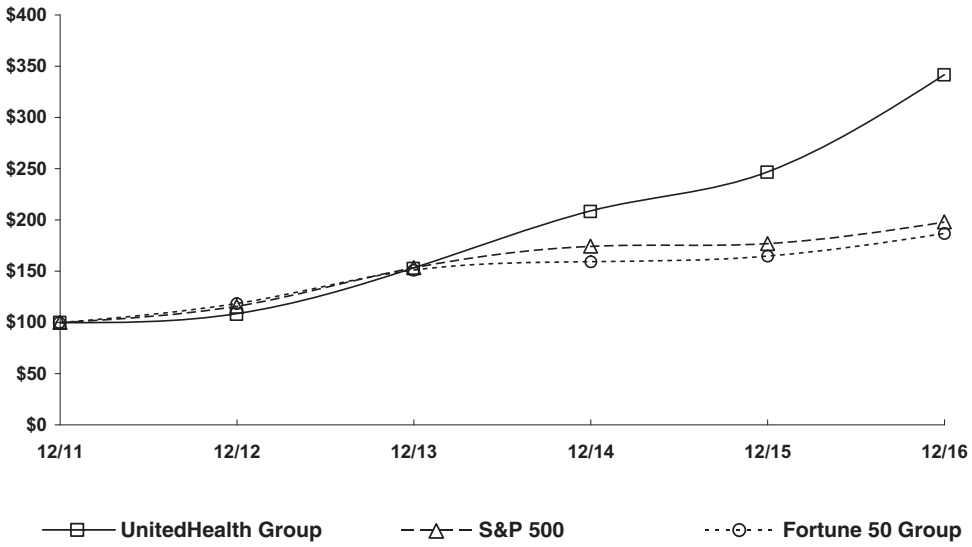
The following two performance graphs compare our total return to shareholders with the returns of indexes of other specified companies and the S&P 500 Index. The first graph compares the cumulative five-year total return to shareholders on our common stock relative to the cumulative total returns of the S&P 500 index and a customized peer group of certain *Fortune 50* companies (the "*Fortune 50* Group") for the five-year period ended December 31, 2016. The second graph compares our cumulative total return to shareholders with the S&P 500 Index and an index of a group of peer companies selected by us for the five-year period ended December 31, 2016. We are not included in either the *Fortune 50* Group index in the first graph or the peer group index in the second graph. In calculating the cumulative total shareholder return of the indexes, the shareholder returns of the *Fortune 50* Group companies in the first graph and the peer group companies in the second graph are weighted according to the stock market capitalizations of the companies at January 1 of each year. The comparisons assume the investment of $100 on December 31, 2011 in our common stock and in each index, and that dividends were reinvested when paid.

Fortune 50 Group

The *Fortune 50* Group consists of the following companies: American International Group, Inc., Berkshire Hathaway Inc., Cardinal Health, Inc., Citigroup Inc., General Electric Company, International Business Machines Corporation and Johnson & Johnson. Although there are differences among the companies in terms of size and industry, like UnitedHealth Group, all of these companies are large multi-segment companies using a well-defined operating model in one or more broad sectors of the economy.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

Among UnitedHealth Group, the S&P 500 Index,
and Fortune 50 Group



	12/11	12/12	12/13	12/14	12/15	12/16
UnitedHealth Group	**$100.00**	**$108.59**	**$153.15**	**$208.98**	**$247.13**	**$342.05**
S&P 500 Index	**100.00**	**116.00**	**153.58**	**174.60**	**177.01**	**198.18**
Fortune 50 Group	**100.00**	**118.48**	**151.44**	**159.51**	**164.70**	**186.76**

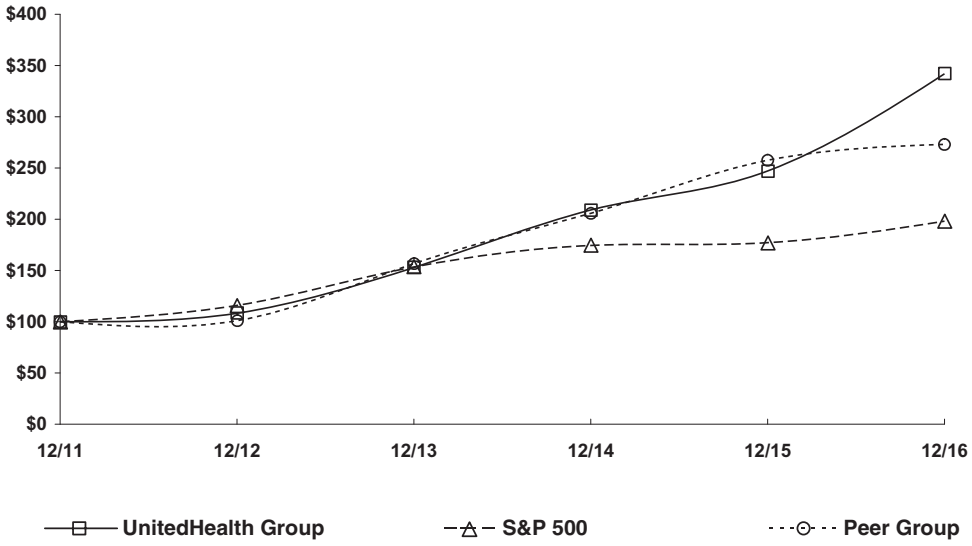
The stock price performance included in this graph is not necessarily indicative of future stock price performance.

Peer Group

The companies included in our peer group are Aetna Inc., Anthem Inc., Cigna Corporation and Humana Inc. We believe that this peer group reflects publicly traded peers to our UnitedHealthcare businesses.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

Among UnitedHealth Group, the S&P 500 Index,
and a Peer Group



	12/11	12/12	12/13	12/14	12/15	12/16
UnitedHealth Group	**$100.00**	**$108.59**	**$153.15**	**$208.98**	**$247.13**	**$342.05**
S&P 500 Index	**100.00**	**116.00**	**153.58**	**174.60**	**177.01**	**198.18**
Peer Group	**100.00**	**101.01**	**156.96**	**206.09**	**257.48**	**273.12**

The stock price performance included in this graph is not necessarily indicative of future stock price performance.

ITEM 6. SELECTED FINANCIAL DATA

(in millions, except percentages and per share data)	For the Year Ended December 31, 2016	2015 (a)	2014	2013	2012
Consolidated operating results					
Revenues	$184,840	$157,107	$130,474	$122,489	$110,618
Earnings from operations	12,930	11,021	10,274	9,623	9,254
Net earnings attributable to UnitedHealth Group common shareholders	7,017	5,813	5,619	5,625	5,526
Return on equity (b)	19.4%	17.7%	17.3%	17.7%	18.7%
Basic earnings per share attributable to UnitedHealth Group common shareholders	$ 7.37	$ 6.10	$ 5.78	$ 5.59	$ 5.38
Diluted earnings per share attributable to UnitedHealth Group common shareholders	7.25	6.01	5.70	5.50	5.28
Cash dividends declared per common share	2.3750	1.8750	1.4050	1.0525	0.8000
Consolidated cash flows from (used for)					
Operating activities	$ 9,795	$ 9,740	$ 8,051	$ 6,991	$ 7,155
Investing activities	(9,355)	(18,395)	(2,534)	(3,089)	(8,649)
Financing activities	(1,011)	12,239	(5,293)	(4,946)	471
Consolidated financial condition (as of December 31)					
Cash and investments	$ 37,143	$ 31,703	$ 28,063	$ 28,818	$ 29,148
Total assets (c)	122,810	111,254	86,300	81,800	80,811
Total commercial paper and long-term debt (c)	32,970	31,965	17,324	16,778	16,680
Redeemable noncontrolling interests	2,012	1,736	1,388	1,175	2,121
Total equity	38,177	33,725	32,454	32,149	31,178

(a) Includes the effects of the July 2015 acquisition of Catamaran Corporation (Catamaran) and related debt issuances.

(b) Return on equity is calculated as net earnings divided by average equity. Average equity is calculated using the equity balance at the end of the preceding year and the equity balances at the end of each of the four quarters of the year presented.

(c) In the first quarter of 2016, the Company adopted Financial Accounting Standards Board (FASB) Accounting Standard Update (ASU) No. 2015-03 (ASU 2015-03), retrospectively as required. See Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements" for more information on the adoption of ASU 2015-03.

Financial Highlights should be read with the accompanying "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 and the Consolidated Financial Statements and Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read together with the accompanying Consolidated Financial Statements and Notes to the Consolidated Financial Statements thereto included in Item 8, "Financial Statements." Readers are cautioned that the statements, estimates, projections or outlook contained in this report, including discussions regarding financial prospects, economic conditions, trends and uncertainties contained in this Item 7, may constitute forward-looking statements within the meaning of the PSLRA. These forward-looking statements involve risks and uncertainties that may cause our actual results to differ materially from the expectations expressed or implied in the forward-looking statements. A description of some of the risks and uncertainties can be found further below in this Item 7 and in Part I, Item 1A, "Risk Factors."

EXECUTIVE OVERVIEW

General

UnitedHealth Group is a diversified health and well-being company dedicated to helping people live healthier lives and helping to make the health system work better for everyone. Through our diversified family of businesses, we leverage core competencies in advanced, enabling technology; health care data; information and intelligence; and clinical care management and coordination to help meet the demands of the health system. These core competencies are deployed within our two distinct, but strategically aligned, business platforms: health benefits operating under UnitedHealthcare and health services operating under Optum.

We have four reportable segments across our two business platforms, UnitedHealthcare and Optum:

- UnitedHealthcare, which includes UnitedHealthcare Employer & Individual, UnitedHealthcare Medicare & Retirement, UnitedHealthcare Community & State and UnitedHealthcare Global;
- OptumHealth;
- OptumInsight; and
- OptumRx.

Further information on our business and reportable segments is presented in Part I, Item 1, "Business" and in Note 13 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

Recent Developments

We have recognized in our financial results for the fourth quarter 2016 and the year ended December 31, 2016 the previously disclosed $350 million impact of our estimated share of guaranty association assessments resulting from the liquidation of Penn Treaty Network America Insurance Company and its subsidiary (Penn Treaty), following accounting, legal and regulatory consultations in connection with our 10-K filing. This charge will be funded over several years and affected by premium tax credits over time.

For more detail related to the Penn Treaty liquidation, see Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

Business Trends

Our businesses participate in the United States, Brazilian and certain other international health markets. In the United States, health care spending has grown consistently for many years and comprises approximately 18% of gross domestic product. We expect overall spending on health care to continue to grow in the future, due to inflation, medical technology and pharmaceutical advancement, regulatory requirements, demographic trends in the population and national interest in health and well-being. The rate of market growth may be affected by a variety of factors, including macro-economic conditions and regulatory changes, which have impacted and could further impact our results of operations.

Pricing Trends. To price our health care benefit products, we start with our view of expected future costs. We frequently evaluate and adjust our approach in each of the local markets we serve, considering all relevant factors, such as product positioning, price competitiveness and environmental, competitive, legislative and regulatory considerations. Our review of regulatory considerations involves a focus on minimum MLR thresholds and the risk adjustment that impacts the small group and individual markets. We will continue seeking to balance growth and profitability across all of these dimensions.

The commercial risk market remains highly competitive in both the small group and large group segments. We expect broad-based competition to continue as the industry adapts to individual and employer needs amid reform changes. The ACA included an annual, nondeductible insurance industry tax (Health Insurance Industry Tax) to be levied proportionally across the insurance industry for risk-based health insurance products. A provision in the 2016 Federal Budget imposes a one year moratorium for 2017 on the collection of the Health Insurance Industry Tax. Pricing for contracts that cover some portion of calendar year 2017 will reflect the impact of the moratorium. Additionally, the industry has continued to experience favorable medical cost trends due to moderated utilization, which has impacted the competitive pricing environment.

Medicare Advantage funding continues to be pressured, as discussed below in “Regulatory Trends and Uncertainties.”

We expect continued Medicaid revenue growth due to anticipated increases in the number of people we serve; we also believe that the payment rate environment creates the risk of downward pressure on Medicaid net margin percentages. We continue to take a prudent, market-sustainable posture for both new business and maintenance of existing relationships. We advocate for actuarially sound rates that are commensurate with our medical cost trends and we remain dedicated to partnering with those states that are committed to the long-term viability of their programs.

Medical Cost Trends. Our medical cost trends primarily relate to changes in unit costs, health system utilization and prescription drug costs. We endeavor to mitigate those increases with medical management. Our 2017 management activities include managing costs across all health care categories, including specialty pharmacy spending, as new therapies are introduced at high costs and older drugs experience price increases.

Delivery System and Payment Modernization. The health care market continues to change based on demographic shifts, new regulations, political forces and both payer and patient expectations. Health plans and care providers are being called upon to work together to close gaps in care and improve overall care quality, improve the health of populations and reduce costs. We continue to see a greater number of people enrolled in plans with underlying incentive-based care provider payment models that reward high-quality, affordable care and foster collaboration. We work together with clinicians to leverage our data and analytics to provide the necessary information to close gaps in care and improve overall health outcomes for patients.

We are increasingly rewarding care providers for delivering improvements in quality and cost-efficiency. As of December 31, 2016, we served more than 15 million people through some form of aligned contractual arrangement, including full-risk, shared-risk and bundled episode-of-care and performance incentive payment approaches. As of December 31, 2016, our contracts with value-based elements total nearly $53 billion in annual spending.

This trend is creating needs for health management services that can coordinate care around the primary care physician, including new primary care channels, and for investments in new clinical and administrative information and management systems, which we believe provide growth opportunities for our Optum business platform.

Regulatory Trends and Uncertainties

Following is a summary of management’s view of the trends and uncertainties related to some of the key provisions of the ACA and other regulatory matters. For additional information regarding the ACA and regulatory trends and uncertainties, see Part I, Item 1 “Business — Government Regulation” and Item 1A, “Risk Factors.”

Medicare Advantage Rates. Final 2017 Medicare Advantage rates resulted in an increase in industry base rates of approximately 0.85%, well short of the industry forward medical cost trend of 3%, which creates continued pressure in the Medicare Advantage program. The impact of this funding shortfall in Medicare Advantage is partially mitigated by reductions in provider payments for those care providers with rates indexed to Medicare Advantage revenues or Medicare fee-for-service payment rates. These factors can affect our plan benefit designs, pricing, growth prospects and earnings expectations for our Medicare Advantage plans.

The ongoing pressure on Medicare Advantage funding places continued importance on effective medical management and ongoing improvements in administrative efficiency. There are a number of adjustments we have made to partially offset these rate pressures and reductions. In some years, these adjustments will impact the majority of the seniors we serve through Medicare Advantage. For example, we seek to intensify our medical and operating cost management, make changes to the size and composition of our care provider networks, adjust members' benefits, implement or increase the member premiums that supplement the monthly payments we receive from the government and decide on a county-by-county basis where we will offer Medicare Advantage plans.

As Medicare Advantage payments change, other products may become relatively more attractive to Medicare beneficiaries and increase the demand for other senior health benefits products such as our market-leading Medicare Supplement and stand-alone Medicare Part D insurance offerings.

As provided in the ACA, our Medicare Advantage rates are currently enhanced by CMS quality bonuses in certain counties based on our local plans' Star ratings. The level of Star ratings from CMS, based upon specified clinical and operational performance standards, will impact future quality bonuses. In addition, Star ratings affect the amount of savings a plan can use to offer supplemental benefits, which ultimately may affect the plan's membership and revenue. For the 2016 payment year, approximately 57% of our Medicare Advantage members were in plans rated four stars or higher. We expect that at least 80% of our Medicare Advantage members will be in plans rated four stars or higher for payment year 2017. We continue to dedicate substantial resources to advance our quality scores and Star ratings to strengthen our local market programs and further improve our performance.

Health Insurance Industry Tax and Premium Stabilization Programs. The industry-wide amount of the Health Insurance Industry Tax was $11.3 billion in 2016 and we paid our portion of the tax, which was $1.8 billion, in September 2016. A provision in the 2016 Federal Budget imposes a one year moratorium for 2017 on the collection of the Health Insurance Industry Tax. The Health Insurance Industry Tax is scheduled to be imposed for 2018 and beyond. In 2018, the industry-wide amount of the Health Insurance Industry Tax is expected to be $14.3 billion. The ACA also included three programs designed to stabilize the health insurance markets. These programs encompassed: a transitional reinsurance program; a temporary risk corridors program; and a permanent risk adjustment program. The transitional reinsurance and temporary risk corridors programs expired at the end of 2016.

Individual Public Exchanges. In 2016, we participated in individual public exchanges in 34 states and offered individual ACA compliant products. We recorded a premium deficiency reserve for a portion of our estimated 2016 losses in our 2015 results for in-force contracts as of January 1, 2016. During 2016, we incurred additional losses in our individual ACA compliant products and, for 2017, reduced our participation to three individual public exchanges. We expect to reduce the number of consumers we serve through individual insurance plans by nearly 1 million people in 2017, which will reduce our premium revenues by more than $4 billion.

RESULTS SUMMARY

The following table summarizes our consolidated results of operations and other financial information:

(in millions, except percentages and per share data)	For the Years Ended December 31, 2016	2015	2014	Change 2016 vs. 2015		Change 2015 vs. 2014	
Revenues:							
Premiums	$144,118	$127,163	$115,302	$16,955	13%	$11,861	10%
Products	26,658	17,312	4,242	9,346	54	13,070	308
Services	13,236	11,922	10,151	1,314	11	1,771	17
Investment and other income	828	710	779	118	17	(69)	(9)
Total revenues	184,840	157,107	130,474	27,733	18	26,633	20
Operating costs:							
Medical costs	117,038	103,875	93,633	13,163	13	10,242	11
Operating costs	28,401	24,312	21,263	4,089	17	3,049	14
Cost of products sold	24,416	16,206	3,826	8,210	51	12,380	324
Depreciation and amortization	2,055	1,693	1,478	362	21	215	15
Total operating costs	171,910	146,086	120,200	25,824	18	25,886	22
Earnings from operations	12,930	11,021	10,274	1,909	17	747	7
Interest expense	(1,067)	(790)	(618)	(277)	35	(172)	28
Earnings before income taxes	11,863	10,231	9,656	1,632	16	575	6
Provision for income taxes	(4,790)	(4,363)	(4,037)	(427)	10	(326)	8
Net earnings	7,073	5,868	5,619	1,205	21	249	4
Earnings attributable to noncontrolling interests	(56)	(55)	—	(1)	2	(55)	nm
Net earnings attributable to UnitedHealth Group common shareholders	$ 7,017	$ 5,813	$ 5,619	$ 1,204	21%	$ 194	3%
Diluted earnings per share attributable to UnitedHealth Group common shareholders	$ 7.25	$ 6.01	$ 5.70	$ 1.24	21%	$ 0.31	5%
Medical care ratio (a)	81.2%	81.7%	81.2%	(0.5)%		0.5%	
Operating cost ratio	15.4	15.5	16.3	(0.1)		(0.8)	
Operating margin	7.0	7.0	7.9	—		(0.9)	
Tax rate	40.4	42.6	41.8	(2.2)		0.8	
Net earnings margin (b)	3.8	3.7	4.3	0.1		(0.6)	
Return on equity (c)	19.4%	17.7%	17.3%	1.7%		0.4%	

nm = not meaningful

(a) Medical care ratio is calculated as medical costs divided by premium revenue.

(b) Net earnings margin attributable to UnitedHealth Group shareholders.

(c) Return on equity is calculated as annualized net earnings divided by average equity. Average equity is calculated using the equity balance at the end of the preceding year and the equity balances at the end of each of the four quarters in the year presented.

SELECTED OPERATING PERFORMANCE AND OTHER SIGNIFICANT ITEMS

The following represents a summary of select 2016 year-over-year operating comparisons to 2015 and other 2016 significant items.

- Consolidated revenues increased by 18%, UnitedHealthcare revenues increased 13% and Optum revenues grew 24%.
- UnitedHealthcare grew to serve an additional 2.1 million people domestically.
- Earnings from operations increased by 17%, including increases of 8% at UnitedHealthcare and 32% at Optum.
- Diluted earnings per common share increased 21% to $7.25.
- Cash flows from operations were $9.8 billion.

2016 RESULTS OF OPERATIONS COMPARED TO 2015 RESULTS

Our results of operations were affected by our acquisition of Catamaran in the third quarter of 2015.

Consolidated Financial Results

Revenues

The increases in revenues were primarily driven by organic growth in the number of individuals served across our UnitedHealthcare benefits businesses and growth across all of our Optum services businesses.

Medical Costs

Medical costs increased due to risk-based membership growth and medical cost trends, partially offset by medical management initiatives.

Income Tax Rate

Our effective tax rate decreased primarily due to the adoption of the ASU 2016-09, which we adopted in the first quarter of 2016. See Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, of this report for more information about the adoption of ASU 2016-09.

Reportable Segments

See Note 13 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements" for more information on our segments. The following table presents a summary of the reportable segment financial information:

	For the Years Ended December 31,			Change		Change	
(in millions, except percentages)	2016	2015	2014	2016 vs. 2015		2015 vs. 2014	
Revenues							
UnitedHealthcare	$148,581	$131,343	$119,798	$17,238	13%	$11,545	10%
OptumHealth	16,908	13,927	11,032	2,981	21	2,895	26
OptumInsight	7,333	6,196	5,227	1,137	18	969	19
OptumRx	60,440	48,272	31,976	12,168	25	16,296	51
Optum eliminations	(1,088)	(791)	(489)	(297)	38	(302)	62
Optum	83,593	67,604	47,746	15,989	24	19,858	42
Eliminations	(47,334)	(41,840)	(37,070)	(5,494)	13	(4,770)	13
Consolidated revenues	$184,840	$157,107	$130,474	$27,733	18%	$26,633	20%
Earnings from operations							
UnitedHealthcare	$ 7,307	$ 6,754	$ 6,992	$ 553	8%	$ (238)	(3)%
OptumHealth	1,428	1,240	1,090	188	15	150	14
OptumInsight	1,513	1,278	1,002	235	18	276	28
OptumRx	2,682	1,749	1,190	933	53	559	47
Optum	5,623	4,267	3,282	1,356	32	985	30
Consolidated earnings from operations	$ 12,930	$ 11,021	$ 10,274	$ 1,909	17%	$ 747	7%
Operating margin							
UnitedHealthcare	4.9%	5.1%	5.8%	(0.2)%		(0.7)%	
OptumHealth	8.4	8.9	9.9	(0.5)		(1.0)	
OptumInsight	20.6	20.6	19.2	—		1.4	
OptumRx	4.4	3.6	3.7	0.8		(0.1)	
Optum	6.7	6.3	6.9	0.4		(0.6)	
Consolidated operating margin	7.0%	7.0%	7.9%	—%		(0.9)%	

UnitedHealthcare

The following table summarizes UnitedHealthcare revenues by business:

(in millions, except percentages)	For the Years Ended December 31, 2016	2015	2014	Change 2016 vs. 2015		Change 2015 vs. 2014	
UnitedHealthcare Employer & Individual	$ 53,084	$ 47,194	$ 43,017	$ 5,890	12%	$ 4,177	10%
UnitedHealthcare Medicare & Retirement	56,329	49,735	46,258	6,594	13	3,477	8
UnitedHealthcare Community & State	32,945	28,911	23,586	4,034	14	5,325	23
UnitedHealthcare Global	6,223	5,503	6,937	720	13	(1,434)	(21)
Total UnitedHealthcare revenues	$148,581	$131,343	$119,798	$17,238	13%	$11,545	10%

The following table summarizes the number of individuals served by our UnitedHealthcare businesses, by major market segment and funding arrangement:

(in thousands, except percentages)	December 31, 2016	2015	2014	Change 2016 vs. 2015		Change 2015 vs. 2014	
Commercial risk-based — group	7,470	7,095	6,765	375	5%	330	5%
Commercial risk-based — individual	1,350	1,190	740	160	13	450	61
Commercial fee-based	18,900	18,565	18,350	335	2	215	1
Fee-based TRICARE	2,860	2,880	2,895	(20)	(1)	(15)	(1)
Total commercial	30,580	29,730	28,750	850	3	980	3
Medicare Advantage	3,630	3,235	3,005	395	12	230	8
Medicaid	5,890	5,305	5,055	585	11	250	5
Medicare Supplement (Standardized)	4,265	4,035	3,750	230	6	285	8
Total public and senior	13,785	12,575	11,810	1,210	10	765	6
Total UnitedHealthcare — domestic medical	44,365	42,305	40,560	2,060	5	1,745	4
International	4,220	4,090	4,425	130	3	(335)	(8)
Total UnitedHealthcare — medical	48,585	46,395	44,985	2,190	5%	1,410	3%
Supplemental Data:							
Medicare Part D stand-alone	4,930	5,060	5,165	(130)	(3)%	(105)	(2)%

Growth in services to the public sector, mid-sized employers, small groups and individuals led the overall increase in people served through risk-based benefit plans in the commercial market. Medicare Advantage increased year-over-year due to growth in people served through individual and employer-sponsored group Medicare Advantage plans. Medicaid growth was driven by the combination of new state-based awards and growth in established programs. Medicare Supplement growth reflected strong customer retention and new sales.

UnitedHealthcare's revenue increase was due to growth in the number of individuals served across its businesses and price increases for underlying medical cost trends.

The increase in UnitedHealthcare's operating earnings was due to diversified growth, offset by guaranty fund assessments recorded in the fourth quarter of 2016. For more information on these assessments, see Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements." Operating earnings in 2015 included the establishment of premium deficiency reserves for 2016, primarily for individual ACA compliant business.

Optum

Total revenues and operating earnings increased as each segment reported increased revenues and earnings from operations as a result of the factors discussed below.

The results by segment were as follows:

OptumHealth

Revenue increased at OptumHealth primarily due to growth in its health care delivery businesses as well as expansion of behavioral services into new Medicaid markets. Strong performance in business supporting UnitedHealthcare partially offset by investments in the health care delivery business drove the increase in earnings from operations.

OptumInsight

Revenue and earnings from operations at OptumInsight increased primarily due to growth in revenue management, business process outsourcing and technology services.

OptumRx

Revenue and earnings from operations at OptumRx increased primarily due to the full-year impact of Catamaran and organic growth. In 2016, OptumRx fulfilled 1.24 billion adjusted scripts compared to 932 million in 2015.

2015 RESULTS OF OPERATIONS COMPARED TO 2014 RESULTS

Consolidated Financial Results

Revenues

The increase in revenues was primarily driven by the effect of the Catamaran acquisition and organic growth in the number of individuals served across our benefits businesses and across all of Optum's businesses.

Medical Costs

Medical costs increased primarily due to risk-based membership growth in our benefits businesses. Medical costs also included losses on individual ACA compliant products related to 2015, and the establishment of premium deficiency reserves related to the 2016 policy year for anticipated future losses for in-force individual ACA compliant contracts and a new state Medicaid contract.

Operating Cost Ratio

The decrease in our operating cost ratio was due to the inclusion of Catamaran and growth in government benefits programs, both of which have lower operating cost ratios and Company wide productivity gains.

Reportable Segments

UnitedHealthcare

UnitedHealthcare's revenue growth during the year ended December 31, 2015 was due to growth in the number of individuals served across its businesses and price increases reflecting underlying medical cost trends.

UnitedHealthcare's operating earnings for the year ended December 31, 2015 decreased as the combined individual ACA compliant losses and premium deficiency reserves totaling $815 million more than offset strong growth across the business, improved medical cost management and increased productivity.

Optum

Total revenues and operating earnings increased for the year ended December 31, 2015 as each reporting segment increased revenues and earnings from operations by double-digit percentages as a result of the factors discussed below.

The results by segment were as follows:

OptumHealth

Revenue and earnings from operations increased at OptumHealth during the year ended December 31, 2015 primarily due to growth in its care delivery businesses and the impact of acquisitions in patient care centers and population health management services. The operating margins for the year ended December 31, 2015 decreased from the prior year primarily due to investments made to develop future growth opportunities.

OptumInsight

Revenue, earnings from operations and operating margins at OptumInsight for the year ended December 31, 2015 increased primarily due to expansion and growth in care provider revenue management services and payer services.

OptumRx

Revenue and earnings from operations for the year ended December 31, 2015 increased due to the mid-year acquisition of Catamaran as well as strong organic growth. Operating margins for the year ended December 31, 2015 decreased slightly due to the inclusion of lower margin Catamaran business.

LIQUIDITY, FINANCIAL CONDITION AND CAPITAL RESOURCES

Liquidity

Introduction

We manage our liquidity and financial position in the context of our overall business strategy. We continually forecast and manage our cash, investments, working capital balances and capital structure to meet the short-term and long-term obligations of our businesses while seeking to maintain liquidity and financial flexibility. Cash flows generated from operating activities are principally from earnings before noncash expenses.

Our regulated subsidiaries generate significant cash flows from operations and are subject to financial regulations and standards in their respective jurisdictions. These standards, among other things, require these subsidiaries to maintain specified levels of statutory capital, as defined by each jurisdiction, and restrict the timing and amount of dividends and other distributions that may be paid to their parent companies.

In 2016, our U.S. regulated subsidiaries paid their parent companies dividends of $3.9 billion. For the year ended December 31, 2015, our U.S. regulated subsidiaries paid their parent companies dividends of $4.4 billion. See Note 10 of Notes to the Consolidated Financial Statements included in Part II, Item 8, “Financial Statements” for further detail concerning our regulated subsidiary dividends.

Our nonregulated businesses also generate cash flows from operations that are available for general corporate use. Cash flows generated by these entities, combined with dividends from our regulated entities and financing through the issuance of long-term debt as well as issuance of commercial paper or the ability to draw under our committed credit facilities, further strengthen our operating and financial flexibility. We use these cash flows to expand our businesses through acquisitions, reinvest in our businesses through capital expenditures, repay debt and return capital to our shareholders through shareholder dividends and/or repurchases of our common stock, depending on market conditions.

Summary of our Major Sources and Uses of Cash and Cash Equivalents

(in millions)	For the Years Ended December 31, 2016	2015	2014	Change 2016 vs. 2015	Change 2015 vs. 2014
Sources of cash:					
Cash provided by operating activities	$ 9,795	$ 9,740	$ 8,051	$ 55	$ 1,689
Issuances of long-term debt and commercial paper, net of repayments	990	14,607	391	(13,617)	14,216
Proceeds from common share issuances	429	402	462	27	(60)
Sales and maturities of investments, net of purchases	—	—	799	—	(799)
Customer funds administered	1,692	768	—	924	768
Other	37	—	115	37	(115)
Total sources of cash	12,943	25,517	9,818		
Uses of cash:					
Cash paid for acquisitions and noncontrolling interest shares, net of cash assumed	(2,017)	(16,282)	(1,923)	14,265	(14,359)
Cash dividends paid	(2,261)	(1,786)	(1,362)	(475)	(424)
Common share repurchases	(1,280)	(1,200)	(4,008)	(80)	2,808
Purchases of property, equipment and capitalized software	(1,705)	(1,556)	(1,525)	(149)	(31)
Purchases of investments, net of sales and maturities	(5,927)	(531)	—	(5,396)	(531)
Customer funds administered	—	—	(638)	—	638
Other	(324)	(578)	(138)	254	(440)
Total uses of cash	(13,514)	(21,933)	(9,594)		
Effect of exchange rate changes on cash and cash equivalents	78	(156)	(5)	234	(151)
Net (decrease) increase in cash and cash equivalents	$ (493)	$ 3,428	$ 219	$ (3,921)	$ 3,209

2016 Cash Flows Compared to 2015 Cash Flows

Cash flows provided by operating activities increased slightly as higher net earnings were mostly offset by increased CMS receivables and other operating items.

Other significant changes in sources or uses of cash year-over-year included increased net purchases of investments in 2016 and the decreases in cash paid for acquisitions and proceeds from debt issuances due to the 2015 acquisition of Catamaran.

2015 Cash Flows Compared to 2014 Cash Flows

Cash flows provided by operating activities in 2015 increased primarily due to growth in risk-based products, which increased medical costs payable and an increase in CMS risk share payables, which increased other liabilities. These increases were partially offset by an increase in pharmacy rebates, which increased other receivables, the increase in the payment of the 2015 Health Insurance Industry Tax and the payment of Reinsurance Program fees in 2015.

Other significant changes in sources or uses of cash year-over-year included increased cash paid for acquisitions and net debt issuances and decreased share repurchases, all due to the Catamaran acquisition.

Financial Condition

As of December 31, 2016, our cash, cash equivalent and available-for-sale investment balances of $36.7 billion included $10.4 billion of cash and cash equivalents (of which approximately $700 million was available for general corporate use), $24.2 billion of debt securities and $2.0 billion of investments in equity securities consisting of investments in non-U.S. dollar fixed-income funds; employee savings plan related investments; venture capital funds; and dividend paying stocks. Given the significant portion of our portfolio held in cash equivalents, we do not anticipate fluctuations in the aggregate fair value of our financial assets to have a material impact on our liquidity or capital position. Other sources of liquidity, primarily from operating cash flows and our commercial paper program, which is supported by our bank credit facilities, reduce the need to sell investments during adverse market conditions. See Note 4 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements" for further detail concerning our fair value measurements.

Our available-for-sale debt portfolio had a weighted-average duration of 3.3 years and a weighted-average credit rating of "AA" as of December 31, 2016. When multiple credit ratings are available for an individual security, the average of the available ratings is used to determine the weighted-average credit rating.

Capital Resources and Uses of Liquidity

In addition to cash flows from operations and cash and cash equivalent balances available for general corporate use, our capital resources and uses of liquidity are as follows:

Commercial Paper and Bank Credit Facilities. Our revolving bank credit facilities provide liquidity support for our commercial paper borrowing program, which facilitates the private placement of senior unsecured debt through third-party broker-dealers, and are available for general corporate purposes. For more information on our commercial paper and bank credit facilities, see Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

Our revolving bank credit facilities contain various covenants, including covenants requiring us to maintain a defined debt to debt-plus-shareholders' equity ratio of not more than 55%. As of December 31, 2016, our debt to debt-plus-shareholders' equity ratio, as defined and calculated under the credit facilities was approximately 44%.

Long-Term Debt. Periodically, we access capital markets to issue long-term debt for general corporate purposes, such as, to meet our working capital requirements, to refinance debt, to finance acquisitions or for share repurchases. In February 2016, we issued debt to repay commercial paper borrowings, which were incurred for general corporate and working capital purposes, and to repay our 5.375% notes that were due March 15, 2016. In December 2016, we issued debt to repay commercial paper borrowings, which were incurred for general corporate and working capital purposes. For more information on these debt issuances, see Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8 "Financial Statements."

Credit Ratings. Our credit ratings as of December 31, 2016 were as follows:

	Moody's		Standard & Poor's		Fitch		A.M. Best	
	Ratings	Outlook	Ratings	Outlook	Ratings	Outlook	Ratings	Outlook
Senior unsecured debt	A3	Negative	A+	Negative	A-	Negative	bbb+	Stable
Commercial paper	P-2	n/a	A-1	n/a	F1	n/a	AMB-2	n/a

The availability of financing in the form of debt or equity is influenced by many factors, including our profitability, operating cash flows, debt levels, credit ratings, debt covenants and other contractual restrictions, regulatory requirements and economic and market conditions. For example, a significant downgrade in our credit ratings or adverse conditions in the capital markets may increase the cost of borrowing for us or limit our access to capital.

Share Repurchase Program. As of December 31, 2016, we had Board authorization to purchase up to an additional 51 million shares of our common stock. For more information on our share repurchase program, see Note 10 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

Dividends. In June 2016, our Board increased our quarterly cash dividend to shareholders to an annual dividend rate of $2.50 per share. For more information on our dividend, see Note 10 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

CONTRACTUAL OBLIGATIONS AND COMMITMENTS

The following table summarizes future obligations due by period as of December 31, 2016, under our various contractual obligations and commitments:

(in millions)	2017	2018 to 2019	2020 to 2021	Thereafter	Total
Debt (a)	$ 8,262	$ 6,282	$ 6,059	$ 27,899	$48,502
Operating leases	453	771	587	499	2,310
Purchase and other obligations (b)	623	617	297	170	1,707
Future policy benefits (c)	133	271	273	1,980	2,657
Unrecognized tax benefits (d)	19	—	—	234	253
Other liabilities recorded on the Consolidated Balance Sheet (e)	269	14	5	2,288	2,576
Redeemable noncontrolling interests (f)	958	1,054	—	—	2,012
Total contractual obligations	$10,717	$ 9,009	$ 7,221	$ 33,070	$60,017

(a) Includes interest coupon payments and maturities at par or put values. The table also assumes amounts are outstanding through their contractual term. See Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements" for more detail.

(b) Includes fixed or minimum commitments under existing purchase obligations for goods and services, including agreements that are cancelable with the payment of an early termination penalty and remaining capital commitments for venture capital funds and other funding commitments. Excludes agreements that are cancelable without penalty and excludes liabilities to the extent recorded in our Consolidated Balance Sheets as of December 31, 2016.

(c) Future policy benefits represent account balances that accrue to the benefit of the policyholders, excluding surrender charges, for universal life and investment annuity products and for long-duration health policies sold to individuals for which some of the premium received in the earlier years is intended to pay benefits to be incurred in future years. See Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements" for more detail.

(d) As the timing of future settlements is uncertain, the long-term portion has been classified as "Thereafter."

(e) Includes obligations associated with contingent consideration and other payments related to business acquisitions, certain employee benefit programs, amounts accrued for guaranty fund assessments and various other long-term liabilities. Due to uncertainty regarding payment timing, obligations for employee benefit programs, charitable contributions and other liabilities have been classified as "Thereafter."

(f) Includes commitments for redeemable shares of our subsidiaries.

We do not have other significant contractual obligations or commitments that require cash resources. However, we continually evaluate opportunities to expand our operations, which include internal development of new products, programs and technology applications and may include acquisitions.

OFF-BALANCE SHEET ARRANGEMENTS

As of December 31, 2016, we were not involved in any off-balance sheet arrangements, which have or are reasonably likely to have a material effect on our financial condition, results of operations or liquidity.

RECENTLY ISSUED ACCOUNTING STANDARDS

See Note 2 of Notes to the Consolidated Financial Statements in Part II, Item 8 "Financial Statements" for a discussion of new accounting pronouncements that affect us.

CRITICAL ACCOUNTING ESTIMATES

Critical accounting estimates are those estimates that require management to make challenging, subjective or complex judgments, often because they must estimate the effects of matters that are inherently uncertain and may change in subsequent periods. Critical accounting estimates involve judgments and uncertainties that are sufficiently sensitive and may result in materially different results under different assumptions and conditions.

Medical Costs Payable

Medical costs and medical costs payable include estimates of our obligations for medical care services that have been rendered on behalf of insured consumers, but for which claims have either not yet been received or processed. Depending on the health care professional and type of service, the typical billing lag for services can be up to 90 days from the date of service. Approximately 90% of claims related to medical care services are known and settled within 90 days from the date of service and substantially all within twelve months. As of December 31, 2016, our days outstanding in medical payables was 51 days, calculated as total medical payables divided by total medical costs times the number of days in the period.

In each reporting period, our operating results include the effects of more completely developed medical costs payable estimates associated with previously reported periods. If the revised estimate of prior period medical costs is less than the previous estimate, we will decrease reported medical costs in the current period (favorable development). If the revised estimate of prior period medical costs is more than the previous estimate, we will increase reported medical costs in the current period (unfavorable development). Medical costs in 2016, 2015 and 2014 included favorable medical cost development related to prior years of $220 million, $320 million and $420 million, respectively.

In developing our medical costs payable estimates, we apply different estimation methods depending on the month for which incurred claims are being estimated. For example, for the most recent two months, we estimate claim costs incurred by applying observed medical cost trend factors to the average per member per month (PMPM) medical costs incurred in prior months for which more complete claim data is available, supplemented by a review of near-term completion factors.

Completion Factors. A completion factor is an actuarial estimate, based upon historical experience and analysis of current trends, of the percentage of incurred claims during a given period that have been adjudicated by us at the date of estimation. Completion factors are the most significant factors we use in developing our medical costs payable estimates for periods prior to the most recent two months. Completion factors include judgments in relation to claim submissions such as the time from date of service to claim receipt, claim inventory levels and claim processing backlogs, as well as other factors. If actual claims submission rates from providers (which can be influenced by a number of factors, including provider mix and electronic versus manual submissions) or our claim processing patterns are different than estimated, our reserves may be significantly impacted.

The following table illustrates the sensitivity of these factors and the estimated potential impact on our medical costs payable estimates for those periods as of December 31, 2016:

Completion Factors (Decrease) Increase in Factors	Increase (Decrease) In Medical Costs Payable
	(in millions)
(0.75)%	$ 437
(0.50)	291
(0.25)	145
0.25	(144)
0.50	(288)
0.75	(430)

Medical Cost Per Member Per Month Trend Factors. Medical cost PMPM trend factors are significant factors we use in developing our medical costs payable estimates for the most recent two months. Medical cost trend factors are developed through a comprehensive analysis of claims incurred in prior months, provider contracting and expected unit costs, benefit design and by reviewing a broad set of health care utilization indicators, including but not limited to, pharmacy utilization trends, inpatient hospital census data and incidence data from the National Centers for Disease Control. We also consider macroeconomic variables such as gross-domestic product growth, employment and disposable income. A large number of factors can cause the medical cost trend to vary from our estimates, including: our ability and practices to manage medical and pharmaceutical costs, changes in level and mix of services utilized, mix of benefits offered, including the impact of co-pays and deductibles, changes in medical practices, catastrophes and epidemics.

The following table illustrates the sensitivity of these factors and the estimated potential impact on our medical costs payable estimates for the most recent two months as of December 31, 2016:

Medical Cost PMPM Trend Increase (Decrease) in Factors	Increase (Decrease) In Medical Costs Payable
	(in millions)
3%	$ 557
2	371
1	186
(1)	(186)
(2)	(371)
(3)	(557)

The completion factors and medical costs PMPM trend factors analyses above include outcomes that are considered reasonably likely based on our historical experience estimating liabilities for incurred but not reported benefit claims.

Management believes the amount of medical costs payable is reasonable and adequate to cover our liability for unpaid claims as of December 31, 2016; however, actual claim payments may differ from established estimates as discussed above. Assuming a hypothetical 1% difference between our December 31, 2016 estimates of medical costs payable and actual medical costs payable, excluding AARP Medicare Supplement Insurance and any potential offsetting impact from premium rebates, 2016 net earnings would have increased or decreased by $90 million.

For more detail related to our medical cost estimates, see Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, “Financial Statements.”

Revenues

We derive a substantial portion of our revenues from health care insurance premiums. We recognize premium revenues in the period eligible individuals are entitled to receive health care services. Customers are typically billed monthly at a contracted rate per eligible person multiplied by the total number of people eligible to receive services.

Our Medicare Advantage and Medicare Part D premium revenues are subject to periodic adjustment under the CMS risk adjustment payment methodology. The CMS risk adjustment model provides higher per member payments for enrollees diagnosed with certain conditions and lower payments for enrollees who are healthier. We estimate risk adjustment revenues based upon the data submitted and expected to be submitted to CMS. As a result of the variability of factors that determine such estimations, the actual amount of CMS’ retroactive payments could be materially more or less than our estimates. This may result in favorable or unfavorable adjustments to our Medicare premium revenue and, accordingly, our profitability. For more detail on premium revenues see Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, “Financial

Statements." Risk adjustment data for certain of our plans is subject to review by the federal and state governments, including audit by regulators. See Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements" for additional information regarding these audits. Our estimates of premiums to be recognized are reduced by any expected premium minimum MLR rebates payable by us to CMS.

Goodwill and Intangible Assets

Goodwill. We evaluate goodwill for impairment annually or more frequently when an event occurs or circumstances change that indicate the carrying value may not be recoverable. When testing goodwill for impairment, we may first assess qualitative factors to determine if it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value. During a qualitative analysis, we consider the impact of changes, if any, to the following factors: macroeconomic, industry and market factors, cost factors, changes in overall financial performance, and any other relevant events and uncertainties impacting a reporting unit. If our qualitative assessment indicates that goodwill impairment is more likely than not, we perform additional quantitative analysis. We may also elect to skip the qualitative testing and proceed directly to the quantitative testing. For reporting units where a quantitative analysis is performed, we perform a multi-step test measuring the fair values of the reporting units and comparing them to their aggregate carrying values, including goodwill. If the fair value is less than the carrying value of the reporting unit, then the implied value of goodwill would be calculated and compared to the carrying amount of goodwill to determine whether goodwill is impaired.

We estimate the fair values of our reporting units using discounted cash flows, which include assumptions about a wide variety of internal and external factors. Significant assumptions used in the impairment analysis include financial projections of free cash flow (including significant assumptions about operations, capital requirements and income taxes), long-term growth rates for determining terminal value beyond the discretely forecasted periods and discount rates. For each reporting unit, comparative market multiples are used to corroborate the results of our discounted cash flow test.

Forecasts and long-term growth rates used for our reporting units are consistent with, and use inputs from, our internal long-term business plan and strategies. Key assumptions used in these forecasts include:

- *Revenue trends.* Key revenue drivers for each reporting unit are determined and assessed. Significant factors include: membership growth, medical trends and the impact and expectations of regulatory environments. Additional macro-economic assumptions relating to unemployment, GDP growth, interest rates and inflation are also evaluated and incorporated, as appropriate.
- *Medical cost trends.* For further discussion of medical cost trends, see the "Medical Cost Trend" section of Executive Overview-Business Trends above and the discussion in the "Medical Costs Payable" critical accounting estimate above. Similar factors, including historical and expected medical cost trend levels, are considered in estimating our long-term medical trends at the reporting unit level.
- *Operating productivity.* We forecast expected operating cost levels based on historical levels and expectations of future operating cost levels.
- *Capital levels.* The operating and long-term capital requirements for each business are considered.

Discount rates are determined for each reporting unit and include consideration of the implied risk inherent in their forecasts. Our most significant estimate in the discount rate determinations involves our adjustments to the peer company weighted average costs of capital that reflect reporting unit-specific factors. We have not made any adjustments to decrease a discount rate below the calculated peer company weighted average cost of capital for any reporting unit. Company-specific adjustments to discount rates are subjective and thus are difficult to measure with certainty. The passage of time and the availability of additional information regarding areas of uncertainty with respect to the reporting units' operations could cause these assumptions to change in the future. We completed our annual impairment tests for goodwill as of October 1, 2016. All of our reporting units had fair values substantially in excess of their carrying values.

Intangible Assets. Our finite-lived intangible assets are subject to impairment tests when events or circumstances indicate that an asset's (or asset group's) carrying value may exceed its estimated fair value. Consideration is given on a quarterly basis to a number of potential impairment indicators, including: changes in the use of the assets, changes in legal or other business factors that could affect value, experienced or expected operating cash-flow deterioration or losses, adverse changes in customer populations, adverse competitive or technological advances that could impact value and other factors.

Our indefinite-lived intangible assets are tested for impairment on an annual basis, or more frequently if impairment indicators exist. To determine if an indefinite-lived intangible asset is impaired, we compare its estimated fair value to its carrying value. If the carrying value exceeds its estimated fair value, an impairment would be recorded for the amount by which the carrying value exceeds its estimated fair value. Intangible assets were not impaired in 2016.

Investments

Our investments are principally classified as available-for-sale and are recorded at fair value. We continually monitor the difference between the cost and fair value of our investments.

Other-Than-Temporary Impairment Assessment. Individual securities with fair values lower than costs are reviewed for impairment considering the following factors: our intent to sell the security or the likelihood that we will be required to sell the security before recovery of the entire amortized cost, the length of time and extent of impairment and the financial condition and near-term prospects of the issuer as well as specific events or circumstances that may influence the operations of the issuer. Other factors included in the assessment include the type and nature of the securities and their liquidity. Given the nature of our portfolio, primarily investment grade securities, historical impairments were largely market related (e.g., interest rate fluctuations) as opposed to credit related. Our large cash holdings reduce the risk that we will be required to sell a security. However, our intent to sell a security may change from period to period if facts and circumstances change.

The judgments and estimates related to other-than-temporary impairment may ultimately prove to be inaccurate due to many factors, including: circumstances may change over time, industry sector and market factors may differ from expectations and estimates or we may ultimately sell a security we previously intended to hold. Our assessment of the financial condition and near-term prospects of the issuer may ultimately prove to be inaccurate as time passes and new information becomes available, including changes to current facts and circumstances, or as unknown or estimated unlikely trends develop.

LEGAL MATTERS

A description of our legal proceedings is presented in Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

CONCENTRATIONS OF CREDIT RISK

Investments in financial instruments such as marketable securities and accounts receivable may subject us to concentrations of credit risk. Our investments in marketable securities are managed under an investment policy authorized by our Board of Directors. This policy limits the amounts that may be invested in any one issuer and generally limits our investments to U.S. government and agency securities, state and municipal securities and corporate debt obligations that are investment grade. Concentrations of credit risk with respect to accounts receivable are limited due to the large number of employer groups and other customers that constitute our client base. As of December 31, 2016, there were no significant concentrations of credit risk.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Our primary market risks are exposures to changes in interest rates that impact our investment income and interest expense and the fair value of certain of our fixed-rate investments and debt, as well as foreign currency exchange rate risk of the U.S. dollar primarily to the Brazilian real.

As of December 31, 2016, we had $13.2 billion of financial assets on which the interest rates received vary with market interest rates, which may materially impact our investment income. Also as of December 31, 2016, $12.4 billion of our financial liabilities, which include commercial paper, debt and deposit liabilities, were at interest rates that vary with market rates, either directly or through the use of related interest rate swap contracts.

The fair value of certain of our fixed-rate investments and debt also varies with market interest rates. As of December 31, 2016, $21.9 billion of our investments were fixed-rate debt securities and $25.2 billion of our debt was non-swapped fixed-rate term debt. An increase in market interest rates decreases the market value of fixed-rate investments and fixed-rate debt. Conversely, a decrease in market interest rates increases the market value of fixed-rate investments and fixed-rate debt.

We manage exposure to market interest rates by diversifying investments across different fixed income market sectors and debt across maturities, as well as by endeavoring to match our floating-rate assets and liabilities over time, either directly or through the use of interest rate swap contracts. Unrealized gains and losses on investments in available-for-sale securities are reported in comprehensive income.

The following tables summarize the impact of hypothetical changes in market interest rates across the entire yield curve by 1% point or 2% points as of December 31, 2016 and 2015 on our investment income and interest expense per annum and the fair value of our investments and debt (in millions, except percentages):

	December 31, 2016			
Increase (Decrease) in Market Interest Rate	Investment Income Per Annum (a)	Interest Expense Per Annum (a)	Fair Value of Financial Assets (b)	Fair Value of Financial Liabilities
2%	$ 263	$ 245	$ (1,711)	$ (3,470)
1	132	122	(873)	(1,860)
(1)	(105)	(95)	855	2,244
(2)	nm	nm	1,562	4,784

	December 31, 2015			
Increase (Decrease) in Market Interest Rate	Investment Income Per Annum (a)	Interest Expense Per Annum (a)	Fair Value of Financial Assets (b)	Fair Value of Financial Liabilities
2%	$ 258	$ 257	$ (1,388)	$ (3,233)
1	129	128	(702)	(1,746)
(1)	(80)	(55)	677	2,085
(2)	nm	nm	1,132	4,442

nm = not meaningful

(a) Given the low absolute level of short-term market rates on our floating-rate assets and liabilities as of December 31, 2016 and 2015, the assumed hypothetical change in interest rates does not reflect the full 100 basis point reduction in interest income or interest expense as the rate cannot fall below zero and thus the 200 basis point reduction is not meaningful.

(b) As of December 31, 2016 and 2015, some of our investments had interest rates below 2% so the assumed hypothetical change in the fair value of investments does not reflect the full 200 basis point reduction.

We have an exposure to changes in the value of the Brazilian real to the U.S. dollar in translation of UnitedHealthcare Brazil's operating results at the average exchange rate over the accounting period, and

UnitedHealthcare Brazil's assets and liabilities at the spot rate at the end of the accounting period. The gains or losses resulting from translating foreign assets and liabilities into U.S. dollars are included in equity and comprehensive income.

An appreciation of the U.S. dollar against the Brazilian real reduces the carrying value of the net assets denominated in Brazilian real. For example, as of December 31, 2016, a hypothetical 10% and 25% increase in the value of the U.S. dollar against the Brazilian real would have caused a reduction in net assets of approximately $400 million and $900 million, respectively. We manage exposure to foreign currency earnings risk by conducting our international business operations primarily in their functional currencies.

As of December 31, 2016, we had $2.0 billion of investments in equity securities, consisting of investments in non-U.S. dollar fixed-income funds; employee savings plan related investments; venture capital funds; and dividend paying stocks. Valuations in non-U.S. dollar funds are subject to foreign exchange rates. Valuations in venture capital funds are subject to conditions affecting health care and technology stocks and dividend paying equities are subject to more general market conditions.

ITEM 8. FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of UnitedHealth Group Incorporated and Subsidiaries:

We have audited the accompanying consolidated balance sheets of UnitedHealth Group Incorporated and subsidiaries (the "Company") as of December 31, 2016 and 2015, and the related consolidated statements of operations, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2016. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of UnitedHealth Group Incorporated and subsidiaries as of December 31, 2016 and 2015, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2016, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 8, 2017, expressed an unqualified opinion on the Company's internal control over financial reporting.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 8, 2017

UnitedHealth Group
Consolidated Balance Sheets

(in millions, except per share data)	December 31, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	$ 10,430	$ 10,923
Short-term investments	2,845	1,988
Accounts receivable, net of allowances of $514 and $333	8,152	6,523
Other current receivables, net of allowances of $409 and $138	7,499	6,801
Assets under management	3,105	2,998
Prepaid expenses and other current assets	1,848	2,406
Total current assets	33,879	31,639
Long-term investments	23,868	18,792
Property, equipment and capitalized software, net of accumulated depreciation and amortization of $3,749 and $3,173	5,901	4,861
Goodwill	47,584	44,453
Other intangible assets, net of accumulated amortization of $3,847 and $3,128	8,541	8,391
Other assets	3,037	3,118
Total assets	$ 122,810	$ 111,254
Liabilities, redeemable noncontrolling interests and equity		
Current liabilities:		
Medical costs payable	$ 16,391	$ 14,330
Accounts payable and accrued liabilities	13,361	11,994
Commercial paper and current maturities of long-term debt	7,193	6,634
Unearned revenues	1,968	2,142
Other current liabilities	10,339	7,798
Total current liabilities	49,252	42,898
Long-term debt, less current maturities	25,777	25,331
Future policy benefits	2,524	2,496
Deferred income taxes	2,761	3,587
Other liabilities	2,307	1,481
Total liabilities	82,621	75,793
Commitments and contingencies (Note 12)		
Redeemable noncontrolling interests	2,012	1,736
Equity:		
Preferred stock, $0.001 par value —10 shares authorized; no shares issued or outstanding	—	—
Common stock, $0.01 par value—3,000 shares authorized; 952 and 953 issued and outstanding	10	10
Additional paid-in capital	—	29
Retained earnings	40,945	37,125
Accumulated other comprehensive loss	(2,681)	(3,334)
Nonredeemable noncontrolling interest	(97)	(105)
Total equity	38,177	33,725
Total liabilities, redeemable noncontrolling interests and equity	$ 122,810	$ 111,254

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Consolidated Statements of Operations

(in millions, except per share data)	For the Years Ended December 31, 2016	2015	2014
Revenues:			
Premiums	$144,118	$127,163	$115,302
Products	26,658	17,312	4,242
Services	13,236	11,922	10,151
Investment and other income	828	710	779
Total revenues	184,840	157,107	130,474
Operating costs:			
Medical costs	117,038	103,875	93,633
Operating costs	28,401	24,312	21,263
Cost of products sold	24,416	16,206	3,826
Depreciation and amortization	2,055	1,693	1,478
Total operating costs	171,910	146,086	120,200
Earnings from operations	12,930	11,021	10,274
Interest expense	(1,067)	(790)	(618)
Earnings before income taxes	11,863	10,231	9,656
Provision for income taxes	(4,790)	(4,363)	(4,037)
Net earnings	7,073	5,868	5,619
Earnings attributable to noncontrolling interests	(56)	(55)	—
Net earnings attributable to UnitedHealth Group common shareholders	$ 7,017	$ 5,813	$ 5,619
Earnings per share attributable to UnitedHealth Group common shareholders:			
Basic	$ 7.37	$ 6.10	$ 5.78
Diluted	$ 7.25	$ 6.01	$ 5.70
Basic weighted-average number of common shares outstanding	952	953	972
Dilutive effect of common share equivalents	16	14	14
Diluted weighted-average number of common shares outstanding	968	967	986
Anti-dilutive shares excluded from the calculation of dilutive effect of common share equivalents	3	8	6
Cash dividends declared per common share	$ 2.375	$ 1.875	$ 1.405

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Consolidated Statements of Comprehensive Income

(in millions)	For the Years Ended December 31, 2016	2015	2014
Net earnings	$ 7,073	$ 5,868	$ 5,619
Other comprehensive income (loss):			
Gross unrealized (losses) gains on investment securities during the period	(73)	(123)	476
Income tax effect	26	44	(173)
Total unrealized (losses) gains, net of tax	(47)	(79)	303
Gross reclassification adjustment for net realized gains included in net earnings	(166)	(141)	(211)
Income tax effect	60	53	77
Total reclassification adjustment, net of tax	(106)	(88)	(134)
Total foreign currency translation gains (losses)	806	(1,775)	(653)
Other comprehensive income (loss)	653	(1,942)	(484)
Comprehensive income	7,726	3,926	5,135
Comprehensive income attributable to noncontrolling interests	(56)	(55)	—
Comprehensive income attributable to UnitedHealth Group common shareholders	$ 7,670	$ 3,871	$ 5,135

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Consolidated Statements of Changes in Equity

(in millions)	Common Stock Shares	Common Stock Amount	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss): Net Unrealized Gains (Losses) on Investments	Accumulated Other Comprehensive Income (Loss): Foreign Currency Translation (Losses) Gains	Nonredeemable Noncontrolling Interest	Total Equity
Balance at January 1, 2014	988	$ 10	$ —	$ 33,047	$ 54	$ (962)	$ —	$32,149
Net earnings				5,619				5,619
Other comprehensive income (loss)					169	(653)		(484)
Issuances of common stock, and related tax effects	15	—	146					146
Share-based compensation, and related tax benefits			394					394
Common share repurchases	(49)	—	(540)	(3,468)				(4,008)
Cash dividends paid on common shares				(1,362)				(1,362)
Balance at December 31, 2014	954	10	—	33,836	223	(1,615)	—	32,454
Net earnings				5,813			26	5,839
Other comprehensive loss					(167)	(1,775)		(1,942)
Issuances of common stock, and related tax effects	10	—	127					127
Share-based compensation, and related tax benefits			589					589
Common share repurchases	(11)	—	(462)	(738)				(1,200)
Cash dividends paid on common shares				(1,786)				(1,786)
Redeemable noncontrolling interests fair value and other adjustments			(225)					(225)
Acquisition of nonredeemable noncontrolling interest							9	9
Distributions to nonredeemable noncontrolling interest							(140)	(140)
Balance at December 31, 2015	953	10	29	37,125	56	(3,390)	(105)	33,725
Adjustment to adopt ASU 2016-09				28				28
Net earnings				7,017			40	7,057
Other comprehensive (loss) income					(153)	806		653
Issuances of common stock, and related tax effects	9	—	191					191
Share-based compensation			455					455
Common share repurchases	(10)	—	(316)	(964)				(1,280)
Cash dividends paid on common shares				(2,261)				(2,261)
Acquisition of redeemable noncontrolling interest shares			(143)					(143)
Redeemable noncontrolling interests fair value and other adjustments			(216)					(216)
Distributions to nonredeemable noncontrolling interest							(32)	(32)
Balance at December 31, 2016	952	$ 10	$ —	$ 40,945	$ (97)	$ (2,584)	$ (97)	$38,177

See Notes to the Consolidated Financial Statements

UnitedHealth Group
Consolidated Statements of Cash Flows

(in millions)	For the Years Ended December 31, 2016	2015	2014
Operating activities			
Net earnings	$ 7,073	$ 5,868	$ 5,619
Noncash items:			
Depreciation and amortization	2,055	1,693	1,478
Deferred income taxes	81	(73)	(117)
Share-based compensation	485	406	364
Other, net	(82)	(235)	(298)
Net change in other operating items, net of effects from acquisitions and changes in AARP balances:			
Accounts receivable	(1,357)	(591)	(911)
Other assets	(1,601)	(1,430)	(590)
Medical costs payable	1,849	2,585	484
Accounts payable and other liabilities	1,494	1,280	1,637
Unearned revenues	(202)	237	385
Cash flows from operating activities	9,795	9,740	8,051
Investing activities			
Purchases of investments	(17,547)	(9,939)	(9,928)
Sales of investments	7,339	6,054	7,701
Maturities of investments	4,281	3,354	3,026
Cash paid for acquisitions, net of cash assumed	(1,760)	(16,164)	(1,923)
Purchases of property, equipment and capitalized software	(1,705)	(1,556)	(1,525)
Other, net	37	(144)	115
Cash flows used for investing activities	(9,355)	(18,395)	(2,534)
Financing activities			
Acquisition of redeemable noncontrolling interest shares	(257)	(118)	—
Common share repurchases	(1,280)	(1,200)	(4,008)
Cash dividends paid	(2,261)	(1,786)	(1,362)
Proceeds from common stock issuances	429	402	462
Repayments of long-term debt	(2,596)	(1,041)	(812)
(Repayments of) proceeds from commercial paper, net	(382)	3,666	(794)
Proceeds from issuance of long-term debt	3,968	11,982	1,997
Customer funds administered	1,692	768	(638)
Other, net	(324)	(434)	(138)
Cash flows (used for) from financing activities	(1,011)	12,239	(5,293)
Effect of exchange rate changes on cash and cash equivalents	78	(156)	(5)
(Decrease) increase in cash and cash equivalents	(493)	3,428	219
Cash and cash equivalents, beginning of period	10,923	7,495	7,276
Cash and cash equivalents, end of period	$ 10,430	$ 10,923	$ 7,495
Supplemental cash flow disclosures			
Cash paid for interest	$ 1,055	$ 639	$ 644
Cash paid for income taxes	4,726	4,401	4,024

See Notes to the Consolidated Financial Statements

UnitedHealth Group

Notes to the Consolidated Financial Statements

1. Description of Business

UnitedHealth Group Incorporated (individually and together with its subsidiaries, "UnitedHealth Group" and "the Company") is a diversified health and well-being company dedicated to helping people live healthier lives and helping to make the health system work better for everyone.

Through its diversified family of businesses, the Company leverages core competencies in advanced, enabling technology; health care data, information and intelligence; and clinical care management and coordination to help meet the demands of the health system. These core competencies are deployed within the Company's two distinct, but strategically aligned, business platforms: health benefits operating under UnitedHealthcare and health services operating under Optum.

2. Basis of Presentation, Use of Estimates and Significant Accounting Policies

Basis of Presentation

The Company has prepared the Consolidated Financial Statements according to U.S. Generally Accepted Accounting Principles (GAAP) and has included the accounts of UnitedHealth Group and its subsidiaries.

Use of Estimates

These Consolidated Financial Statements include certain amounts based on the Company's best estimates and judgments. The Company's most significant estimates relate to estimates and judgments for medical costs payable and revenues, valuation and impairment analysis of goodwill and other intangible assets, estimates of other current liabilities and other current receivables and valuations of certain investments. Certain of these estimates require the application of complex assumptions and judgments, often because they involve matters that are inherently uncertain and will likely change in subsequent periods. The impact of any change in estimates is included in earnings in the period in which the estimate is adjusted.

Revenues

Premiums

Premium revenues are primarily derived from risk-based health insurance arrangements in which the premium is typically at a fixed rate per individual served for a one-year period, and the Company assumes the economic risk of funding its customers' health care and related administrative costs.

Premium revenues are recognized in the period in which eligible individuals are entitled to receive health care benefits. Health care premium payments received from the Company's customers in advance of the service period are recorded as unearned revenues. Fully insured commercial products of U.S. health plans, Medicare Advantage and Medicare Prescription Drug Benefit (Medicare Part D) plans with medical loss ratios as calculated under the definitions in the Patient Protection and Affordable Care Act (ACA) and related federal and state regulations and implementing regulations, that fall below certain targets are required to rebate ratable portions of their premiums annually. Medicare Advantage premium revenue includes the impact of Centers for Medicare & Medicaid Services (CMS) quality bonuses based on plans' Star ratings.

Premium revenues are recognized based on the estimated premiums earned net of projected rebates because the Company is able to reasonably estimate the ultimate premiums of these contracts. The Company also records premium revenues from capitation arrangements at its OptumHealth businesses.

The Company's Medicare Advantage and Medicare Part D premium revenues are subject to periodic adjustment under CMS' risk adjustment payment methodology. CMS deploys a risk adjustment model that apportions premiums paid to all health plans according to health severity and certain demographic factors. The CMS risk adjustment model provides higher per member payments for enrollees diagnosed with certain conditions and lower payments for enrollees who are healthier. Under this risk adjustment methodology, CMS calculates the risk adjusted premium payment using diagnosis data from hospital inpatient, hospital outpatient and physician treatment settings. The Company and health care providers collect, capture and submit the necessary and available diagnosis data to CMS within prescribed deadlines. The Company estimates risk adjustment revenues based upon the diagnosis data submitted and expected to be submitted to CMS. Risk adjustment data for certain of the Company's plans are subject to review by the government, including audit by regulators. See Note 12 for additional information regarding these audits.

Products and Services

For the Company's OptumRx pharmacy care services business, the majority of revenues are derived from products sold through a contracted network of retail pharmacies or home delivery and specialty pharmacy facilities. Product revenues include ingredient costs (net of rebates), a negotiated dispensing fee and customer co-payments for drugs dispensed through the Company's mail-service pharmacy. In retail pharmacy transactions, revenues recognized exclude the member's applicable co-payment. Pharmacy products are billed to customers based on the number of transactions occurring during the billing period. Product revenues are recognized when the prescriptions are dispensed through the retail network or received by consumers through the Company's mail-service pharmacy. The Company has entered into contracts in which it is primarily obligated to pay its network pharmacy providers for benefits provided to their customers regardless of whether the Company is paid. The Company is also involved in establishing the prices charged by retail pharmacies, determining which drugs will be included in formulary listings and selecting which retail pharmacies will be included in the network offered to plan sponsors' members. As a result, revenues are reported on a gross basis.

Services revenue consists of fees derived from services performed for customers that self-insure the health care costs of their employees and employees' dependents. Under service fee contracts, the Company receives monthly, a fixed fee per employee, which is recognized as revenue as the Company performs, or makes available the applicable services to the customer. The customers retain the risk of financing health care costs for their employees and employees' dependents, and the Company administers the payment of customer funds to physicians and other health care professionals from customer-funded bank accounts. As the Company has neither the obligation for funding the health care costs, nor the primary responsibility for providing the medical care, the Company does not recognize premium revenue and medical costs for these contracts in its Consolidated Financial Statements. For these fee-based customer arrangements, the Company provides coordination and facilitation of medical services; transaction processing; customer, consumer and care professional services; and access to contracted networks of physicians, hospitals and other health care professionals. These services are performed throughout the contract period.

Revenues are also comprised of a number of services and products sold through Optum. For its financial services offerings, OptumHealth charges fees and earns investment income on managed funds. OptumInsight provides software and information products, advisory consulting arrangements and services outsourcing contracts, which may be delivered over several years. OptumInsight revenues are generally recognized over time on either a time and materials basis, or ratably as services are performed or made available to customers.

Medical Costs and Medical Costs Payable

The Company's estimate of medical costs payable represents management's best estimate of its liability for unpaid medical costs as of December 31, 2016.

Each period, the Company re-examines previously established medical costs payable estimates based on actual claim submissions and other changes in facts and circumstances. As more complete claim information becomes

available, the Company adjusts the amount of the estimates and includes the changes in estimates in medical costs in the period in which the change is identified. Approximately 90% of claims related to medical care services are known and settled within 90 days from the date of service and substantially all within twelve months.

Medical costs and medical costs payable include estimates of the Company's obligations for medical care services that have been rendered on behalf of insured consumers, but for which claims have either not yet been received, processed, or paid. The Company develops estimates for medical care services incurred but not reported (IBNR), which includes estimates for claims that have not been received or fully processed, using an actuarial process that is consistently applied, centrally controlled and automated. The actuarial models consider factors such as time from date of service to claim processing, seasonal variances in medical care consumption, health care professional contract rate changes, medical care utilization and other medical cost trends, membership volume and demographics, the introduction of new technologies, benefit plan changes, and business mix changes related to products, customers and geography.

In developing its medical costs payable estimates, the Company applies different estimation methods depending on which incurred claims are being estimated. For the most recent two months, the Company estimates claim costs incurred by applying observed medical cost trend factors to the average per member per month (PMPM) medical costs incurred in prior months for which more complete claim data are available, supplemented by a review of near-term completion factors (actuarial estimates, based upon historical experience and analysis of current trends, of the percentage of incurred claims during a given period that have been adjudicated by the Company at the date of estimation).

For months prior to the most recent two months, the Company applies the completion factors to actual claims adjudicated-to-date to estimate the expected amount of ultimate incurred claims for those months.

Cost of Products Sold

The Company's cost of products sold includes the cost of pharmaceuticals dispensed to unaffiliated customers either directly at its mail and specialty pharmacy locations, or indirectly through its nationwide network of participating pharmacies. Rebates attributable to non-affiliated clients are accrued as rebates receivable and a reduction of cost of products sold with a corresponding payable for the amounts of the rebates to be remitted to those non-affiliated clients in accordance with their contracts and recorded in the Consolidated Statements of Operations as a reduction of product revenue. Cost of products sold also includes the cost of personnel to support the Company's transaction processing services, system sales, maintenance and professional services.

Cash, Cash Equivalents and Investments

Cash and cash equivalents are highly liquid investments that have an original maturity of three months or less. The fair value of cash and cash equivalents approximates their carrying value because of the short maturity of the instruments.

Investments with maturities of less than one year are classified as short-term. Because of regulatory requirements, certain investments are included in long-term investments regardless of their maturity date. The Company classifies these investments as held-to-maturity and reports them at amortized cost. Substantially all other investments are classified as available-for-sale and reported at fair value based on quoted market prices, where available.

The Company excludes unrealized gains and losses on investments in available-for-sale securities from net earnings and reports them as comprehensive income and, net of income tax effects, as a separate component of equity. To calculate realized gains and losses on the sale of investments, the Company specifically identifies the cost of each investment sold.

The Company evaluates an investment for impairment by considering the length of time and extent to which market value has been less than cost or amortized cost, the financial condition and near-term prospects of the issuer as well as specific events or circumstances that may influence the operations of the issuer and the Company's intent to sell the security or the likelihood that it will be required to sell the security before recovery of the entire amortized cost.

New information and the passage of time can change these judgments. The Company manages its investment portfolio to limit its exposure to any one issuer or market sector, and largely limits its investments to investment grade quality. Securities downgraded below policy minimums after purchase will be disposed of in accordance with the Company's investment policy.

Assets Under Management

The Company provides health insurance products and services to members of AARP under a Supplemental Health Insurance Program (the AARP Program) and to AARP members and non-members under separate Medicare Advantage and Medicare Part D arrangements. The products and services under the AARP Program include supplemental Medicare benefits, hospital indemnity insurance, including insurance for individuals between 50 to 64 years of age and other related products.

Pursuant to the Company's agreement, AARP Program assets are managed separately from the Company's general investment portfolio and are used to pay costs associated with the AARP Program. These assets are invested at the Company's discretion, within investment guidelines approved by AARP. The Company does not guarantee any rates of return on these investments and, upon any transfer of the AARP Program contract to another entity, the Company would transfer cash equal in amount to the fair value of these investments at the date of transfer to that entity. Because the purpose of these assets is to fund the medical costs payable, the rate stabilization fund (RSF) liabilities and other related liabilities associated with this AARP contract, assets under management are classified as current assets, consistent with the classification of these liabilities.

The effects of changes in other balance sheet amounts associated with the AARP Program also accrue to the overall benefit of the AARP policyholders through the RSF balance. Accordingly, the Company excludes the effect of such changes in its Consolidated Statements of Cash Flows.

Other Current Receivables

Other current receivables include amounts due from pharmaceutical manufacturers for rebates and Medicare Part D drug discounts and other miscellaneous amounts due to the Company.

The Company's pharmacy care services businesses contract with pharmaceutical manufacturers, some of which provide rebates based on use of the manufacturers' products by its affiliated and non-affiliated clients. The Company accrues rebates as they are earned by its clients on a monthly basis based on the terms of the applicable contracts, historical data and current estimates. The pharmacy care services businesses bill these rebates to the manufacturers on a monthly or quarterly basis depending on the contractual terms and records rebates attributable to affiliated clients as a reduction to medical costs. The Company generally receives rebates from two to five months after billing. As of December 31, 2016 and 2015, total pharmaceutical manufacturer rebates receivable included in other receivables in the Consolidated Balance Sheets amounted to $3.3 billion and $2.6 billion, respectively.

For details on the Company's Medicare Part D receivables see "Medicare Part D Pharmacy Benefits" below.

Medicare Part D Pharmacy Benefits

The Company serves as a plan sponsor offering Medicare Part D prescription drug insurance coverage under contracts with CMS. Under the Medicare Part D program, there are seven separate elements of payment received by the Company during the plan year. These payment elements are as follows:

- *CMS Premium.* CMS pays a fixed monthly premium per member to the Company for the entire plan year.
- *Member Premium.* Additionally, certain members pay a fixed monthly premium to the Company for the entire plan year.
- *Low-Income Premium Subsidy.* For qualifying low-income members, CMS pays some or all of the member's monthly premiums to the Company on the member's behalf.
- *Catastrophic Reinsurance Subsidy*. CMS pays the Company a cost reimbursement estimate monthly to fund the CMS obligation to pay approximately 80% of the costs incurred by individual members in excess of the individual annual out-of-pocket maximum. A settlement is made with CMS based on actual cost experience, after the end of the plan year.
- *Low-Income Member Cost Sharing Subsidy.* For qualifying low-income members, CMS pays on the member's behalf some or all of a member's cost sharing amounts, such as deductibles and coinsurance. The cost sharing subsidy is funded by CMS through monthly payments to the Company. The Company administers and pays the subsidized portion of the claims on behalf of CMS, and a settlement payment is made between CMS and the Company based on actual claims and premium experience, after the end of the plan year.
- *CMS Risk-Share.* Premiums from CMS are subject to risk corridor provisions that compare costs targeted in the Company's annual bids by product and region to actual prescription drug costs, limited to actual costs that would have been incurred under the standard coverage as defined by CMS. Variances of more than 5% above or below the original bid submitted by the Company may result in CMS making additional payments to the Company or require the Company to refund to CMS a portion of the premiums it received. The Company estimates and recognizes an adjustment to premium revenues related to the risk corridor payment settlement based upon pharmacy claims experience to date. The estimate of the settlement associated with these risk corridor provisions requires the Company to consider factors that may not be certain, including estimates of eligible pharmacy costs and member eligibility status differences with CMS. The Company records risk-share adjustments to premium revenues in the Consolidated Statements of Operations and other current liabilities or other current receivables in the Consolidated Balance Sheets.
- *Drug Discount.* The ACA mandated a consumer discount on brand name prescription drugs for Medicare Part D plan participants in the coverage gap. This discount is funded by CMS and pharmaceutical manufacturers while the Company administers the application of these funds. Accordingly, amounts received are not reflected as premium revenues, but rather are accounted for as deposits. The Company records a liability when amounts are received from CMS and a receivable when the Company bills the pharmaceutical manufacturers. Related cash flows are presented as customer funds administered within financing activities in the Consolidated Statements of Cash Flows.

The CMS Premium, the Member Premium and the Low-Income Premium Subsidy represent payments for the Company's insurance risk coverage under the Medicare Part D program and, therefore, are recorded as premium revenues in the Consolidated Statements of Operations. Premium revenues are recognized ratably over the period in which eligible individuals are entitled to receive prescription drug benefits. The Company records premium payments received in advance of the applicable service period in unearned revenues in the Consolidated Balance Sheets.

The Catastrophic Reinsurance Subsidy and the Low-Income Member Cost Sharing Subsidy (Subsidies) represent cost reimbursements under the Medicare Part D program. Amounts received for these Subsidies are not reflected as premium revenues, but rather are accounted for as receivables and/or deposits. Related cash flows are presented as customer funds administered within financing activities in the Consolidated Statements of Cash Flows.

Pharmacy care costs and administrative costs under the contract are expensed as incurred and are recognized in medical costs and operating costs, respectively, in the Consolidated Statements of Operations.

The final 2016 risk-share amount is expected to be settled during the second half of 2017, and is subject to the reconciliation process with CMS.

The Consolidated Balance Sheets include the following amounts associated with the Medicare Part D program:

	December 31, 2016			December 31, 2015		
(in millions)	Subsidies	Drug Discount	Risk-Share	Subsidies	Drug Discount	Risk-Share
Other current receivables	$ 934	$ 543	$ —	$ 1,703	$ 423	$ —
Other current liabilities	—	267	471	—	58	496

Property, Equipment and Capitalized Software

Property, equipment and capitalized software are stated at cost, net of accumulated depreciation and amortization. Capitalized software consists of certain costs incurred in the development of internal-use software, including external direct costs of materials and services and applicable payroll costs of employees devoted to specific software development.

The Company calculates depreciation and amortization using the straight-line method over the estimated useful lives of the assets. The useful lives for property, equipment and capitalized software are:

Furniture, fixtures and equipment	3 to 7 years
Buildings	35 to 40 years
Capitalized software	3 to 5 years

Leasehold improvements are depreciated over the shorter of the remaining lease term or their estimated useful economic life.

Goodwill

To determine whether goodwill is impaired, annually or more frequently if needed, the Company performs a multi-step impairment test. The Company may first assess qualitative factors to determine if it is more likely than not that the carrying value of a reporting unit exceeds its estimated fair value. The Company may also elect to skip the qualitative testing and proceed directly to the quantitative testing. When performing quantitative testing, the Company first estimates the fair values of its reporting units using discounted cash flows. To determine fair values, the Company must make assumptions about a wide variety of internal and external factors. Significant assumptions used in the impairment analysis include financial projections of free cash flow (including significant assumptions about operations, capital requirements and income taxes), long-term growth rates for determining terminal value and discount rates. Comparative market multiples are used to corroborate the results of the discounted cash flow test. If the fair value is less than the carrying value of the reporting unit, then the implied value of goodwill would be calculated and compared to the carrying amount of goodwill to determine whether goodwill is impaired.

There was no impairment of goodwill during the year ended December 31, 2016.

Intangible Assets

The Company’s intangible assets are subject to impairment tests when events or circumstances indicate that an intangible asset (or asset group) may be impaired. The Company’s indefinite lived intangible assets are also tested for impairment annually. There was no impairment of intangible assets during the year ended December 31, 2016.

Accounts Payable and Accrued Liabilities

The Company had checks outstanding of $1.5 billion and $1.6 billion as of December 31, 2016 and 2015, respectively, which were classified as accounts payable and accrued liabilities and the change in this balance has been reflected within other financing activities in the Consolidated Statements of Cash Flows.

Other Current Liabilities

Other current liabilities include health savings account deposits ($5.7 billion and $3.6 billion as of December 31, 2016 and 2015, respectively), the RSF associated with the AARP Program, deposits under the Medicare Part D program (see "Medicare Part D Pharmacy Benefits" above), accruals for premium rebate payments under the ACA, the current portion of future policy benefits and customer balances.

Future Policy Benefits

Future policy benefits represent account balances that accrue to the benefit of the policyholders, excluding surrender charges, for universal life and investment annuity products and for long-duration health policies sold to individuals for which some of the premium received in the earlier years is intended to pay benefits to be incurred in future years.

Policy Acquisition Costs

The Company's short duration health insurance contracts typically have a one-year term and may be canceled by the customer with at least 30 days' notice. Costs related to the acquisition and renewal of short duration customer contracts are charged to expense as incurred.

Redeemable Noncontrolling Interests

Redeemable noncontrolling interests in the Company's subsidiaries whose redemption is outside the control of the Company are classified as temporary equity. The following table provides details of the Company's redeemable noncontrolling interests' activity for the years ended December 31, 2016 and 2015:

(in millions)	2016	2015
Redeemable noncontrolling interests, beginning of period	$1,736	$1,388
Net earnings	16	29
Acquisitions	34	196
Redemptions	(123)	(116)
Distributions	(11)	(19)
Fair value and other adjustments	360	258
Redeemable noncontrolling interests, end of period	$2,012	$1,736

Share-Based Compensation

The Company recognizes compensation expense for share-based awards, including stock options, stock-settled stock appreciation rights (SARs) and restricted stock and restricted stock units (collectively, restricted shares), on a straight-line basis over the related service period (generally the vesting period) of the award, or to an employee's eligible retirement date under the award agreement, if earlier. Restricted shares vest ratably; primarily over two to five years and compensation expense related to restricted shares is based on the share price on date of grant. Stock options and SARs vest ratably primarily over four years and may be exercised up to 10 years from the date of grant. Compensation expense related to stock options and SARs is based on the fair value at date of grant, which is estimated on the date of grant using a binomial option-pricing model. Under the Company's Employee Stock Purchase Plan (ESPP) eligible employees are allowed to purchase the Company's

stock at a discounted price, which is 85% of the lower market price of the Company's common stock at the beginning or at the end of the six-month purchase period. Share-based compensation expense for all programs is recognized in operating costs in the Consolidated Statements of Operations.

Net Earnings Per Common Share

The Company computes basic earnings per common share attributable to UnitedHealth Group common shareholders by dividing net earnings attributable to UnitedHealth Group common shareholders by the weighted-average number of common shares outstanding during the period. The Company determines diluted net earnings per common share attributable to UnitedHealth Group common shareholders using the weighted-average number of common shares outstanding during the period, adjusted for potentially dilutive shares associated with stock options, SARs, restricted shares and the ESPP, (collectively, common stock equivalents) using the treasury stock method. The treasury stock method assumes a hypothetical issuance of shares to settle the share-based awards, with the assumed proceeds used to purchase common stock at the average market price for the period. Assumed proceeds include the amount the employee must pay upon exercise and any unrecognized compensation cost. The difference between the number of shares assumed issued and number of shares assumed purchased represents the dilutive shares.

Health Insurance Industry Tax

The ACA includes an annual, nondeductible insurance industry tax (Health Insurance Industry Tax) to be levied proportionally across the insurance industry for risk-based health insurance products.

The Company estimates its liability for the Health Insurance Industry Tax based on a ratio of the Company's applicable net premiums written compared to the U.S. health insurance industry total applicable net premiums, both for the previous calendar year. The Company records in full the estimated liability for the Health Insurance Industry Tax at the beginning of the calendar year with a corresponding deferred cost that is amortized to operating costs on the Consolidated Statements of Operations using a straight-line method of allocation over the calendar year. The liability is recorded in accounts payable and accrued liabilities and the corresponding deferred cost is recorded in prepaid expenses and other current assets on the Consolidated Balance Sheets. A provision in the 2016 Federal Budget imposed a one year moratorium for 2017 on the collection of the Health Insurance Industry Tax.

Premium Stabilization Programs

The ACA included three programs designed to stabilize health insurance markets (Premium Stabilization Programs): a permanent risk adjustment program; a temporary risk corridors program; and a transitional reinsurance program (Reinsurance Program).

The risk-adjustment provisions apply to market reform compliant individual and small group plans in the commercial markets. Under the program, each covered member is assigned a risk score based upon demographic information and applicable diagnostic codes from the current year paid claims, in order to determine an average risk score for each plan in a particular state and market risk pool. Generally, a plan with a risk score that is less than the state's average risk score will pay into the pool, while a plan with a risk score that is greater than the state's average will receive money from the pool. The temporary risk corridors provisions are intended to limit the gains and losses of individual and small group qualified health plans. Plans are required to calculate the U.S. Department of Health and Human Services (HHS) risk corridor ratio of allowable costs to the defined target amount. Qualified health plans with ratios below 97% are required to make payments to HHS, while plans with ratios greater than 103% expect to receive funds from HHS. The Reinsurance Program and temporary risk corridors program expired at the end of 2016.

For the Premium Stabilization Programs, the Company records a receivable or payable as an adjustment to premium revenue based on year-to-date experience when the amounts are reasonably estimable and collection is reasonably assured. Final adjustments or recoverable amounts to the Premium Stabilization Programs are determined by HHS in the year following the policy year.

Recently Issued Accounting Standards

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standard Update (ASU) No. 2016-02, "Leases (Topic 842)" (ASU 2016-02). Under ASU 2016-02, an entity will be required to recognize assets and liabilities for the rights and obligations created by leases on the entity's balance sheet for both finance and operating leases. For leases with a term of 12 months or less, an entity can elect to not recognize lease assets and lease liabilities and expense the lease over a straight-line basis for the term of the lease. ASU 2016-02 will require new disclosures that depict the amount, timing, and uncertainty of cash flows pertaining to an entity's leases. Companies are required to adopt the new standard using a modified retrospective approach for annual and interim periods beginning after December 15, 2018. Early adoption of ASU 2016-02 is permitted. When adopted, the Company does not expect ASU 2016-02 to have a material impact on its results of operations, equity or cash flows. The impact of ASU 2016-02 on the Company's consolidated financial position will be based on leases outstanding at the time of adoption.

In January 2016, the FASB issued ASU 2016-01, "Financial Instruments — Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities" (ASU 2016-01). The new guidance changes the current accounting related to (i) the classification and measurement of certain equity investments, (ii) the presentation of changes in the fair value of financial liabilities measured under the fair value option that are due to instrument-specific credit risk, and (iii) certain disclosures associated with the fair value of financial instruments. Most notably, ASU 2016-01 requires that equity investments, with certain exemptions, be measured at fair value with changes in fair value recognized in net income as opposed to other comprehensive income. The new guidance is effective for annual and interim reporting periods beginning after December 15, 2017. As of December 31, 2016, based on equity securities held, the Company does not expect ASU 2016-01 to have a material impact on its consolidated financial position, results of operations, equity or cash flows. The Company will continue to evaluate any changes in its mix of investments or market conditions and the related impact of ASU 2016-01.

In May 2014, the FASB issued ASU No. 2014-09, "Revenue from Contracts with Customers (Topic 606)" (ASU 2014-09) as modified by ASU No. 2015-14, "Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date," ASU 2016-08, "Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)," ASU No. 2016-10, "Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing," ASU No. 2016-12, "Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients," and ASU 2016-20, "Revenue from Contracts with Customers (Topic 606): Technical Corrections and Improvements." ASU 2014-09 will supersede existing revenue recognition standards with a single model unless those contracts are within the scope of other standards (e.g., an insurance entity's insurance contracts). The revenue recognition principle in ASU 2014-09 is that an entity should recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In addition, new and enhanced disclosures will be required. Companies may adopt the new standard either using the full retrospective approach, a modified retrospective approach with practical expedients, or a cumulative effect upon adoption approach. The Company early adopted the new standard effective January 1, 2017, as allowed, using the modified retrospective approach. As the majority of the Company's revenues are not subject to the new guidance, the adoption of ASU 2014-09 did not have a material impact on the Company's consolidated financial position, results of operations, equity or cash flows.

Recently Adopted Accounting Standards

In March 2016, the FASB issued ASU No. 2016-09, "Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting" (ASU 2016-09). ASU 2016-09 modifies several aspects of the accounting for share-based payment awards, including income tax consequences, and classification on the statement of cash flows. The Company early adopted ASU 2016-09 in the first quarter of 2016. The provisions of ASU 2016-09 related to the timing of when excess tax benefits are recognized, minimum statutory

withholding requirements and forfeitures were adopted using a modified retrospective transition method by means of a cumulative-effect adjustment to equity as of January 1, 2016. The provisions of ASU 2016-09 related to the recognition of excess tax benefits in the income statement and classification in the statement of cash flows were adopted prospectively and the prior periods were not retrospectively adjusted. The adoption of ASU 2016-09 did not materially impact the Company's consolidated financial position, results of operations, equity or cash flows.

In November 2015, the FASB issued ASU No. 2015-17, "Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes" (ASU 2015-17). ASU 2015-17 requires entities to present deferred tax assets and deferred tax liabilities as noncurrent on the balance sheet. Prior to the issuance of ASU 2015-17, deferred taxes were required to be presented as a net current asset or liability and a net noncurrent asset or liability. The Company adopted ASU 2015-17 on a prospective basis in the first quarter of 2016 and the prior period was not retrospectively adjusted. The adoption of ASU 2015-17 did not impact the Company's consolidated financial position, results of operations, equity or cash flows.

In May 2015, the FASB issued ASU No. 2015-09, "Financial Services — Insurance (Topic 944): Disclosures about Short-Duration Contracts" (ASU 2015-09). ASU 2015-09 requires insurance entities to provide additional disclosures about short-duration insurance liabilities, including incurred and paid medical costs information by year. The Company adopted the disclosure requirements of ASU 2015-09 and has included the new disclosures within Notes 2 and 7.

In April 2015, the FASB issued ASU No. 2015-03, "Interest-Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs" (ASU 2015-03). ASU 2015-03 requires debt issuance costs to be presented as a reduction of the carrying amount of the related debt liability. Prior to the issuance of ASU 2015-03, debt issuance costs were required to be presented as an asset on the balance sheet. The Company adopted ASU 2015-03 on a retrospective basis, as required, in the first quarter of 2016. The Company reclassified $129 million and $82 million in debt issuance costs that were recorded in other assets to long-term debt, less current maturities on the Consolidated Balance Sheet as of December 31, 2015 and 2014, respectively.

The Company has determined that there have been no other recently adopted or issued accounting standards that had, or will have, a material impact on its Consolidated Financial Statements.

3. Investments

A summary of short-term and long-term investments by major security type is as follows:

(in millions)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
December 31, 2016				
Debt securities — available-for-sale:				
U.S. government and agency obligations	$ 2,294	$ 1	$ (31)	$ 2,264
State and municipal obligations	7,120	40	(101)	7,059
Corporate obligations	10,944	41	(58)	10,927
U.S. agency mortgage-backed securities	2,963	7	(43)	2,927
Non-U.S. agency mortgage-backed securities	1,009	3	(10)	1,002
Total debt securities — available-for-sale	24,330	92	(243)	24,179
Equity securities	2,036	52	(47)	2,041
Debt securities — held-to-maturity:				
U.S. government and agency obligations	250	1	—	251
State and municipal obligations	5	—	—	5
Corporate obligations	238	—	—	238
Total debt securities — held-to-maturity	493	1	—	494
Total investments	$ 26,859	$ 145	$ (290)	$26,714
December 31, 2015				
Debt securities — available-for-sale:				
U.S. government and agency obligations	$ 1,982	$ 1	$ (6)	$ 1,977
State and municipal obligations	6,022	149	(3)	6,168
Corporate obligations	7,446	41	(81)	7,406
U.S. agency mortgage-backed securities	2,127	13	(16)	2,124
Non-U.S. agency mortgage-backed securities	962	5	(11)	956
Total debt securities — available-for-sale	18,539	209	(117)	18,631
Equity securities	1,638	58	(57)	1,639
Debt securities — held-to-maturity:				
U.S. government and agency obligations	163	1	—	164
State and municipal obligations	8	—	—	8
Corporate obligations	339	—	—	339
Total debt securities — held-to-maturity	510	1	—	511
Total investments	$ 20,687	$ 268	$ (174)	$20,781

Nearly all of the Company's investments in mortgage-backed securities were rated AAA as of December 31, 2016.

The amortized cost and fair value of debt securities as of December 31, 2016, by contractual maturity, were as follows:

	Available-for-Sale		Held-to-Maturity	
(in millions)	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Due in one year or less	$ 2,893	$ 2,895	$ 151	$ 151
Due after one year through five years	9,646	9,625	153	153
Due after five years through ten years	5,706	5,645	124	124
Due after ten years	2,113	2,085	65	66
U.S. agency mortgage-backed securities	2,963	2,927	—	—
Non-U.S. agency mortgage-backed securities	1,009	1,002	—	—
Total debt securities	$ 24,330	$24,179	$ 493	$ 494

The fair value of available-for-sale investments with gross unrealized losses by major security type and length of time that individual securities have been in a continuous unrealized loss position were as follows:

	Less Than 12 Months		12 Months or Greater		Total	
(in millions)	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
December 31, 2016						
Debt securities — available-for-sale:						
U.S. government and agency obligations	$ 1,794	$ (31)	$ —	$ —	$ 1,794	$ (31)
State and municipal obligations	4,376	(101)	—	—	4,376	(101)
Corporate obligations	5,128	(56)	137	(2)	5,265	(58)
U.S. agency mortgage-backed securities	2,247	(40)	79	(3)	2,326	(43)
Non-U.S. agency mortgage-backed securities	544	(7)	97	(3)	641	(10)
Total debt securities — available-for-sale	$14,089	$ (235)	$ 313	$ (8)	$14,402	$ (243)
Equity securities	$ 93	$ (5)	$ 91	$ (42)	$ 184	$ (47)
December 31, 2015						
Debt securities — available-for-sale:						
U.S. government and agency obligations	$ 1,473	$ (6)	$ —	$ —	$ 1,473	$ (6)
State and municipal obligations	650	(3)	—	—	650	(3)
Corporate obligations	4,629	(63)	339	(18)	4,968	(81)
U.S. agency mortgage-backed securities	1,304	(12)	116	(4)	1,420	(16)
Non-U.S. agency mortgage-backed securities	593	(7)	127	(4)	720	(11)
Total debt securities — available-for-sale	$ 8,649	$ (91)	$ 582	$ (26)	$ 9,231	$ (117)
Equity securities	$ 112	$ (11)	$ 89	$ (46)	$ 201	$ (57)

The Company's unrealized losses from all securities as of December 31, 2016 were generated from approximately 12,000 positions out of a total of 27,000 positions. The Company believes that it will collect the principal and interest due on its debt securities that have an amortized cost in excess of fair value. The unrealized losses were primarily caused by interest rate increases and not by unfavorable changes in the credit quality associated with these securities. At each reporting period, the Company evaluates securities for impairment when the fair value of the investment is less than its amortized cost. The Company evaluated the underlying credit quality and credit ratings of the issuers, noting no significant deterioration since purchase. As of December 31, 2016, the Company did not have the intent to sell any of the securities in an unrealized loss position. Therefore, the Company believes these losses to be temporary.

The Company's investments in equity securities consist of investments in Brazilian real denominated fixed-income funds, employee savings plan related investments, venture capital funds and dividend paying stocks. The Company evaluated its investments in equity securities for severity and duration of unrealized loss, overall market volatility and other market factors.

Net realized gains reclassified out of accumulated other comprehensive income were from the following sources:

	For the Years Ended December 31,		
(in millions)	2016	2015	2014
Total other-than-temporary impairment recognized in earnings	$ (45)	$ (22)	$ (26)
Gross realized losses from sales	(44)	(28)	(47)
Gross realized gains from sales	255	191	284
Net realized gains (included in investment and other income on the Consolidated Statements of Operations)	166	141	211
Income tax effect (included in provision for income taxes on the Consolidated Statements of Operations)	(60)	(53)	(77)
Realized gains, net of taxes	$ 106	$ 88	$ 134

4. Fair Value

Certain assets and liabilities are measured at fair value in the Consolidated Financial Statements or have fair values disclosed in the Notes to the Consolidated Financial Statements. These assets and liabilities are classified into one of three levels of a hierarchy defined by GAAP. In instances in which the inputs used to measure fair value fall into different levels of the fair value hierarchy, the fair value measurement is categorized in its entirety based on the lowest level input that is significant to the fair value measurement in its entirety. The Company's assessment of the significance of a particular item to the fair value measurement in its entirety requires judgment, including the consideration of inputs specific to the asset or liability.

The fair value hierarchy is summarized as follows:

Level 1 — Quoted prices (unadjusted) for identical assets/liabilities in active markets.

Level 2 — Other observable inputs, either directly or indirectly, including:

- Quoted prices for similar assets/liabilities in active markets;
- Quoted prices for identical or similar assets/liabilities in inactive markets (e.g., few transactions, limited information, noncurrent prices, high variability over time);
- Inputs other than quoted prices that are observable for the asset/liability (e.g., interest rates, yield curves, implied volatilities, credit spreads); and
- Inputs that are corroborated by other observable market data.

Level 3 — Unobservable inputs that cannot be corroborated by observable market data.

Transfers between levels, if any, are recorded as of the beginning of the reporting period in which the transfer occurs; there was no transfer between Levels 1, 2 or 3 of any financial assets or liabilities during the years ended December 31, 2016 or 2015.

Nonfinancial assets and liabilities or financial assets and liabilities that are measured at fair value on a nonrecurring basis are subject to fair value adjustments only in certain circumstances, such as when the Company records an impairment. There were no significant fair value adjustments for these assets and liabilities recorded during the years ended December 31, 2016 or 2015.

The following methods and assumptions were used to estimate the fair value and determine the fair value hierarchy classification of each class of financial instrument included in the tables below:

Cash and Cash Equivalents. The carrying value of cash and cash equivalents approximates fair value as maturities are less than three months. Fair values of cash equivalent instruments that do not trade on a regular basis in active markets are classified as Level 2.

Debt and Equity Securities. Fair values of debt and equity securities are based on quoted market prices, where available. The Company obtains one price for each security primarily from a third-party pricing service (pricing service), which generally uses quoted or other observable inputs for the determination of fair value. The pricing service normally derives the security prices through recently reported trades for identical or similar securities, and, if necessary, makes adjustments through the reporting date based upon available observable market information. For securities not actively traded, the pricing service may use quoted market prices of comparable instruments or discounted cash flow analyses, incorporating inputs that are currently observable in the markets for similar securities. Inputs that are often used in the valuation methodologies include, but are not limited to, benchmark yields, credit spreads, default rates, prepayment speeds and nonbinding broker quotes. As the Company is responsible for the determination of fair value, it performs quarterly analyses on the prices received from the pricing service to determine whether the prices are reasonable estimates of fair value. Specifically, the Company compares the prices received from the pricing service to prices reported by a secondary pricing source, such as its custodian, its investment consultant and third-party investment advisors. Additionally, the Company compares changes in the reported market values and returns to relevant market indices to test the reasonableness of the reported prices. The Company's internal price verification procedures and reviews of fair value methodology documentation provided by independent pricing services have not historically resulted in adjustment in the prices obtained from the pricing service.

Fair values of debt securities that do not trade on a regular basis in active markets but are priced using other observable inputs are classified as Level 2.

Fair value estimates for Level 1 and Level 2 equity securities are based on quoted market prices for actively traded equity securities and/or other market data for the same or comparable instruments and transactions in establishing the prices.

The fair values of Level 3 investments in venture capital portfolios are estimated using a market valuation technique that relies heavily on management assumptions and qualitative observations. Under the market approach, the fair values of the Company's various venture capital investments are computed using limited quantitative and qualitative observations of activity for similar companies in the current market. The Company's market modeling utilizes, as applicable, transactions for comparable companies in similar industries that also have similar revenue and growth characteristics and preferences in their capital structure. Key significant unobservable inputs in the market technique include implied earnings before interest, taxes, depreciation and amortization (EBITDA) multiples and revenue multiples. Additionally, the fair values of certain of the Company's venture capital securities are based on recent transactions in inactive markets for identical or similar securities. Significant changes in any of these inputs could result in significantly lower or higher fair value measurements.

Throughout the procedures discussed above in relation to the Company's processes for validating third-party pricing information, the Company validates the understanding of assumptions and inputs used in security pricing and determines the proper classification in the hierarchy based on that understanding.

Assets Under Management. Assets under management consists of debt securities and other investments held to fund costs associated with the AARP Program and are priced and classified using the same methodologies as the Company's investments in debt and equity securities.

Other Assets. The fair values of the Company's other assets are estimated and classified using the same methodologies as the Company's investments in debt securities.

Interest Rate Swaps. Fair values of the Company's swaps are estimated using the terms of the swaps and publicly available information, including market yield curves. Because the swaps are unique and not actively traded but are valued using other observable inputs, the fair values are classified as Level 2.

Long-Term Debt. The fair values of the Company's long-term debt are estimated and classified using the same methodologies as the Company's investments in debt securities.

The following table presents a summary of fair value measurements by level and carrying values for items measured at fair value on a recurring basis in the Consolidated Balance Sheets:

(in millions)	Quoted Prices in Active Markets (Level 1)	Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)	Total Fair and Carrying Value
December 31, 2016				
Cash and cash equivalents	$ 10,386	$ 44	$ —	$10,430
Debt securities — available-for-sale:				
U.S. government and agency obligations	2,017	247	—	2,264
State and municipal obligations	—	7,059	—	7,059
Corporate obligations	21	10,804	102	10,927
U.S. agency mortgage-backed securities	—	2,927	—	2,927
Non-U.S. agency mortgage-backed securities	—	1,002	—	1,002
Total debt securities — available-for-sale	2,038	22,039	102	24,179
Equity securities	1,591	13	437	2,041
Assets under management	1,064	2,041	—	3,105
Interest rate swap assets	—	55	—	55
Total assets at fair value	$ 15,079	$ 24,192	$ 539	$39,810
Percentage of total assets at fair value	38%	61%	1%	100%
Interest rate swap liabilities	$ —	$ 14	$ —	$ 14
December 31, 2015				
Cash and cash equivalents	$ 10,906	$ 17	$ —	$10,923
Debt securities — available-for-sale:				
U.S. government and agency obligations	1,779	198	—	1,977
State and municipal obligations	—	6,168	—	6,168
Corporate obligations	5	7,308	93	7,406
U.S. agency mortgage-backed securities	—	2,124	—	2,124
Non-U.S. agency mortgage-backed securities	—	951	5	956
Total debt securities — available-for-sale	1,784	16,749	98	18,631
Equity securities	1,223	14	402	1,639
Assets under management	832	2,166	—	2,998
Interest rate swap assets	—	93	—	93
Total assets at fair value	$ 14,745	$ 19,039	$ 500	$34,284
Percentage of total assets at fair value	43%	56%	1%	100%
Interest rate swap liabilities	$ —	$ 11	$ —	$ 11

The following table presents a summary of fair value measurements by level and carrying values for certain financial instruments not measured at fair value on a recurring basis in the Consolidated Balance Sheets:

(in millions)	Quoted Prices in Active Markets (Level 1)	Other Observable Inputs (Level 2)	Unobservable Inputs (Level 3)	Total Fair Value	Total Carrying Value
December 31, 2016					
Debt securities — held-to-maturity:					
U.S. government and agency obligations	$ 251	$ —	$ —	$ 251	$ 250
State and municipal obligations	—	—	5	5	5
Corporate obligations	20	8	210	238	238
Total debt securities — held-to-maturity	$ 271	$ 8	$ 215	$ 494	$ 493
Other assets	$ —	$ 476	$ —	$ 476	$ 471
Long-term debt and other financing obligations	$ —	$ 31,295	$ —	$31,295	$29,337
December 31, 2015					
Debt securities — held-to-maturity:					
U.S. government and agency obligations	$ 164	$ —	$ —	$ 164	$ 163
State and municipal obligations	—	—	8	8	8
Corporate obligations	91	10	238	339	339
Total debt securities — held-to-maturity	$ 255	$ 10	$ 246	$ 511	$ 510
Other assets	$ —	$ 493	$ —	$ 493	$ 500
Long-term debt and other financing obligations	$ —	$ 29,455	$ —	$29,455	$27,978

The carrying amounts reported on the Consolidated Balance Sheets for other current financial assets and liabilities approximate fair value because of their short-term nature. These assets and liabilities are not listed in the table above.

A reconciliation of the beginning and ending balances of assets measured at fair value on a recurring basis using Level 3 inputs is as follows:

	December 31, 2016			December 31, 2015			December 31, 2014		
(in millions)	Debt Securities	Equity Securities	Total	Debt Securities	Equity Securities	Total	Debt Securities	Equity Securities	Total
Balance at beginning of period	$ 98	$ 402	$500	$ 74	$ 310	$384	$ 42	$ 269	$ 311
Purchases	12	100	112	27	106	133	32	105	137
Sales	(9)	(29)	(38)	(4)	(24)	(28)	(1)	(180)	(181)
Net unrealized gains (losses) in accumulated other comprehensive income	1	(13)	(12)	2	5	7	1	6	7
Net realized (losses) gains in investment and other income	—	(23)	(23)	(1)	5	4	—	110	110
Balance at end of period	$ 102	$ 437	$539	$ 98	$ 402	$500	$ 74	$ 310	$ 384

The following table presents quantitative information regarding unobservable inputs that were significant to the valuation of assets measured at fair value on a recurring basis using Level 3 inputs:

(in millions)	Fair Value	Valuation Technique	Unobservable Input	Range Low	Range High
December 31, 2016					
Equity securities:					
Venture capital portfolios	$ 404	Market approach — comparable companies	Revenue multiple	1.0	6.0
			EBITDA multiple	8.0	12.0
	33	Market approach — recent transactions	Inactive market transactions	N/A	N/A
Total equity securities	$ 437				

Also included in the Company's assets measured at fair value on a recurring basis using Level 3 inputs were $102 million of available-for-sale debt securities as of December 31, 2016, which were not significant.

5. Property, Equipment and Capitalized Software

A summary of property, equipment and capitalized software is as follows:

(in millions)	December 31, 2016	December 31, 2015
Land and improvements	$ 324	$ 237
Buildings and improvements	3,148	2,420
Computer equipment	2,021	1,945
Furniture and fixtures	999	790
Less accumulated depreciation	(2,621)	(2,163)
Property and equipment, net	3,871	3,229
Capitalized software	3,158	2,642
Less accumulated amortization	(1,128)	(1,010)
Capitalized software, net	2,030	1,632
Total property, equipment and capitalized software, net	$ 5,901	$ 4,861

Depreciation expense for property and equipment for the years ended December 31, 2016, 2015 and 2014 was $698 million, $613 million and $532 million, respectively. Amortization expense for capitalized software for the years ended December 31, 2016, 2015 and 2014 was $475 million, $430 million and $422 million, respectively.

6. Goodwill and Other Intangible Assets

Changes in the carrying amount of goodwill, by reportable segment, were as follows:

(in millions)	UnitedHealthcare	OptumHealth	OptumInsight	OptumRx	Consolidated
Balance at January 1, 2015	$ 24,030	$ 3,834	$ 4,236	$ 840	$ 32,940
Acquisitions	128	1,817	89	10,732	12,766
Foreign currency effects and adjustments, net	(1,233)	9	(29)	—	(1,253)
Balance at December 31, 2015	22,925	5,660	4,296	11,572	44,453
Acquisitions	526	683	—	1,387	2,596
Foreign currency effects and adjustments, net	403	(21)	153	—	535
Balance at December 31, 2016	$ 23,854	$ 6,322	$ 4,449	$ 12,959	$ 47,584

During the third quarter of 2015, the Company acquired all of the outstanding common shares of Catamaran Corporation and funded Catamaran's payoff of its outstanding debt and credit facility for a total of $14.3 billion in cash. This combination diversified OptumRx's customer and business mix and enhanced OptumRx's technology capabilities and flexible service offerings. The total consideration exceeded the estimated fair value of the net tangible assets acquired by $16.0 billion, of which $5.4 billion has been allocated to finite-lived intangible assets and $10.6 billion to goodwill. The goodwill is not deductible for income tax purposes.

The gross carrying value, accumulated amortization and net carrying value of other intangible assets were as follows:

	December 31, 2016			December 31, 2015		
(in millions)	Gross Carrying Value	Accumulated Amortization	Net Carrying Value	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
Customer-related	$10,942	$ (3,416)	$ 7,526	$10,270	$ (2,796)	$ 7,474
Trademarks and technology	720	(323)	397	682	(249)	433
Trademarks — indefinite-lived	468	—	468	358	—	358
Other	258	(108)	150	209	(83)	126
Total	$12,388	$ (3,847)	$ 8,541	$11,519	$ (3,128)	$ 8,391

The acquisition date fair values and weighted-average useful lives assigned to finite-lived intangible assets acquired in business combinations consisted of the following by year of acquisition:

	2016		2015	
(in millions, except years)	Fair Value	Weighted-Average Useful Life	Fair Value	Weighted-Average Useful Life
Customer-related	$785	17 years	$5,518	19 years
Trademarks and technology	82	4 years	194	4 years
Other	22	5 years	—	
Total acquired finite-lived intangible assets	$889	16 years	$5,712	19 years

Estimated full year amortization expense relating to intangible assets for each of the next five years ending December 31 is as follows:

(in millions)	
2017	$865
2018	755
2019	679
2020	596
2021	536

Amortization expense relating to intangible assets for the years ended December 31, 2016, 2015 and 2014 was $882 million, $650 million and $524 million, respectively.

7. Medical Costs Payable

The following table shows the components of the change in medical costs payable for the years ended December 31:

(in millions)	2016	2015	2014
Medical costs payable, beginning of period	$ 14,330	$ 12,040	$ 11,575
Reported medical costs:			
Current year	117,258	104,195	94,053
Prior years	(220)	(320)	(420)
Total reported medical costs	117,038	103,875	93,633
Medical payments:			
Payments for current year	(101,696)	(90,630)	(82,750)
Payments for prior years	(13,281)	(10,955)	(10,418)
Total medical payments	(114,977)	(101,585)	(93,168)
Medical costs payable, end of period	$ 16,391	$ 14,330	$ 12,040

For the years ended December 31, 2016, 2015 and 2014 the medical cost reserve development included no individual factors that were material.

Medical costs payable included IBNR of $11.6 billion and $9.8 billion at December 31, 2016 and 2015, respectively. Substantially all of the IBNR balance as of December 31, 2016 relates to the current year. The following is information about incurred and paid medical cost development as of December 31, 2016:

(in millions)	Net Incurred Medical Costs For the Years ended December 31,	
Year	2015	2016
2015	$ 104,195	$ 103,973
2016		117,258
Total		$ 221,231

(in millions)	Net Cumulative Medical Payments For the Years ended December 31,	
Year	2015	2016
2015	$ (90,630)	$ (103,885)
2016		(101,696)
Total		(205,581)
Net remaining outstanding liabilities prior to 2015		741
Total medical costs payable		$ 16,391

8. Commercial Paper and Long-Term Debt

Commercial paper, term loan and senior unsecured long-term debt consisted of the following:

(in millions, except percentages)	December 31, 2016 Par Value	December 31, 2016 Carrying Value	December 31, 2016 Fair Value	December 31, 2015 Par Value	December 31, 2015 Carrying Value (a)	December 31, 2015 Fair Value
Commercial paper	$ 3,633	$ 3,633	$ 3,633	$ 3,987	$ 3,987	$ 3,987
Floating rate term loan due July 2016	—	—	—	1,500	1,500	1,500
5.375% notes due March 2016	—	—	—	601	605	606
1.875% notes due November 2016	—	—	—	400	400	403
5.360% notes due November 2016	—	—	—	95	95	98
Floating rate notes due January 2017	750	750	750	750	749	751
6.000% notes due June 2017	441	446	450	441	458	469
1.450% notes due July 2017	750	750	751	750	749	750
1.400% notes due October 2017	625	624	626	625	624	624
6.000% notes due November 2017	156	159	163	156	162	168
1.400% notes due December 2017	750	751	750	750	751	748
6.000% notes due February 2018	1,100	1,107	1,153	1,100	1,114	1,196
1.900% notes due July 2018	1,500	1,496	1,507	1,500	1,494	1,505
1.700% notes due February 2019	750	748	748	—	—	—
1.625% notes due March 2019	500	501	498	500	502	494
2.300% notes due December 2019	500	498	504	500	499	502
2.700% notes due July 2020	1,500	1,495	1,523	1,500	1,493	1,516
3.875% notes due October 2020	450	450	474	450	452	476
4.700% notes due February 2021	400	409	433	400	413	438
2.125% notes due March 2021	750	745	741	—	—	—
3.375% notes due November 2021	500	497	519	500	500	517
2.875% notes due December 2021	750	748	760	750	753	760
2.875% notes due March 2022	1,100	1,057	1,114	1,100	1,059	1,099
3.350% notes due July 2022	1,000	995	1,030	1,000	994	1,023
0.000% notes due November 2022	15	11	12	15	10	11
2.750% notes due February 2023	625	609	622	625	611	613
2.875% notes due March 2023	750	771	753	750	781	742
3.750% notes due July 2025	2,000	1,986	2,070	2,000	1,985	2,062
3.100% notes due March 2026	1,000	994	986	—	—	—
3.450% notes due January 2027	750	745	762	—	—	—
4.625% notes due July 2035	1,000	991	1,090	1,000	991	1,038
5.800% notes due March 2036	850	837	1,034	850	838	1,003
6.500% notes due June 2037	500	491	643	500	492	628
6.625% notes due November 2037	650	640	850	650	641	829
6.875% notes due February 2038	1,100	1,075	1,497	1,100	1,076	1,439
5.700% notes due October 2040	300	296	366	300	296	348
5.950% notes due February 2041	350	345	437	350	345	416
4.625% notes due November 2041	600	588	634	600	588	609
4.375% notes due March 2042	502	483	509	502	483	493
3.950% notes due October 2042	625	606	609	625	606	582
4.250% notes due March 2043	750	734	765	750	734	728
4.750% notes due July 2045	2,000	1,972	2,203	2,000	1,971	2,107
4.200% notes due January 2047	750	737	759	—	—	—
Total commercial paper, term loan and long-term debt	$33,022	$32,770	$34,728	$31,972	$31,801	$33,278

(a) In the first quarter of 2016, the Company adopted ASU 2015-03, retrospectively as required. See Note 2 for more information on the adoption of ASU 2015-03.

The Company's long-term debt obligations also included $200 million and $164 million of other financing obligations, of which $80 million and $47 million were current as of December 31, 2016 and 2015, respectively.

Maturities of commercial paper and long-term debt for the years ending December 31 are as follows:

(in millions)	
2017	$ 7,185
2018	2,622
2019	1,769
2020	1,955
2021	2,407
Thereafter	17,284

Commercial Paper and Revolving Bank Credit Facilities

Commercial paper consists of short-duration, senior unsecured debt privately placed on a discount basis through broker-dealers. As of December 31, 2016, the Company's outstanding commercial paper had a weighted-average annual interest rate of 0.9%.

The Company has $3.0 billion five-year, $2.0 billion three-year and $1.0 billion 364-day revolving bank credit facilities with 23 banks, which mature in December 2021, December 2019, and December 2017, respectively. These facilities provide liquidity support for the Company's commercial paper program and are available for general corporate purposes. As of December 31, 2016, no amounts had been drawn on any of the bank credit facilities. The annual interest rates, which are variable based on term, are calculated based on the London Interbank Offered Rate (LIBOR) plus a credit spread based on the Company's senior unsecured credit ratings. If amounts had been drawn on the bank credit facilities as of December 31, 2016, annual interest rates would have ranged from 1.6% to 2.2%.

Debt Covenants

The Company's bank credit facilities contain various covenants, including requiring the Company to maintain a debt to debt-plus-shareholders' equity ratio of not more than 55%. The Company was in compliance with its debt covenants as of December 31, 2016.

9. Income Taxes

The current income tax provision reflects the tax consequences of revenues and expenses currently taxable or deductible on various income tax returns for the year reported. The deferred income tax provision or benefit generally reflects the net change in deferred income tax assets and liabilities during the year, excluding any deferred income tax assets and liabilities of acquired businesses. The components of the provision for income taxes for the years ended December 31 are as follows:

(in millions)	2016	2015	2014
Current Provision:			
Federal	$4,397	$4,155	$3,883
State and local	312	281	271
Total current provision	4,709	4,436	4,154
Deferred provision (benefit)	81	(73)	(117)
Total provision for income taxes	$4,790	$4,363	$4,037

The reconciliation of the tax provision at the U.S. federal statutory rate to the provision for income taxes and the effective tax rate for the years ended December 31 is as follows:

(in millions, except percentages)	2016		2015		2014	
Tax provision at the U.S. federal statutory rate	$4,152	35.0%	$3,581	35.0%	$3,380	35.0%
Health insurance industry tax	645	5.4	627	6.1	469	4.8
State income taxes, net of federal benefit	205	1.7	145	1.4	154	1.6
Share-based awards — excess tax benefit	(158)	(1.3)	—	—	—	—
Non-deductible compensation	128	1.1	103	1.0	96	1.0
Other, net	(182)	(1.5)	(93)	(0.9)	(62)	(0.6)
Provision for income taxes	$4,790	40.4%	$4,363	42.6%	$4,037	41.8%

Deferred income tax assets and liabilities are recognized for the differences between the financial and income tax reporting bases of assets and liabilities based on enacted tax rates and laws. The components of deferred income tax assets and liabilities as of December 31 are as follows:

(in millions)	2016	2015
Deferred income tax assets:		
Accrued expenses and allowances	$ 820	$ 739
U.S. federal and state net operating loss carryforwards	147	139
Share-based compensation	126	124
Nondeductible liabilities	236	205
Medical costs payable and other current liabilities	95	71
Non-U.S. tax loss carryforwards	434	244
Net unrealized losses on investments	55	—
Other-domestic	194	214
Other-non-U.S.	175	130
Subtotal	2,282	1,866
Less: valuation allowances	(55)	(44)
Total deferred income tax assets	2,227	1,822
Deferred income tax liabilities:		
U.S. federal and state intangible assets	(3,055)	(2,951)
Non-U.S. goodwill and intangible assets	(584)	(397)
Capitalized software	(707)	(574)
Net unrealized gains on investments	—	(34)
Depreciation and amortization	(332)	(312)
Prepaid expenses	(228)	(205)
Other-non-U.S.	(82)	(76)
Total deferred income tax liabilities	(4,988)	(4,549)
Net deferred income tax liabilities	$(2,761)	$(2,727)

Valuation allowances are provided when it is considered more likely than not that deferred tax assets will not be realized. The valuation allowances primarily relate to future tax benefits on certain federal, state and non-U.S. net operating loss carryforwards. Federal net operating loss carryforwards of $74 million expire beginning in 2021 through 2036; state net operating loss carryforwards expire beginning in 2017 through 2036. Substantially all of the non-U.S. tax loss carryforwards have indefinite carryforward periods.

As of December 31, 2016, the Company had $717 million of undistributed earnings from non-U.S. subsidiaries that are intended to be reinvested in non-U.S. operations. Because these earnings are considered permanently reinvested, no U.S. tax provision has been accrued related to the repatriation of these earnings. It is not practicable to estimate the amount of U.S. tax that might be payable on the eventual remittance of such earnings.

A reconciliation of the beginning and ending amount of unrecognized tax benefits as of December 31 is as follows:

(in millions)	2016	2015	2014
Gross unrecognized tax benefits, beginning of period	$224	$ 92	$89
Gross increases:			
Current year tax positions	37	—	—
Prior year tax positions	24	55	4
Acquired reserves	—	89	—
Gross decreases:			
Prior year tax positions	(4)	(2)	—
Settlements	(6)	(1)	—
Statute of limitations lapses	(12)	(9)	(1)
Gross unrecognized tax benefits, end of period	$263	$224	$92

The Company believes it is reasonably possible that its liability for unrecognized tax benefits will decrease in the next twelve months by $197 million as a result of audit settlements and the expiration of statutes of limitations.

The Company classifies interest and penalties associated with uncertain income tax positions as income taxes within its Consolidated Statement of Operations. During the years ended December 31, 2016, 2015 and 2014 the Company recognized $11 million, $11 million and $6 million of interest and penalties, respectively. The Company had $70 million and $59 million of accrued interest and penalties for uncertain tax positions as of December 31, 2016 and 2015, respectively. These amounts are not included in the reconciliation above.

The Company currently files income tax returns in the United States, various states and non-U.S. jurisdictions. The U.S. Internal Revenue Service (IRS) has completed exams on the consolidated income tax returns for fiscal years 2015 and prior. The Company's 2016 tax year is under advance review by the IRS under its Compliance Assurance Program. With the exception of a few states, the Company is no longer subject to income tax examinations prior to the 2010 tax year. The Brazilian federal revenue service — Secretaria da Receita Federal (SRF) may audit the Company's Brazilian subsidiaries for a period of five years from the date on which corporate income taxes should have been paid and/or the date when the tax return was filed.

10. Shareholders' Equity

Regulatory Capital and Dividend Restrictions

The Company's regulated subsidiaries are subject to regulations and standards in their respective jurisdictions. These standards, among other things, require these subsidiaries to maintain specified levels of statutory capital, as defined by each jurisdiction, and restrict the timing and amount of dividends and other distributions that may be paid to their parent companies. In the United States, most of these regulations and standards are generally consistent with model regulations established by the National Association of Insurance Commissioners. These standards generally permit dividends to be paid from statutory unassigned surplus of the regulated subsidiary and are limited based on the regulated subsidiary's level of statutory net income and statutory capital and surplus. These dividends are referred to as "ordinary dividends" and generally can be paid without prior regulatory approval. If the dividend, together with other dividends paid within the preceding twelve months, exceeds a specified statutory limit or is paid from sources other than earned surplus, it is generally considered an "extraordinary dividend" and must receive prior regulatory approval.

For the year ended December 31, 2016, the Company's regulated subsidiaries paid their parent companies dividends of $3.9 billion, including $3.3 billion of extraordinary dividends. For the year ended December 31, 2015, the Company's regulated subsidiaries paid their parent companies dividends of $4.4 billion, including $1.5 billion of extraordinary dividends. As of December 31, 2016, approximately $700 million of the Company's $10.4 billion of cash and cash equivalents was available for general corporate use.

The Company's regulated subsidiaries had estimated aggregate statutory capital and surplus of approximately $17.9 billion as of December 31, 2016. The estimated statutory capital and surplus necessary to satisfy regulatory requirements of the Company's regulated subsidiaries was approximately $10.5 billion as of December 31, 2016.

Optum Bank must meet minimum requirements for Tier 1 leverage capital, Tier 1 risk-based capital, common equity Tier1 risk-based capital and total risk-based capital of the Federal Deposit Insurance Corporation (FDIC) to be considered "Well Capitalized" under the capital adequacy rules to which it is subject. At December 31, 2016, the Company believes that Optum Bank met the FDIC requirements to be considered "Well Capitalized."

Share Repurchase Program

Under its Board of Directors' authorization, the Company maintains a share repurchase program. The objectives of the share repurchase program are to optimize the Company's capital structure and cost of capital, thereby improving returns to shareholders, as well as to offset the dilutive impact of share-based awards. Repurchases may be made from time to time in open market purchases or other types of transactions (including prepaid or structured share repurchase programs), subject to certain Board restrictions. In June 2014, the Board renewed the Company's share repurchase program with an authorization to repurchase up to 100 million shares of its common stock.

A summary of common share repurchases for the years ended December 31, 2016 and 2015 is as follows:

	Years Ended December 31,	
(in millions, except per share data)	**2016**	**2015**
Common share repurchases, shares	10	11
Common share repurchases, average price per share	$ 128.97	$ 112.45
Common share repurchases, aggregate cost	$ 1,280	$ 1,200
Board authorized shares remaining	51	61

Dividends

In June 2016, the Company's Board of Directors increased the Company's quarterly cash dividend to shareholders to equal an annual dividend rate of $2.50 per share compared to the annual dividend rate of $2.00 per share, which the Company had paid since June 2015. Declaration and payment of future quarterly dividends is at the discretion of the Board and may be adjusted as business needs or market conditions change.

11. Share-Based Compensation

The Company's outstanding share-based awards consist mainly of non-qualified stock options, SARs and restricted shares. As of December 31, 2016, the Company had 68 million shares available for future grants of share-based awards under the Plan. As of December 31, 2016, there were also 10 million shares of common stock available for issuance under the ESPP.

Stock Options and SARs

Stock option and SAR activity for the year ended December 31, 2016 is summarized in the table below:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life	Aggregate Intrinsic Value
	(in millions)		(in years)	(in millions)
Outstanding at beginning of period	34	$ 68		
Granted	11	113		
Exercised	(8)	57		
Forfeited	(1)	103		
Outstanding at end of period	36	84	6.6	$ 2,758
Exercisable at end of period	14	56	4.0	1,458
Vested and expected to vest, end of period	35	83	6.6	2,704

Restricted Shares

Restricted share activity for the year ended December 31, 2016 is summarized in the table below:

(shares in millions)	Shares	Weighted-Average Grant Date Fair Value per Share
Nonvested at beginning of period	7	$ 82
Granted	3	115
Vested	(3)	76
Nonvested at end of period	7	96

Other Share-Based Compensation Data

	For the Years Ended December 31,		
(in millions, except per share amounts)	2016	2015	2014
Stock Options and SARs			
Weighted-average grant date fair value of shares granted, per share	$ 20	$ 22	$ 22
Total intrinsic value of stock options and SARs exercised	595	482	526
Restricted Shares			
Weighted-average grant date fair value of shares granted, per share	115	110	71
Total fair value of restricted shares vested	$274	$460	$437
Employee Stock Purchase Plan			
Number of shares purchased	2	2	2
Share-Based Compensation Items			
Share-based compensation expense, before tax	$485	$406	$364
Share-based compensation expense, net of tax effects	417	348	314
Income tax benefit realized from share-based award exercises	236	247	231

(in millions, except years)	December 31, 2016
Unrecognized compensation expense related to share awards	$ 516
Weighted-average years to recognize compensation expense	1.3

Share-Based Compensation Recognition and Estimates

The principal assumptions the Company used in calculating grant-date fair value for stock options and SARs were as follows:

	For the Years Ended December 31,		
	2016	2015	2014
Risk-free interest rate	1.2% - 1.4%	1.6% - 1.7%	1.7% -1.8%
Expected volatility	20.8% - 22.5%	22.3% - 24.1%	24.1% - 39.6%
Expected dividend yield	1.8%	1.4% - 1.7%	1.6% - 1.9%
Forfeiture rate	5.0%	5.0%	5.0%
Expected life in years	5.6 - 5.9	5.5 - 6.1	5.4

Risk-free interest rates are based on U.S. Treasury yields in effect at the time of grant. Expected volatilities are based on the historical volatility of the Company's common stock and the implied volatility from exchange-traded options on the Company's common stock. Expected dividend yields are based on the per share cash dividend paid by the Company. The Company uses historical data to estimate option and SAR exercises and forfeitures within the valuation model. The expected lives of options and SARs granted represents the period of time that the awards granted are expected to be outstanding based on historical exercise patterns.

Other Employee Benefit Plans

The Company also offers a 401(k) plan for its employees. Compensation expense related to this plan was not material for 2016, 2015 and 2014.

In addition, the Company maintains non-qualified, deferred compensation plans, which allow certain members of senior management and executives to defer portions of their salary or bonus and receive certain Company contributions on such deferrals, subject to plan limitations. The deferrals are recorded within long-term investments with an approximately equal amount in other liabilities in the Consolidated Balance Sheets. The total deferrals are distributable based upon termination of employment or other periods, as elected under each plan and were $672 million and $553 million as of December 31, 2016 and 2015, respectively.

12. Commitments and Contingencies

The Company leases facilities and equipment under long-term operating leases that are non-cancelable and expire on various dates. Rent expense under all operating leases for the years ended December 31, 2016, 2015 and 2014 was $608 million, $555 million and $449 million, respectively.

As of December 31, 2016, future minimum annual lease payments, net of sublease income, under all non-cancelable operating leases were as follows:

(in millions)	Future Minimum Lease Payments
2017	$ 453
2018	416
2019	355
2020	314
2021	273
Thereafter	499

The Company provides guarantees related to its service level under certain contracts. If minimum standards are not met, the Company may be financially at risk up to a stated percentage of the contracted fee or a stated dollar amount. None of the amounts accrued, paid or charged to income for service level guarantees were material as of December 31, 2016, 2015 or 2014.

As of December 31, 2016, the Company had outstanding, undrawn letters of credit with financial institutions of $28 million and surety bonds outstanding with insurance companies of $1.2 billion, primarily to bond contractual performance.

Legal Matters

Because of the nature of its businesses, the Company is frequently made party to a variety of legal actions and regulatory inquiries, including class actions and suits brought by members, care providers, consumer advocacy organizations, customers and regulators, relating to the Company's businesses, including management and administration of health benefit plans and other services. These matters include medical malpractice, employment, intellectual property, antitrust, privacy and contract claims and claims related to health care benefits coverage and other business practices.

The Company records liabilities for its estimates of probable costs resulting from these matters where appropriate. Estimates of costs resulting from legal and regulatory matters involving the Company are inherently difficult to predict, particularly where the matters: involve indeterminate claims for monetary damages or may involve fines, penalties or punitive damages; present novel legal theories or represent a shift in regulatory policy; involve a large number of claimants or regulatory bodies; are in the early stages of the proceedings; or could

result in a change in business practices. Accordingly, the Company is often unable to estimate the losses or ranges of losses for those matters where there is a reasonable possibility or it is probable that a loss may be incurred.

Litigation Matters

California Claims Processing Matter. On January 25, 2008, the California Department of Insurance (CDI) issued an Order to Show Cause to PacifiCare Life and Health Insurance Company, a subsidiary of the Company, alleging violations of certain insurance statutes and regulations related to an alleged failure to include certain language in standard claims correspondence, timeliness and accuracy of claims processing, interest payments, care provider contract implementation, care provider dispute resolution and other related matters. Although the Company believes that CDI had never before issued a fine in excess of $8 million, CDI advocated a fine of approximately $325 million in this matter. The matter was the subject of an administrative hearing before a California administrative law judge beginning in December 2009, and in August 2013, the administrative law judge issued a nonbinding proposed decision recommending a fine of $11.5 million. The California Insurance Commissioner rejected the administrative law judge's recommendation and on June 9, 2014, issued his own decision imposing a fine of approximately $174 million. On July 10, 2014, the Company filed a lawsuit in California state court challenging the Commissioner's decision. On September 8, 2015, in the first phase of that lawsuit, the California state court issued an order invalidating certain of the regulations the Commissioner had relied upon in issuing his decision and penalty. The Company cannot reasonably estimate the range of loss, if any, that may result from this matter given the procedural status of the dispute, the wide range of possible outcomes, the legal issues presented (including the legal basis for the majority of the alleged violations), the inherent difficulty in predicting a regulatory fine in the event of a remand, and the various remedies and levels of judicial review that remain available to the Company.

Government Investigations, Audits and Reviews

The Company has been involved or is currently involved in various governmental investigations, audits and reviews. These include routine, regular and special investigations, audits and reviews by the CMS, state insurance and health and welfare departments, the Brazilian national regulatory agency for private health insurance and plans (the Agência Nacional de Saúde Suplementar), state attorneys general, the Office of the Inspector General, the Office of Personnel Management, the Office of Civil Rights, the Government Accountability Office, the Federal Trade Commission, U.S. Congressional committees, the U.S. Department of Justice, the SEC, the Internal Revenue Service, the U.S. Drug Enforcement Administration, the Brazilian federal revenue service (the Secretaria da Receita Federal), the U.S. Department of Labor, the Federal Deposit Insurance Corporation, the Defense Contract Audit Agency and other governmental authorities. Certain of the Company's businesses have been reviewed or are currently under review, including for, among other matters, compliance with coding and other requirements under the Medicare risk-adjustment model. The Company has produced documents, information and witnesses to the Department of Justice in cooperation with a current review of the Company's risk-adjustment processes, including the Company's patient chart review and related programs. CMS has selected certain of the Company's local plans for risk adjustment data validation (RADV) audits to validate the coding practices of and supporting documentation maintained by health care providers and such audits may result in retrospective adjustments to payments made to the Company's health plans.

The Company cannot reasonably estimate the range of loss, if any, that may result from any material government investigations, audits and reviews in which it is currently involved given the status of the reviews, the wide range of possible outcomes and the inherent difficulty in predicting regulatory action, fines and penalties, if any, the Company's legal and factual defenses and the various remedies and levels of judicial review available to the Company in the event of an adverse finding.

Guaranty Fund Assessments

Under state guaranty association laws, certain insurance companies can be assessed (up to prescribed limits) for certain obligations to the policyholders and claimants of impaired or insolvent insurance companies that write the same line or similar lines of business. Some states have similar laws relating to HMOs and other payers such as consumer operated and oriented plans (co-ops) established under the ACA. In 2009, the Pennsylvania Insurance Commissioner placed long term care insurer Penn Treaty Network America Insurance Company and its subsidiary (Penn Treaty), neither of which is affiliated with the Company, in rehabilitation and petitioned a state court for approval to liquidate Penn Treaty. In 2012, the court denied the liquidation petition and ordered the Insurance Commissioner to submit a rehabilitation plan. A second amended plan of rehabilitation was later withdrawn and, as of November 2016, Penn Treaty will be liquidated. As of December 31, 2016, the Company recorded the $350 million impact of its estimated share of guaranty association assessments resulting from the Penn Treaty liquidation.

13. Segment Financial Information

Factors used to determine the Company's reportable segments include the nature of operating activities, economic characteristics, existence of separate senior management teams and the type of information used by the Company's chief operating decision maker to evaluate its results of operations. Reportable segments with similar economic characteristics, products and services, customers, distribution methods and operational processes that operate in a similar regulatory environment are combined.

The following is a description of the types of products and services from which each of the Company's four reportable segments derives its revenues:

- *UnitedHealthcare* includes the combined results of operations of UnitedHealthcare Employer & Individual, UnitedHealthcare Medicare & Retirement, UnitedHealthcare Community & State and UnitedHealthcare Global. The U.S. businesses share significant common assets, including a contracted network of physicians, health care professionals, hospitals and other facilities, information technology infrastructure and other resources. UnitedHealthcare Employer & Individual offers an array of consumer-oriented health benefit plans and services for large national employers, public sector employers, mid-sized employers, small businesses and individuals nationwide and active and retired military and their families through the TRICARE program. UnitedHealthcare Medicare & Retirement provides health care coverage and health and well-being services to individuals age 50 and older, addressing their unique needs for preventive and acute health care services as well as services dealing with chronic disease and other specialized issues for older individuals. UnitedHealthcare Community & State's primary customers oversee Medicaid plans, the Children's Health Insurance Program and other federal, state and community health care programs. UnitedHealthcare Global is a diversified global health services business with a variety of offerings, including international commercial health and dental benefits.
- *OptumHealth* serves the physical, emotional and health-related financial needs of individuals, enabling population health management through programs offered by employers, payers, government entities and directly with the care delivery system. OptumHealth offers access to networks of care provider specialists, health management services, care delivery, consumer engagement and financial services.
- *OptumInsight* provides services, technology and health care expertise to major participants in the health care industry. Hospital systems, physicians, health plans, governments, life sciences companies and other organizations that comprise the health care industry depend on OptumInsight to help them improve performance, achieve efficiency, reduce costs, meet compliance mandates and modernize their core operating systems to meet the changing needs of the health system.
- *OptumRx* offers pharmacy care services and programs, including retail network contracting, home delivery and specialty pharmacy services, purchasing and clinical capabilities, and develops programs in areas such as step therapy, formulary management, drug adherence and disease/drug therapy management.

The Company's accounting policies for reportable segment operations are consistent with those described in the Summary of Significant Accounting Policies (see Note 2). Transactions between reportable segments principally consist of sales of pharmacy care products and services to UnitedHealthcare customers by OptumRx, certain product offerings and care management and local care delivery services sold to UnitedHealthcare by OptumHealth, and health information and technology solutions, consulting and other services sold to UnitedHealthcare by OptumInsight. These transactions are recorded at management's estimate of fair value. Intersegment transactions are eliminated in consolidation. Assets and liabilities that are jointly used are assigned to each reportable segment using estimates of pro-rata usage. Cash and investments are assigned such that each reportable segment has working capital and/or at least minimum specified levels of regulatory capital.

As a percentage of the Company's total consolidated revenues, premium revenues from CMS were 25% for 2016, 26% for 2015 and 29% for 2014, most of which were generated by UnitedHealthcare Medicare & Retirement and included in the UnitedHealthcare segment. U.S. customer revenue represented approximately 97%, 96% and 95% of consolidated total revenues for 2016, 2015 and 2014, respectively. Long-lived fixed assets located in the United States represented approximately 75% and 81% of the total long-lived fixed assets as of December 31, 2016 and 2015, respectively. The non-U.S. revenues and fixed assets are primarily related to UnitedHealthcare Global.

The following table presents the reportable segment financial information:

(in millions)	UnitedHealthcare	Optum					Corporate and Eliminations	Consolidated
		OptumHealth	OptumInsight	OptumRx	Optum Eliminations	Optum		
2016								
Revenues — external customers:								
Premiums	$ 140,455	$ 3,663	$ —	$ —	$ —	$ 3,663	$ —	$ 144,118
Products	1	48	103	26,506	—	26,657	—	26,658
Services	7,514	2,498	2,670	554	—	5,722	—	13,236
Total revenues — external customers	147,970	6,209	2,773	27,060	—	36,042	—	184,012
Total revenues — intersegment	—	10,491	4,559	33,372	(1,088)	47,334	(47,334)	—
Investment and other income	611	208	1	8	—	217	—	828
Total revenues	$ 148,581	$ 16,908	$ 7,333	$ 60,440	$ (1,088)	$83,593	$ (47,334)	$ 184,840
Earnings from operations	$ 7,307	$ 1,428	$ 1,513	$ 2,682	$ —	$ 5,623	$ —	$ 12,930
Interest expense	—	—	—	—	—	—	(1,067)	(1,067)
Earnings before income taxes	$ 7,307	$ 1,428	$ 1,513	$ 2,682	$ —	$ 5,623	$ (1,067)	$ 11,863
Total assets	$ 70,505	$ 18,656	$ 9,017	$ 29,066	$ —	$56,739	$ (4,434)	$ 122,810
Purchases of property, equipment and capitalized software	640	345	571	149	—	1,065	—	1,705
Depreciation and amortization	724	297	559	475	—	1,331	—	2,055
2015								
Revenues — external customers:								
Premiums	$ 124,011	$ 3,152	$ —	$ —	$ —	$ 3,152	$ —	$ 127,163
Products	2	31	108	17,171	—	17,310	—	17,312
Services	6,776	2,375	2,390	381	—	5,146	—	11,922
Total revenues — external customers	130,789	5,558	2,498	17,552	—	25,608	—	156,397
Total revenues — intersegment	—	8,216	3,697	30,718	(791)	41,840	(41,840)	—
Investment and other income	554	153	1	2	—	156	—	710
Total revenues	$ 131,343	$ 13,927	$ 6,196	$ 48,272	$ (791)	$67,604	$ (41,840)	$ 157,107
Earnings from operations	$ 6,754	$ 1,240	$ 1,278	$ 1,749	$ —	$ 4,267	$ —	$ 11,021
Interest expense	—	—	—	—	—	—	(790)	(790)
Earnings before income taxes	$ 6,754	$ 1,240	$ 1,278	$ 1,749	$ —	$ 4,267	$ (790)	$ 10,231
Total assets [a]	$ 64,212	$ 14,600	$ 8,335	$ 26,844	$ —	$49,779	$ (2,737)	$ 111,254
Purchases of property, equipment and capitalized software	653	252	572	79	—	903	—	1,556
Depreciation and amortization	718	251	492	232	—	975	—	1,693
2014								
Revenues — external customers:								
Premiums	$ 112,645	$ 2,657	$ —	$ —	$ —	$ 2,657	$ —	$ 115,302
Products	3	18	96	4,125	—	4,239	—	4,242
Services	6,516	1,300	2,224	111	—	3,635	—	10,151
Total revenues — external customers	119,164	3,975	2,320	4,236	—	10,531	—	129,695
Total revenues — intersegment	—	6,913	2,906	27,740	(489)	37,070	(37,070)	—
Investment and other income	634	144	1	—	—	145	—	779
Total revenues	$ 119,798	$ 11,032	$ 5,227	$ 31,976	$ (489)	$47,746	$ (37,070)	$ 130,474
Earnings from operations	$ 6,992	$ 1,090	$ 1,002	$ 1,190	$ —	$ 3,282	$ —	$ 10,274
Interest expense	—	—	—	—	—	—	(618)	(618)
Earnings before income taxes	$ 6,992	$ 1,090	$ 1,002	$ 1,190	$ —	$ 3,282	$ (618)	$ 9,656
Total assets [a]	$ 62,405	$ 11,148	$ 8,112	$ 5,474	$ —	$24,734	$ (839)	$ 86,300
Purchases of property, equipment and capitalized software	773	212	484	56	—	752	—	1,525
Depreciation and amortization	772	179	433	94	—	706	—	1,478

(a) In the first quarter of 2016, the Company adopted ASU 2015-03, retrospectively as required. See Note 2 for more information on the adoption of ASU 2015-03.

14. Quarterly Financial Data (Unaudited)

Selected quarterly financial information for all quarters of 2016 and 2015 is as follows:

	For the Quarter Ended			
(in millions, except per share data)	March 31	June 30	September 30	December 31
2016				
Revenues	$ 44,527	$ 46,485	$ 46,293	$ 47,535
Operating costs	41,567	43,282	42,713	44,348
Earnings from operations	2,960	3,203	3,580	3,187
Net earnings	1,627	1,760	1,978	1,708
Net earnings attributable to UnitedHealth Group common shareholders	1,611	1,754	1,968	1,684
Net earnings per share attributable to UnitedHealth Group common shareholders:				
Basic	1.69	1.84	2.07	1.77
Diluted	1.67	1.81	2.03	1.74
2015				
Revenues	$ 35,756	$ 36,263	$ 41,489	$ 43,599
Operating costs	33,116	33,368	38,471	41,131
Earnings from operations	2,640	2,895	3,018	2,468
Net earnings	1,413	1,585	1,618	1,252
Net earnings attributable to UnitedHealth Group common shareholders	1,413	1,585	1,597	1,218
Net earnings per share attributable to UnitedHealth Group common shareholders:				
Basic	1.48	1.66	1.68	1.28
Diluted	1.46	1.64	1.65	1.26

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

We maintain disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934 (Exchange Act) that are designed to provide reasonable assurance that information required to be disclosed by us in reports that we file or submit under the Exchange Act is (i) recorded, processed, summarized and reported within the time periods specified in SEC rules and forms; and (ii) accumulated and communicated to our management, including our principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

In connection with the filing of this Annual Report on Form 10-K, management evaluated, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2016. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2016.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There have been no changes in our internal control over financial reporting during the quarter ended December 31, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Management on Internal Control Over Financial Reporting as of December 31, 2016

UnitedHealth Group Incorporated and Subsidiaries' (the "Company") management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934. The Company's internal control system is designed to provide reasonable assurance to our management and board of directors regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles. The Company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2016. In making this assessment, we used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control-Integrated Framework (2013).* Based on our assessment and the COSO criteria, we believe that, as of December 31, 2016, the Company maintained effective internal control over financial reporting.

The Company's independent registered public accounting firm has audited the Company's internal control over financial reporting as of December 31, 2016, as stated in the Report of Independent Registered Public Accounting Firm, appearing under Item 9A.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of UnitedHealth Group Incorporated and Subsidiaries:

We have audited the internal control over financial reporting of UnitedHealth Group Incorporated and subsidiaries (the "Company") as of December 31, 2016, based on criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Report of Management on Internal Control Over Financial Reporting as of December 31, 2016. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed by, or under the supervision of, the company's principal executive and principal financial officers, or persons performing similar functions, and effected by the company's board of directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. Also, projections of any evaluation of the effectiveness of the internal control over financial reporting to future periods are subject to the risk that the controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements as of and for the year ended December 31, 2016 of the Company and our report dated February 8, 2017 expressed an unqualified opinion on those consolidated financial statements.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 8, 2017

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

DIRECTORS OF THE REGISTRANT

The following sets forth certain information regarding our directors as of February 8, 2017, including their name and principal occupation or employment:

William C. Ballard, Jr.
Former Of Counsel
Bingham Greenebaum Doll LLP

Edson Bueno, M.D.
Founder Amil and
Chairman UnitedHealth Group Latin America

Richard T. Burke
Non-Executive Chair
UnitedHealth Group

Robert J. Darretta
Retired Vice-Chair and
Chief Financial Officer
Johnson & Johnson

Timothy P. Flynn
Retired Chair
KPMG International

Stephen J. Hemsley
Chief Executive Officer
UnitedHealth Group

Michele J. Hooper
President and Chief Executive Officer
The Directors' Council, a company
focused on improving the governance
processes of corporate boards

Rodger A. Lawson
Executive Chair
E*TRADE Financial Corporation and
Retired President and Chief Executive Officer
Fidelity Investments — Financial Services

Glenn M. Renwick
Executive Chair
The Progressive Corporation

Kenneth I. Shine, M.D.
Professor of Medicine at the Dell Medical School
University of Texas

Gail R. Wilensky, Ph.D.
Senior Fellow
Project HOPE, an international health foundation

Pursuant to General Instruction G(3) to Form 10-K and Instruction 3 to Item 401(b) of Regulation S-K, information regarding our executive officers is provided in Item 1 of Part I of this Annual Report on Form 10-K under the caption "Executive Officers of the Registrant."

We have adopted a code of ethics applicable to our principal executive officer and other senior financial officers, who include our principal financial officer, principal accounting officer, controller and persons performing similar functions. The code of ethics, entitled Code of Conduct: Our Principles of Ethics and Integrity, is posted on our website at *www.unitedhealthgroup.com*. For information about how to obtain the Code of Conduct, see Part I, Item 1, "Business." We intend to satisfy the SEC's disclosure requirements regarding amendments to, or waivers of, the code of ethics for our senior financial officers by posting such information on our website indicated above.

The remaining information required by Items 401, 405, 406 and 407(c)(3), (d)(4) and (d)(5) of Regulation S-K will be included under the headings "Corporate Governance," "Proposal 1-Election of Directors" and "Section

16(a) Beneficial Ownership Reporting Compliance" in our definitive proxy statement for our 2017 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Items 402, 407(e)(4) and (e)(5) of Regulation S-K will be included under the headings "Executive Compensation," "Director Compensation," "Corporate Governance — Risk Oversight" and "Compensation Committee Interlocks and Insider Participation" in our definitive proxy statement for our 2017 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS

Equity Compensation Plan Information

The following table sets forth certain information, as of December 31, 2016, concerning shares of common stock authorized for issuance under all of our equity compensation plans:

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(in millions)		(in millions)
Equity compensation plans approved by shareholders [1]	36	$ 84	78 [3]
Equity compensation plans not approved by shareholders [2]	—	—	—
Total [2]	36	$ 84	78

(1) Consists of the UnitedHealth Group Incorporated 2011 Stock Incentive Plan, as amended and the UnitedHealth Group 1993 ESPP, as amended.

(2) Excludes 184,000 shares underlying stock options assumed by us in connection with an acquisition. These options have a weighted-average exercise price of $95 and an average remaining term of approximately 7 years. The options are administered pursuant to the terms of the plan under which the options originally were granted. No future awards will be granted under this acquired plan.

(3) Includes 10 million shares of common stock available for future issuance under the Employee Stock Purchase Plan as of December 31, 2016, and 68 million shares available under the 2011 Stock Incentive Plan as of December 31, 2016. Shares available under the 2011 Stock Incentive Plan may become the subject of future awards in the form of stock options, SARs, restricted stock, restricted stock units, performance awards and other stock-based awards.

The information required by Item 403 of Regulation S-K will be included under the heading "Security Ownership of Certain Beneficial Owners and Management" in our definitive proxy statement for our 2017 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by Items 404 and 407(a) of Regulation S-K will be included under the headings "Certain Relationships and Transactions" and "Corporate Governance" in our definitive proxy statement for our 2017 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by Item 9(e) of Schedule 14A will be included under the heading "Disclosure of Fees Paid to Independent Registered Public Accounting Firm" in our definitive proxy statement for our 2017 Annual Meeting of Shareholders, and such required information is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) 1. *Financial Statements*

The financial statements are included under Item 8 of this report:

- Reports of Independent Registered Public Accounting Firm.
- Consolidated Balance Sheets as of December 31, 2016 and 2015.
- Consolidated Statements of Operations for the years ended December 31, 2016, 2015, and 2014.
- Consolidated Statements of Comprehensive Income for the years ended December 31, 2016, 2015, and 2014.
- Consolidated Statements of Changes in Equity for the years ended December 31, 2016, 2015, and 2014.
- Consolidated Statements of Cash Flows for the years ended December 31, 2016, 2015, and 2014.
- Notes to the Consolidated Financial Statements.

2. *Financial Statement Schedules*

The following financial statement schedule of the Company is included in Item 15(c):

- Schedule I—Condensed Financial Information of Registrant (Parent Company Only).

All other schedules for which provision is made in the applicable accounting regulations of the SEC are not required under the related instructions, are inapplicable, or the required information is included in the consolidated financial statements, and therefore have been omitted.

(b) The following exhibits are filed or incorporated by reference herein in response to Item 601 of Regulation S-K. The Company files Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K pursuant to the Securities Exchange Act of 1934 under Commission File No. 1-10864.

EXHIBIT INDEX**

3.1	Certificate of Incorporation of UnitedHealth Group Incorporated (incorporated by reference to Exhibit 3.1 to UnitedHealth Group Incorporated's Registration Statement on Form 8-A/A, Commission File No. 1-10864, filed on July 1, 2015)
3.2	Bylaws of UnitedHealth Group Incorporated (incorporated by reference to Exhibit 3.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on February 12, 2016)
4.1	Senior Indenture, dated as of November 15, 1998, between United HealthCare Corporation and The Bank of New York (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Registration Statement on Form S-3/A, SEC File Number 333-66013, filed on January 11, 1999)
4.2	Amendment, dated as of November 6, 2000, to Senior Indenture, dated as of November 15, 1998, between the UnitedHealth Group Incorporated and The Bank of New York (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001)

4.3	Instrument of Resignation, Appointment and Acceptance of Trustee, dated January 8, 2007, pursuant to the Senior Indenture, dated as of November 15, 1988, amended as of November 6, 2000, among UnitedHealth Group Incorporated, The Bank of New York and Wilmington Trust Company (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007)
4.4	Indenture, dated as of February 4, 2008, between UnitedHealth Group Incorporated and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Registration Statement on Form S-3, SEC File Number 333-149031, filed on February 4, 2008)
*10.1	UnitedHealth Group Incorporated 2011 Stock Incentive Plan, as amended and restated in 2015 (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on June 5, 2015)
*10.2	Amendment to UnitedHealth Group Incorporated's Stock Option and Stock Appreciation Right Awards, effective November 6, 2014 (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2014)
*10.3	Form of Agreement for Non-Qualified Stock Option Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.4 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.4	Form of Agreement for Non-Qualified Stock Option Award for International Participants under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2013)
*10.5	Form of Addendum for Non-Qualified Stock Option Award Agreement for International Participants under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.37 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2012)
*10.6	Form of Agreement for Restricted Stock Unit Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.5 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.7	Form of Agreement for Restricted Stock Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.5 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
*10.8	Form of Agreement for Stock Appreciation Rights Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.4 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
*10.9	Form of Agreement for Performance-based Restricted Stock Unit Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.6 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.10	Form of Agreement for Initial Deferred Stock Unit Award to Non-Employee Directors under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.7 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
*10.11	Form of Agreement for Deferred Stock Unit Award to Non-Employee Directors under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.6 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)

10.12	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on July 1, 2015)
*10.13	Amended and Restated UnitedHealth Group Incorporated Executive Incentive Plan (2009 Statement), effective as of December 31, 2008 (incorporated by reference to Exhibit 10.12 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.14	Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan, effective as of December 31, 2008 (incorporated by reference to Exhibit 10.13 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.15	Amendment, dated as of December 21, 2012, of Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan (incorporated by reference to Exhibit 10.11 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2012)
*10.16	Second Amendment, dated as of November 5, 2015, of Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.17	UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10(e) of UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2003)
*10.18	First Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 3, 2006)
*10.19	Second Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.13 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2007)
*10.20	Third Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.17 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.21	Fourth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010)
*10.22	Fifth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014)
*10.23	Sixth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.24	Seventh Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement)
*10.25	Summary of Non-Management Director Compensation, effective as of October 1, 2016 (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016)
*10.26	UnitedHealth Group Directors' Compensation Deferral Plan (2009 Statement) (incorporated by reference to Exhibit 10.18 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)

*10.27	Amendment to the UnitedHealth Group Directors' Compensation Deferral Plan, effective as of January 1, 2010 (incorporated by reference to Exhibit 10.20 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2009)
*10.28	First Amendment to UnitedHealth Group Directors' Compensation Deferral Plan (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010)
*10.29	Catamaran Corporation Third Amended and Restated Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Registration Statement on Form S-8, SEC File Number 333-205824, filed on July 23, 2015)
*10.30	Catalyst Health Solutions, Inc. 2006 Stock Incentive Plan, as amended (incorporated by reference to Exhibit 4.4 to UnitedHealth Group Incorporated's Registration Statement on Form S-8, SEC File Number 333-205824, filed on July 23, 2015)
*10.31	Employment Agreement, dated as of November 7, 2006, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 8, 2006)
*10.32	Agreement for Supplemental Executive Retirement Pay, effective April 1, 2004, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10(b) to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2004)
*10.33	Amendment to Agreement for Supplemental Executive Retirement Pay, dated as of November 7, 2006, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit A to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 8, 2006)
*10.34	Amendment to Employment Agreement and Agreement for Supplemental Executive Retirement Pay, effective as of December 31, 2008, between United HealthCare Services, Inc. and Stephen J. Hemsley (incorporated by reference to Exhibit 10.22 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.35	Amendment to Agreement for Supplemental Executive Retirement Pay, dated as of June 7, 2016, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016)
*10.36	Letter Agreement, effective as of February 19, 2008, by and between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.22 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2007)
*10.37	Amendment to Employment Agreement, dated as of December 14, 2010, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on December 15, 2010)
*10.38	Amended and Restated Employment Agreement, effective as of December 1, 2014, between United HealthCare Services, Inc. and David Wichmann (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015)
*10.39	Amended and Restated Employment Agreement, effective December 1, 2014, between United HealthCare Services, Inc. and Larry Renfro (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015)

*10.40	Amended Employment Agreement, effective as of November 1, 2012, between Amil Assistência Médica Internacional S.A. and Dr. Edson de Godoy Bueno (incorporated by reference to Exhibit 10.32 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2012)
*10.41	Employment Agreement, effective as of January 1, 2013, between United HealthCare Services, Inc. and Marianne D. Short (incorporated by reference to Exhibit 10.34 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2013)
*10.42	Amended and Restated Employment Agreement, dated as of February 3, 2014, between United HealthCare Services, Inc. and D. Ellen Wilson (incorporated by reference to Exhibit 10.40 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2015)
*10.43	Amended and Restated Employment Agreement, dated as of June 7, 2016, between United HealthCare Services, Inc. and John Rex (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016)
11.1	Statement regarding computation of per share earnings (incorporated by reference to the information contained under the heading "Net Earnings Per Common Share" in Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements")
12.1	Computation of Ratio of Earnings to Fixed Charges
21.1	Subsidiaries of UnitedHealth Group Incorporated
23.1	Consent of Independent Registered Public Accounting Firm
24.1	Power of Attorney
31.1	Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certifications pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	The following materials from UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2016, filed on February 8, 2017, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statements of Changes in Equity, (v) Consolidated Statements of Cash Flows, and (vi) Notes to the Consolidated Financial Statements.

---

* Denotes management contracts and compensation plans in which certain directors and named executive officers participate and which are being filed pursuant to Item 601(b)(10)(iii)(A) of Regulation S-K.

** Pursuant to Item 601(b)(4)(iii) of Regulation S-K, copies of instruments defining the rights of certain holders of long-term debt are not filed. The Company will furnish copies thereof to the SEC upon request.

(c) Financial Statement Schedule

Schedule I — Condensed Financial Information of Registrant (Parent Company Only).

Schedule I

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of UnitedHealth Group Incorporated and Subsidiaries:

We have audited the consolidated financial statements of UnitedHealth Group Incorporated and subsidiaries (the "Company") as of December 31, 2016 and 2015, and for each of the three years in the period ended December 31, 2016, and the Company's internal control over financial reporting as of December 31, 2016, and have issued our reports thereon dated February 8, 2017; such consolidated financial statements and reports are included elsewhere in this Form 10-K. Our audits also included the consolidated financial statement schedule of the Company listed in Item 15. This consolidated financial statement schedule is the responsibility of the Company's management. Our responsibility is to express an opinion based on our audits. In our opinion, the consolidated financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

/s/ DELOITTE & TOUCHE LLP

Minneapolis, Minnesota
February 8, 2017

Schedule I

Condensed Financial Information of Registrant
(Parent Company Only)
UnitedHealth Group
Condensed Balance Sheets

(in millions, except per share data)	December 31, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	$ 180	$ 29
Short-term notes receivable from subsidiaries	755	—
Other current assets	140	313
Total current assets	1,075	342
Equity in net assets of subsidiaries	60,593	56,316
Long-term notes receivable from subsidiaries	9,912	9,679
Other assets	248	199
Total assets	$ 71,828	$ 66,536
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable and accrued liabilities	$ 452	$ 449
Note payable to subsidiary	280	310
Commercial paper and current maturities of long-term debt	7,113	6,587
Total current liabilities	7,845	7,346
Long-term debt, less current maturities	25,657	25,215
Other liabilities	52	145
Total liabilities	33,554	32,706
Commitments and contingencies (Note 4)		
Shareholders' equity:		
Preferred stock, $0.001 par value — 10 shares authorized; no shares issued or outstanding	—	—
Common stock, $0.01 par value — 3,000 shares authorized; 952 and 953 issued and outstanding	10	10
Additional paid-in capital	—	29
Retained earnings	40,945	37,125
Accumulated other comprehensive loss	(2,681)	(3,334)
Total UnitedHealth Group shareholders' equity	38,274	33,830
Total liabilities and shareholders' equity	$ 71,828	$ 66,536

See Notes to the Condensed Financial Statements of Registrant

Schedule I

Condensed Financial Information of Registrant
(Parent Company Only)
UnitedHealth Group
Condensed Statements of Comprehensive Income

(in millions)	For the Years Ended December 31, 2016	2015	2014
Revenues:			
Investment and other income	$ 522	$ 396	$ 293
Total revenues	522	396	293
Operating costs:			
Operating costs	(22)	(17)	1
Interest expense	995	717	554
Total operating costs	973	700	555
Loss before income taxes	(451)	(304)	(262)
Benefit for income taxes	165	111	96
Loss of parent company	(286)	(193)	(166)
Equity in undistributed income of subsidiaries	7,303	6,006	5,785
Net earnings	7,017	5,813	5,619
Other comprehensive income (loss)	653	(1,942)	(484)
Comprehensive income	$ 7,670	$ 3,871	$ 5,135

See Notes to the Condensed Financial Statements of Registrant

Schedule I

Condensed Financial Information of Registrant
(Parent Company Only)
UnitedHealth Group
Condensed Statements of Cash Flows

(in millions)	For the Years Ended December 31, 2016	2015	2014
Operating activities			
Cash flows from operating activities	$ 4,294	$ 1,727	$ 7,445
Investing activities			
Issuance of notes to subsidiaries	(824)	(5,064)	(436)
Cash paid for acquisitions	(2,292)	(12,270)	(1,852)
Return of capital to parent company	2,143	4,375	—
Capital contributions to subsidiaries	(765)	(1,109)	(704)
Other, net	168	140	(9)
Cash flows used for investing activities	(1,570)	(13,928)	(3,001)
Financing activities			
Common stock repurchases	(1,280)	(1,200)	(4,008)
Proceeds from common stock issuances	429	402	462
Cash dividends paid	(2,261)	(1,786)	(1,362)
(Repayments of) proceeds from commercial paper, net	(382)	3,666	(794)
Proceeds from issuance of long-term debt	3,968	11,982	1,997
Repayments of long-term debt	(2,596)	(1,041)	(812)
Other, net	(451)	(352)	(190)
Cash flows (used for) from financing activities	(2,573)	11,671	(4,707)
Increase (decrease) in cash and cash equivalents	151	(530)	(263)
Cash and cash equivalents, beginning of period	29	559	822
Cash and cash equivalents, end of period	$ 180	$ 29	$ 559
Supplemental cash flow disclosures			
Cash paid for interest	$ 974	$ 573	$ 578
Cash paid for income taxes	4,557	4,294	4,028

See Notes to the Condensed Financial Statements of Registrant

Schedule I

Condensed Financial Information of Registrant
(Parent Company Only)
UnitedHealth Group
Notes to Condensed Financial Statements

1. Basis of Presentation

UnitedHealth Group's parent company financial information has been derived from its consolidated financial statements and should be read in conjunction with the consolidated financial statements included in this Form 10-K. The accounting policies for the registrant are the same as those described in Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

2. Subsidiary Transactions

Investment in Subsidiaries. UnitedHealth Group's investment in subsidiaries is stated at cost plus equity in undistributed earnings of subsidiaries.

Intercompany Notes. In July 2015, the parent company issued $4.8 billion in intercompany notes that were used to partially fund the acquisition of Catamaran. See Note 6 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements" for more information about Catamaran.

Dividends and Capital Distributions. Cash dividends received from subsidiaries and included in Cash Flows from Operating Activities in the Condensed Statements of Cash Flows were $3.7 billion, $4.8 billion and $5.5 billion in 2016, 2015 and 2014, respectively. Additionally, $2.1 billion and $4.4 billion in cash were received as a return of capital to the parent company during 2016 and 2015, respectively.

3. Commercial Paper and Long-Term Debt

Discussion of commercial paper and long-term debt can be found in Note 8 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements." Long-term debt obligations of the parent company do not include other financing obligations at subsidiaries that totaled $200 million and $164 million at December 31, 2016 and 2015, respectively.

Maturities of commercial paper and long-term debt for the years ending December 31 are as follows:

(in millions)	
2017	$ 7,105
2018	2,600
2019	1,750
2020	1,950
2021	2,400
Thereafter	17,217

4. Commitments and Contingencies

For a summary of commitments and contingencies, see Note 12 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements."

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: February 8, 2017

UNITEDHEALTH GROUP INCORPORATED

By /s/ STEPHEN J. HEMSLEY

Stephen J. Hemsley
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ STEPHEN J. HEMSLEY **Stephen J. Hemsley**	Director and Chief Executive Officer (principal executive officer)	February 8, 2017
/s/ JOHN F. REX **John F. Rex**	Executive Vice President and Chief Financial Officer (principal financial officer)	February 8, 2017
/s/ THOMAS E. ROOS **Thomas E. Roos**	Senior Vice President and Chief Accounting Officer (principal accounting officer)	February 8, 2017
* **William C. Ballard, Jr.**	Director	February 8, 2017
* **Edson Bueno**	Director	February 8, 2017
* **Richard T. Burke**	Director	February 8, 2017
 Robert J. Darretta	Director	
* **Timothy P. Flynn**	Director	February 8, 2017
* **Michele J. Hooper**	Director	February 8, 2017
* **Rodger A. Lawson**	Director	February 8, 2017
* **Glenn M. Renwick**	Director	February 8, 2017
* **Kenneth I. Shine**	Director	February 8, 2017
* **Gail R. Wilensky**	Director	February 8, 2017

*By /s/ MARIANNE D. SHORT

Marianne D. Short,
As Attorney-in-Fact

EXHIBIT INDEX**

3.1	Certificate of Incorporation of UnitedHealth Group Incorporated (incorporated by reference to Exhibit 3.1 to UnitedHealth Group Incorporated's Registration Statement on Form 8-A/A, Commission File No. 1-10864, filed on July 1, 2015)
3.2	Bylaws of UnitedHealth Group Incorporated (incorporated by reference to Exhibit 3.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on February 12, 2016)
4.1	Senior Indenture, dated as of November 15, 1998, between United HealthCare Corporation and The Bank of New York (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Registration Statement on Form S-3/A, SEC File Number 333-66013, filed on January 11, 1999)
4.2	Amendment, dated as of November 6, 2000, to Senior Indenture, dated as of November 15, 1998, between the UnitedHealth Group Incorporated and The Bank of New York (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2001)
4.3	Instrument of Resignation, Appointment and Acceptance of Trustee, dated January 8, 2007, pursuant to the Senior Indenture, dated as of November 15, 1988, amended as of November 6, 2000, among UnitedHealth Group Incorporated, The Bank of New York and Wilmington Trust Company (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007)
4.4	Indenture, dated as of February 4, 2008, between UnitedHealth Group Incorporated and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 to UnitedHealth Group Incorporated's Registration Statement on Form S-3, SEC File Number 333-149031, filed on February 4, 2008)
*10.1	UnitedHealth Group Incorporated 2011 Stock Incentive Plan, as amended and restated in 2015 (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on June 5, 2015)
*10.2	Amendment to UnitedHealth Group Incorporated's Stock Option and Stock Appreciation Right Awards, effective November 6, 2014 (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2014)
*10.3	Form of Agreement for Non-Qualified Stock Option Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.4 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.4	Form of Agreement for Non-Qualified Stock Option Award for International Participants under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2013)
*10.5	Form of Addendum for Non-Qualified Stock Option Award Agreement for International Participants under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.37 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2012)
*10.6	Form of Agreement for Restricted Stock Unit Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.5 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.7	Form of Agreement for Restricted Stock Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.5 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)

*10.8	Form of Agreement for Stock Appreciation Rights Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.4 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
*10.9	Form of Agreement for Performance-based Restricted Stock Unit Award to Executives under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan, as amended and restated in 2015, for awards made after January 1, 2016 (incorporated by reference to Exhibit 10.6 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.10	Form of Agreement for Initial Deferred Stock Unit Award to Non-Employee Directors under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.7 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
*10.11	Form of Agreement for Deferred Stock Unit Award to Non-Employee Directors under UnitedHealth Group Incorporated's 2011 Stock Incentive Plan (incorporated by reference to Exhibit 10.6 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on May 27, 2011)
10.12	Form of Indemnification Agreement (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on July 1, 2015)
*10.13	Amended and Restated UnitedHealth Group Incorporated Executive Incentive Plan (2009 Statement), effective as of December 31, 2008 (incorporated by reference to Exhibit 10.12 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.14	Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan, effective as of December 31, 2008 (incorporated by reference to Exhibit 10.13 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.15	Amendment, dated as of December 21, 2012, of Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan (incorporated by reference to Exhibit 10.11 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2012)
*10.16	Second Amendment, dated as of November 5, 2015, of Amended and Restated UnitedHealth Group Incorporated 2008 Executive Incentive Plan (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.17	UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10(e) of UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2003)
*10.18	First Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.3 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 3, 2006)
*10.19	Second Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.13 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2007)
*10.20	Third Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.17 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.21	Fourth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010)

*10.22	Fifth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014)
*10.23	Sixth Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement) (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015)
*10.24	Seventh Amendment to UnitedHealth Group Executive Savings Plan (2004 Statement)
*10.25	Summary of Non-Management Director Compensation, effective as of October 1, 2016 (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016)
*10.26	UnitedHealth Group Directors' Compensation Deferral Plan (2009 Statement) (incorporated by reference to Exhibit 10.18 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.27	Amendment to the UnitedHealth Group Directors' Compensation Deferral Plan, effective as of January 1, 2010 (incorporated by reference to Exhibit 10.20 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2009)
*10.28	First Amendment to UnitedHealth Group Directors' Compensation Deferral Plan (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010)
*10.29	Catamaran Corporation Third Amended and Restated Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 4.3 to UnitedHealth Group Incorporated's Registration Statement on Form S-8, SEC File Number 333-205824, filed on July 23, 2015)
*10.30	Catalyst Health Solutions, Inc. 2006 Stock Incentive Plan, as amended (incorporated by reference to Exhibit 4.4 to UnitedHealth Group Incorporated's Registration Statement on Form S-8, SEC File Number 333-205824, filed on July 23, 2015)
*10.31	Employment Agreement, dated as of November 7, 2006, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 8, 2006)
*10.32	Agreement for Supplemental Executive Retirement Pay, effective April 1, 2004, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10(b) to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2004)
*10.33	Amendment to Agreement for Supplemental Executive Retirement Pay, dated as of November 7, 2006, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit A to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on November 8, 2006)
*10.34	Amendment to Employment Agreement and Agreement for Supplemental Executive Retirement Pay, effective as of December 31, 2008, between United HealthCare Services, Inc. and Stephen J. Hemsley (incorporated by reference to Exhibit 10.22 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2008)
*10.35	Amendment to Agreement for Supplemental Executive Retirement Pay, dated as of June 7, 2016, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016)

*10.36	Letter Agreement, effective as of February 19, 2008, by and between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.22 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2007)
*10.37	Amendment to Employment Agreement, dated as of December 14, 2010, between UnitedHealth Group Incorporated and Stephen J. Hemsley (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Current Report on Form 8-K filed on December 15, 2010)
*10.38	Amended and Restated Employment Agreement, effective as of December 1, 2014, between United HealthCare Services, Inc. and David Wichmann (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015)
*10.39	Amended and Restated Employment Agreement, effective December 1, 2014, between United HealthCare Services, Inc. and Larry Renfro (incorporated by reference to Exhibit 10.2 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended March 31, 2015)
*10.40	Amended Employment Agreement, effective as of November 1, 2012, between Amil Assistência Médica Internacional S.A. and Dr. Edson de Godoy Bueno (incorporated by reference to Exhibit 10.32 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2012)
*10.41	Employment Agreement, effective as of January 1, 2013, between United HealthCare Services, Inc. and Marianne D. Short (incorporated by reference to Exhibit 10.34 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2013)
*10.42	Amended and Restated Employment Agreement, dated as of February 3, 2014, between United HealthCare Services, Inc. and D. Ellen Wilson (incorporated by reference to Exhibit 10.40 to UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2015)
*10.43	Amended and Restated Employment Agreement, dated as of June 7, 2016, between United HealthCare Services, Inc. and John Rex (incorporated by reference to Exhibit 10.1 to UnitedHealth Group Incorporated's Quarterly Report on Form 10-Q for the quarter ended June 30, 2016)
11.1	Statement regarding computation of per share earnings (incorporated by reference to the information contained under the heading "Net Earnings Per Common Share" in Note 2 of Notes to the Consolidated Financial Statements included in Part II, Item 8, "Financial Statements")
12.1	Computation of Ratio of Earnings to Fixed Charges
21.1	Subsidiaries of UnitedHealth Group Incorporated
23.1	Consent of Independent Registered Public Accounting Firm
24.1	Power of Attorney
31.1	Certifications pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certifications pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	The following materials from UnitedHealth Group Incorporated's Annual Report on Form 10-K for the year ended December 31, 2016, filed on February 8, 2017, formatted in XBRL (eXtensible Business Reporting Language): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Income, (iv) Consolidated Statements of Changes in Equity, (v) Consolidated Statements of Cash Flows, and (vi) Notes to the Consolidated Financial Statements.

* Denotes management contracts and compensation plans in which certain directors and named executive officers participate and which are being filed pursuant to Item 601(b)(10)(iii)(A) of Regulation S-K.

** Pursuant to Item 601(b)(4)(iii) of Regulation S-K, copies of instruments defining the rights of certain holders of long-term debt are not filed. The Company will furnish copies thereof to the SEC upon request.

Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended June 30, 2018

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File Number: 1-11373

Cardinal Health, Inc.

(Exact name of registrant as specified in its charter)

Ohio	**31-0958666**
(State or other jurisdiction of incorporation or organization)	***(IRS Employer Identification No.)***
7000 Cardinal Place, Dublin, Ohio	**43017**
(Address of principal executive offices)	***(Zip Code)***

(614) 757-5000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	*Name of each exchange on which registered*
Common shares (without par value)	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☑ No ☐
Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☑
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐
Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐
Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of the Form 10-K or any amendment to the Form 10-K. ☑
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☑	Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐
Emerging growth company ☐	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑
The aggregate market value of voting stock held by non-affiliates or registrant on December 31, 2017 , was the following: $19,248,647,885 .
The number of the registrant's common shares, without par value, outstanding as of July 31, 2018 , was the following: 308,828,810 .

Documents Incorporated by Reference:

Portions of the registrant's Definitive Proxy Statement to be filed for its 2018 Annual Meeting of Shareholders are incorporated by reference into the sections of this Form 10-K addressing the requirements of Part III of Form 10-K.

Cardinal Health

Fiscal 2018 Form 10-K

Table of Contents

Introduction

References to Cardinal Health and Fiscal Years

As used in this report, "we," "our," "us," "Cardinal Health" and similar pronouns refer to Cardinal Health, Inc. and its majority-owned subsidiaries, unless the context requires otherwise. Our fiscal year ends on June 30. References to fiscal 2019 , 2018 , 2017 , 2016 , 2015 and 2014 and to the fiscal years ended June 30, 2019 , 2018 , 2017 , 2016 , 2015 and 2014 , respectively. Except as otherwise specified, information in this report is provided as of June 30, 2018 .

Non-GAAP Financial Measures

In this report, including in the "Fiscal 2018 Overview" section of Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A"), we use financial measures that are derived from consolidated financial data but are not presented in our financial statements that are prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). These measures are considered “non-GAAP financial measures” under the Securities and Exchange Commission (“SEC”) rules. The reasons we use these non-GAAP financial measures and the reconciliations to their most directly comparable GAAP financial measures are included in the “Explanation and Reconciliation of Non-GAAP Financial Measures” section following MD&A in this report.

Important Information Regarding Forward-Looking Statements

This report (including information incorporated by reference) includes forward-looking statements addressing expectations, prospects, estimates and other matters that are dependent upon future events or developments. Many forward-looking statements appear in MD&A, but there are others throughout this report, which may be identified by words such as “expect,” “anticipate,” “intend,” “plan,” “believe,” “will,” “should,” “could,” “would,” “project,” “continue,” “likely,” and similar expressions, and include statements reflecting future results or guidance, statements of outlook and expense accruals. These matters are subject to risks and uncertainties that could cause actual results to differ materially from those projected, anticipated or implied. The most significant of these risks and uncertainties are described in “Risk Factors” in this report and in Exhibit 99.1 to the Form 10-K included in this report. Forward-looking statements in this report speak only as of the date of this document. Except to the extent required by applicable law, we undertake no obligation to update or revise any forward-looking statement.

Available Information

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports are available free of charge on our website (www.cardinalhealth.com), under the “Investors — Financial Reporting — SEC Filings” caption, as soon as reasonably practicable after we electronically file them with, or furnish them to, the SEC. You may read and copy any materials we file with the SEC at the SEC’s Public Reference Room at 100 F Street, NE, Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website (www.sec.gov) where you can search for annual, quarterly and current reports, proxy and information statements, and other information regarding us and other public companies.

Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A)

About Cardinal Health

Cardinal Health, Inc. is an Ohio corporation formed in 1979 and is a global, integrated healthcare services and products company providing customized solutions for hospitals, healthcare systems, pharmacies, ambulatory surgery centers, clinical laboratories and physician offices. We provide medical products and pharmaceuticals and cost-effective solutions that enhance supply chain efficiency. We manage our business and report our financial results in two segments: Pharmaceutical and Medical.

Pharmaceutical Segment

Our Pharmaceutical segment distributes branded and generic pharmaceutical, specialty pharmaceutical, and over-the-counter healthcare and consumer products in the United States. This segment also provides services to pharmaceutical manufacturers and healthcare providers to support the development, marketing, and distribution of specialty pharmaceutical products; operates nuclear pharmacies and radiopharmaceutical manufacturing facilities; provides pharmacy management services to hospitals, as well as medication therapy management and patient outcomes services to hospitals, other healthcare providers and payers; and repackages generic pharmaceuticals and over-the-counter healthcare products.

Medical Segment

Our Medical segment manufactures, sources and distributes Cardinal Health branded medical, surgical and laboratory products, which are sold in the United States, Canada, Europe, Asia and other markets. In addition to distributing Cardinal Health branded products, this segment also distributes a broad range of national brand products and provides supply chain services and solutions to hospitals, ambulatory surgery centers, clinical laboratories and other healthcare providers in the United States and Canada. This segment also distributes medical products to patients' homes in the United States through our Cardinal Health at Home division.

Consolidated Results

Fiscal 2018 Overview

Revenue
Revenue for fiscal 2018 was $136.8 billion , a 5 percent increase from the prior year, due primarily to sales growth from pharmaceutical distribution and specialty pharmaceutical customers. The Patient Recovery Business acquisition also contributed to the increase in revenue in fiscal 2018.

GAAP and Non-GAAP Operating Earnings

(in millions)	2018	2017	Change
GAAP	**$ 126**	$ 2,120	**(94)%**
Restructuring and employee severance	**176**	56	
Amortization and other acquisition-related costs	**707**	527	
Impairments and (gain)/loss on disposal of assets	**1,417**	18	
Litigation (recoveries)/charges, net	**159**	48	
Non-GAAP	**$ 2,585**	$ 2,769	**(7)%**

The sum of the components may not equal the total due to rounding.

During fiscal 2018 , GAAP operating earnings decreased 94 percent to $126 million and non-GAAP operating earnings decreased 7 percent to $2.6 billion .

The decrease in GAAP operating earnings was primarily due to a non-cash goodwill impairment charge related to our Medical segment; increased amortization of acquisition-related intangible assets as a result of the Patient Recovery Business acquisition; contract termination restructuring costs to transition the distribution of our Medical segment's surgeon gloves in certain international markets from a third-party distribution arrangement to a direct distribution model; performance from Cardinal Health Brand products, primarily Cordis; performance from our Pharmaceutical segment generics program; litigation charges associated with inferior vena cava (IVC) filter product liability claims; and the adverse impact of pharmaceutical customer contract renewals. These factors were partially offset by contributions from the Patient Recovery Business acquisition.

The decrease in non-GAAP operating earnings was primarily due to performance from Cardinal Health Brand products, primarily Cordis; performance from our Pharmaceutical segment generics program; and the adverse impact of pharmaceutical customer contract renewals. These factors were partially offset by contributions from the Patient Recovery Business acquisition.

GAAP and Non-GAAP Diluted EPS

($ per share)	2018	2017	Change
GAAP	**$ 0.81**	$ 4.03	**(80)%**
Restructuring and employee severance	**0.48**	0.11	
Amortization and other acquisition-related costs	**1.69**	1.13	
Impairments and (gain)/loss on disposal of assets	**4.64**	0.04	
Litigation (recoveries)/charges, net	**0.35**	0.09	
Transitional tax benefit, net	**(2.97)**	$ —	
Non-GAAP	**$ 5.00**	$ 5.40	**(7)%**

The sum of the components may not equal the total due to rounding.

During fiscal 2018 , GAAP diluted earnings per share attributable to Cardinal Health, Inc. ("diluted EPS") decreased 80 percent to $0.81 and non-GAAP diluted EPS decreased 7 percent to $5.00 .

Fiscal 2018 GAAP diluted EPS decreased primarily due to the factors impacting GAAP operating earnings and increased interest expense. These were partially offset by the net benefit from the U.S. Tax Cuts and Jobs Act ("Tax Act"), which includes a provisional transitional tax benefit of $936 million as well as the benefit from applying a lower federal tax rate to our U.S. pre-tax earnings.

Fiscal 2018 non-GAAP diluted EPS decreased primarily due to the factors impacting non-GAAP operating earnings and an increase in interest expense, partially offset by the benefit of applying a lower U.S. federal statutory tax rate under the Tax Act to U.S. pre-tax non-GAAP earnings.

Cash and Equivalents

Our cash and equivalents balance was $1.8 billion at June 30, 2018 compared to $6.9 billion at June 30, 2017 . The decrease in cash and equivalents during fiscal 2018 was due to $6.1 billion paid for acquisitions, $954 million paid for debt repayments, $581 million paid in dividends, $550 million paid for share repurchases and $384 million paid for capital expenditures. These cash decreases were offset in part by $2.8 billion of net cash provided by operating activities and $861 million of cash proceeds from the sale of our China distribution business.

Significant Developments in Fiscal 2018 and Trends

Acquisitions and Divestitures

Patient Recovery Business Acquisition
On July 29, 2017, we acquired the Patient Care, Deep Vein Thrombosis, and Nutritional Insufficiency businesses (the "Patient Recovery Business") from Medtronic plc for $6.1 billion in cash. The acquisition further expanded the Medical segment's portfolio of Cardinal Health Brand products.

China Distribution Business Divestiture
During fiscal 2018 we completed the divestiture of our pharmaceutical and medical products distribution business in China (the "China distribution business") to Shanghai Pharmaceuticals Holding Co., Ltd. for proceeds of $861 million (after adjusting for third party indebtedness and preliminary transaction adjustments). The proceeds are not reflective of tax obligations due in connection with the sale, for which we have recorded a liability of $59 million . We recognized a pre-tax loss of $41 million related to this divestiture.

naviHealth Divestiture
In June 2018, we signed a securities purchase agreement and a contribution and rollover agreement with investor entities controlled by Clayton, Dubilier & Rice ("CD&R") to sell our ownership interest in naviHealth for proceeds of $736 million (after adjusting for certain fees and expenses) and a 44% equity interest in a partnership that owns naviHealth. We also have certain call rights to reacquire naviHealth. We do not expect a cash tax impact from this transaction because the capital gain will be offset by capital loss carry-forwards . The transaction closed on August 1, 2018. We expect to record a pre-tax gain of more than $500 million in the first quarter of fiscal 2019.

Trends

Within our Pharmaceutical segment, we expect fiscal 2019 segment profit to be less than our fiscal 2018 segment profit due to the adverse impact of customer contract renewals, generics program performance, and the previously announced loss of a large pharmaceutical distribution customer. Our generics program performance includes the negative impact of generic pharmaceutical customer pricing changes partially offset by the benefits of Red Oak Sourcing. As is generally the case, the frequency, timing, magnitude and profit impact of pharmaceutical customer pricing changes and branded and generic pharmaceutical manufacturer pricing changes remain uncertain and their impact on Pharmaceutical segment profit and consolidated operating earnings in fiscal 2019 could be more or less than we expect.

The acquisition of the Patient Recovery Business increased Medical segment revenue and profit during fiscal 2018. We expect the acquisition to increase Medical segment profit further during fiscal 2019 due to the one additional month of results and the fiscal 2018 negative impact of the inventory fair value step up. We also expect the acquisition will increase amortization and acquisition-related costs in fiscal 2019 due to the size and complexity of the acquisition.

The performance of our Cordis business within our Medical segment declined significantly due to inventory challenges and increased operating costs in fiscal 2018. We expect Cordis performance to stabilize in fiscal 2019.

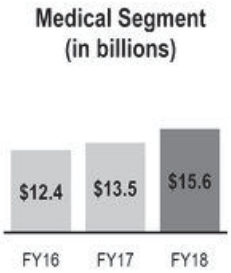
In early fiscal 2019, we implemented certain enterprise-wide cost-saving measures, which we expect to reduce our future operating expenses.

Tax Cuts and Jobs Act
The Tax Act was enacted in December 2017. The Tax Act, among other things, reduced the U.S. federal corporate tax rate from 35 percent to 21 percent and required companies to pay a one-time tax to repatriate, for U.S. purposes, earnings of certain foreign subsidiaries that were previously deferred for tax purposes. The rate change was effective at the beginning of calendar year 2018 and the application of the lower federal tax rate to our U.S. pre-tax earnings resulted in a significant favorable impact to our tax provision in fiscal 2018. Additionally, we recognized a $936 million provisional net transitional tax benefit during fiscal 2018, consisting of the remeasurement of our U.S. deferred tax assets and liabilities at the lower tax rate partially offset by the expense for the repatriation tax. We expect the lower federal statutory rate to be more beneficial in fiscal 2019 than in 2018; however, beginning in fiscal 2019, the Tax Act limits certain deductions and creates new taxes on certain foreign sourced earnings, which will offset some of the additional benefit.

We are still completing our accounting for the tax effects of the Tax Act because all of the necessary information is not currently available, prepared, or analyzed. As such, the amounts we have recorded are provisional estimates and, as permitted by the SEC, we will continue to assess the impact of enactment of the Tax Act and we may record additional provisional amounts or adjustments to provisional amounts during the first half of fiscal 2019.

Results of Operations

Revenue



	Revenue			Change	
(in millions)	**2018**	2017	2016	**2018**	2017
Pharmaceutical	**$ 121,241**	$116,463	$109,131	**4%**	7%
Medical	**15,581**	13,524	12,430	**15%**	9%
Total segment revenue	**136,822**	129,987	121,561	**5%**	7%
Corporate	**(13)**	(11)	(15)	**N.M.**	N.M.
Total revenue	**$ 136,809**	$129,976	$121,546	**5%**	7%

Fiscal 2018 Compared to Fiscal 2017

Pharmaceutical Segment
Fiscal 2018 Pharmaceutical segment revenue grew primarily due to sales growth from pharmaceutical distribution and specialty pharmaceutical customers, which together increased revenue by $9.4 billion. The increases were partially offset by the previously announced May 2017 expiration of a large pharmaceutical distribution mail order customer contract and the February 2018 divestiture of our China distribution business.

Medical Segment
Fiscal 2018 Medical segment revenue grew mainly due to $1.9 billion of contributions from acquisitions, which primarily consists of the Patient Recovery Business acquisition.

Fiscal 2017 Compared to Fiscal 2016

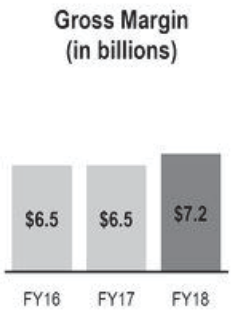
Pharmaceutical Segment
Fiscal 2017 Pharmaceutical segment revenue grew primarily due to sales growth from the addition of OptumRx and from other pharmaceutical distribution customers, including branded pharmaceutical price appreciation, all of which increased revenue by $7.0 billion.

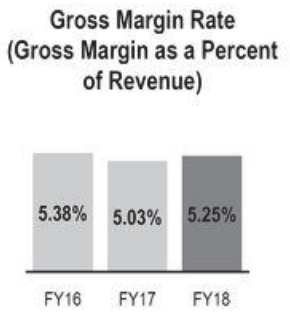
Medical Segment
Fiscal 2017 Medical segment revenue grew primarily due to sales growth from new and existing customers and $212 million in contributions from acquisitions.

Cost of Products Sold

Cost of products sold f or fiscal 2018 and 2017 increased $6.2 billion (5 percent) and $8.4 billion (7 percent) compared to the prior-year periods, respectively, as a result of the same factors affecting the changes in revenue and gross margin.

Gross Margin





	Consolidated Gross Margin			Change	
(in millions)	**2018**	2017	2016	**2018**	2017
Gross margin	**$ 7,181**	$ 6,544	$ 6,543	**10%**	—%

Fiscal 2018 Compared to Fiscal 2017

Fiscal 2018 consolidated gross margin increased $637 million (10 percent) and was favorably impacted by acquisitions ($809 million), which primarily consists of the Patient Recovery Business acquisition.

Gross margin rate grew during fiscal 2018 , mainly due to acquisitions, which primarily consists of the Patient Recovery Business acquisition. Gross margin rate growth was partially offset by the negative impact of changes in pharmaceutical distribution product mix and performance in our Cordis business due to inventory challenges and increased manufacturing costs.

Fiscal 2017 Compared to Fiscal 2016

Fiscal 2017 consolidated gross margin was essentially flat versus the prior-year period.

Consolidated gross margin for fiscal 2017 was positively impacted by sales growth from pharmaceutical distribution customers ($260 million) and acquisitions in both segments ($132 million) and was negatively impacted by the previously disclosed loss of a large pharmaceutical distribution customer.

Gross margin rate contracted during fiscal 2017 , primarily due to generic pharmaceutical customer pricing changes, partially offset by the benefits from Red Oak Sourcing within our Pharmaceutical segment generics program.

Distribution, Selling, General and Administrative ("SG&A") Expenses

	SG&A Expenses			Change	
(in millions)	**2018**	2017	2016	**2018**	2017
SG&A expenses	**$ 4,596**	$ 3,775	$ 3,648	**22%**	3%

Fiscal 2018 Compared to Fiscal 2017

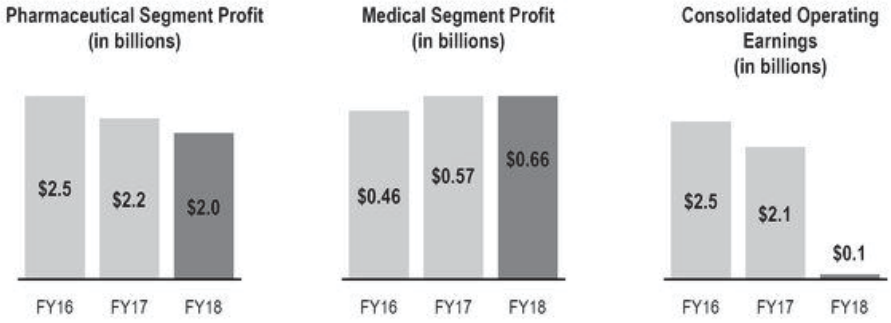
Fiscal 2018 SG&A expenses increased mainly due to acquisitions ($524 million), which primarily consists of the Patient Recovery Business acquisition, and enterprise-wide compensation related items.

Fiscal 2017 Compared to Fiscal 2016

Fiscal 2017 SG&A expenses increased primarily due to acquisitions ($112 million) and costs related to a multi-year project to replace certain Pharmaceutical segment finance and operating information systems, partially offset by reduced enterprise-wide incentive compensation.

Segment Profit

We evaluate segment performance based on segment profit, among other measures. See Note 16 of the "Notes to Consolidated Financial Statements" for additional information on segment profit.



	Segment Profit and Operating Earnings			Change	
(in millions)	**2018**	2017	2016	**2018**	2017
Pharmaceutical	**$ 1,992**	$ 2,187	$ 2,488	**(9)%**	(12)%
Medical	**662**	572	457	**16 %**	25 %
Total segment profit	**2,654**	2,759	2,945	**(4)%**	(6)%
Corporate	**(2,528)**	(639)	(486)	**296 %**	31 %
Total consolidated operating earnings	**$ 126**	$ 2,120	$ 2,459	**(94)%**	(14)%

Fiscal 2018 Compared to Fiscal 2017

Pharmaceutical Segment Profit
Fiscal 2018 Pharmaceutical segment profit decreased largely due to our generics program performance and the adverse impact of customer contract renewals. Our generics program performance includes the negative impact of generic pharmaceutical customer pricing changes partially offset by the benefits of Red Oak Sourcing. Performance from our specialty pharmaceutical products distribution and services business positively impacted Pharmaceutical segment profit.

Medical Segment Profit
Fiscal 2018 Medical segment profit increased largely due to acquisitions, inclusive of the unfavorable cost of products sold impact from the fair value step up of inventory acquired with the Patient Recovery Business acquisition. The increase was partially offset by performance from the Cordis business, and to a lesser extent, performance from other Cardinal Health Brand products. The performance from the Cordis business primarily reflects inventory challenges and increased operating costs.

Corporate
The changes in Corporate during fiscal 2018 are due to the factors discussed in the Other Components of Consolidated Operating Earnings section that follows.

Fiscal 2017 Compared to Fiscal 2016

Pharmaceutical Segment Profit
Fiscal 2017 Pharmaceutical segment profit decreased largely due to our generic program performance. The previously disclosed loss of a large pharmaceutical distribution customer, the adverse impact of customer contract renewals and reduced levels of branded pharmaceutical price appreciation also contributed to the decrease in Pharmaceutical segment profit.

Medical Segment Profit
Fiscal 2017 Medical segment profit increased due to strong performance from naviHealth, contributions from Cardinal Health branded products, reduced enterprise-wide incentive compensation, and contributions from distribution services. Cardinal Health branded products growth includes the prior year unfavorable impact on cost of products sold from the Cordis inventory fair value step up.

Corporate
The changes in Corporate during fiscal 2017 are due to the factors discussed in the Other Components of Consolidated Operating Earnings section that follows.

Other Components of Consolidated Operating Earnings

In addition to revenue, gross margin, and SG&A expenses discussed previously, consolidated operating earnings were impacted by the following:

(in millions)	2018	2017	2016
Restructuring and employee severance	**$ 176**	$ 56	$ 25
Amortization and other acquisition-related costs	**707**	527	459
Impairments and (gain)/loss on disposal of assets, net	**1,417**	18	21
Litigation (recoveries)/charges, net	**159**	48	(69)

Restructuring and Employee Severance
The increase in restructuring and employee severance during fiscal 2018 was primarily due to $125 million in contract termination costs to transition the distribution of our Medical segment's surgeon gloves in certain international markets from a third-party distribution arrangement to a direct distribution model.

Amortization and Other Acquisition-Related Costs
Amortization of acquisition-related intangible assets was $574 million, $395 million and $355 million for fiscal 2018 , 2017 and 2016 , respectively. The increase in amortization of acquisition-related intangible assets during fiscal 2018 was largely due to the Patient Recovery Business acquisition.

Transaction and integration costs associated with the acquisition of the Patient Recovery Business were $109 million and $54 million during fiscal 2018 and 2017, respectively.

Impairments and (gain)/loss on disposal of assets, net
During the fourth quarter of fiscal 2018, we recognized a $1.4 billion non-cash goodwill impairment charge related to our Medical segment, as discussed further in Note 5 of the "Notes to Consolidated Financial Statements." There was no tax benefit related to this goodwill impairment charge.

Litigation (Recoveries)/Charges, Net
The increases in litigation charges during fiscal 2018 and 2017 were due to an increase in estimated losses and legal defense costs associated with inferior vena cava (IVC) filter product liability claims.

During fiscal 2016 , we received and recognized income of $80 million from settlements of class action antitrust lawsuits in which we were a class member.

Earnings/(loss) Before Income Taxes

In addition to the items discussed above, earnings/(loss) before income taxes was impacted by the following:

	Earnings/(loss) Before Income Taxes			Change	
(in millions)	2018	2017	2016	2018	2017
Other (income)/expense, net	**$ 23**	$ (5)	$ 5	**N.M.**	N.M.
Interest expense, net	**329**	201	178	**64%**	13%
Loss on extinguishment of debt	**2**	—	—	**N.M.**	N.M.

Interest Expense, Net
Fiscal 2018 interest expense increased primarily due to new debt issued in June 2017 to fund a portion of the purchase price of the Patient Recovery Business acquisition.

Provision for Income Taxes

Generally, fluctuations in the effective tax rate are due to changes in the distribution of income among taxing jurisdictions with differing income tax rates and other reconciling items.

The fluctuations in the effective tax rate from fiscal 2017 to fiscal 2018 are primarily due to net benefits from the enactment of the Tax Act, the impact of nondeductible goodwill impairment charges, an increase in valuation allowances and a benefit from a capital loss due to international legal entity reorganization. The significant increase in valuation allowances were related to capital losses, credit carryforwards and net operating loss carryforwards in U.S. federal, U.S. state and international jurisdictions that will not likely be realized. A reconciliation of the provision based on the federal statutory income tax rate to our effective income tax rate from continuing operations is as follows (see Note 8 of the "Notes to Consolidated Financial Statements" for additional information):

	2018 (1)	2017 (2)	2016 (2)
Provision at Federal statutory rate	**28.1 %**	35.0 %	35.0 %
State and local income taxes, net of federal benefit	**(16.0)**	1.0	1.5
Foreign tax rate differential	**(48.4)**	(7.3)	(0.6)
Nondeductible/nontaxable items	**(10.2)**	0.2	1.0
Goodwill impairment	**(124.7)**	—	—
Tax Act	**410.9**	—	—
Capital loss	**71.4**	—	—
Change in valuation allowances	**(76.9)**	7.7	0.1
Foreign tax credits	**27.3**	(1.6)	(0.1)
China tax	**(25.8)**	—	—
Other	**(21.9)**	(2.3)	0.2
Effective income tax rate	**213.8 %**	32.7 %	37.1 %

(1) The effective income tax rate for fiscal 2018 represents an income tax benefit tax rate.

(2) The effective income tax rates for fiscal 2017 and 2016 represents income tax expense tax rates.

Fiscal 2018

The fiscal 2018 effective income tax rate was impacted by various items including benefits from the enactment of the Tax Act, the impact of nondeductible goodwill impairment charges, changes in valuation allowances and a benefit from a capital loss due to an international legal entity reorganization.

The net benefit from the Tax Act for fiscal 2018 includes a provisional net tax benefit of $977 million related to the remeasurement of our deferred tax assets and liabilities to the new federal statutory rate, the benefit from the impact of applying a lower federal tax rate to our year-to-date U.S. pre-tax earnings and a provisional tax expense of $41 million for the one-time repatriation tax applied to our undistributed foreign earnings.

Our effective tax rate for fiscal 2018 also includes $59 million of tax expense recognized in connection with the sale of our China distribution business.

Ongoing Audits

The IRS is currently conducting audits of fiscal years 2008 through 2014.

Fiscal 2017 and Fiscal 2016

The fiscal 2017 effective income tax rate was favorably impacted by the realignment of foreign subsidiaries in anticipation of closing the acquisition of the Patient Recovery Business and also from deductions related to U.S. production activities. The state and local income tax rate decreased primarily due to resolutions with state taxing authorities.

The fiscal 2016 effective income tax rate was favorably impacted by the state and local income tax rate, which decreased due to resolutions with state taxing authorities and a shift in the distribution of income among jurisdictions. The foreign tax rate differential decreased primarily due to the deferred tax benefits recognized in fiscal 2015.

Liquidity and Capital Resources

We currently believe that, based on available capital resources (cash on hand and committed credit facilities) and projected operating cash flow, we have adequate capital resources to fund working capital needs; currently anticipated capital expenditures; currently anticipated business growth and expansion; contractual obligations; tax payments; and current and projected debt service requirements, dividends, and share repurchases. If we decide to engage in one or more additional acquisitions, depending on the size and timing of such transactions, we may need to access capital markets for additional financing.

Cash and Equivalents

Our cash and equivalents balance was $1.8 billion at June 30, 2018 compared to $6.9 billion at June 30, 2017 . The decrease in cash and equivalents during fiscal 2018 was due to $6.1 billion deployed for acquisitions during the year, $954 million used for debt repayments, $581 million paid in dividends, $550 million paid for share repurchases and $384 million paid for capital expenditures, offset in part by $2.8 billion net cash provided by operating activities and $861 million of proceeds from the divestiture of the China distribution business. N et cash provided by operating activities increased by $1.6 billion from fiscal 2017 primarily due to working capital changes in part as a result of timing of customer and vendor payments related to the new Pharmaceutical segment finance and operating information systems. At June 30, 2018 , our cash and equivalents were held in cash depository accounts with major banks or invested in high quality, short-term liquid investments.

In August 2018, we completed the sale of our interest in naviHealth to CD&R and received proceeds of $736 million (after adjusting for certain fees and expenses) and a 44% equity interest in a partnership that owns naviHealth.

The increase in cash and equivalents during fiscal 2017 of $4.5 billion was due to proceeds from a $5.2 billion debt issuance and $1.2 billion provided by operating activities, partially offset by $600 million paid for share repurchases, $577 million paid in dividends, $387 million paid in capital expenditures and $310 million in debt repayments. The $1.8 billion decrease in net cash provided by operating activities in fiscal 2017 was primarily due to an increase in working capital as a result of changes in timing of customer and vendor payments, some of which related to implementation of the new Pharmaceutical segment finance and operating information systems.

The decrease in cash and equivalents during fiscal 2016 of $2.2 billion was due to $3.6 billion deployed for acquisitions, $651 million paid for share repurchases, $512 million paid in dividends and $465 million paid in capital expenditures, partially offset by net cash provided by operating activities of $3.0 billion , which was positively impacted by increased net earnings and working capital improvements.

The cash and equivalents balance at June 30, 2018 included $557 million of cash held by subsidiaries outside of the United States. Though our foreign earnings as of December 31, 2017 have been deemed to be repatriated from a U.S. federal tax perspective, we have not yet completed our assessment of the Tax Act on our plans to reinvest foreign earnings and as such have not changed our prior conclusion that the earnings are indefinitely reinvested. As such, no non-U.S. taxes related to repatriation were recorded at June 30, 2018 . If we decide to repatriate these earnings in the future, we may be subject to certain non-U.S. taxes at that time. See Note 8 of the "Notes to Consolidated Financial Statements" for additional information on the Tax Act.

Changes in working capital, which impact operating cash flow, can vary significantly depending on factors such as the timing of customer payments, inventory purchases and payments to vendors in the regular course of business, as well as fluctuating working capital needs driven by customer and product mix.

Other Financing Arrangements and Financial Instruments

Credit Facilities and Commercial Paper

In addition to cash and equivalents and operating cash flow, other sources of liquidity at June 30, 2018 include a $2.0 billion commercial paper program, backed by a $2.0 billion revolving credit facility. We also have a $1.0 billion committed receivables sales facility program. At June 30, 2018 , we had no amounts outstanding under our revolving credit facility or our committed receivables sales facility program. Under our commercial paper and committed receivables programs, we had maximum amounts outstanding of $1.7 billion and an average daily amount outstanding of $277 million during fiscal 2018. Our revolving credit facility and committed receivables sales facility programs require us to maintain, as of the end of any calendar quarter, a consolidated leverage ratio of no more than 4.25-to-1 , which will reduce to 3.25-to-1 in March 2019. As of June 30, 2018 , we were in compliance with this financial covenant.

Long-Term Obligations

In June 2018, we repaid our $550 million 1.95% Notes due 2018 in full at maturity. At June 30, 2018 , we had total long-term obligations of $8.0 billion . In fiscal 2018 we sold our China distribution business, including its debt which was $378 million as of June 30, 2017. See Note 4 of the “Notes to Consolidated Financial Statements” for further discussion of this divestiture.

In June 2017, we sold $1 billion aggregate principal amount of 1.948% notes due 2019, $1.15 billion aggregate principal amount of 2.616% notes due 2022, $350 million aggregate principal amount of floating rate notes due 2022, $750 million aggregate principal amount of 3.079% notes due 2024, $1.35 billion aggregate principal amount of 3.410% notes due 2027 and $600 million aggregate principal amount of 4.368% notes due 2047. In addition to funding a portion of the purchase price of the acquisition of the Patient Recovery Business described below, in July 2017 we used a portion of the debt proceeds to redeem our $400 million 1.7% notes due 2018.

Funding for Acquisition of Medtronic's Patient Recovery Business

On July 29, 2017 , we acquired the Patient Recovery Business from Medtronic for $6.1 billion in cash. We funded the acquisition through $4.5 billion in new long-term debt issued in June 2017, the use of existing cash and borrowings under existing credit arrangements.

Risk Management

We use interest rate swaps, foreign currency contracts and commodity contracts to manage our exposure to cash flow variability. We also use interest rate swaps to protect the value of our debt and use foreign currency forward contracts to protect the value of our existing and forecasted foreign currency assets and liabilities. See the "Quantitative and Qualitative Disclosures About Market Risk" section as well as Note 1 and Note 12 of the “Notes to Consolidated Financial Statements” for information regarding the use of financial instruments and derivatives as well as foreign currency, interest rate and commodity exposures.

Capital Deployment

Capital Expenditures

Capital expenditures during fiscal 2018 , 2017 and 2016 were $384 million , $387 million and $465 million , respectively.

We expect capital expenditures in fiscal 2019 to be between $360 million and $390 million primarily for information technology projects, growth projects in our core business and for integration of the acquisition of the Patient Recovery Business.

Dividends

During fiscal 2018 , we paid quarterly dividends totaling $1.85 per share, an increase of 3 percent from fiscal 2017 .

On May 9, 2018, our Board of Directors approved a quarterly dividend of $0.4763 per share, or $1.91 per share on an annualized basis, which was paid on July 15, 2018 to shareholders of record on July 2, 2018.

On August 8, 2018, our Board of Directors approved a quarterly dividend of $0.4763 per share, or $1.91 per share on an annualized basis, which will be paid on October 15, 2018 to shareholders of record on October 1, 2018.

Share Repurchases

During fiscal 2018 , we repurchased $550 million of our common shares. We funded the repurchases with available cash and short-term borrowing. At June 30, 2018 , we had $893 million r emaining under our existing $1.0 billion share repurchase program.

On August 16, 2018 we entered into an accelerated share repurchase program ("ASR") to purchase shares of our common stock for an aggregate purchase price of $ 600 million and received an initial delivery of 9.5 million shares of common stock using a reference price of $ 50.45 . The program is expected to conclude in the second quarter of fiscal 2019.

During fiscal 2017, we repurchased $600 million of our common shares. We funded the repurchases with available cash.

Acquisition of Medtronic's Patient Recovery Business

Described above under "Funding for Acquisition of Medtronic's Patient Recovery Business."

Contractual Obligations

At June 30, 2018 , our contractual obligations, including estimated payments due by period, are as follows:

(in millions)	2019	2020 to 2021	2022 to 2023	There-after	Total
Long-term debt and short-term borrowings (1)	$ 999	$ 964	$ 2,259	$ 4,783	**$ 9,005**
Interest on long-term debt	303	531	420	2,068	**3,322**
Capital lease obligations (2)	2	4	2	—	**8**
Operating leases (3)	113	174	99	103	**489**
Purchase obligations and other payments (4)	534	501	382	196	**1,613**
Total contractual obligations (5)	**$ 1,951**	**$ 2,174**	**$ 3,162**	**$ 7,150**	**$ 14,437**

(1) Represents maturities of our long-term debt obligations and other short-term borrowings excluding capital lease obligations described below. See Note 7 of the “Notes to Consolidated Financial Statements” for further information.

(2) Represents maturities of our capital lease obligations included within long-term obligations in our consolidated balance sheets.

(3) Represents minimum rental payments for operating leases having initial or remaining non-cancelable lease terms as described in Note 9 of the “Notes to Consolidated Financial Statements.”

(4) A purchase obligation is defined as an agreement to purchase goods or services that is legally enforceable and specifies all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and approximate timing of the transaction. The purchase obligation amounts disclosed above represent estimates of the minimum for which we are obligated and the time period in which cash outflows will occur. Purchase orders and authorizations to purchase that involve no firm commitment from either party are excluded from the above table. In addition, contracts that can be unilaterally canceled with no termination fee or with proper notice are excluded from our total purchase obligations except for the amount of the termination fee or the minimum amount of goods that must be purchased during the requisite notice period. Purchase obligations and other payments also includes quarterly payments of $45.6 million that we are required to pay CVS Health Corporation ("CVS") in connection with Red Oak Sourcing and will be in place for the remaining six years of the agreement. See Note 9 of the “Notes to Consolidated Financial Statements” for additional information.

(5) Long-term liabilities, such as unrecognized tax benefits, deferred taxes and other tax liabilities, have been excluded from the above table due to the inherent uncertainty of the underlying tax positions or because of the inability to reasonably estimate the timing of any cash outflows. See Note 8 of the "Notes to Consolidated Financial Statements" for further discussion of income taxes.

Off-Balance Sheet Arrangements

We had no significant "off-balance sheet arrangements" at June 30, 2018 , as that term is defined in the SEC rules.

Recent Financial Accounting Standards

See Note 1 of the “Notes to Consolidated Financial Statements” for a discussion of recent financial accounting standards.

Critical Accounting Policies and Sensitive Accounting Estimates

Critical accounting policies are those accounting policies that (i) can have a significant impact on our financial condition and results of operations and (ii) require the use of complex and subjective estimates based upon past experience and management's judgment. Other people applying reasonable judgment to the same facts and circumstances could develop different estimates. Because estimates are inherently uncertain, actual results may differ. In this section, we describe the significant policies applied in preparing our consolidated financial statements that management believes are the most dependent on estimates and assumptions. For further discussion of accounting policies for items within this section and of additional accounting policies, see Note 1 of the "Notes to Consolidated Financial Statements."

Allowance for Doubtful Accounts

The allowance for doubtful accounts includes general and specific reserves. We determine our allowance for doubtful accounts by reviewing accounts receivable aging, industry trends, customer financial strength and credit standing, historical write-off trends and payment history. We regularly evaluate how changes in economic conditions may affect credit risks. See Note 1 of the "Notes to Consolidated Financial Statements" for further information on our policy for Receivables and Allowance for Doubtful Accounts.

A hypothetical 0.1 percent increase or decrease in the reserve as a percentage of trade receivables at June 30, 2018 , would result in an increase or decrease in bad debt expense of $8 million . We believe the reserve maintained and expenses recorded in fiscal 2018 are appropriate.

At this time, we are not aware of any analytical findings or customer issues that are likely to lead to a significant future increase in the allowance for doubtful accounts as a percentage of revenue. The following table presents information regarding the allowance for doubtful accounts over the past three fiscal years:

(in millions, except percentages)	2018	2017	2016
Allowance for doubtful accounts at beginning of period	**$ 137**	$ 135	$ 135
Charged to costs and expenses	**114**	60	74
Reduction to allowance for customer deductions and write-offs	**(111)**	(58)	(74)
Allowance for doubtful accounts at end of period	**$ 139**	$ 137	$ 135
Allowance as a percentage of customer receivables	**1.8%**	1.7%	1.8%
Allowance as a percentage of revenue	**0.10%**	0.11%	0.11%

The sum of the components may not equal the total due to rounding.

Inventories

A substantial portion of our inventories (56 percent at both June 30, 2018 and 2017) are valued at the lower of cost, using the last-in, first-out ("LIFO") method, or market. These are primarily merchandise inventories at the core pharmaceutical distribution facilities within our Pharmaceutical segment ("distribution facilities"). The LIFO impact on the consolidated statements of earnings depends on pharmaceutical manufacturer price appreciation or deflation and our fiscal year-end inventory levels, which can be meaningfully influenced by customer buying behavior immediately preceding our fiscal year-end. Historically, prices for branded pharmaceuticals have generally tended to rise, resulting in an increase in cost of products sold, whereas prices for generic pharmaceuticals generally tend to decline, resulting in a decrease in cost of products sold. See Note 1 of the "Notes to Consolidated Financial Statements" for further information on our policy for Inventories.

Using LIFO, if there is a decrease in inventory levels that have experienced pharmaceutical price appreciation, the result generally will be a decrease in future cost of products sold as our older inventory is held at a lower cost. Conversely, if there is a decrease in inventory levels that have experienced a pharmaceutical price decline, the result generally will be an increase in future cost of products sold as our older inventory is held at a higher cost.

We believe that the average cost method of inventory valuation provides a reasonable approximation of the current cost of replacing inventory within these distribution facilities. As such, the LIFO reserve is the difference between (a) inventory at the lower of LIFO cost or market and (b) inventory at replacement cost determined using the average cost method of inventory valuation. If we had used the average cost method of inventory valuation for all inventory within the distribution facilities, the value of our inventories would not have changed in fiscal 2018 or 2017 because inventories valued at LIFO were $92 million and $46 million higher than the average cost value at June 30, 2018 and 2017 , respectively. We do not record inventories in excess of replacement cost. As such, we did not record a LIFO reserve in fiscal 2018 and 2017 .

Our remaining inventory that is not valued at the lower of LIFO or market is stated at the lower of cost, using the first-in, first-out method, or market. Inventories presented in the consolidated balance sheets are net of reserves for excess and obsolete inventory which were $147 million and $76 million at June 30, 2018 and 2017 , respectively. The increase in the reserves for excess and obsolete inventory during fiscal 2018 was driven by increased inventory reserves within our Medical segment Cordis business and the Patient Recovery acquisition.

We reserve for inventory obsolescence using estimates based on historical experience, historical and projected sales trends, specific categories of inventory, age and expiration dates of on-hand inventory and manufacturer return policies. If actual conditions are less favorable than our assumptions, additional inventory reserves may be required.

Business Combinations

The assets acquired and liabilities assumed in a business combination, including identifiable intangible assets, are recorded at their estimated fair values as of the acquisition date. For further discussion of the Business Combinations accounting policy, see Note 1 of the “Notes to Consolidated Financial Statements.”

Critical estimates and assumptions include: expected future cash flows for customer relationships, trademarks, trade names, patents, developed technology, in-process research and development ("IPR&D") and other identifiable intangible assets; discount rates that reflect the risk factors associated with future cash flows; and estimates of useful lives. See Note 2 of the “Notes to Consolidated Financial Statements” for additional information regarding our acquisitions.

Goodwill and Other Indefinite-Lived Intangible Assets

Purchased goodwill and intangible assets with indefinite lives are tested for impairment annually or when indicators of impairment exist. Goodwill impairment testing involves a comparison of the estimated fair value of reporting units to the respective carrying amount, which may be performed utilizing either a qualitative or quantitative assessment. Qualitative factors are first assessed to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If it is determined that it is more likely than not that the fair value does not exceed the carrying amount, then a quantitative test is performed. The quantitative goodwill impairment test involves a comparison of the estimated fair value of the reporting unit to the respective carrying amount. A reporting unit is defined as an operating segment or one level below an operating segment (also known as a component).

We have two operating segments, which are the same as our reportable segments: Pharmaceutical and Medical. These operating segments are comprised of divisions (which are components), for which discrete financial information is available. Components are aggregated into reporting units for purposes of goodwill impairment testing to the extent that they share similar economic characteristics. Our reporting units are: Pharmaceutical operating segment (excluding our Nuclear Pharmacy Services division); Nuclear Pharmacy Services division; Medical operating segment (excluding our Cardinal Health at Home division and naviHealth division) (“Medical Unit”); Cardinal Health at Home division; and naviHealth division.

Goodwill impairment testing involves judgment, including the identification of repo rting units, qualitative evaluation of events and circumstances to determine if it is more likely than not that an impairment exists, and, if necessary, the estimation of the fair value of the applicable reporting unit. Our qualitative evaluation considers the weight of evidence and significance of all identified events and circumstances and most relevant drivers of fair value, both positive and negative, in determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount.

Our determination of estimated fair value of our reporting units is based on a combination of the income-based and market-based approaches (using discount rates ranging from 8.5 percent to 13.5 percent) . We use discount rates that are commensurate with the risks and uncertainty inherent in the respective reporting units and in our internally-developed forecasts. Under the market-based approach, we determine fair value by comparing our reporting units to similar businesses or guideline companies whose securities are actively traded in public markets. We also use the guideline transaction method to determine fair value based on pricing multiples derived from the sale of companies that are similar to our reporting units.

Estimating the fair value of reporting units requires the use of estimates and significant judgments that are based on a number of factors including actual operating results. The use of alternate estimates and assumptions or changes in the industry or peer groups could materially affect the determination of fair value for each reporting unit and potentially result in goodwill impairment. If a reporting unit fails to achieve expected earnings or otherwise fails to meet current financial plans, or if there were changes to any other key assumptions used in the tests, the reporting unit could incur a goodwill impairment in a future period.

We performed annual impairment testing in fiscal 2018, 2017 and 2016 and, with the exception of our Medical Unit in fiscal 2018, concluded that there were no impairments of goodwill as the estimated fair value of each reporting unit exceeded its carrying value. As discussed further in Note 5 of the "Notes to Consolidated Financial Statements," during the fourth quarter of fiscal 2018 we recognized a $1.4 billion goodwill impairment charge related to our Medical Unit, which is included in impairments and loss on disposal of assets in our consolidated statements of earnings. The impairment was primarily driven by inventory and cost challenges within our Cordis business which furthered in the fourth quarter of fiscal 2018. There was no tax benefit related to the goodwill impairment charge. If the fair value of the Medical Unit were to decline below its carrying value in subsequent periods, additional impairment would be recognized in those periods. For any of our other reporting units, there would not have been an impairment for fiscal 2018 if we raised the discount rate by 1 percent.

The impairment test for indefinite-lived intangibles other than goodwill (primarily IPR&D) involves first assessing qualitative factors to determine if it is more likely than not that the fair value of the indefinite-lived intangible asset is less than its carrying amount. If so, then a quantitative test is performed to compare the estimated fair value of the indefinite-lived intangible asset to the respective asset's carrying amount. Our qualitative evaluation requires the use of estimates and significant judgments and considers the weight of evidence and significance of all identified events and circumstances and most relevant drivers of fair value, both positive and negative, in determining whether it is more likely than not that the fair value of the indefinite-lived intangible asset is less than its carrying amount.

See Note 1 of "Notes to Consolidated Financial Statements" for additional information regarding goodwill and other intangible assets.

Vendor Reserves

In the ordinary course of business, our vendors may dispute deductions taken against payments otherwise due to them or assert other disputes. These disputed transactions are researched and resolved based upon findings of the research performed. At any given time, there are outstanding items in various stages of research and resolution. In determining appropriate reserves for areas of exposure with our vendors, we assess historical experience and current outstanding claims. We have established various levels of reserves based on the type of claim and status of review. For further discussion on the Vendor Reserves, see Note 1 of “Notes to Consolidated Financial Statements.”

Vendor reserves were $45 million and $50 million at June 30, 2018 and 2017 , respectively. Approximately 69 percent of the vendor reserve at the end of fiscal 2018 pertained to the Pharmaceutical segment compared to 77 percent at the end of fiscal 2017 . The reserve balance will fluctuate due to variations in outstanding claims from period-to-period, timing of resolutions and specific vendor issues.

The ultimate outcome of specific claims may be different than our original estimate and may require adjustment. We believe, however, that reserves recorded for such disputes are reasonable based upon current facts and circumstances.

Loss Contingencies and Self-Insurance

We accrue for contingencies related to disputes, litigation and regulatory matters if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Because these matters are inherently unpredictable and unfavorable developments or outcomes can occur, assessing contingencies is highly subjective and requires judgments about future events.

We also self-insure for employee healthcare, certain product liability matters, auto liability, property and workers' compensation and maintain insurance for individual losses exceeding certain limits when available.

Self-insurance accruals include an estimate for expected settlements on pending claims, defense costs, administrative fees, claims adjustment costs and an estimate for claims incurred but not reported. For certain types of exposures, we develop the estimate of expected ultimate costs to settle each claim based on specific information related to each claim if available. Other estimates are based on an assessment of outstanding claims, historical analysis and current payment trends. For claims incurred but not reported, the liabilities are calculated and derived in accordance with generally accepted actuarial practices or using an estimated lag period.

We regularly review contingencies and self-insurance accruals to determine whether our accruals and related disclosures are adequate. Examples of such contingencies include the New York Opioid Stewardship Act, various lawsuits related to the distribution of prescription opioid pain medications and the Cordis IVC filter lawsuits. The amount of loss may differ from these estimates. See Note 9 of the “Notes to Consolidated Financial Statements” for additional information regarding loss contingencies and product liability lawsuits.

Provision for Income Taxes

We account for income taxes using the asset and liability method. Deferred tax assets and liabilities are measured using enacted tax rates in the respective jurisdictions in which we operate. Our income tax expense, deferred income tax assets and liabilities, and unrecognized tax benefits reflect management's assessment of estimated future taxes to be paid on items in the consolidated financial statements.

The following table presents information about our tax position at June 30:

(in millions)	2018	2017
Total deferred income tax assets (1)	**$ 848**	$ 692
Valuation allowance for deferred income tax assets (2)	**(412)**	(237)
Net deferred income tax assets	**436**	455
Total deferred income tax liabilities	**(2,213)**	(2,331)
Net deferred income tax liability	**$ (1,777)**	$ (1,876)

(1) Total deferred income tax assets included $526 million and $378 million of loss and tax credit carryforwards at June 30, 2018 and 2017 , respectively.

(2) The valuation allowance primarily relates to federal, state and international loss and credit carryforwards for which the ultimate realization of future benefits is uncertain.

Expiring or unusable loss and credit carryforwards and the required valuation allowances are adjusted quarterly when it is more likely than not that at least a portion of the respective deferred tax assets will not be realized. After applying the valuation allowances, we do not anticipate any limitations on our use of any of the other net deferred income tax assets described above. Tax benefits from uncertain tax positions are recognized when it is more likely than not that the position will be sustained upon examination of the technical merits of the position, including resolutions of any related appeals or litigation. The amount recognized is measured as the largest amount of tax benefit that is greater than 50 percent likely of being realized upon settlement.

Our assumptions and estimates around uncertain tax positions require significant judgment; the actual amount of tax benefit related to uncertain tax positions may differ from these estimates. See Note 8 of the "Notes to Consolidated Financial Statements" for additional information regarding unrecognized tax benefits.

We believe that our estimates for the valuation allowances against deferred tax assets and unrecognized tax benefits are appropriate based on current facts and circumstances. The amount we ultimately pay when matters are resolved may differ from the amounts accrued. Changes in our current estimates due to unanticipated market conditions, tax law changes or other factors could have a material effect on our ability to utilize deferred tax assets. For a further discussion on Provision for Income Taxes, see Note 8 of the "Notes to the Consolidated Financial Statements."

The calculation of our tax liabilities includes estimates for uncertainties in the application of broad and complex changes to the U.S. tax code as per the Tax Cuts and Jobs Act ("the Tax Act") as enacted by the United States government on December 22, 2017. Although we are still completing our accounting for the tax effects of the Tax Act, we have made reasonable estimates and recorded provisional amounts based on management judgment and our current understanding of the Tax Act which is subject to further interpretation by the Internal Revenue Service ("IRS"). See Note 8 of the "Notes to Consolidated Financial Statements" for additional information regarding the Tax Act.

Share-Based Compensation

Employee share-based compensation is recognized in the consolidated statements of earnings based on the grant date fair value of the awards. The grant date market price of our common shares determines the fair value of restricted share units and performance share units. The fair value of stock options is determined using a lattice valuation model. We believe the lattice model provides reasonable estimates because it takes into account employee exercise patterns based on changes in our stock price and other variables and it provides for a range of input assumptions.

We analyze historical data to estimate option exercise behaviors and post-vesting forfeitures. The expected life of the options granted, which represents the length of time in years that the options granted are expected to be outstanding, is calculated from the option valuation model. Expected volatilities are based on implied volatility from traded options on our common shares and historical volatility over a period of time commensurate with the contractual term of the option grant (up to ten years).

Forfeiture estimates for all types of awards are adjusted as circumstances change and ultimately reflect actual forfeitures when an award vests. Actual forfeitures in future reporting periods could be higher or lower than our current estimates.

Compensation expense for nonvested performance share units depends on our periodic assessment of the probability of the targets being achieved and our estimate, which may vary over time, of the number of shares that ultimately will be issued. See Note 17 of the "Notes to Consolidated Financial Statements" for additional information regarding share-based compensation.

Explanation and Reconciliation of Non-GAAP Financial Measures

This report, including the "Fiscal 2018 Overview" section within MD&A, contains financial measures that are not calculated in accordance with GAAP. In addition to analyzing our business based on financial information prepared in accordance with GAAP, we use these non-GAAP financial measures internally to evaluate our performance, evaluate the balance sheet, engage in financial and operational planning, and determine incentive compensation because we believe that these measures provide additional perspective on and, in some circumstances are more closely correlated to, the performance of our underlying, ongoing business. We provide these non-GAAP financial measures to investors as supplemental metrics to assist readers in assessing the effects of items and events on our financial and operating results on a year-over-year basis and in comparing our performance to that of our competitors. However, the non-GAAP financial measures that we use may be calculated differently from, and therefore may not be comparable to, similarly titled measures used by other companies. The non-GAAP financial measures disclosed by us should not be considered a substitute for, or superior to, financial measures calculated in accordance with GAAP, and the financial results calculated in accordance with GAAP and reconciliations to those financial statements set forth below should be carefully evaluated.

Exclusions from Non-GAAP Financial Measures

Management believes it is useful to exclude the following items from the non-GAAP measures presented in this report for its own and for investors' assessment of the business for the reasons identified below:

- LIFO charges and credits are excluded because the factors that drive last-in first-out ("LIFO") inventory charges or credits, such as pharmaceutical manufacturer price appreciation or deflation and year-end inventory levels (which can be meaningfully influenced by customer buying behavior immediately preceding our fiscal year-end), are largely out of our control and cannot be accurately predicted. The exclusion of LIFO charges and credits from non-GAAP metrics facilitates comparison of our current financial results to our historical financial results and to our peer group companies' financial results.
- Restructuring and employee severance costs are excluded because they are not part of the ongoing operations of our underlying business.
- Amortization and other acquisition-related costs, which include transaction costs, integration costs, and changes in the fair value of contingent consideration obligations, are excluded primarily for consistency with the presentation of the financial results of our peer group companies. Additionally, costs for amortization of acquisition-related intangible assets are non-cash amounts, which are variable in amount and frequency and are significantly impacted by the timing and size of acquisitions, so their exclusion facilitates comparison of historical, current and forecasted financial results. We also exclude other acquisition-related costs, which are directly related to an acquisition but do not meet the criteria to be recognized on the acquired entity's initial balance sheet as part of the purchase price allocation. These costs are also significantly impacted by the timing, complexity and size of acquisitions.
- Impairments and gain or loss on disposal of assets are excluded because they do not occur in or reflect the ordinary course of our ongoing business operations and are inherently unpredictable in timing and amount, and in the case of impairments, are non-cash amounts, so their exclusion facilitates comparison of historical, current and forecasted financial results.
- Litigation recoveries or charges, net are excluded because they often relate to events that may have occurred in prior or multiple periods, do not occur in or reflect the ordinary course of our business and are inherently unpredictable in timing and amount.
- Loss on extinguishment of debt is excluded because it does not typically occur in the normal course of business and may obscure analysis of trends and financial performance. Additionally, the amount and frequency of this type of charge is not consistent and is significantly impacted by the timing and size of debt extinguishment transactions.
- Transitional tax benefit, net related to the Tax Cuts and Jobs Act is excluded because it results from the one-time impact during the one-year measurement period of a very significant change in the U.S. federal corporate tax rate and, due to the significant size of the benefit, obscures analysis of trends and financial performance. The transitional tax benefit includes the initial estimate and measurement period adjustments for the re-measurement of deferred tax assets and liabilities due to the reduction of the U.S. federal corporate income tax rate and the repatriation tax on undistributed foreign earnings, both of which are subject to adjustment during an up to 12 month measurement period.

The tax effect for each of the items listed above, other than the transitional tax benefit item, is determined using the tax rate and other tax attributes applicable to the item and the jurisdiction(s) in which the item is recorded. The gross, tax and net impact of each item are presented with our GAAP to non-GAAP reconciliations.

Explanation and Reconciliation of Non-GAAP Financial Measures

Definitions

Growth rate calculation : growth rates in this report are determined by dividing the difference between current period results and prior period results by prior period results.

Non-GAAP operating earnings : operating earnings excluding (1) LIFO charges/(credits), (2) restructuring and employee severance, (3) amortization and other acquisition-related costs, (4) impairments and (gain)/loss on disposal of assets and (5) litigation (recoveries)/charges, net.

Non-GAAP earnings before income taxes : earnings before income taxes excluding (1) LIFO charges/(credits), (2) restructuring and employee severance, (3) amortization and other acquisition-related costs, (4) impairments and (gain)/loss on disposal of assets, (5) litigation (recoveries)/charges, net and (6) loss on extinguishment of debt.

Non-GAAP Net Earnings attributable to Cardinal Health, Inc.: net earnings attributable to Cardinal Health, Inc. excluding (1) LIFO charges/(credits), (2) restructuring and employee severance, (3) amortization and other acquisition-related costs, (4) impairments and (gain)/loss on disposal of assets, (5) litigation (recoveries)/charges, net, (6) loss on extinguishment of debt, each net of tax, and (7) transitional tax benefit related to the Tax Cuts and Jobs Act.

Non-GAAP effective tax rate : (provision for income taxes adjusted for (1) LIFO charges/(credits), (2) restructuring and employee severance, (3) amortization and other acquisition-related costs, (4) impairments and (gain)/loss on disposal of assets, (5) litigation (recoveries)/charges, net, (6) loss on extinguishment of debt, and (7) transitional tax benefit, (net) divided by (earnings before income taxes adjusted for the first six items).

Non-GAAP diluted EPS attributable to Cardinal Health, Inc. : non-GAAP net earnings attributable to Cardinal Health, Inc. divided by diluted weighted-average shares outstanding.

Explanation and Reconciliation of Non-GAAP Financial Measures

GAAP to Non-GAAP Reconciliations

(in millions, except per common share amounts)	Operating Earnings	Operating Earnings Growth Rate	Earnings/(Loss) Before Income Taxes	Provision for Income Taxes	Net Earnings [1,2]	Net Earnings/(Loss) [1,2] Growth Rate	Diluted EPS [1,2]	Diluted EPS [1,2] Growth Rate
				Fiscal Year 2018				
GAAP	**$ 126**	**(94)%**	**$ (228)**	**$ (487)**	**$ 259**	**(80)%**	**$ 0.81**	**(80)%**
Restructuring and employee severance	176		176	25	151		0.48	
Amortization and other acquisition-related costs	707		707	176	531		1.69	
Impairments and loss on disposal of assets [4]	1,417		1,417	(44)	1,461		4.64	
Litigation (recoveries)/charges, net	159		159	48	111		0.35	
Loss on extinguishment of debt	—		2	1	1		—	
Transitional tax benefit, net [3]	—		—	936	(936)		(2.97)	
Non-GAAP	**$ 2,585**	**(7)%**	**$ 2,233**	**$ 655**	**$ 1,578**	**(9)%**	**$ 5.00**	**(7)%**
				Fiscal Year 2017				
GAAP	$ 2,120	(14)%	$ 1,924	$ 630	$ 1,288	(10)%	$ 4.03	(7)%
Restructuring and employee severance	56		56	20	36		0.11	
Amortization and other acquisition-related costs	527		527	165	362		1.13	
Impairments and loss on disposal of assets	18		18	6	12		0.04	
Litigation (recoveries)/charges, net	48		48	19	29		0.09	
Non-GAAP	$ 2,769	(4)%	$ 2,572	$ 839	$ 1,727	— %	$ 5.40	3 %
				Fiscal Year 2016				
GAAP	$ 2,459	14 %	$ 2,276	$ 845	$ 1,427	18 %	$ 4.32	20 %
Restructuring and employee severance	25		25	9	16		0.05	
Amortization and other acquisition-related costs	459		459	143	316		0.96	
Impairments and (gain)/loss on disposal of assets	21		21	6	15		0.04	
Litigation (recoveries)/charges, net	(69)		(69)	(27)	(42)		(0.13)	
Non-GAAP	$ 2,895	17 %	$ 2,711	$ 976	$ 1,732	18 %	$ 5.24	20 %
				Fiscal Year 2015				
GAAP	$ 2,161	15 %	$ 1,967	$ 755	$ 1,212	4 %	$ 3.61	7 %
Restructuring and employee severance	44		44	15	29		0.09	
Amortization and other acquisition-related costs	281		281	100	181		0.54	
Impairments and (gain)/loss on disposal of assets	(19)		(19)	(10)	(9)		(0.03)	
Litigation (recoveries)/charges, net	5		5	(14)	19		0.06	
Loss on extinguishment of debt	—		60	23	37		0.11	
Non-GAAP	$ 2,472	16 %	$ 2,339	$ 870	$ 1,469	11 %	$ 4.38	14 %
				Fiscal Year 2014				
GAAP	$ 1,885	89 %	$ 1,798	$ 635	$ 1,163	247 %	$ 3.37	247 %
Restructuring and employee severance	31		31	11	20		0.06	
Amortization and other acquisition-related costs	223		223	79	144		0.42	
Impairments and (gain)/loss on disposal of assets	15		15	5	10		0.03	
Litigation (recoveries)/charges, net	(21)		(21)	(8)	(13)		(0.04)	
Non-GAAP	$ 2,133	4 %	$ 2,047	$ 722	$ 1,324	3 %	$ 3.84	3 %

1 from continuing operations

2 attributable to Cardinal Health, Inc.

3 Reflects the estimated net transitional benefit from the re-measurement of our deferred tax assets and liabilities partially offset by the repatriation tax on cash and earnings of foreign subsidiaries. We have not yet completed our analysis of the impact of the Tax Act and, as such, these amounts are provisional estimates and we may record additional provisional amounts or adjustments to the provisional amounts in future periods.

4 Fiscal year 2018 includes a goodwill impairment charge of $1.4 billion related to our Medical segment. There was no tax benefit related to this goodwill impairment charge.

The sum of the components may not equal the total due to rounding.
We apply varying tax rates depending on the item's nature and tax jurisdiction where it is incurred.

Selected Financial Data

The consolidated financial data below includes all business combinations as of the date of acquisition that occurred during these periods. The following selected consolidated financial data should be read in conjunction with the consolidated financial statements and related notes and MD&A.

(in millions, except per common share amounts)	2018 [1,2]	2017	2016	2015	2014
Earnings Data:					
Revenue	**$ 136,809**	$ 129,976	$ 121,546	$ 102,531	$ 91,084
Operating earnings	**126**	2,120	2,459	2,161	1,885
Earnings from continuing operations	**259**	1,294	1,431	1,212	1,163
Earnings/(loss) from discontinued operations, net of tax	**—**	—	—	3	3
Net earnings	**259**	1,294	1,431	1,215	1,166
Less: Net earnings attributable to noncontrolling interests	**(3)**	(6)	(4)	—	—
Net earnings attributable to Cardinal Health, Inc.	**$ 256**	$ 1,288	$ 1,427	$ 1,215	$ 1,166
Basic earnings per common share attributable to Cardinal Health, Inc.:					
Continuing operations	**$ 0.82**	$ 4.06	$ 4.36	$ 3.65	$ 3.41
Discontinued operations	**—**	—	—	0.01	0.01
Net basic earnings per common share attributable to Cardinal Health, Inc.	**$ 0.82**	$ 4.06	$ 4.36	$ 3.66	$ 3.42
Diluted earnings per common share attributable to Cardinal Health, Inc.:					
Continuing operations	**$ 0.81**	$ 4.03	$ 4.32	$ 3.61	$ 3.37
Discontinued operations	**—**	—	—	0.01	0.01
Net diluted earnings per common share attributable to Cardinal Health, Inc.	**$ 0.81**	$ 4.03	$ 4.32	$ 3.62	$ 3.38
Cash dividends declared per common share	**$ 1.8635**	$ 1.8091	$ 1.6099	$ 1.4145	$ 1.2500
Balance Sheet Data:					
Total assets	**$ 39,951**	$ 40,112	$ 34,122	$ 30,142	$ 26,033
Long-term obligations, less current portion	**8,012**	9,068	4,952	5,211	3,171
Total Cardinal Health, Inc. shareholders' equity	**6,059**	6,808	6,554	6,256	6,401

[1] During the fourth quarter of fiscal 2018, we recognized a non-cash goodwill impairment charge of $1.4 billion related to our Medical segment. There was no tax benefit related to this goodwill impairment charge.

[2] During fiscal 2018, the United States enacted the Tax Cuts and Jobs Act. See Note 8 for more information.

Quantitative and Qualitative Disclosures About Market Risk

We are exposed to cash flow and earnings fluctuations as a result of certain market risks. These market risks primarily relate to foreign exchange, interest rate, and commodity price-related changes. We maintain a hedging program to manage volatility related to some of these market exposures which employs operational, economic, and derivative financial instruments in order to mitigate risk. See Note 1 and Note 12 of the "Notes to Consolidated Financial Statements" for further discussion regarding our use of derivative instruments.

Foreign Exchange Rate Sensitivity

By the nature of our global operations, we are exposed to cash flow and earnings fluctuations resulting from foreign exchange rate variation. These exposures are transactional and translational in nature. The following foreign currencies represent the principal drivers of our foreign exchange exposure: Canadian dollar, Euro, Thai baht, Mexican peso and Chinese renminbi.

We apply a Value-At-Risk ("VAR") methodology to our transactional and translational exposures. The VAR model is a risk estimation tool and is not intended to represent actual losses in fair value that could be incurred.

Transactional Exposure

Transactional exposure arises from the purchase and sale of goods and services in currencies other than our functional currency or the functional currency of our subsidiaries. At the end of each fiscal year we perform sensitivity analyses on our forecasted transactional exposure for the upcoming fiscal year. These analyses include the estimated impact of our hedging program, which is designed to mitigate transactional exposure. Applying a VAR methodology to our transactional exposure and including the impact of our hedging program, the potential maximum loss in earnings for the upcoming fiscal year is estimated to be $26 million, which is based on a one-year horizon and a 95 percent confidence level. Under the same methodology, at June 30, 2017, our potential maximum loss in earnings for the upcoming fiscal year was estimated to be $19 million.

Translational Exposure

We have exposure related to the translation of financial statements of our foreign operations into U.S. dollars, our functional currency. Applying a VAR methodology to our translational exposure, the potential maximum loss in earnings for the upcoming fiscal year is estimated to be $9 million, which is based on a one-year horizon and a 95 percent confidence level. Under the same methodology, at June 30, 2017, our potential maximum loss in earnings for the upcoming fiscal year was estimated to be $14 million.

Interest Rate Sensitivity

We are exposed to changes in interest rates primarily as a result of our borrowing and investing activities to maintain liquidity and fund operations. The nature and amount of our long-term and short-term debt can be expected to fluctuate as a result of business requirements, market conditions and other factors. Our policy is to manage exposures to interest rates using a mix of fixed and floating rate debt as deemed appropriate by management. We utilize interest rate swap instruments to mitigate our exposure to interest rate movements.

As part of our risk management program, we perform an annual sensitivity analysis on our forecasted exposure to interest rates for the upcoming fiscal year. This analysis assumes a hypothetical 50 basis point change in interest rates. At June 30, 2018 and 2017 , the potential increase or decrease in annual interest expense under this analysis as a result of this hypothetical change was $15 million and $16 million, respectively.

We are also exposed to market risk from changes in interest rates related to our cash and cash equivalents, which includes marketable securities that are classified as available-for-sale and are carried at fair value in the consolidated balance sheets. The fair value of our cash and cash equivalents is subject to change primarily as a result of changes in market interest rates and investment risk related to the issuers' credit worthiness. At June 30, 2018 , a hypothetical increase or decrease of 50 basis points in interest rates would result in no change in the estimated fair value. At June 30, 2017 , a hypothetical increase or decrease of 50 basis points in interest rates would result in a potential increase or decrease of $1 million in the estimated fair value.

Commodity Price Sensitivity

We are directly exposed to market price changes for certain commodities, including oil-based resins, nitrile, cotton, diesel fuel and latex. We typically purchase raw materials at either market prices or prices tied to a commodity index and some finished goods at prices based in part on a commodity price index.

As part of our risk management program, we perform sensitivity analysis on our forecasted direct commodity exposure for the upcoming fiscal year. Our forecasted direct commodity exposure at June 30, 2018 increased approximately $190 million from June 30, 2017 primarily due to the acquisition of the Patient Recovery Business. At June 30, 2018 and 2017 , we had hedged a portion of these direct commodity exposures (see Note 12 of the "Notes to Consolidated Financial Statements" for further discussion).

Our forecasted direct commodity exposures for the upcoming fiscal years were $424 million and $234 million at June 30, 2018 and 2017, respectively. The potential gain/loss given a hypothetical 10 percent fluctuation in commodity prices, assuming pricing collectively shifts in the same direction and we are unable to change customer pricing in response to those shifts, for the upcoming fiscal year were $42 million and $23 million at June 30, 2018 and 2017, respectively. The hypothetical offsetting impact of hedges in both periods was minimal. In prior years, we forecasted both direct and indirect exposure to commodity pricing changes. Beginning in fiscal 2018, we began only estimating direct exposure because it is the primary way that we view and manage commodity risk. Under the prior methodology, our exposure in fiscal 2017 for the next fiscal year was estimated to be $411 million and the potential gain/loss was $41 million.

Business

General

Cardinal Health, Inc. is a global integrated healthcare services and products company providing customized solutions for hospitals, healthcare systems, pharmacies, ambulatory surgery centers, clinical laboratories and physician offices. We provide medical products and pharmaceuticals and cost-effective solutions that enhance supply chain efficiency from hospital to home.

Pharmaceutical Segment

In the United States, our Pharmaceutical segment:

- distributes branded and generic pharmaceutical and over-the-counter healthcare and consumer products through its Pharmaceutical Distribution division to retailers (including chain and independent drug stores and pharmacy departments of supermarkets and mass merchandisers), hospitals and other healthcare providers. This division:
  - maintains prime vendor relationships that streamline the purchasing process resulting in greater efficiency and lower costs for our retail, hospital and other healthcare provider customers;
  - provides services to pharmaceutical manufacturers, including distribution, inventory management, data reporting, new product launch support and chargeback administration;
  - provides pharmacy management services to hospitals as well as medication therapy management and patient outcomes services to hospitals, other healthcare providers and payers, and operates pharmacies in community health centers; and
  - repackages generic pharmaceuticals and over-the-counter healthcare products;
- through its Specialty Solutions division, distributes specialty pharmaceutical products to hospitals and other healthcare providers and provides consulting, patient support and other services for specialty pharmaceutical products to pharmaceutical manufacturers and healthcare providers; and
- operates nuclear pharmacies and manufacturing facilities through its Nuclear Pharmacy Services division, which manufactures, prepares and delivers radiopharmaceuticals for use in nuclear imaging and other procedures in hospitals and physician offices. This division also contract manufactures a radiopharmaceutical treatment (Xofigo) and holds the North American rights to manufacture and distribute Lymphoseek, a radiopharmaceutical diagnostic imaging agent.

See Note 16 of the “Notes to Consolidated Financial Statements” for Pharmaceutical segment revenue, profit and assets for fiscal 2018 , 2017 and 2016 .

Pharmaceutical Distribution

Our Pharmaceutical Distribution division’s gross margin includes margin from our generic pharmaceutical program, from distribution services agreements with branded pharmaceutical manufacturers and from over-the-counter healthcare and consumer products. It also includes manufacturer cash discounts.

Margin from our generic pharmaceutical program includes price discounts and rebates from manufacturers and may in some instances include price appreciation. Our earnings on generic pharmaceuticals are generally highest during the period immediately following the initial launch of a product, because generic pharmaceutical selling prices are generally highest during that period and tend to decline over time.

Margin from distribution services agreements with branded pharmaceutical manufacturers is derived primarily from compensation we receive for providing a range of distribution and related services to manufacturers. Our compensation typically is a percentage of the wholesale acquisition cost that is set by manufacturers. In addition, under a limited number of agreements, branded pharmaceutical price appreciation, which is determined by the manufacturers, also serves as part of our compensation.

Sourcing Venture With CVS Health Corporation

In July 2014, we established Red Oak Sourcing, a U.S.-based generic pharmaceutical sourcing venture with CVS with an initial term of 10 years. Red Oak Sourcing negotiates generic pharmaceutical supply contracts on behalf of both companies.

Specialty Pharmaceutical Products and Services

We refer to products and services offered by our Specialty Solutions division as “specialty pharmaceutical products and services.” The Specialty Solutions division distributes oncology, rheumatology, urology, nephrology and other pharmaceutical products ("specialty pharmaceutical products") and human-derived plasma products to hospitals, dialysis clinics, physician offices and other healthcare providers; provides consulting, patient support, logistics, group purchasing and other services to pharmaceutical manufacturers and healthcare providers primarily supporting the development, marketing and distribution of specialty pharmaceutical products; and provides specialty pharmacy services. Our use of the terminology "specialty pharmaceutical products and services" may not be comparable to the terminology used by other industry participants.

Medical Segment

Our Medical segment manufactures and sources Cardinal Health branded medical, surgical and laboratory products, including cardiovascular and endovascular products; wound care products; single-use surgical drapes, gowns and apparel; exam and surgical gloves; and fluid suction and collection systems. We further expanded this segment's portfolio of Cardinal Health Brand products through the acquisition of the Patient Recovery Business from Medtronic in July 2017, which includes incontinence, wound care, enteral feeding, urology, operating room supply, electrode and needle, syringe and sharps disposal product lines. Our Cardinal Health Brand products are sold directly or through third-party distributors in the United States, Canada, Europe, Asia and other markets.

The Medical segment also distributes a broad range of national brand products and provides supply chain services and solutions to hospitals, ambulatory surgery centers, clinical laboratories and other healthcare providers in the United States and Canada.

This segment also distributes medical products to patients' homes in the United States through our Cardinal Health at Home division.

This segment also assembles and sells sterile and non-sterile procedure kits. It also provides supply chain services, including spend management, distribution management and inventory management services, to healthcare providers.

naviHealth Partnership

In August 2018, we entered into a partnership with CD&R through which we own 44% of the ownership interests in the naviHealth business. naviHealth partners with health plans, hospital systems, physician groups and other healthcare providers to manage post-acute care through value-based programs.

See Note 16 of the “Notes to Consolidated Financial Statements” for Medical segment revenue, profit and assets for fiscal 2018 , 2017 and 2016 .

Acquisitions and Divestitures

Acquisitions

We have acquired a number of businesses over the years that have enhanced our core strategic areas of Cardinal Health Brand medical products, generic pharmaceutical distribution and services, specialty pharmaceutical products and services, international and post-acute care. We expect to continue to pursue additional acquisitions in the future.

During the last five fiscal years, we completed the following three large acquisitions:

Date	Company	Location	Lines of Business	Acquisition Price (in billions)
07/17	Patient Recovery Business of Medtronic, plc	Mansfield, MA	Patient Care, Deep Vein Thrombosis and Nutritional Insufficiency	$6.1
10/15	Cordis business of Johnson & Johnson	Fremont, CA	Cardiovascular and endovascular products	$1.9
07/15	The Harvard Drug Group	Livonia, MI	Pharmaceutical product distribution	$1.1

We have also completed several smaller acquisitions during the last five fiscal years, including: in fiscal 2017, the acquisition of the North American rights to Lymphoseek, a radiopharmaceutical diagnostic imaging agent, from Navidea Biopharmaceuticals, Inc.; in fiscal 2015, the acquisitions of Tradex International, Inc., a supplier of disposable gloves, and Metro Medical Supply, Inc., a distributor of specialty pharmaceuticals and medical and surgical products; and in fiscal 2014, the acquisition of Access Closure, Inc., a manufacturer and distributor of extravascular closure devices.

Divestitures

Over the past year, we have also completed several divestitures, including, in February 2018, selling our pharmaceutical and medical products distribution business in China to Shanghai Pharmaceuticals Holding Co., Ltd. for proceeds of $861 million (after adjusting for third party indebtedness and preliminary transaction adjustments).

Additionally, in August 2018, we completed the sale of our ownership interest in naviHealth, Inc. to investor entities controlled by CD&R for proceeds of $736 million (after adjusting for certain fees and expenses) and a 44% equity interest in a partnership that owns the naviHealth business.

We had acquired our ownership interest in naviHealth through a series of transactions, beginning in fiscal 2016, when we acquired a 71% ownership interest. As of the end of fiscal 2018, we owned 98% of the interests in naviHealth.

Customers

Our largest customers, CVS and OptumRx accounted for 25 percent and 11 percent of our fiscal 2018 revenue, respectively. In the aggregate, our five largest customers, including CVS and OptumRx, accounted for 47 percent of our fiscal 2018 revenue. Our pharmaceutical distribution agreements with CVS extend through June 2019.

We have agreements with group purchasing organizations ("GPOs") that act as agents to negotiate vendor contracts on behalf of their members. Our two largest GPO relationships in terms of member revenue are with Vizient, Inc. and Premier, Inc. Sales to members of these two GPOs, under numerous contracts across all of our businesses, collectively accounted for 22 percent of our revenue in fiscal 2018 .

Suppliers

We rely on many different suppliers. Products obtained from our five largest suppliers accounted for an aggregate of 29 percent of our revenue during fiscal 2018 , but no single supplier's products accounted for more than 8 percent of revenue.

Competition

We operate in a highly competitive environment in the distribution of pharmaceuticals and consumer healthcare products. We also operate in a highly competitive environment in the development, manufacturing and distribution of medical devices and surgical products. We compete on many levels, including price, service offerings, support services, breadth of product lines and product quality and efficacy.

In the Pharmaceutical segment, we compete with wholesale distributors with national reach, including McKesson Corporation and AmerisourceBergen Corporation, regional wholesale distributors, self-warehousing chains, specialty distributors, third-party logistics companies, companies that provide specialty pharmaceutical services and nuclear pharmacies, among others. In addition, the Pharmaceutical segment has experienced competition from a number of organizations offering generic pharmaceuticals, including telemarketers. We also compete with manufacturers that sell their products directly.

In the Medical segment, we compete with many diversified healthcare companies and national medical product distributors, such as Medline Industries, Inc., Owens & Minor, Inc. and Becton, Dickinson and Company, as well as regional medical product distributors and companies that are focused on specific product categories. We also compete with companies that distribute medical products to patients' homes and third-party logistics companies.

Employees

At June 30, 2018 , we had approximately 32,300 employees in the United States and approximately 17,900 employees outside of the United States.

Intellectual Property

We rely on a combination of trade secret, patent, copyright and trademark laws, nondisclosure and other contractual provisions, and technical measures to protect our products, services and intangible assets. We hold patents, and continue to pursue patent protection throughout the world, relating to the manufacture, operation and use of various medical and surgical products, to certain distribution and logistics systems, to the production and distribution of our nuclear pharmacy products and to other service offerings. We also operate under licenses for certain proprietary technologies, and in certain instances we license our technologies to third parties.

We believe that we have taken all necessary steps to protect our proprietary rights, but no assurance can be given that we will be able to successfully enforce or protect our rights in the event that they are infringed upon by a third party. While all of these proprietary rights are important to our operations, we do not consider any particular patent, trademark, license, franchise or concession to be material to our overall business.

Regulatory Matters

Our business is highly regulated in the United States, at both the federal and state level, and in foreign countries. Depending upon the specific business, we may be subject to regulation by government entities including:

- the U.S. Drug Enforcement Administration (the “DEA”);
- certain agencies within the U.S. Department of Health and Human Services, including the U.S. Food and Drug Administration (the “FDA”), the Centers for Medicare and Medicaid Services, the Office of Inspector General and the Office for Civil Rights;
- state health departments, insurance departments, Medicaid departments or other comparable state agencies;
- state boards of pharmacy and other controlled substance authorities;
- the U.S. Nuclear Regulatory Commission (the “NRC”);
- the U.S. Federal Trade Commission (the "FTC");
- U.S. Customs and Border Protection; and
- agencies comparable to those listed above in markets outside the United States.

These regulatory agencies have a variety of civil, administrative and criminal sanctions at their disposal for failure to comply with applicable legal or regulatory requirements. They can suspend our ability to manufacture and distribute products, initiate product recalls, seize products or impose criminal, civil and administrative sanctions.

Distribution

State Boards of Pharmacy, FDA, DEA and various other state authorities regulate the marketing, purchase, storage and distribution of pharmaceutical and medical products under various federal and state statutes including the federal Prescription Drug Marketing Act of 1987, Drug Quality and Security Act of 2013 (the “DQSA”), and Controlled Substances Act (the "CSA"). The CSA governs the sale, packaging, storage and distribution of controlled substances. Wholesale distributors of controlled substances must hold valid DEA registrations and state-level licenses, meet various security and operating standards, and comply with the CSA. They must also comply with state requirements relating to controlled substances that differ from state to state.

Manufacturing and Marketing

We sell our manufactured products in the United States, Canada, Europe, Asia and other markets. The FDA and other governmental agencies in the United States, as well as foreign governmental agencies, administer requirements that cover the design, testing, safety, effectiveness, manufacturing (including good manufacturing practices), quality systems, labeling, promotion and advertising (including restrictions on promoting or advertising a product other than for the product's cleared or approved uses), distribution, importation and post-market surveillance for most of our manufactured products. In addition, we need specific approval or clearance from, and registrations with, regulatory authorities before we can market and sell some products in the United States and certain other countries, including countries in the European Union ("EU").

In the United States, authorization to commercially market a medical device is generally received in one of two ways. The first, known as pre-market notification or the 510(k) process, requires us to demonstrate that a medical device is substantially equivalent to a legally marketed medical device. The second more rigorous process, known as pre-market approval (“PMA”), requires us to independently demonstrate that a medical device is safe and effective. Many of our Medical segment products are cleared through the 510(k) process and certain Cordis products must be approved through the PMA process.

In the EU, we are required to comply with applicable Medical Device Directives ("MDDs") and obtain CE Mark Certification in order to market medical devices. The EU regulatory bodies finalized a new Medical Device Regulation ("MDR") in 2017, which replaces the existing MDDs after a three-year transition period. Among other things, the MDR clarifies that private label distributors are deemed to be the manufacturer, which will increase our regulatory obligations in the EU with respect to private label products.

It can be costly and time-consuming to obtain regulatory approvals, clearances and registrations of medical devices, and they might not be granted on a timely basis, if at all. Even after we obtain approval or clearance to market a product or obtain product registrations, the product and our manufacturing processes are subject to continued regulatory oversight, including periodic inspection of manufacturing facilities by FDA and other regulatory authorities both in the United States and internationally.

From time to time, we may determine that products we manufacture or market do not meet our specifications, regulatory requirements or published standards. When we or a regulatory agency identify a quality or regulatory issue, we investigate and take appropriate corrective action, which may include recalling the product, correcting the product at the customer location, revising product labeling and notifying customers.

Health and Personal Information Practices

We collect, handle and maintain patient-identifiable health information. The U.S. Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as augmented by the Health Information Technology for Economic and Clinical Health Act, and state laws regulate the use and disclosure of patient-identifiable health information, including requiring specified privacy and security measures. We also collect, handle and maintain other sensitive personal and financial information that is subject to U.S. federal and state laws protecting such information.

The processing and disclosure of personal information is also highly regulated in many other countries in which we operate. In Europe, for example, we are subject to the EU data protection regulations, including the current EU Directive on Data Protection, which requires member states to impose minimum restrictions on the collection, use

and transfer of personal data. The EU General Data Protection Regulation ("GDPR") includes, among other things, a requirement for prompt notice of data breaches to data subjects and supervisory authorities in certain circumstances and significant fines for non-compliance. The GDPR also requires companies processing personal data of individuals residing in the EU to comply with EU privacy and data protection rules.

Nuclear Pharmacies and Related Businesses

Our nuclear pharmacies and radiopharmaceutical manufacturing facilities (including for Xofigo) require licenses or permits and must abide by regulations issued by the NRC, applicable state boards of pharmacy and the radiologic health agency or department of health of each state in which we operate, including pharmacy sterile compounding standards and practices. In addition, our radiopharmaceutical manufacturing facilities also must comply with FDA regulations, including good manufacturing practices.

Product Tracing and Supply Chain Integrity

Title II of the DQSA, known as the Drug Supply Chain Security Act or "Track and Trace," establishes a phased-in national system for tracing pharmaceutical products through the pharmaceutical distribution supply chain to prevent the introduction of counterfeit, adulterated or mislabeled drugs. The first phase of implementation began in 2015, and upon full implementation in 2023, we and other supply chain stakeholders will participate in an electronic, interoperable, prescription drug tracing system. In addition, the FDA also has issued regulations requiring most medical device labeling to bear a unique device identifier. These regulations are being phased in through 2020. The MDR finalized in the EU in 2017 also introduces a new unique device identifier requirement with a three-year transition period.

Government Healthcare Programs

We are subject to U.S. federal healthcare fraud and abuse laws. These laws generally prohibit persons from soliciting, offering, receiving or paying any compensation in order to induce someone to order, recommend or purchase products or services that are in any way paid for by Medicare, Medicaid or other federally-funded healthcare programs. They also prohibit submitting any fraudulent claim for payment by the federal government. There are similar state healthcare fraud and abuse laws that apply to Medicaid and other state-funded healthcare programs. Violations of these laws may result in criminal or civil penalties, as well as breach of contract claims and *qui tam* actions (false claims cases initiated by private parties purporting to act on behalf of federal or state governments).

Some businesses within each of our segments are Medicare-certified suppliers or participate in other federal and state healthcare programs, such as state Medicaid programs and the federal 340B drug pricing program. These businesses are subject to accreditation and quality standards and other rules and regulations, including applicable reporting, billing, payment and record-keeping requirements. Other businesses within each segment manufacture pharmaceutical or medical products or repackage pharmaceuticals that are purchased or reimbursed through, or are otherwise governed by, federal or state healthcare programs. Failure to comply with applicable eligibility requirements, standards and regulations could result in civil or criminal sanctions, including the loss of our ability to participate in Medicare, Medicaid and other federal and state healthcare programs.

Our U.S. federal and state government contracts are subject to specific procurement requirements. Failure to comply with applicable rules or regulations or with contractual or other requirements may result in monetary damages and criminal or civil penalties as well as termination of our government contracts or our suspension or debarment from government contract work.

Antitrust Laws

The U.S. federal government, most U.S. states and many foreign countries have laws that prohibit certain types of conduct deemed to be anti-competitive. Violations of these laws can result in various sanctions, including criminal and civil penalties. Private plaintiffs also could bring civil lawsuits against us in the United States for alleged antitrust law violations, including claims for treble damages.

Environmental, Health and Safety Laws

In the United States and other countries, we are subject to various federal, state and local environmental laws, as well as laws relating to safe working conditions and laboratory practices.

Laws Relating to Foreign Trade and Operations

U.S. and foreign laws require us to abide by standards relating to the import and export of finished goods, raw materials and supplies and the handling of information. We also must comply with various export control and trade embargo laws, which may require licenses or other authorizations for transactions within some countries or with some counterparties.

Similarly, we are subject to U.S. and foreign laws concerning the conduct of our foreign operations, including the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and other foreign anti-bribery laws. Among other things, these laws generally prohibit companies and their intermediaries from offering, promising or making payments to officials of foreign governments for the purpose of obtaining or retaining business.

Other Information

Although our agreements with manufacturers sometimes require us to maintain inventory levels within specified ranges, our distribution businesses are generally not required by our customers to maintain particular inventory levels other than as needed to meet service level requirements. Certain supply contracts with U.S. government entities require us to maintain sufficient inventory to meet emergency demands, but we do not believe those requirements materially affect inventory levels.

Our customer return policies generally require that the product be physically returned, subject to restocking fees. We only allow customers to return products that can be added back to inventory and resold at full value, or that can be returned to vendors for credit.

We offer market payment terms to our customers.

Revenue and Long-Lived Assets by Geographic Area

See Note 16 of the "Notes to Consolidated Financial Statements" for revenue and long-lived assets by geographic area.

Risk Factors

The risks described below could materially and adversely affect our results of operations, financial condition, liquidity or cash flows. These are not the only risks we face. Our businesses also could be affected by risks that we are not presently aware of or that we currently consider immaterial to our operations.

We could continue to suffer the adverse effects of competitive pressures.
As described in greater detail in the "Business" section, we operate in markets that are highly competitive and dynamic. In addition, competitive pressures in our pharmaceutical and medical distribution may be increased by new business models, new entrants, new regulations, or changes in consumer demand. Our businesses face continued pricing pressure from these factors, which adversely affects our margins. If we are unable to offset margin reductions caused by these pricing pressures through steps such as sourcing or cost control measures, additional service offerings and sales of higher margin products, our results of operations could continue to be adversely affected.

Our Pharmaceutical segment's generic pharmaceutical program may continue to be adversely affected by pricing changes and fewer product launches.
The performance of our Pharmaceutical segment's generic pharmaceutical program declined in fiscal 2018 and 2017 and is expected to decline in fiscal 2019. The decline has been due to generic pharmaceutical customer pricing deflation and less benefit from new generic pharmaceutical launches, which have more than offset the benefits from sourcing generic pharmaceuticals through our Red Oak Sourcing venture with CVS. If we continue to be unable to offset this decline, our Pharmaceutical segment profit and consolidated operating earnings will continue to be adversely affected.

The extent and magnitude of generic pharmaceutical pricing changes is uncertain in future fiscal years and may vary from what we anticipate. Similarly, the number of new generic pharmaceutical launches also varies from year to year, and the margin impact of these launches varies from product to product. Finally, the benefit from Red Oak Sourcing could be less than we anticipate.

CVS is a large customer that generates a significant amount of our revenue.
Our sales and credit concentration is significant. CVS accounted for 25 percent of our fiscal 2018 revenue and 22 percent of our gross trade receivable balance at June 30, 2018. Our pharmaceutical distribution agreements with CVS expire in June 2019. If CVS does not renew our agreements, renews our agreements at a reduced price or significantly reduces its purchases from us, our results of operations and financial condition could be adversely affected.

Changes in manufacturer approaches to pricing branded pharmaceutical products could have an adverse effect on our Pharmaceutical segment's margins.

Our compensation under contractual arrangements with manufacturers for the purchase of branded pharmaceutical products is set as a percentage of the wholesale acquisition cost set by the manufacturer. Sales prices of branded pharmaceutical products to our customers generally are a percentage discount from wholesale acquisition cost.

In recent years, pharmaceutical manufacturers have generally increased the wholesale acquisition cost of their branded pharmaceuticals each year. In May 2018, the U.S. government announced plans to, among other things, adopt policies to encourage manufacturers to limit increases in (or reduce) wholesale acquisition cost. If manufacturers change their historical approach to setting and increasing wholesale acquisition cost and we are unable to negotiate alternative ways to be compensated by manufacturers or customers for the value of our services, our Pharmaceutical segment profit and consolidated operating earnings could be adversely affected.

Our Pharmaceutical segment's margins under a limited number of our distribution services agreements with branded pharmaceutical manufacturers are affected by prices established by the manufacturers.
Our distribution services agreements with branded pharmaceutical manufacturers generally provide that we receive fees from the manufacturers to compensate us for services we provide them. Under a limited number of agreements, branded pharmaceutical price appreciation, which is determined by the manufacturers currently also serves as a part of our compensation. If manufacturers decide not to increase prices or to implement only small increases and we are unable to negotiate alternative ways to be compensated by manufacturers or customers for the value of our services, our margins could be adversely affected.

Our business is subject to rigorous regulatory and licensing requirements.
As described in greater detail in the "Business" section, our business is highly regulated in the United States, at both the federal and state level, and in foreign countries. If we fail to comply with regulatory requirements, or if allegations are made that we fail to comply, our results of operations and financial condition could be adversely affected.

To lawfully operate our businesses, we are required to obtain and hold permits, product registrations, licenses and other regulatory approvals from, and to comply with operating and security standards of, numerous governmental bodies. For example, as a wholesale distributor of controlled substances, we must hold valid DEA registrations and state-level licenses, meet various security and operating standards, and comply with the CSA. Failure to maintain or renew necessary permits, product registrations, licenses or approvals, or to comply with required standards, could have an adverse effect on our results of operations and financial condition.

Products that we manufacture, source, distribute or market must comply with regulatory requirements. Noncompliance or concerns over noncompliance may result in suspension of our ability to distribute, import or manufacture products, product bans, recalls or seizures, or criminal or civil sanctions, which, in turn, could result in product liability claims and lawsuits, including class actions. In addition, it can be costly and time-consuming to obtain regulatory approvals or product registrations to market a medical device, and

such approvals or registrations might not be granted on a timely basis, if at all.

We collect, handle and maintain patient-identifiable health information and other sensitive personal and financial information, which are subject to federal, state and foreign laws that regulate the use and disclosure of such information. Regulations currently in place continue to evolve, and new laws in this area could further restrict our ability to collect, handle and maintain personal or patient information, or could require us to incur additional compliance costs, either of which could have an adverse impact on our results of operations. Violations of federal, state or foreign laws concerning privacy and data protection could subject us to civil or criminal penalties, breach of contract claims, costs for remediation and harm to our reputation.

We are required to comply with laws relating to healthcare fraud and abuse. The requirements of these laws are complex and subject to varying interpretations, and it is possible that regulatory authorities could challenge our policies and practices. If we fail to comply with these laws, we could be subject to federal or state government investigations or *qui tam* actions (false claims cases initiated by private parties purporting to act on behalf of federal or state governments), which could result in civil or criminal sanctions, including the loss of licenses or the ability to participate in Medicare, Medicaid and other federal and state healthcare programs. Such sanctions and damages could adversely affect our results of operations and financial condition.

Some businesses within each of our segments are Medicare-certified suppliers or participate in other federal and state healthcare programs, such as state Medicaid program and the federal 340B drug pricing program. In addition, other businesses within each segment manufacture pharmaceutical or medical products or repackage pharmaceuticals that are purchased or reimbursed through, or are otherwise governed by, federal or state healthcare programs. Failure to comply with applicable eligibility requirements, standards and regulations could result in civil or criminal sanctions, including the loss of our ability to participate in Medicare, Medicaid and other federal and state healthcare programs.

Our government contracts are subject to specific procurement requirements. Failure to comply with applicable rules or regulations or with contractual or other requirements may result in monetary damages and criminal or civil penalties as well as termination of our government contracts or our suspension or debarment from government contract work.

Our global operations are required to comply with the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and similar anti-bribery laws in other jurisdictions and U.S. and foreign export control, trade embargo and customs laws. If we fail to comply with any of these laws, we could suffer civil or criminal sanctions.

We could be subject to adverse changes in the tax laws or challenges to our tax positions.

We are a large multinational corporation with operations in the United States and many foreign countries. As a result, we are subject to the tax laws of many jurisdictions.

The Tax Act was enacted in December 2017. The Tax Act, among other things, reduced the U.S. federal corporate tax rate from 35 percent to 21 percent and required companies to pay a one-time tax to repatriate, for U.S. purposes, earnings of certain foreign subsidiaries that were previously deferred for tax purposes. In addition, beginning in our fiscal year 2019, the Tax Act limits certain deductions and creates new taxes on certain foreign sourced earnings. While we generally expect the impact of the Tax Act to be positive, it is possible that the limitation of certain deductions and the creation of new taxes could be more detrimental to us than anticipated.

From time to time, initiatives are proposed in the United States and other jurisdictions in which we operate that could adversely affect our tax positions, effective tax rate or tax payments. Specific initiatives that may impact us include the repeal of the LIFO (last-in, first-out) method of inventory accounting for income tax purposes, the establishment or increase in taxation at the U.S. state level on the basis of gross revenues, recommendations of the base erosion and profit shifting project undertaken by the Organization for Economic Cooperation and Development and the European Commission's investigation into illegal state aid.

Tax laws are complex and subject to varying interpretations. Tax authorities have challenged some of our tax positions and it is possible that they will challenge others. These challenges may adversely affect our effective tax rate or tax payments.

Changes to the U.S. healthcare environment may not be favorable to us.

In recent years, the U.S. healthcare industry has undergone significant changes designed to increase access to medical care, improve safety and patient outcomes, contain costs and increase efficiencies. These changes include adoption of the Patient Protection and Affordable Care Act, a general decline in Medicare and Medicaid reimbursement levels, efforts by healthcare insurance companies to limit or reduce payments to pharmacies and providers, the basis for payments beginning to transition from a fee-for-service model to value-based payments and risk-sharing models, and the industry shifting away from traditional healthcare venues like hospitals and into clinics, physician offices and patients' homes.

We expect the U.S. healthcare industry to continue to change significantly in the future. Possible changes include repeal and replacement of major parts of the Patient Protection and Affordable Care Act, further reduction or limitations on governmental funding at the state or federal level, efforts by healthcare insurance companies to further limit payments for products and services or changes in legislation or regulations governing prescription pharmaceutical pricing, healthcare services or mandated benefits. These possible changes, and the uncertainty surrounding these possible changes, may cause healthcare industry participants to reduce the amount of products and services they purchase from us or the price they are willing to pay for our products and services, which could adversely affect us.

Our business and operations depend on the proper functioning of information systems, critical facilities and distribution networks. Our business could be adversely affected if we experience a cyber-attack or other systems breach.

We rely on our and third-party service providers' information systems for a wide variety of critical operations, including to obtain, rapidly process, analyze and manage data to:

- facilitate the purchase and distribution of inventory items from numerous distribution centers;
- receive, process and ship orders on a timely basis;
- manage accurate billing and collections for thousands of customers;
- process payments to suppliers;
- facilitate manufacturing and assembly of medical products; and
- generate financial information.

Our business also depends on the proper functioning of our critical facilities, including our national logistics center, and our distribution networks. Our results of operations could be adversely affected if our or a service provider's information systems, critical facilities or distribution networks are disrupted (including disruption of access), are damaged or fail, whether due to physical disruptions, such as fire, natural disaster, pandemic or power outage, or due to cyber-security incidents, ransomware or other actions of third parties, including labor strikes, political unrest and terrorist attacks. Manufacturing disruptions also can occur due to regulatory action, production quality deviations, safety issues or raw material shortages or defects, or because a key product is manufactured at a single manufacturing facility with limited alternate facilities.

From time to time, our businesses perform business process improvements or infrastructure modernizations or use service providers for key systems and processes, such as receiving and processing customer orders, customer service and accounts payable. If any of these initiatives are not successfully or efficiently implemented or maintained, they could adversely affect our business and our internal control over financial reporting.

Our business relies on the secure transmission, storage and hosting of patient-identifiable health information, financial information and other sensitive information relating to our customers, company and workforce. We have programs in place to detect, contain and respond to information security incidents. However, because the techniques used to obtain unauthorized access, disable or degrade service or sabotage systems change frequently and may be difficult to detect for long periods of time, we may be unable to anticipate these techniques or to implement adequate preventative measures. In addition, hardware, software or applications developed internally or procured from third parties may contain defects in design or manufacture or other problems that could unexpectedly compromise information security. Unauthorized parties also may attempt to gain access to our or a service provider's systems or facilities through fraud, trickery or other forms of deception. Any compromise of our or a service provider's information systems, including unauthorized access to or use or disclosure of sensitive information, could adversely impact our operations, results of operations or our ability to satisfy legal requirements, including those related to patient-identifiable health information and the new EU general data protection regulation (GDPR).

Consolidation in the U.S. healthcare industry may negatively impact our results of operations.

In recent years, U.S. healthcare industry participants, including distributors, manufacturers, healthcare providers, insurers and pharmacy chains, have consolidated or formed strategic alliances. Consolidations create larger enterprises with greater negotiating power, and also could result in the possible loss of a customer where the combined enterprise selects one distributor from two incumbents. If this consolidation trend continues, it could adversely affect our results of operations.

We may become involved in legal proceedings that could adversely impact our cash flows or results of operations.

Due to the nature of our business, which includes the distribution of controlled substances and the manufacture of medical products, we may from time to time become involved in disputes, litigation and regulatory matters. Litigation is inherently unpredictable and the unfavorable outcome of one or more of these legal proceedings could adversely affect our results of operations or financial condition.

For example, we are subject to a number of lawsuits and investigations related to the national health crisis involving the abuse of opioid pain medication as described below in the Risk Factor titled "The public health crisis involving the abuse of prescription opioid pain medication could negatively affect our business" and in Note 9 to the "Notes to Consolidated Financial Statements."

Additionally, some of the products that we distribute or manufacture have been and may in the future be alleged to cause personal injury, subjecting us to product liability claims. For example, we are a defendant in product liability lawsuits that allege personal injuries associated with the use of Cordis OptEase and TrapEase inferior vena cava (IVC) filter products. We have accrued an amount for losses and legal defense costs related to these lawsuits, which are discussed in Note 9 of the "Notes to Consolidated Financial Statements." Any settlement of or judgment for a product liability claim that is not covered by insurance and is in excess of any prior accruals could adversely affect our results of operations and financial condition.

We also operate in an industry characterized by extensive intellectual property litigation. Patent litigation can result in significant damage awards and injunctions that could prevent the manufacture and sale of affected products or force us to make royalty payments in order to continue selling the affected products.

The public health crisis involving the abuse of prescription opioid pain medication could negatively affect our business.

Our Pharmaceutical segment distributes prescription opioid pain medications. In recent years, the abuse of prescription opioid pain medication has received heightened public attention. These developments heighten a number of risks that we face and may present new risks that could adversely affect our operations or financial condition.

A significant number of counties, municipalities and other plaintiffs, including a number of state attorneys general, have filed lawsuits against pharmaceutical manufacturers, pharmaceutical wholesale distributors (including us), retail chains and others relating to the manufacturing, marketing or distribution of prescription opioid pain medications. In addition, we are currently being investigated by about 40 other states for the same activities and may be named as a defendant in additional lawsuits in the future. We are vigorously defending ourselves in these lawsuits. The defense and resolution of current and future lawsuits could adversely affect our results of operations and financial condition or have adverse reputational or operational effects on our business. See Note 9 of the "Notes to the Consolidated Financial Statements" for more information regarding these matters.

Other legislative, regulatory or industry measures related to the public health crisis could affect our business in ways that we may not be able to predict. For example, in April 2018, the State of New York created an aggregate $100 million annual assessment on all manufacturers and distributors licensed to sell or distribute opioids in New York. In addition, legislation has been proposed in some states that, if enacted, could require distributors to pay taxes on the distribution of opioid medications in those states. These proposed bills vary in the tax amounts and the means of calculation. Liabilities for taxes or assessments under any such laws could have an adverse impact on our results of operations unless we are able to mitigate them through operational changes or commercial arrangements where permitted.

Unfavorable publicity regarding the abuse or misuse of prescription opioid pain medications and the role of wholesale distributors in the supply chain of such prescription medications, as well as the continued proliferation of the opioid lawsuits, investigations, regulations and legislative actions discussed above could adversely affect our reputation and results of operations.

Our ability to manage and complete acquisitions and divestitures could impact our strategic objectives and financial condition.

An important element of our growth strategy has been to acquire other businesses that expand or complement our existing businesses. In fiscal 2018, we spent $6.1 billion to acquire other businesses including, in July 2017, the acquisition of the Patient Recovery Business from Medtronic for $6.1 billion and divested our China distribution business as well as our majority interest in naviHealth.

The acquisition of the Patient Recovery Business as well as other acquisitions involve the following risks: we may overpay for a business or fail to realize the synergies and other benefits we expect from the acquisition; our management's attention may be diverted to integration efforts; we may fail to retain key personnel of the acquired business; future developments may impair the value of our purchased goodwill or intangible assets; we may face difficulties or delays establishing, integrating or combining operations and systems; we may assume liabilities related to legal proceedings involving the acquired business; we may face challenges retaining the customers of the acquired business; or we may encounter unforeseen internal control, regulatory or compliance issues.

When we decide to sell assets or a business, we may encounter difficulty finding buyers or alternative exit strategies, which could delay the achievement of our strategic objectives. We could also experience greater dis-synergies than expected and the impact of the divestiture on our results of operations could be greater than anticipated.

We depend on certain suppliers to make their raw materials and products available to us and are subject to fluctuations in costs of raw materials and products.

We depend on the availability of various components, compounds, raw materials and energy supplied by others for our operations. In some instances, for reasons of quality assurance, cost effectiveness, or availability, we procure certain components and raw materials from a sole supplier. Any of our supplier relationships could be interrupted due to events beyond our control, including natural disasters, or could be terminated. In addition, due to the stringent regulations and requirements of the FDA regarding the manufacture of our products, we may not be able to quickly establish additional or replacement sources for certain components or materials. A sustained supply reduction or interruption, and an inability to develop alternative sources for such supply, could have an adverse effect on our business.

Our manufacturing businesses use oil-based resins, pulp, cotton, latex and other commodities as raw materials in many products. Prices of oil and gas also affect our distribution and transportation costs. Prices of these commodities are volatile and can fluctuate significantly, causing our costs to produce and distribute our products to fluctuate. Due to competitive dynamics and contractual limitations, we may be unable to pass along cost increases through higher prices. If we cannot fully offset cost increases through other cost reductions, or recover these costs through price increases or surcharges, our results of operations could be adversely affected.

Our results of operations may suffer upon the bankruptcy, insolvency, or other credit failure of a customer that has a substantial amount owed to us.

Most of our customers buy products and services from us on credit, which is made available to customers based on our assessment of creditworthiness. The bankruptcy, insolvency or other credit failure of any customer that has a substantial amount owed to us could adversely affect our results of operations.

As a result of our international operations, we have exposure to economic, political and currency risks, including changes in tariffs.

We conduct our operations in various regions of the world outside of the United States, including Europe, Asia and Latin America. Global developments can affect our business in many ways. Our global operations are affected by local economic environments, including inflation, recession and competition. Additionally, divergent or unfamiliar regulatory systems and labor markets also can increase the risks and burdens of operating in numerous countries.

Changes or uncertainty in U.S. or foreign policy, including any changes or uncertainty with respect to U.S. or international trade

policies or tariffs, also can disrupt our global operations, as well as our customers and suppliers, in a particular location and may require us to spend more money to source certain products or materials that we purchase.

In addition, we conduct our business in U.S. dollars and various functional currencies of our foreign subsidiaries. Changes in foreign currency exchange rates could adversely affect our financial results, which are reported in U.S. dollars. We may not be able to hedge to protect us against these exposures, and any hedges may not successfully mitigate these exposures.

Our goodwill may be further impaired, which would require us to record a significant charge to earnings in accordance with generally accepted accounting principles.

U.S. GAAP requires us to test our goodwill for impairment on an annual basis, or more frequently if indicators for potential impairment exist. This year, as a result of the required annual test, we have recorded a $1.4 billion impairment to goodwill within our Medical segment. The testing required by GAAP involves estimates and judgments by management. Although we believe our assumptions and estimates are reasonable and appropriate, any changes in key assumptions, including a failure to meet business plans or other unanticipated events and circumstances such as a rise in interest rates, may affect the accuracy or validity of such estimates. In addition to the impairment to goodwill in our Medical segment, it is possible that we may record significant charges related to other business units or we may record additional charges in our Medical segment, which charge or charges could adversely affect our results of operations. See "Critical Accounting Policies and Sensitive Accounting Estimates" in MD&A above for more information regarding goodwill impairment testing.

Properties

In the United States and Puerto Rico, at June 30, 2018 , the Pharmaceutical segment operated 24 primary pharmaceutical distribution facilities and one national logistics center; seven specialty distribution facilities; and more than 140 nuclear pharmacy and radiopharmaceutical manufacturing facilities. The Medical segment operated more than 70 medical-surgical distribution, assembly, manufacturing and other operating facilities in the United States and Puerto Rico. Our U.S. operating facilities are located in 45 states.

Outside the United States and Puerto Rico, at June 30, 2018 , our Medical segment operated 25 facilities in Canada, Costa Rica, the Dominican Republic, Germany, Ireland, Japan, Malaysia, Malta, Mexico and Thailand that engage in manufacturing, distribution or research.

At June 30, 2018 , we owned more than 75 operating facilities and leased more than 200 operating facilities around the world. Our principal executive offices are headquartered in an owned building located at 7000 Cardinal Place in Dublin, Ohio.

We consider our operating properties to be in satisfactory condition and adequate to meet our present needs. However, we regularly evaluate operating properties and may make further additions and improvements or consolidate locations as we seek opportunities to expand or enhance the efficiency of our business.

Legal Proceedings

The legal proceedings described in Note 9 of the "Notes to Consolidated Financial Statements" are incorporated in this "Legal Proceedings" section by reference.

Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common shares are listed on the New York Stock Exchange under the symbol "CAH." The following table reflects the range of the reported high and low closing prices of our common shares as reported on the New York Stock Exchange Composite Tape and the per share dividends declared for the fiscal years ended June 30, 2018 and 2017 and paid quarterly. It also reflects the range of the reported high and low closing prices of our common shares from July 1, 2018 through the period ended on July 31, 2018 and the per share dividends declared from July 1, 2018 through the period ended on July 31, 2018:

	High	Low	Dividends Declared
Fiscal 2017			
Quarter Ended:			
September 30, 2016	$ 84.92	$ 75.26	$ 0.4489
December 31, 2016	76.71	65.17	0.4489
March 31, 2017	83.80	72.47	0.4489
June 30, 2017	82.71	71.18	0.4624
Fiscal 2018			
Quarter Ended:			
September 30, 2017	$ 78.69	$ 64.36	$ 0.4624
December 31, 2017	68.24	55.00	0.4624
March 31, 2018	75.23	61.22	0.4624
June 30, 2018	65.82	48.83	0.4763
Fiscal 2019	$ 50.80	$ 48.80	$ —

At July 31, 2018 there were approximately 7,817 shareholders of record of our common shares.

We anticipate that we will continue to pay quarterly cash dividends in the future. The payment and amount of future dividends remain, however, within the discretion of our Board of Directors and will depend upon our future earnings, financial condition, capital requirements and other factors.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs (2)	Approximate Dollar Value of Shares That May Yet be Purchased Under the Programs (2) (in millions)
April 2018	292	$ 63.07	—	$ 993
May 2018	449,113	52.22	448,675	970
June 2018	1,433,537	53.41	1,433,244	893
Total	**1,882,942**	**$ 53.13**	**1,881,919**	**$ 893**

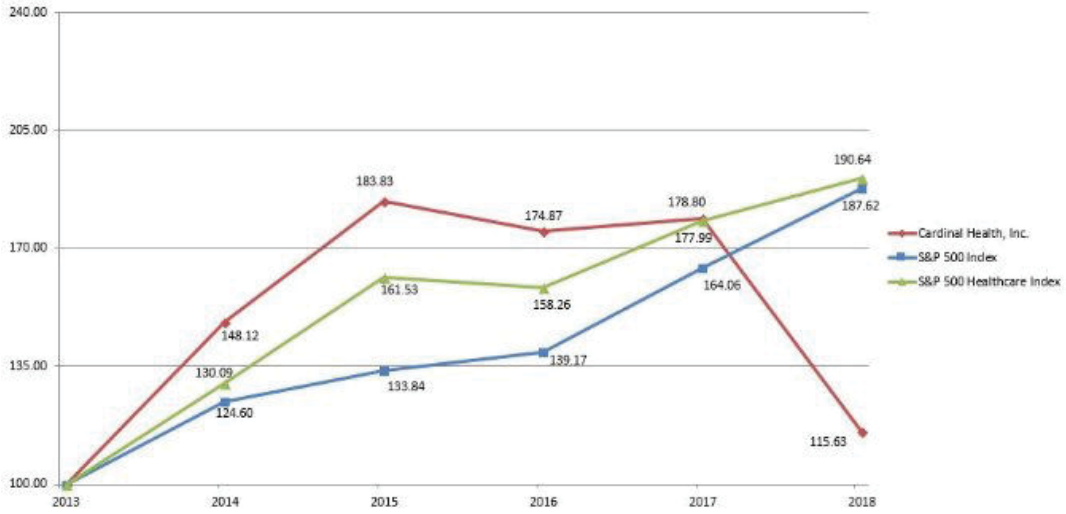
(1) Reflects 292 , 438 and 293 common shares purchased in April, May and June 2018 , respectively, through a rabbi trust as investments of participants in our Deferred Compensation Plan.

(2) On February 7, 2018 our Board of Directors approved a $1.0 billion share repurchase program that expires on December 31, 2020. During the three months ended June 30, 2018 , we repurchased two million common shares under this program at June 30, 2018. We have $893 million available under this program. On August 16, 2018 we entered into an ASR program to purchase shares of our common stock for an aggregate purchase price of $ 600 million and received an initial delivery of 9.5 million shares of common stock using a reference price of $ 50.45 . The program is expected to conclude in the second quarter of fiscal 2019.

Market for Registrant's Common Equity

Five Year Performance Graph

The following line graph compares the cumulative total return of our common shares with the cumulative total return of the Standard & Poor's Composite—500 Stock Index (the "S&P 500 Index") and the Standard & Poor's Composite—500 Healthcare Index (the "S&P 500 Healthcare Index"). The line graph assumes, in each case, an initial investment of $100 on June 30, 2013, based on the market prices at the end of each fiscal year through and including June 30, 2018 , and reinvestment of dividends. The S&P 500 Index and S&P 500 Healthcare Index investments are weighted on the basis of market capitalization at the beginning of each period.



	June 30					
	2013	2014	2015	2016	2017	**2018**
Cardinal Health, Inc.	$ 100.00	$ 148.12	$ 183.83	$ 174.87	$ 178.80	**$ 115.63**
S&P 500 Index	100.00	124.60	133.84	139.17	164.06	**187.62**
S&P 500 Healthcare Index	100.00	130.09	161.53	158.26	177.99	**190.64**

Management Reports

Evaluation of Disclosure Controls and Procedures

We evaluated, with the participation of our principal executive officer and principal financial officer, the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) as of June 30, 2018 . Based on this evaluation, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures were effective as of June 30, 2018 to provide reasonable assurance that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms and that such information is accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act. Our internal control system is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, controls deemed effective now may become inadequate in the future because of changes in conditions, or because compliance with policies or procedures has deteriorated or been circumvented.

Management assessed the effectiveness of our internal control over financial reporting as of June 30, 2018 . In making this assessment, management used the criteria established in the Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the "COSO criteria"). Based on management's assessment and the COSO criteria, management believes that our internal control over financial reporting was effective as of June 30, 2018 .

Our independent registered public accounting firm, Ernst & Young LLP, has issued a report on our internal control over financial reporting. Ernst & Young LLP's report appears following this "Management Reports" section and expresses an unqualified opinion on the effectiveness of our internal control over financial reporting.

On July 29, 2017, we completed the acquisition of the Patient Recovery business. As permitted by guidelines established by the SEC, management excluded the Patient Recovery business from the scope of its assessment of the effectiveness of internal control over financial reporting as of June 30, 2018. The Patient Recovery business constituted 17% and 11% of our total and net assets, respectively, as of June 30, 2018 and approximately 2% of our revenue for the fiscal year then ended.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended June 30, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting

The Shareholders and the Board of Directors of Cardinal Health, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Cardinal Health, Inc. and subsidiaries' internal control over financial reporting as of June 30, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Cardinal Health, Inc. and subsidiaries (the Company) maintained, in all material respects, effective internal control over financial reporting as of June 30, 2018, based on the COSO criteria.

As indicated in the accompanying "Management's Report on Internal Control Over Financial Reporting," management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of the Patient Recovery Business, which is included in the 2018 consolidated financial statements of the Company and constituted 17% and 11% of total and net assets, respectively; as of June 30, 2018 and 2% of revenues for the year then ended. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of the Patient Recovery Business.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of Cardinal Health, Inc. and subsidiaries as of June 30, 2018 and 2017 and the related consolidated statements of earnings, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended June 30, 2018, and the related notes and financial statement schedule listed in the Index at Item 15(a)(2) and our report dated August 22, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying "Management's Report on Internal Control Over Financial Reporting." Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Grandview Heights, Ohio
August 22, 2018

Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Cardinal Health, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Cardinal Health, Inc. and subsidiaries (the Company) as of June 30, 2018 and 2017, the related consolidated statements of earnings, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended June 30, 2018, and the related notes and the financial statement schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at June 30, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended June 30, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of June 30, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated August 22, 2018 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2002.

Grandview Heights, Ohio

August 22, 2018

Financial Statements and Supplementary Data

Consolidated Statements of Earnings

(in millions, except per common share amounts)	2018	2017	2016
Revenue	$ 136,809	$ 129,976	$ 121,546
Cost of products sold	129,628	123,432	115,003
Gross margin	7,181	6,544	6,543
Operating expenses:			
Distribution, selling, general and administrative expenses	4,596	3,775	3,648
Restructuring and employee severance	176	56	25
Amortization and other acquisition-related costs	707	527	459
Impairments and (gain)/loss on disposal of assets, net	1,417	18	21
Litigation (recoveries)/charges, net	159	48	(69)
Operating earnings	126	2,120	2,459
Other (income)/expense, net	23	(5)	5
Interest expense, net	329	201	178
Loss on extinguishment of debt	2	—	—
Earnings/(loss) before income taxes	(228)	1,924	2,276
Provision for/(benefit from) income taxes	(487)	630	845
Net earnings	259	1,294	1,431
Less: Net earnings attributable to noncontrolling interests	(3)	(6)	(4)
Net earnings attributable to Cardinal Health, Inc.	$ 256	$ 1,288	$ 1,427
Earnings per common share attributable to Cardinal Health, Inc.			
Basic	$ 0.82	$ 4.06	$ 4.36
Diluted	0.81	4.03	4.32
Weighted-average number of common shares outstanding:			
Basic	313	317	327
Diluted	315	320	330

The accompanying notes are an integral part of these consolidated statements.

Consolidated Statements of Comprehensive Income

(in millions)	2018	2017	2016
Net earnings	$ 259	$ 1,294	$ 1,431
Other comprehensive income/(loss):			
Foreign currency translation adjustments and other	58	(25)	(82)
Amounts reclassified to earnings	(23)	—	—
Net unrealized gain/(loss) on derivative instruments, net of tax	(2)	16	(11)
Total other comprehensive income/(loss), net of tax	33	(9)	(93)
Total comprehensive income	292	1,285	1,338
Less: comprehensive income attributable to noncontrolling interests	(3)	(6)	(4)
Total comprehensive income attributable to Cardinal Health, Inc.	$ 289	$ 1,279	$ 1,334

The accompanying notes are an integral part of these consolidated statements.

Financial Statements

Consolidated Balance Sheets

(in millions)	June 30 2018	2017
Assets		
Current assets:		
Cash and equivalents	$ **1,763**	$ 6,879
Trade receivables, net	**7,800**	8,048
Inventories, net	**12,308**	11,301
Prepaid expenses and other	**1,926**	2,117
Assets held for sale	**756**	—
Total current assets	**24,553**	28,345
Property and equipment, net	**2,487**	1,879
Goodwill and other intangibles, net	**12,229**	9,207
Other assets	**682**	681
Total assets	$ **39,951**	$ 40,112
Liabilities, Redeemable Noncontrolling Interests and Shareholders' Equity		
Current liabilities:		
Accounts payable	$ **19,677**	$ 17,906
Current portion of long-term obligations and other short-term borrowings	**1,001**	1,327
Other accrued liabilities	**2,002**	$ 1,988
Liabilities related to assets held for sale	**213**	—
Total current liabilities	**22,893**	21,221
Long-term obligations, less current portion	**8,012**	9,068
Deferred income taxes and other liabilities	**2,975**	2,877
Redeemable noncontrolling interests	**12**	118
Shareholders' equity:		
Preferred shares, without par value:		
Authorized— **500 thousand** shares, Issued— **none**	**—**	—
Common shares, without par value:		
Authorized— **755 million** shares, Issued— **327 million** shares at **June 30, 2018** and June 30, 2017, respectively	**2,730**	2,697
Retained earnings	**4,645**	4,967
Common shares in treasury, at cost: **18 million** shares and 11 million shares at **June 30, 2018** and June 30, 2017, respectively	**(1,224)**	(731)
Accumulated other comprehensive loss	**(92)**	(125)
Total Cardinal Health, Inc. shareholders' equity	**6,059**	6,808
Noncontrolling interests	**—**	20
Total shareholders' equity	**6,059**	6,828
Total liabilities, redeemable noncontrolling interests and shareholders' equity	$ **39,951**	$ 40,112

The accompanying notes are an integral part of these consolidated statements.

Consolidated Statements of Shareholders' Equity

(in millions)	Common Shares Issued	Common Shares Amount	Retained Earnings	Treasury Shares	Treasury Shares Amount	Accumulated Other Comprehensive Income/(Loss)	Noncontrolling Interests	**Total Shareholders' Equity**
Balance at June 30, 2015	364	$ 3,003	$ 5,521	(36)	$ (2,245)	$ (23)	$ —	**$ 6,256**
Net earnings			1,427				3	**1,430**
Other comprehensive loss, net of tax						(93)		**(93)**
Purchase of noncontrolling interests							(7)	**(7)**
Employee stock plans activity, including tax benefit of $33 million	—	7		2	137			**144**
Treasury shares acquired				(8)	(651)			**(651)**
Dividends declared			(529)					**(529)**
Other							21	**21**
Balance at June 30, 2016	364	3,010	6,419	(42)	(2,759)	(116)	17	**6,571**
Net earnings			1,288				2	**1,290**
Other comprehensive loss, net of tax						(9)		**(9)**
Purchase of noncontrolling interests							(1)	**(1)**
Employee stock plans activity, including tax benefit of $34 million	—	(11)		2	167			**156**
Treasury shares acquired				(8)	(600)			**(600)**
Dividends declared			(580)					**(580)**
Other			(1)				2	**1**
Retirement of Treasury Shares	(37)	(302)	(2,159)	37	2,461			**—**
Balance at June 30, 2017	327	2,697	4,967	(11)	(731)	(125)	20	**6,828**
Net earnings			**256**				**(1)**	**255**
Other comprehensive loss, net of tax						**33**		**33**
Purchase and divestiture of noncontrolling interests							**(19)**	**(19)**
Employee stock plans activity, including tax benefit of $10 million	—	**33**		**1**	**57**			**90**
Treasury shares acquired				**(8)**	**(550)**			**(550)**
Dividends declared			**(584)**					**(584)**
Other			**6**					**6**
Balance at June 30, 2018	**327**	**$ 2,730**	**$ 4,645**	**(18)**	**$ (1,224)**	**$ (92)**	**$ —**	**$ 6,059**

The accompanying notes are an integral part of these consolidated statements.

Consolidated Statements of Cash Flows

(in millions)	2018	2017	2016
Cash flows from operating activities:			
Net earnings	**$ 259**	$ 1,294	$ 1,431
Adjustments to reconcile net earnings to net cash provided by operating activities:			
Depreciation and amortization	**1,032**	717	641
Loss on extinguishment of debt	**2**	—	—
Impairments and loss on sale of other investments	**6**	4	—
Impairments and loss on disposal of assets, net	**1,417**	18	21
Share-based compensation	**85**	96	111
Provision for/(benefit from) deferred income taxes	**(1,012)**	291	87
Provision for bad debts	**111**	63	73
Change in fair value of contingent consideration obligation	**(2)**	(5)	(16)
Change in operating assets and liabilities, net of effects from acquisitions and divestitures:			
Increase in trade receivables	**(871)**	(665)	(866)
Increase in inventories	**(1,211)**	(673)	(1,179)
Increase in accounts payable	**2,574**	564	2,815
Other accrued liabilities and operating items, net	**378**	(520)	(147)
Net cash provided by operating activities	**2,768**	1,184	2,971
Cash flows from investing activities:			
Acquisition of subsidiaries, net of cash acquired	**(6,142)**	(132)	(3,614)
Additions to property and equipment	**(384)**	(387)	(465)
Purchase of available-for-sale securities and other investments	**(9)**	(194)	(200)
Proceeds from sale of available-for-sale securities and other investments	**65**	228	136
Proceeds from maturities of available-for-sale securities	**—**	77	50
Proceeds from divestitures, net of cash sold, and disposal of property and equipment	**862**	3	13
Net cash used in investing activities	**(5,608)**	(405)	(4,080)
Cash flows from financing activities:			
Payment of contingent consideration obligation	**(35)**	(3)	(25)
Net change in short-term borrowings	**(50)**	3	26
Purchase of noncontrolling interests	**(106)**	(12)	(10)
Reduction of long-term obligations	**(954)**	(310)	(6)
Proceeds from interest rate swap terminations	**—**	14	—
Proceeds from long-term obligations, net of issuance costs	**3**	5,171	—
Net tax proceeds/(withholding) from share-based compensation	**(3)**	26	6
Excess tax benefits from share-based compensation	**—**	34	33
Dividends on common shares	**(581)**	(577)	(512)
Purchase of treasury shares	**(550)**	(600)	(651)
Net cash provided by/(used in) financing activities	**(2,276)**	3,746	(1,139)
Effect of exchange rates changes on cash and equivalents	**4**	(2)	(12)
Cash reclassified to assets held for sale	**(4)**	—	—
Net increase/(decrease) in cash and equivalents	**(5,116)**	4,523	(2,260)
Cash and equivalents at beginning of period	**6,879**	2,356	4,616
Cash and equivalents at end of period	**$ 1,763**	$ 6,879	$ 2,356
Supplemental Information:			
Cash payments for interest	**$ 320**	$ 200	$ 174
Cash payments for income taxes	**425**	686	635

The accompanying notes are an integral part of these consolidated statements.

Notes to Consolidated Financial Statements

1. Basis of Presentation and Summary of Significant Accounting Policies

Cardinal Health, Inc. is a globally integrated healthcare services and products company providing customized solutions for hospitals, healthcare systems, pharmacies, ambulatory surgery centers, clinical laboratories and physician offices. The company provides medical products and pharmaceuticals and cost-effective solutions that enhance supply chain efficiency. References to “we”, “our” and similar pronouns in these consolidated financial statements are to Cardinal Health, Inc. and its majority-owned or controlled subsidiaries unless the context otherwise requires.

Our fiscal year ends on June 30. References to fiscal 2018 , 2017 and 2016 in these consolidated financial statements are to the fiscal years ended June 30, 2018 , 2017 and 2016 , respectively.

Basis of Presentation

Our consolidated financial statements include the accounts of all majority-owned or controlled subsidiaries, and all significant intercompany transactions and amounts have been eliminated. To conform to the current year presentation, certain prior year amounts have been reclassified. The results of businesses acquired or disposed of are included in the consolidated financial statements from the date of the acquisition or up to the date of disposal, respectively.

Use of Estimates

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (“GAAP”). The preparation of financial statements in accordance with GAAP requires us to make estimates, judgments and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Estimates, judgments and assumptions are used in the accounting and disclosure related to, among other items, allowance for doubtful accounts, inventory valuation and reserves, business combinations, goodwill and other intangible asset impairment, vendor reserves, loss contingencies, self-insurance accruals, income taxes and share-based compensation. Actual amounts could ultimately differ from these estimated amounts.

Cash Equivalents

We consider liquid investments purchased with an initial maturity of three months or less to be cash equivalents. The carrying value of cash equivalents approximates fair value.

Receivables and Allowance for Doubtful Accounts

Trade receivables are presented net of an allowance for doubtful accounts of $139 million and $137 million at June 30, 2018 and 2017 , respectively. An account is considered past due on the first day after its due date. In accordance with contract terms, we generally have the ability to charge customers service fees or higher prices if an account is considered past due. We regularly monitor past due accounts and establish appropriate reserves to cover potential losses, which are based primarily on historical collection rates and the credit worthiness of the customer. We write off any amounts deemed uncollectible against the established allowance for doubtful accounts.

We provide financing to various customers. Such financing arrangements range from 1 year to 5 years at interest rates that are generally subject to fluctuation. Interest income on these arrangements is recognized as it is earned. The financings may be collateralized, guaranteed by third parties or unsecured. Finance notes, net and related accrued interest were $136 million (current portion $26 million) and $171 million (current portion $53 million) at June 30, 2018 and 2017 , respectively, and are included in other assets (current portion is included in prepaid expenses and other) in the consolidated balance sheets. Finance notes receivable allowance for doubtful accounts were $7 million and $9 million at June 30, 2018 and 2017 , respectively. We estimate an allowance for these financing receivables based on historical collection rates and the credit worthiness of the customer. We write off any amounts deemed uncollectible against the established allowance for doubtful accounts.

Concentrations of Credit Risk

We maintain cash depository accounts with major banks, and we invest in high quality, short-term liquid instruments, and in marketable securities. Our short-term liquid instruments mature within three months and we have not historically incurred any related losses. Investments in marketable debt securities consist of a portfolio of high-grade instruments. Such investments are made only in instruments issued by highly-rated institutions, whose financial condition we monitor. We had none of these investments at June 30, 2018.

Our trade receivables and finance notes and related accrued interest are exposed to a concentration of credit risk with certain large customers and with customers in the retail and healthcare sectors. Credit risk can be affected by changes in reimbursement and other economic pressures impacting the healthcare industry. With respect to customers in the retail and healthcare sectors, such credit risk is limited due to supporting collateral and the diversity of the customer base, including its wide geographic dispersion. We perform regular credit evaluations of our customers’ financial conditions and maintain reserves for losses through the established allowance for doubtful accounts. Historically, such losses have been within our expectations. Refer to the "Receivables and Allowance for Doubtful Accounts" section within this Note for additional information on the accounting treatment of reserves for allowance for doubtful accounts.

Major Customers

CVS Health Corporation ("CVS") and OptumRx, are our only customers that individually account for at least 10 percent of revenue and gross trade receivables. These customers are primarily serviced through our Pharmaceutical segment.

The following table summarizes historical percent of revenue and gross trade receivables from CVS and OptumRx:

	Percent of Revenue			Percent of Gross Trade Receivables at June 30	
	2018	2017	2016	**2018**	2017
CVS	**25%**	23%	25%	**22%**	20%
OptumRx	**11%**	11%	7%	**4%**	1%

Our pharmaceutical distribution contract with OptumRx began in fiscal 2016 and did not exceed 10 percent until fiscal 2017.

We have entered into agreements with group purchasing organizations ("GPOs") which act as purchasing agents that negotiate vendor contracts on behalf of their members. Vizient, Inc. and Premier, Inc. are our two largest GPO member relationships in terms of revenue. Sales to members of these two GPOs collectively accounted for 22 percent , 21 percent and 17 percent of revenue for fiscal 2018 , 2017 and 2016 , respectively. Our trade receivable balances are with individual members of the GPO, and therefore no significant concentration of credit risk exists with these types of arrangements.

Inventories

A substantial portion of our inventories (56 percent at both June 30, 2018 and 2017) are valued at the lower of cost, using the last-in, first-out ("LIFO") method, or market. These inventories are included within the core pharmaceutical distribution facilities of our Pharmaceutical segment ("distribution facilities") and are primarily merchandise inventories. The LIFO method presumes that the most recent inventory purchases are the first items sold, so LIFO helps us better match current costs and revenue. We believe that the average cost method of inventory valuation provides a reasonable approximation of the current cost of replacing inventory within the distribution facilities. As such, the LIFO reserve is the difference between (a) inventory at the lower of LIFO cost or market and (b) inventory at replacement cost determined using the average cost method of inventory valuation.

If we had used the average cost method of inventory valuation for all inventory within the distribution facilities, the value of our inventories would not have changed in fiscal 2018 or 2017 because inventories valued at LIFO were $92 million and $46 million higher than the average cost value at June 30, 2018 and 2017 , respectively. We do not record inventories in excess of replacement cost. As such, we did not record any changes in our LIFO reserve in fiscal 2018 and 2017 .

Our remaining inventory that is not valued at the lower of LIFO or market is stated at the lower of cost, using the first-in, first-out method, or net realizable value. Net realizable value is defined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. Inventories presented in the consolidated balance sheets are net of reserves for excess and obsolete inventory which were $147 million and $76 million at June 30, 2018 and 2017 , respectively. The increase in the reserves for excess and obsolete inventory during fiscal 2018 was driven by increased Cordis inventory reserves and the Patient Recovery acquisition. We reserve for inventory obsolescence using estimates based on historical experience, historical and projected sales trends, specific categories of inventory and age of on-hand inventory.

Cash Discounts

Manufacturer cash discounts are recorded as a component of inventory cost and recognized as a reduction of cost of products sold as inventory is sold.

Property and Equipment

Property and equipment are carried at cost less accumulated depreciation. Property and equipment held for sale are recorded at the lower of cost or fair value less cost to sell. When certain events or changes in operating conditions occur, an impairment assessment may be performed on the recoverability of the carrying amounts.

Depreciation expense is computed using the straight-line method over the estimated useful lives of the assets, including capital lease assets which are depreciated over the terms of their respective leases. We generally use the following range of useful lives for our property and equipment categories: buildings and improvements— 3 to 39 years ; machinery and equipment— 3 to 20 years ; and furniture and fixtures— 3 to 7 years . We recorded depreciation and amortization expense of $446 million , $314 million and $277 million for fiscal 2018 , 2017 and 2016 , respectively.

The following table presents the components of property and equipment, net at June 30:

(in millions)		**2018**		2017
Land, building and improvements	**$**	**2,115**	$	1,637
Machinery and equipment		**3,006**		2,860
Furniture and fixtures		**139**		130
Total property and equipment, at cost		**5,260**		4,627
Accumulated depreciation and amortization		**(2,773)**		(2,748)
Property and equipment, net	**$**	**2,487**	$	1,879

Repairs and maintenance expenditures are expensed as incurred. Interest on long-term projects is capitalized using a rate that approximates the weighted-average interest rate on long-term obligations, which was 4 percent at June 30, 2018 . The amount of capitalized interest was immaterial for all periods presented.

Business Combinations

The assets acquired and liabilities assumed in a business combination, including identifiable intangible assets, are recorded at their estimated fair values as of the acquisition date. The excess of the purchase price over the estimated fair value of the identifiable net assets acquired is recorded as goodwill. We base the fair values of identifiable intangible assets on detailed valuations that require management to make significant judgments, estimates and assumptions. Critical estimates and assumptions include: expected future cash flows for customer relationships, trade names and other identifiable intangible assets; discount rates that reflect the risk factors associated with future cash flows; and estimates of useful lives. When an acquisition involves contingent consideration, we recognize a liability equal to the fair value of the contingent consideration obligation at the acquisition date. The estimate of fair

value of a contingent consideration obligation requires subjective assumptions to be made regarding future business results, discount rates, discount periods and probabilities assigned to various potential business result scenarios. See Note 2 for additional information regarding our acquisitions.

Goodwill and Other Intangible Assets

Purchased goodwill and intangible assets with indefinite lives are not amortized, but instead are tested for impairment annually or when indicators of impairment exist.

Purchased goodwill is tested for impairment at least annually. Qualitative factors are first assessed to determine if it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If it is determined that it is more likely than not that the fair value does not exceed the carrying amount, then a quantitative test is performed. The quantitative goodwill impairment test involves a comparison of the estimated fair value of the reporting unit to the respective carrying amount.

Goodwill impairment testing involves judgment, including the identification of reporting units, qualitative evaluation of events and circumstances to determine if it is more likely than not that an impairment exists, and, if necessary, the estimation of the fair value of the applicable reporting unit. Our qualitative evaluation considers the weight of evidence and significance of all identified events and circumstances and most relevant drivers of fair value, both positive and negative, in determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount.

We have two operating segments, which are the same as our reportable segments: Pharmaceutical and Medical. These operating segments are comprised of divisions (components), for which discrete financial information is available. Components are aggregated into reporting units for purposes of goodwill impairment testing to the extent that they share similar economic characteristics. Our reporting units are: Pharmaceutical operating segment (excluding our Nuclear Pharmacy Services division); Nuclear Pharmacy Services division; Medical operating segment (excluding our Cardinal Health at Home division and naviHealth division) (“Medical Unit”); Cardinal Health at Home division; and naviHealth division.

Fair value can be determined using market, income or cost-based approaches. Our determination of estimated fair value of the reporting units is based on a combination of the income-based and market-based approaches. Under the income-based approach, we use a discounted cash flow model in which cash flows anticipated over several future periods, plus a terminal value at the end of that time horizon, are discounted to their present value using an appropriate risk-adjusted rate of return. We use our internal forecasts to estimate future cash flows, which we believe are consistent with those of a market participant, and include an estimate of long-term growth rates based on our most recent views of the long-term outlook for each reporting unit. Actual results may differ materially from those used in our forecasts. We use discount rates that are commensurate with the risks and uncertainty inherent in the respective reporting units and in our internally-developed forecasts. Discount rates used in our reporting unit valuations ranged from 8.5 percent to 13.5 percent .

Under the market-based approach, we determine fair value by comparing our reporting units to similar businesses or guideline companies whose securities are actively traded in public markets. We also use the guideline transaction method to determine fair value based on pricing multiples derived from the sale of companies that are similar to our reporting units. To further confirm fair value, we compare the aggregate fair value of our reporting units to our total market capitalization. Estimating the fair value of reporting units requires the use of estimates and significant judgments that are based on a number of factors including forecasted operating results. The use of alternate estimates and assumptions or changes in the industry or peer groups could materially affect the determination of fair value for each reporting unit and potentially result in goodwill impairment.

We performed annual impairment testing in fiscal 2018 , 2017 and 2016 and with the exception of our Medical Unit in fiscal 2018, concluded that there were no impairments of goodwill as the estimated fair value of each reporting unit exceeded its carrying value. As discussed further in Note 5 of the "Notes to Consolidated Financial Statements," during the fourth quarter of fiscal 2018 we recognized a $1.4 billion goodwill impairment charge related to our Medical Unit, which is included in impairments and loss on disposal of assets in our consolidated statements of earnings. There was no tax benefit related to this goodwill impairment charge.

The impairment test for indefinite-lived intangibles other than goodwill (primarily IPR&D) involves first assessing qualitative factors to determine if it is more likely than not that the fair value of the indefinite-lived intangible asset is less than its carrying amount. If so, then a quantitative test is performed to compare the estimated fair value of the indefinite-lived intangible asset to the respective asset's carrying amount. Our qualitative evaluation requires the use of estimates and significant judgments and considers the weight of evidence and significance of all identified events and circumstances and most relevant drivers of fair value, both positive and negative, in determining whether it is more likely than not that the fair value of the indefinite-lived intangible asset is less than its carrying amount.

Intangible assets with finite lives, primarily customer relationships; trademarks, trade names and patents; and developed technology, are amortized using a combination of straight-line and accelerated methods based on the expected cash flows from the asset over their estimated useful lives. We review intangible assets with finite lives for impairment whenever events or changes in circumstances indicate that the related carrying amounts may not be recoverable. Determining whether an impairment loss occurred requires a comparison of the carrying amount to the sum of the future forecasted undiscounted cash flows expected to be generated by the asset group. Actual results may differ materially from those used in our forecasts.

Assets Held for Sale

We classify assets and liabilities (the “disposal group”) as held for sale when management commits to a plan to sell the disposal group in its present condition and at a price that is reasonable in relation to its current fair value. We also consider whether an active program to locate a buyer has been initiated and if it is probable that the sale will

occur within one year without significant changes to the plan to sell. Upon classification of the disposal group as held for sale, we test the assets for impairment and cease related depreciation and amortization.

Investments

Investments in non-marketable equity securities are accounted for under either the cost or equity method of accounting and are included in other assets in the consolidated balance sheets. For investments in which we can exercise significant influence, we use the equity method of accounting. Our share of the earnings and losses was immaterial, both individually and in the aggregate, for all periods presented and is recorded in other income, net in the consolidated statements of earnings. We closely monitor our investments for other-than-temporary impairment by considering factors such as the operating performance of the investment and current economic and market conditions.

Marketable securities are classified as available-for-sale and are carried at fair value in the consolidated balance sheets. Unrealized gains and losses on available-for-sale securities, net of applicable taxes, are included within shareholders' equity in accumulated other comprehensive income ("AOCI"). We monitor these securities for other-than-temporary impairment by considering factors such as the duration that, and the extent to which, the fair value is below cost, the operating performance and credit worthiness of the issuer of the securities and current economic and market conditions. See Note 6 for additional information regarding available-for-sale securities.

Vendor Reserves

In the ordinary course of business, our vendors may dispute deductions taken against payments otherwise due to them or assert other disputes. These disputes are researched and resolved based upon the findings of the research performed. At any given time, there are outstanding items in various stages of research and resolution. In determining appropriate reserves for areas of exposure with our vendors, we assess historical experience and current outstanding claims. We have established various levels of reserves based on the type of claim and status of review. Though the claim types are relatively consistent, we periodically refine our methodology by updating the reserve estimate percentages to reflect actual historical experience. The ultimate outcome of certain claims may be different than our original estimate and may require an adjustment. Adjustments to vendor reserves are included in cost of products sold. In addition, the reserve balance will fluctuate due to variations of outstanding claims from period-to-period, timing of settlements and specific vendor issues, such as bankruptcies. Vendor reserves were $45 million and $50 million at June 30, 2018 and 2017 , respectively, excluding third-party returns. See Third-Party Returns section within this Note for a description of third-party returns.

Distribution Services Agreement and Other Vendor Fees

Our Pharmaceutical segment recognizes fees received from distribution services agreements and other fees received from vendors related to the purchase or distribution of the vendors' inventory when those fees have been earned and we are entitled to payment. Since the benefit provided to a vendor is related to the purchase and distribution of the vendor's inventory, we recognize the fees as a reduction in the carrying value of the inventory that generated the fees, and as such, a reduction of cost of products sold in our consolidated statements of earnings when the inventory is sold.

Loss Contingencies and Self-Insurance

We accrue for contingencies related to disputes, litigation and regulatory matters if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. We also self-insure for employee healthcare, general liability, certain product liability matters, auto liability, property and workers' compensation. Self-insurance accruals include an estimate for expected settlements or pending claims, defense costs, administrative fees, claim adjustment costs and an estimate for claims incurred but not reported. Because these matters are inherently unpredictable and unfavorable developments or resolutions can occur, assessing contingencies and other liabilities is highly subjective and requires judgments about future events. We regularly review contingencies and our self-insurance accruals to determine whether our accruals and related disclosures are adequate. The amount of ultimate loss may differ from these estimates. We recognize these estimated loss contingencies, income from favorable resolution of litigation and certain defense costs in litigation (recoveries)/charges in our consolidated statements of earnings. See Note 9 for additional information regarding loss contingencies and product liability lawsuits.

Income Taxes

We account for income taxes using the asset and liability method. Deferred tax assets and liabilities are measured using enacted tax rates in the respective jurisdictions in which we operate . We assess the realizability of deferred tax assets on a quarterly basis and provide a valuation allowance for deferred tax assets when it is more likely than not that at least a portion of the deferred tax assets will not be realized. The realizability of deferred tax assets depends on our ability to generate sufficient taxable income within the carryback or carryforward periods provided for in the tax law for each applicable tax jurisdiction and also considers all available positive and negative evidence.

Deferred taxes for non-U.S. liabilities are not provided on the unremitted earnings of subsidiaries outside of the United States when it is expected that these earnings are indefinitely reinvested.

Tax benefits from uncertain tax positions are recognized when it is more likely than not that the position will be sustained upon examination of the technical merits of the position, including resolutions of any related appeals or litigation processes. The amount recognized is measured as the largest amount of tax benefit that is greater than 50 percent likely of being realized upon settlement. See Note 8 for additional information regarding income taxes.

Other Accrued Liabilities

Other accrued liabilities represent various current obligations, including certain accrued operating expenses and taxes payable.

Noncontrolling Interests and Redeemable Noncontrolling Interests

Noncontrolling interests represent the portion of net earnings, comprehensive income and net assets that is not attributable to Cardinal Health, Inc.

The redeemable noncontrolling interests relate to our ownership interest in naviHealth Holdings, LLC ("naviHealth"), which we acquired during fiscal 2016. The redeemable noncontrolling interests are redeemable at the option of the third-party noncontrolling interest holders at any time after the two-year anniversary of the closing, or earlier if a trigger event occurs. As such, the noncontrolling interests have been presented as redeemable noncontrolling interests in our consolidated balance sheets. The noncontrolling interests will be adjusted each period for net earnings and dividends attributable to the noncontrolling interests and changes in the noncontrolling ownership interests, if any. An additional adjustment to the carrying value of the noncontrolling interests may be required if the redemption value under the terms of the agreement exceeds the carrying value. Changes in the carrying value of the noncontrolling interests related to a change in the redemption value will be recorded through retained earnings and will not affect net earnings attributable to Cardinal Health, Inc. See Note 13 for additional information regarding redeemable noncontrolling interests.

In June 2018, we signed a securities purchase agreement and a contribution and rollover agreement with investor entities controlled by Clayton, Dubilier & Rice ("CD&R") to sell our ownership interest in naviHealth. For more information on this divestiture see Note 4 .

Share-Based Compensation

Share-based compensation provided to employees is recognized in the consolidated statements of earnings based on the grant date fair value of the awards. The fair value of stock options is determined on the grant date using a lattice valuation model. The fair value of restricted share units and performance share units is determined by the grant date market price of our common shares. The compensation expense associated with nonvested performance share units is dependent on our periodic assessment of the probability of the targets being achieved and our estimate, which may vary over time, of the number of shares that ultimately will be issued. The compensation expense recognized for share-based awards is net of estimated forfeitures and is recognized ratably over the service period of the awards. All income tax effects of share-based awards are recognized in the statement of earnings as awards vest or are settled. We classify share-based compensation expense in distribution, selling, general and administrative ("SG&A") expenses to correspond with the same line item as the majority of the cash compensation paid to employees. If awards are modified in connection with a restructuring activity, the incremental share-based compensation expense is classified in restructuring and employee severance. See Note 17 for additional information regarding share-based compensation.

Dividends

We paid cash dividends per common share of $1.85 , $1.80 and $1.55 in fiscal 2018 , 2017 and 2016 , respectively.

Revenue Recognition

We recognize revenue when persuasive evidence of an arrangement exists, product delivery has occurred or the services have been rendered, the price is fixed or determinable, and collectability is reasonably assured.

Pharmaceutical Segment

The Pharmaceutical segment recognizes distribution revenue when title transfers to its customers and we have no further obligation to provide services related to such merchandise.

Revenue for deliveries that are directly shipped to customers from the manufacturer when we act as an intermediary in the ordering and delivery of products is recorded gross. This is in accordance with accounting standards addressing reporting revenue on a gross basis as a principal versus on a net basis as an agent. This revenue is recorded on a gross basis since we incur credit risk from the customer, are primarily responsible for fulfillment, bear the risk of loss for incomplete shipments and do not receive a separate fee or commission for the transaction and, as such, are the primary obligor. Revenue from these sales is recognized when title transfers to the customer and we have no further obligation to provide services related to such merchandise.

Radiopharmaceutical revenue is recognized upon delivery of the product to the customer and we have no further obligation to provide services related to such merchandise.

Medical Segment

The Medical segment recognizes revenue when title transfers to its customers and we have no further obligation to provide services related to such products.

Sales Returns and Allowances

Revenue is recorded net of sales returns and allowances. Our customer return policies generally require that the product be physically returned, subject to restocking fees, in a condition suitable to be added back to inventory and resold at full value, or returned to vendors for credit (“merchantable product”). Product returns are generally consistent throughout the year and typically are not specific to any particular product or customer.

We accrue for estimated sales returns and allowances at the time of sale based upon historical customer return trends, margin rates and processing costs. Our accrual for sales returns is reflected as a reduction of revenue and cost of products sold for the sales price and cost, respectively. At June 30, 2018 and 2017 , the accrual for estimated sales returns and allowances was $479 million and $347 million , respectively, the impact of which is reflected in trade receivables, net and inventories, net in the consolidated balance sheets. Sales returns and allowances were $2.4 billion , $2.3 billion and $2.2 billion , for fiscal 2018 , 2017 and 2016 , respectively.

Third-Party Returns

We generally do not accept non-merchantable pharmaceutical product returns from our customers, so many of our customers return non-merchantable pharmaceutical products to the manufacturer through third parties. Since our customers generally do not have a direct relationship with manufacturers, our vendors pass the value of such returns to us (usually in the form of an accounts payable

deduction) for distribution to customers. We, in turn, pass the value received, less an administrative fee, to our customer. In certain instances, we pass the estimated value of the return to our customer prior to our receipt of the value from the vendor. Although we believe we have satisfactory protections, we could be subject to claims from customers or vendors if our administration of this overall process was deficient in some respect or our contractual terms with vendors are in conflict with our contractual terms with our customers. We have maintained reserves for some of these situations based on their nature and our historical experience with their resolution.

Shipping and Handling

Shipping and handling costs are primarily included in SG&A expenses in our consolidated statements of earnings. Shipping and handling costs include all delivery expenses as well as all costs to prepare the product for shipment to the end customer. Shipping and handling costs were $543 million , $496 million and $504 million , for fiscal 2018 , 2017 and 2016 , respectively. Revenue received for shipping and handling was immaterial for all periods presented.

Restructuring and Employee Severance

Restructuring activities are programs that are not part of the ongoing operations of our underlying business, such as closing and consolidating facilities, changing the way we manufacture or distribute our products, moving manufacturing of a product to another location, changes in production or business process outsourcing or insourcing, employee severance (including rationalizing headcount or other significant changes in personnel) and realigning operations (including realignment of the management structure in response to changing market conditions). See Note 3 for additional information regarding our restructuring activities.

Amortization and Other Acquisition-Related Costs

We classify certain costs incurred in connection with acquisitions as amortization and other acquisition-related costs in our consolidated statements of earnings. These costs consist of amortization of acquisition-related intangible assets, transaction costs, integration costs and changes in the fair value of contingent consideration obligations. Transaction costs are incurred during the initial evaluation of a potential acquisition and primarily relate to costs to analyze, negotiate and consummate the transaction as well as due diligence activities. Integration costs relate to activities required to combine the operations of an acquired enterprise into our operations and, in the case of the Cordis and Patient Recovery businesses, to stand-up the systems and processes needed to support an expanded geographic footprint. We record changes in the fair value of contingent consideration obligations relating to acquisitions as income or expense in amortization and other acquisition-related costs. See Note 5 for additional information regarding amortization of acquisition-related intangible assets and Note 11 for additional information regarding contingent consideration.

Translation of Foreign Currencies

Financial statements of our subsidiaries outside the United States are generally measured using the local currency as the functional currency. Adjustments to translate the assets and liabilities of these foreign subsidiaries into U.S. dollars are accumulated in shareholders' equity through AOCI utilizing period-end exchange rates. Revenues and expenses of these foreign subsidiaries are translated using average exchange rates during the year.

The foreign currency translation gains/(losses) included in AOCI at June 30, 2018 and 2017 are presented in Note 14 . Foreign currency transaction gains and losses for the period are included in the consolidated statements of earnings in the respective financial statement line item.

Interest Rate, Currency and Commodity Risk

All derivative instruments are recognized at fair value on the consolidated balance sheets and all changes in fair value are recognized in net earnings or shareholders' equity through AOCI, net of tax.

For contracts that qualify for hedge accounting treatment, the hedge contracts must be effective at reducing the risk associated with the exposure being hedged and must be designated as a hedge at the inception of the contract. Hedge effectiveness is assessed periodically. Any contract not designated as a hedge, or so designated but ineffective, is adjusted to fair value and recognized immediately in net earnings. If a fair value or cash flow hedge ceases to qualify for hedge accounting treatment, the contract continues to be carried on the balance sheet at fair value until settled and future adjustments to the contract's fair value are recognized immediately in net earnings. If a forecasted transaction is probable not to occur, amounts previously deferred in AOCI are recognized immediately in net earnings. See Note 12 for additional information regarding our derivative instruments, including the accounting treatment for instruments designated as fair value, cash flow and economic hedges.

Fair Value Measurements

Fair value is defined as the price that would be received upon selling an asset or the price paid to transfer a liability on the measurement date. It focuses on the exit price in the principal or most advantageous market for the asset or liability in an orderly transaction between willing market participants. A three-tier fair value hierarchy is established as a basis for considering such assumptions and for inputs used in the valuation methodologies in measuring fair value. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair values are:

Level 1 - Observable prices in active markets for identical assets and liabilities.

Level 2 - Observable inputs other than quoted prices in active markets for identical assets and liabilities.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

See Note 11 for additional information regarding fair value measurements.

Recent Financial Accounting Standards

In March 2018, the Financial Accounting Standards Board (the "FASB") issued amended accounting guidance to codify guidance

pursuant to SEC staff accounting bulletin 118 ("SAB 118"), which was issued in connection with the Tax Cuts and Jobs Act (the "Tax Act") of December 2017. The guidance allows companies to use provisional estimates to record the effects of the Tax Act and also provides a measurement period (not to exceed one year from the date of enactment) to complete the accounting for the impacts of the Tax Act. We adopted this guidance in the second quarter of fiscal 2018 when it was initially issued as SAB 118. We are still completing our accounting for the tax effects of the Tax Act because all the necessary information is not currently available, prepared, or analyzed. As such, we have made reasonable estimates of the effects of the Tax Act on our financial results. As we complete our analysis of the accounting for the tax effects of enactment of the Tax Act, we may record additional provisional amounts or adjustments to provisional amounts as discrete items in future periods. See Note 8 for additional information regarding income taxes.

In August 2017, the FASB issued accounting guidance which is intended to improve and simplify accounting rules around hedge accounting. The guidance will be effective for us in the first quarter of fiscal 2020 and early adoption is permitted. While we are currently evaluating the timing of adoption, we do not expect the impact of this standard to have a material impact on our consolidated financial statements.

In March 2016, the FASB issued amended accounting guidance that changed the accounting for certain aspects of share-based compensation to employees. The guidance requires all income tax effects of share-based awards to be recognized in the statement of earnings as awards vest or are settled. Additionally, the guidance increases the amount employers can withhold in shares to cover employee income taxes without requiring liability classification and allows a policy election for accounting for forfeitures. The primary impact of adoption is the recognition of excess tax benefits in the statement of earnings on a prospective basis, rather than as a component of equity. The impact on the presentation in the consolidated statement of cash flows is also prospective. We adopted this guidance in the first quarter of fiscal 2018. The impact of adoption on the provision for/(benefit from) income taxes on our consolidated statement of earnings was immaterial. The inclusion of excess tax benefits and deficiencies as a component of our income tax expense will increase volatility within our provision for/(benefit from) income taxes as the amount of excess tax benefits or deficiencies from share- based compensation awards depends on our stock price at the date the awards vest or settle.

In February 2016, the FASB issued amended accounting guidance that requires lessees to recognize most leases on the balance sheet as a lease liability and corresponding right-of-use asset. The guidance also requires disclosures that meet the objective of enabling financial statement users to assess the amount, timing, and uncertainty of cash flows arising from leases. This guidance will be effective for us in the first quarter of fiscal 2020 and we expect to elect the practical expedient which will allow us to not apply the amended lease accounting guidance to comparative periods that will be presented. The majority of our lease spend relates to certain real estate with the remaining lease spend primarily related to equipment.

We are continuing to evaluate the impact of this standard on our consolidated financial statements and the methods of adoption.

In May 2014, the FASB issued amended accounting guidance related to revenue recognition which is effective for us in the first quarter of fiscal 2019. This guidance is based on the principle that revenue is recognized in an amount that reflects the consideration to which an entity expects to be entitled in exchange for the transfer of goods or services to customers. The guidance also requires additional disclosure about the nature, amount, timing, and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. The FASB also subsequently issued several amendments to the standard, including clarification on principal versus agent considerations, performance obligations and licensing, and certain scope improvements and practical expedients.

During fiscal 2018 we finalized our evaluation and assessment of the amended revenue recognition guidance. Our revenue is primarily distribution revenue, which we recognize at a point in time when title transfers to customers and we have no further obligation to provide services related to such merchandise. The timing of recognition of our distribution revenue will be unchanged under the amended guidance. The adoption of the amended accounting guidance will not have a material impact on our consolidated financial statements.

In May 2017, the FASB issued final guidance that clarifies when changes to the terms or conditions of a share-based payment award must be accounted for as modifications. Entities will apply the modification accounting guidance if the value, vesting conditions or classification of the award changes. This guidance will be effective for us in the first quarter of fiscal 2019 and the impact of this new guidance is dependent on future events.

In February 2017, the FASB clarified the guidance on how to account for the derecognition of nonfinancial assets (e.g., real estate, land, buildings, intangibles) and in-substance nonfinancial assets once an entity adopts the new revenue recognition guidance that is discussed in more detail above. The guidance also defines what constitutes an in-substance nonfinancial asset. This guidance will be effective for us in the first quarter of fiscal 2019. We anticipate the adoption of this guidance will not impact our consolidated financial statements.

In January 2017, the FASB issued amended accounting guidance that simplifies the accounting for goodwill impairment by eliminating the step of measuring a goodwill impairment by estimating the implied fair value of goodwill. Instead, goodwill impairment will be measured as the amount by which the reporting unit's carrying value exceeds its fair value, limited to the carrying value of the goodwill. We adopted this guidance in the second quarter of fiscal 2018. During the fourth quarter of fiscal 2018, we measured the Medical Unit's impairment at the amount by which the reporting unit's carrying value exceeded its fair value, resulting in an impairment charge of $1.4 billion . Refer to Note 5 for further discussion.

Also in January 2017, the FASB issued new accounting guidance that changes the definition of a business when evaluating whether a set of transferred assets and activities is considered a business. This

guidance will be effective for us in the first quarter of fiscal 2019. The impact of adoption is dependent on future events.

In October 2016, the FASB issued amended accounting guidance that requires an entity to recognize the income tax effect of intercompany sales and transfers of assets other than inventory at the time that the transfer occurs rather than when the asset is sold to a third party. This amendment will be effective for us in the first quarter of fiscal 2019. We are currently evaluating the impact of this standard on our consolidated financial statements.

In August 2016, the FASB issued accounting guidance which clarifies the classification of certain cash receipts and cash payments in the statement of cash flows, including those related to contingent consideration payments made after a business combination, distributions received from equity method investees, debt prepayment or debt extinguishment costs and proceeds from the settlement of insurance claims. This guidance will be effective for us in the first quarter of fiscal 2019. We are currently evaluating the impact of this standard on our consolidated financial statements.

In June 2016, the FASB issued amended accounting guidance that will require entities to measure credit losses on trade and other receivables, held-to-maturity debt securities, loans and other instruments using an "expected credit loss" model that considers historical experience, current conditions and reasonable supportable forecasts. This guidance also requires that credit losses on available-for-sale debt securities with unrealized losses be recognized as allowances rather than as deductions in the amortized cost of the securities. This guidance will be effective for us in the first quarter of fiscal 2021. We are currently evaluating the impact of adoption on our consolidated financial statements.

2. Acquisitions

D uring fiscal 2018 , we completed several acquisitions, the most significant of which is the Patient Recovery Business described in more detail below. T he pro forma results of operations and the results of operations for acquired businesses since the acquisition dates have not been separately disclosed because the effects were not significant compared to the consolidated financial statements, individually or in the aggregate.

Patient Recovery Business

On July 29, 2017, we acquired the Patient Care, Deep Vein Thrombosis, and Nutritional Insufficiency businesses (the "Patient Recovery Business") from Medtronic plc for $6.1 billion in cash. The Patient Recovery Business manufactures 23 categories of medical products sold into multiple healthcare channels. The acquisition further expanded the Medical segment's portfolio of self-manufactured products. We closed the Patient Recovery Business acquisition in 28 principal countries on July 29, 2017, and acquired control of, for GAAP purposes, and the rights to the net economic benefit from the entire Patient Recovery Business in the remaining countries at the closing. We are in the process of transitioning legal ownership in the remaining non-principal countries, which we expect to complete in early calendar 2019.

The results for the entire Patient Recovery Business in all countries are included in the consolidated financial statements beginning July 29, 2017. We funded the acquisition through $4.5 billion in long-term debt, existing cash and borrowings under our existing credit arrangements.

Transaction and integration costs associated with the acquisition of the Patient Recovery business were $109 million during the fiscal year ended June 30, 2018 and are included in amortization and other acquisition-related costs in the consolidated statements of earnings.

Fair Value of Assets Acquired and Liabilities Assumed

The allocation of the purchase price for the acquisition of the Patient Recovery Business is not yet finalized and is subject to adjustment as we complete the valuation analysis for this acquisition.

The valuation of identifiable intangible assets utilizes significant unobservable inputs and thus represents a Level 3 nonrecurring fair value measurement. The estimated fair value of the identifiable intangible assets was determined using income-based approaches, which includes market participant expectations of the cash flows that an asset could generate over its economic life, discounted back to present value using an appropriate rate of return. The weighted- average discount rate used to arrive at the present value of the identifiable intangible assets was 8.0 percent, and considers the inherent risk of each intangible asset relative to the internal rate of return and weighted-average cost of capital.

The following table summarizes the estimated fair value of the assets acquired and liabilities assumed as of the acquisition date for the Patient Recovery Business:

(in millions)		Patient Recovery Business
Identifiable intangible assets:		
Customer relationships (1)	$	1,733
Trade names (2)		187
Developed technology and other (3)		732
Total identifiable intangible assets acquired		2,652
Cash and equivalents		22
Inventories		425
Prepaid expenses and other		252
Property and equipment, net		741
Other accrued liabilities		(322)
Deferred income taxes and other liabilities		(982)
Total identifiable net assets acquired/(liabilities assumed)		2,788
Goodwill		3,292
Total net assets acquired	**$**	**6,080**

(1) The range of useful lives for customer relationships is 10 to 18 years.

(2) The useful life of trade names is 15 years.

(3) The useful life of developed technology is 15 years.

3. Restructuring and Employee Severance

The following tables summarize restructuring and employee severance costs:

(in millions)	2018	2017	2016
Employee-related costs (1)	$ 34	$ 51	$ 15
Facility exit and other costs (2)	142	5	10
Total restructuring and employee severance	**$ 176**	$ 56	$ 25

(1) Employee-related costs primarily consist of termination benefits provided to employees who have been involuntarily terminated and duplicate payroll costs during transition periods.

(2) Facility exit and other costs primarily consist of product distribution and lease contract termination costs, accelerated depreciation, equipment relocation costs, project consulting fees and costs associated with restructuring our delivery of information technology infrastructure services.

In September 2017, we entered into an agreement to transition the distribution of our Medical segment's surgeon gloves in certain international markets from a third-party distribution arrangement to a direct distribution model. The costs with this restructuring include $125 million , on a pre-tax basis, of contract termination costs which have been paid and are reflected in facility exit and other costs in the consolidated statement of earnings during the fiscal year ended 2018.

The following table summarizes activity related to liabilities associated with restructuring and employee severance:

(in millions)	Employee-Related Costs	Facility Exit and Other Costs	Total
Balance at June 30, 2016	$ 15	$ 1	**$ 16**
Additions	43	1	**44**
Payments and other adjustments	(17)	(2)	**(19)**
Balance at June 30, 2017	41	—	**41**
Additions	19	131	**150**
Payments and other adjustments	(36)	(127)	**(163)**
Balance at June 30, 2018	**$ 24**	**$ 4**	**$ 28**

4. Divestitures and Assets Held for Sale

China Divestiture

In February 2018, we sold our pharmaceutical and medical products distribution business in China ("China distribution business") for proceeds of $861 million (after adjusting for third party indebtedness and preliminary transaction adjustments) to Shanghai Pharmaceuticals Holding Co., Ltd. The proceeds are not reflective of tax obligations due in connection with the sale, for which we have recorded a liability of $59 million . The purchase price is subject to adjustment based on working capital requirements as set forth in the definitive agreement, which would impact the loss related to this divestiture.

We determined that the sale of the China distribution business does not meet the criteria to be classified as discontinued operations. The China distribution business primarily operated within our Pharmaceutical segment, and a smaller portion operated within our Medical segment.

During the fiscal year ended 2018, we recognized a pre-tax loss of $41 million related to this divestiture.

naviHealth Assets Held for Sale

In June 2018, we entered into a Securities Purchase Agreement and related Contribution and Rollover Agreement with investor entities controlled by CD&R. Pursuant to those agreements, on August 1, 2018, we sold our 98% ownership interest in naviHealth Holdings, LLC in exchange for proceeds of $736 million (after adjusting for certain fees and expenses) and a 44% equity interest in a partnership that owns 100% of the equity interest of naviHealth. We also have certain call rights to reacquire naviHealth.

Upon signing the agreement, we met the criteria for the related assets and liabilities of naviHealth to be classified as held for sale. At June 30, 2018, we determined that the fair value less cost to sell exceeded the book value of the disposal group and there were no other indicators of asset impairment. We recognized a provisional tax benefit of $12 million related to the transaction during the three months ended June 30, 2018. See Note 8 for additional information regarding income taxes. We determined that the sale of naviHealth does not meet the criteria to be classified as discontinued operations. The naviHealth business operated within our Medical segment.

The following table presents information related to the assets and liabilities that were classified as held for sale at June 30, 2018 in the consolidated balance sheets:

(in millions)	June 30, 2018
Trade Receivables, net	**$ 74**
Goodwill and other intangibles, net	**642**
Other assets	**40**
Total assets held for sale	**$ 756**
Deferred revenue	**35**
Deferred income taxes	**38**
Other liabilities	**140**
Total liabilities related to assets held for sale	**$ 213**

5. Goodwill and Other Intangible Assets

Goodwill

The following table summarizes the changes in the carrying amount of goodwill by segment and in total:

(in millions)	Pharmaceutical (1)	Medical (2)	Total
Balance at June 30, 2016	$ 2,919	$ 4,248	**$ 7,167**
Goodwill acquired, net of purchase price adjustments	29	35	**64**
Foreign currency translation adjustments and other	(9)	(1)	**(10)**
Balance at June 30, 2017	2,939	4,282	**7,221**
Goodwill acquired, net of purchase price adjustments	1	3,342	**3,343**
Foreign currency translation adjustments and other	28	6	**34**
Goodwill divested with the sale of our China distribution business	(347)	(54)	**(401)**
naviHealth goodwill reclassified to assets held for sale	—	(509)	**(509)**
Impairment	—	(1,372)	**(1,372)**
Balance at June 30, 2018	**$ 2,621**	**$ 5,695**	**$ 8,316**

(1) At June 30, 2018 and 2017, the Pharmaceutical segment accumulated goodwill impairment loss was $829 million .

(2) At June 30, 2018 , the Medical segment accumulated goodwill impairment loss was $1.4 billion . The Medical segment had no accumulated goodwill impairment loss at June 30, 2017.

The increase in the Medical segment goodwill during fiscal 2018 is primarily due to the Patient Recovery Business acquisition. Goodwill recognized in connection with the Patient Recovery Business acquisition primarily represents the expected benefits from certain synergies of integrating the business, the existing workforce of the acquired entity, and the expected growth from new customers. See Note 2 for further discussion of this acquisition.

In conjunction with the preparation of our consolidated financial statements for fiscal 2018, we recently completed our annual quantitative goodwill impairment test, which we perform annually in the fourth quarter. This quantitative test resulted in a $1.4 billion goodwill impairment charge related to our Medical Unit, which is included in impairments and loss on disposal of assets in our consolidated statements of earnings. The impairment was primarily driven by inventory and cost challenges within our Cordis business which furthered in the fourth quarter of fiscal 2018. This impairment charge does not impact our liquidity, cash flows from operations, or compliance with debt covenants. There was no tax benefit related to the goodwill impairment charge. The goodwill balance for our Medical Unit, after recognizing the impairment, was $4.3 billion at June 30, 2018.

Using a combination of income and market-based approaches (using a discount rate of 8.5 percent), the carrying amount exceeded the fair value and resulted in an impairment of $1.4 billion for the Medical unit. Our fair value estimates utilize significant unobservable inputs and thus represent Level 3 fair value measurements.

During fiscal 2018, goodwill was also reduced by $401 million and $509 million in connection with the sale of our China distribution business and reclassification of naviHealth's assets and liabilities to held for sale, respectively.

See Note 4 for further discussion of this divestiture and assets held for sale.

Other Intangible Assets

The following tables summarize other intangible assets by class at June 30:

	2018			
(in millions)	Gross Intangible	Accumulated Amortization	Net Intangible	Weighted-Average Remaining Amortization Period (Years)
Indefinite-life intangibles:				
IPR&D, trademarks and other	**$ 62**	**$ —**	**$ 62**	**N/A**
Total indefinite-life intangibles	**62**	**—**	**62**	**N/A**
Definite-life intangibles:				
Customer relationships	**3,513**	**1,191**	**2,322**	**15**
Trademarks, trade names and patents	**667**	**246**	**421**	**15**
Developed technology and other	**1,562**	**454**	**1,108**	**12**
Total definite-life intangibles	**5,742**	**1,891**	**3,851**	**14**
Total other intangible assets	**$ 5,804**	**$ 1,891**	**$ 3,913**	**N/A**

	2017		
(in millions)	Gross Intangible	Accumulated Amortization	Net Intangible
Indefinite-life intangibles:			
IPR&D, trademarks and other	$ 61	$ —	$ 61
Total indefinite-life intangibles	61	—	61
Definite-life intangibles:			
Customer relationships	1,966	967	999
Trademarks, trade names and patents	509	195	314
Developed technology and other	916	304	612
Total definite-life intangibles	3,391	1,466	1,925
Total other intangible assets	$ 3,452	$ 1,466	$ 1,986

Total amortization of intangible assets was $574 million , $395 million and $355 million for fiscal 2018 , 2017 and 2016 , respectively. The estimated annual amortization for intangible assets for fiscal 2019 through 2023 is as follows: $529 million , $501 million , $430 million , $398 million and $348 million .

During fiscal 2018, other intangible assets were reduced by $62 million and $133 million in connection with the sale of our China distribution business and reclassification of naviHealth's assets and liabilities to held for sale, respectively.

See Note 4 for further discussions of this divestiture and assets held for sale.

6. Available-for-Sale Securities

We invest in marketable securities, which are classified as available-for-sale and are carried at fair value in the consolidated balance sheets. We held the following investments in marketable securities at fair value at June 30:

(in millions)	2018	2017
Current available-for-sale securities:		
Treasury bills	—	25
International bonds	—	3
Corporate bonds	—	30
U.S. agency bonds	—	3
Asset-backed securities	—	3
International equity securities	—	1
Total available-for-sale securities	**$ —**	$ 65

In July 2017, we liquidated our marketable securities. There were no unrealized gains or losses at June 30, 2018 and unrealized gains and losses were immaterial at June 30, 2017 . During fiscal 2018 , 2017 and 2016 , gross realized gains and losses were immaterial and we did not recognize any other-than-temporary-impairments.

7. Long-Term Obligations and Other Short-Term Borrowings

The following table summarizes long-term obligations and other short-term borrowings at June 30:

(in millions) (1)	2018	2017
1.7% Notes due 2018	**$ —**	$ 400
1.95% Notes due 2018	**—**	547
1.948% Notes due 2019	**998**	996
2.4% Notes due 2019	**448**	453
4.625% Notes due 2020	**514**	519
2.616% Notes due 2022	**1,143**	1,142
3.2% Notes due 2022	**243**	248
Floating Rate Notes due 2022	**348**	347
3.2% Notes due 2023	**525**	544
3.079% Notes due 2024	**742**	744
3.5% Notes due 2024	**390**	396
3.75% Notes due 2025	**460**	481
3.41% Notes due 2027	**1,340**	1,340
4.6% Notes due 2043	**346**	346
4.5% Notes due 2044	**342**	341
4.9% Notes due 2045	**445**	445
4.368% Notes due 2047	**594**	594
7.0% Debentures due 2026	**124**	124
Other obligations	**11**	388
Total	**9,013**	10,395
Less: current portion of long-term obligations and other short-term borrowings	**1,001**	1,327
Long-term obligations, less current portion	**$ 8,012**	$ 9,068

(1) Maturities are presented on a calendar year basis.

Maturities of existing long-term obligations and other short-term borrowings for fiscal 2019 through 2023 and thereafter are as follows: $1.0 billion , $452 million , $516 million , $1.7 billion , $526 million and $4.8 billion .

Long-Term Debt

All the notes represent unsecured obligations of Cardinal Health, Inc. and rank equally in right of payment with all of our existing and future unsecured and unsubordinated indebtedness. The 7.0% Debentures represent unsecured obligations of Allegiance Corporation (a wholly-owned subsidiary), which Cardinal Health, Inc. has guaranteed. None of these obligations are subject to a sinking fund and the Allegiance obligations are not redeemable prior to maturity. Interest is paid pursuant to the terms of the obligations. These notes are effectively subordinated to the liabilities of our subsidiaries, including trade payables of $19.7 billion .

In June 2018, we repaid the full principal of the 1.95% Notes due 2018 at maturity for $550 million . In July 2017, we redeemed the 1.7% Notes due 2018 early in full with a portion of the proceeds from the June 2017 issuance for $400 million .

In June 2017, we issued additional debt with the aggregate principal amount of $5.2 billion to fund a portion of the acquisition of the Patient Recovery Business from Medtronic, which closed on July 29, 2017 , to redeem the 1.7% Notes due 2018 and for general corporate purposes. The notes issued in conjunction with the acquisition are 1.948% Notes due 2019, 2.616% Notes due 2022, 3.079% Notes due 2024, 3.41% Notes due 2027, 4.368% Notes due 2047, and floating rate Notes due 2022. The amount of the notes issued net of discounts, premiums, mark-to-market of any interest rate swaps and debt issuance costs was $5.2 billion .

If we undergo a change of control, as defined in the notes, and if the notes receive specified ratings below investment grade by each of Standard & Poors Ratings Services, Moody's Investors Services and Fitch Ratings, any holder of the notes, excluding the debentures, can require with respect to the notes owned by such holder, or we can offer, to repurchase the notes at 101% of the principal amount plus accrued and unpaid interest.

Other Financing Arrangements

In addition to cash and equivalents and operating cash flow, other sources of liquidity include a $2.0 billion revolving credit facility and a $1.0 billion committed receivables sales facility program, which we increased in August 2017 from $1.75 billion to $2.0 billion . In November 2016, we renewed our committed receivables sales facility program through Cardinal Health Funding, LLC ("CHF") through November 1, 2019. CHF was organized for the sole purpose of buying receivables and selling undivided interests in those receivables to third-party purchasers. Although consolidated with Cardinal Health, Inc. in accordance with GAAP, CHF is a separate legal entity from Cardinal Health, Inc. and from our subsidiary that sells receivables to CHF. CHF is designed to be a special purpose, bankruptcy-remote entity whose assets are available solely to satisfy the claims of its creditors.

We also maintain a $2.0 billion commercial paper program backed by a $2.0 billion revolving credit facility. At June 30, 2018 , we had no amounts outstanding under the revolving credit facility; however, availability was reduced by outstanding letters of credit of $24 million and $20 million at June 30, 2018 and 2017 , respectively. We also had no amounts outstanding under the committed receivables sales facility program; however, availability was reduced by outstanding standby letters of credit of $34 million and $46 million at June 30, 2018 and 2017 , respectively. Under our commercial paper and committed receivables programs, we had a maximum amount outstanding of $1.7 billion and an average daily amount outstanding of $277 million during fiscal 2018 . We had no amounts outstanding under the commercial paper program as of June 30, 2018 .

Our revolving credit facility and committed receivables sales facility program require us to maintain, as of the end of any calendar quarter, a consolidated leverage ratio of no more than 4.25 -to-1, which will reduce to 3.25-to-1 in March 2019. As of June 30, 2018 , we were in compliance with these financial covenants.

We also maintain other short-term credit facilities and an unsecured line of credit that allowed for borrowings up to $8 million and $690 million at June 30, 2018 and 2017 , respectively. The $11 million and $388 million balance of other obligations at June 30, 2018 and 2017 , respectively, consisted of short-term borrowings and capital leases.

In fiscal 2018 we sold our China distribution business, including its debt which was $378 million as of June 30, 2017. See Note 4 for further discussion of this divestiture.

8. Income Taxes

Earnings/(loss) before Income Taxes and Provision for Income Taxes
The following table summarizes earnings/(loss) before income taxes:

(in millions)	2018	2017	2016
U.S. operations	$ 391	$ 1,772	$ 2,050
Non-U.S. operations	(619)	152	226
Earnings/(loss) before income taxes	$ (228)	$ 1,924	$ 2,276

The following table summarizes the components of provision for/(benefit from) income taxes:

(in millions)	2018	2017	2016
Current:			
Federal	$ 341	$ 273	$ 633
State and local	41	10	52
Non-U.S.	143	56	73
Total current	$ 525	$ 339	$ 758
Deferred:			
Federal	$ (1,003)	$ 258	$ 96
State and local	16	37	12
Non-U.S.	(25)	(4)	(21)
Total deferred	(1,012)	291	87
Provision for/(benefit from) income taxes	$ (487)	$ 630	$ 845

Effective Tax Rate

The following table presents a reconciliation of the provision based on the federal statutory income tax rate to our effective income tax rate:

	2018 (1)	2017 (2)	2016 (2)
Provision at Federal statutory rate	**28.1 %**	35.0 %	35.0 %
State and local income taxes, net of federal benefit	**(16.0)**	1.0	1.5
Foreign tax rate differential	**(48.4)**	(7.3)	(0.6)
Nondeductible/nontaxable items	**(10.2)**	0.2	1.0
Goodwill impairment	**(124.7)**	—	—
Tax Act	**410.9**	—	—
Capital loss	**71.4**	—	—
Change in valuation allowances	**(76.9)**	7.7	0.1
Foreign tax credits	**27.3**	(1.6)	(0.1)
China tax related to divestiture	**(25.8)**	—	—
Other	**(21.9)**	(2.3)	0.2
Effective income tax rate	**213.8 %**	32.7 %	37.1 %

(1) The effective income tax rate for fiscal 2018 represents an income tax benefit tax rate.

(2) The effective income tax rates for fiscal 2017 and 2016 represents income tax expense tax rates.

The income tax benefit rate in fiscal 2018 was 213.8% compared to income tax expense rates of 32.7% in fiscal 2017 and 37.1% in fiscal 2016. Fluctuations in the effective tax rates are primarily due to net benefits from the enactment of the Tax Act, the impact of nondeductible goodwill impairment charges, and a benefit from a capital loss due to international legal entity reorganization. There were also changes in valuation allowances related to capital losses, credit carryforwards and net operating loss carryforwards in U.S. federal, U.S. state and international jurisdictions.

On December 22, 2017, the United States enacted the Tax Act. The Tax Act makes broad and complex changes to the U.S. tax code that affect our fiscal year 2018 financial results in two primary ways. First, effective as of January 1, 2018, the Tax Act reduces the U.S. federal corporate tax rate from 35 percent to 21 percent. Second, it requires companies to pay a one-time U.S. repatriation tax on certain undistributed earnings of foreign subsidiaries. Because our fiscal year ends in June, we have a blended U.S. Federal statutory tax rate for fiscal 2018 of 28.1 percent under the Tax Act. The Tax Act also establishes new tax provisions that will affect us beginning July 1, 2018 including, (1) eliminating the U.S. manufacturing deduction; (2) establishing new limitations on deductible interest expense and certain executive compensation; (3) eliminating the corporate alternative minimum tax; (4) creating the base erosion anti-abuse tax; (5) creating a new provision designed to tax global intangible low-tax income ("GILTI"); (6) generally eliminating U.S. federal income taxes on dividends from foreign subsidiaries; and (7) changing rules related to uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017.

Regarding the new GILTI tax rules, we are allowed to make an accounting policy election to either (1) treat taxes due on future GILTI exclusions in U.S. taxable income as a current period expense when incurred or (2) reflect such portion of the future GILTI exclusions in U.S. taxable income that relate to existing basis differences in our measurement of deferred taxes. Our analysis of the new GILTI rules and how they may impact us is incomplete. Accordingly, we have not made a policy election regarding the treatment of the GILTI tax.

As a result of the enactment of a lower tax rate, we remeasured our U.S. deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future. While we are still analyzing certain aspects of the Tax Act and refining our calculations, we have recorded a provisional net benefit of $977 million related to this required remeasurement. The provisional estimate is based on currently available information related to deferred tax assets and liabilities which is subject to change as additional information becomes available, prepared, and analyzed.

At June 30, 2018 , we had $110 million of undistributed earnings from non-U.S. subsidiaries. In connection with the required one-time U.S. repatriation tax on undistributed earnings of foreign subsidiaries, we recorded a provisional tax expense of $41 million which may change when our calculation is complete. The Tax Act permits the payment of this tax in eight installments over an eight-year period beginning in fiscal 2019. Though these foreign earnings have been deemed to be repatriated from a U.S. federal tax perspective, we have not yet completed our assessment of the Tax Act on our plans to reinvest foreign earnings and as such have not changed our prior conclusion that the earnings are indefinitely reinvested. The repatriation tax is based on currently available information and technical guidance related to the new tax law. The provisional estimate will be updated when additional information related to undistributed foreign earnings, foreign taxes and foreign cash and equivalents becomes available, prepared and analyzed.

Our effective tax rate was unfavorably impacted by goodwill impairment charges related to our Medical operating segment for the portion attributable to nondeductible goodwill for income tax purposes.

On June 28, 2018, we executed an international legal entity reorganization. This transaction resulted in a US capital loss and a tax benefit of $163 million . Due to the uncertainty of the future utilization of the capital loss, we recorded a valuation allowance of $72 million on the carryforward.

We had other changes in valuation allowances related to federal credits and various international and state net operating losses that we believe are more likely than not to expire unutilized.

Deferred Income Taxes

Deferred income taxes arise from temporary differences between financial reporting and tax reporting bases of assets and liabilities and operating loss and tax credit carryforwards for tax purposes.

The following table presents the components of the deferred income tax assets and liabilities at June 30:

(in millions)	2018	2017
Deferred income tax assets:		
Receivable basis difference	**$ 41**	$ 42
Accrued liabilities	**110**	125
Share-based compensation	**40**	53
Loss and tax credit carryforwards	**526**	378
Deferred tax assets related to uncertain tax positions	**30**	51
Other	**101**	43
Total deferred income tax assets	**848**	692
Valuation allowance for deferred income tax assets	**(412)**	(237)
Net deferred income tax assets	**$ 436**	$ 455
Deferred income tax liabilities:		
Inventory basis differences	**$ (1,103)**	$ (1,578)
Property-related	**(176)**	(183)
Goodwill and other intangibles	**(934)**	(570)
Total deferred income tax liabilities	$ (2,213)	$ (2,331)
Net deferred income tax liability	**$ (1,777)**	$ (1,876)

Deferred income tax assets and liabilities in the preceding table, after netting by taxing jurisdiction, are in the following captions in the consolidated balance sheets at June 30:

(in millions)	2018	2017
Noncurrent deferred income tax asset (1)	**37**	73
Noncurrent deferred income tax liability (2)	**(1,814)**	(1,949)
Net deferred income tax liability	**$ (1,777)**	$ (1,876)

(1) Included in other assets in the consolidated balance sheets.

(2) Included in deferred income taxes and other liabilities in the consolidated balance sheets.

At June 30, 2018 we had gross federal, state and international loss and credit carryforwards of $794 million , $2.0 billion and $1.1 billion , respectively, the tax effect of which is an aggregate deferred tax asset of $526 million . Substantially all of these carryforwards are available for at least three years. Approximately $379 million of the valuation allowance at June 30, 2018 applies to certain federal, state and international loss carryforwards that, in our opinion, are more likely than not to expire unutilized. However, to the extent that tax benefits related to these carryforwards are realized in the future, the reduction in the valuation allowance would reduce income tax expense.

Unrecognized Tax Benefits

We had $423 million , $417 million and $527 million of unrecognized tax benefits at June 30, 2018 , 2017 and 2016 , respectively. The June 30, 2018 , 2017 and 2016 balances include $262 million , $268 million and $355 million , respectively, of unrecognized tax benefits that, if recognized, would have an impact on the effective tax rate. The remaining unrecognized tax benefits relate to tax positions for which ultimate deductibility is highly certain but for which there is uncertainty as to the timing of such deductibility. Recognition of these tax benefits would not affect our effective tax rate. We include the full amount of unrecognized tax benefits in deferred income taxes and other liabilities in the consolidated balance sheets. The following table presents a reconciliation of the beginning and ending amounts of unrecognized tax benefits:

(in millions)	2018	2017	2016
Balance at beginning of fiscal year	**$ 417**	$ 527	$ 542
Additions for tax positions of the current year	**15**	29	22
Additions for tax positions of prior years (1)	**141**	23	42
Reductions for tax positions of prior years	**(40)**	(8)	(48)
Settlements with tax authorities (1)	**(99)**	(154)	(30)
Expiration of the statute of limitations (1)	(11)	—	(1)
Balance at end of fiscal year	**$ 423**	$ 417	$ 527

(1) Included in additions for tax positions of prior years is $110 million related to exposures acquired as part of the Patient Recovery Business for which we are indemnified. Settlements of $81 million related to the Patient Recovery Business as well as $11 million of statute expirations.

It is reasonably possible that there could be a change in the amount of unrecognized tax benefits within the next 12 months due to activities of the U.S. Internal Revenue Service ("IRS") or other taxing authorities, possible settlement of audit issues, reassessment of existing unrecognized tax benefits or the expiration of statutes of limitations. We estimate that the range of the possible change in unrecognized tax benefits within the next 12 months is a net decrease of $0 million to $35 million , exclusive of penalties and interest.

We recognize accrued interest and penalties related to unrecognized tax benefits in the provision for income taxes. At June 30, 2018 , 2017 and 2016 , we had $110 million , $99 million and $145 million , respectively, accrued for the payment of interest and penalties. These balances are gross amounts before any tax benefits and are included in deferred income taxes and other liabilities in the consolidated balance sheets. During fiscal 2018 and 2017, we recognized $8 million and $12 million of expense for interest and penalties in income tax expense, respectively. During fiscal 2016 , we recognized $9 million of benefit for interest and penalties in income tax expense.

Other Tax Matters

We file income tax returns in the U.S. federal jurisdiction, various U.S. state and local jurisdictions, and various foreign jurisdictions. With few exceptions, we are subject to audit by taxing authorities for fiscal years 2008 through the current fiscal year.

We are a party to a tax matters agreement with CareFusion Corporation ("CareFusion"), which has been acquired by Becton, Dickinson and Company. Under the tax matters agreement, CareFusion is obligated to indemnify us for certain tax exposures and transaction taxes prior to our fiscal 2010 spin-off of CareFusion. The indemnification receivable was $151 million and $142 million at June 30, 2018 and 2017 , respectively, and is included in other assets in the consolidated balance sheets.

As a result of the acquisition of the Patient Recovery Business, Medtronic plc is obligated to indemnify us for certain tax exposures and transaction taxes related to periods prior to the acquisition under the purchase agreement. The indemnification receivable was $21 million at June 30, 2018 and is included in Other assets in the consolidated balance sheet.

9. Commitments, Contingent Liabilities and Litigation

Commitments

Operating Leases

The future minimum rental payments for operating leases having initial or remaining non-cancelable lease terms in excess of one year at June 30, 2018 for fiscal 2019 through 2023 and thereafter are as follows: $113 million , $97 million , $77 million , $58 million , $41 million and $103 million . Rental expense relating to operating leases was $172 million , $159 million and $126 million in fiscal 2018 , 2017 and 2016 , respectively. Sublease rental income was immaterial for all periods presented.

Generic Sourcing Venture With CVS Health Corporation

Red Oak Sourcing, LLC ("Red Oak Sourcing") is a U.S.-based generic pharmaceutical sourcing venture with CVS Health for an initial term through June 2024. Red Oak Sourcing negotiates generic pharmaceutical supply contracts on behalf of its participants. Due to the achievement of predetermined milestones, we are required to make quarterly payments of $45.6 million to CVS Health for the initial term.

Contingencies

New York Opioid Stewardship Act

In April 2018, the State of New York passed a budget which included the Opioid Stewardship Act (the "OSA"). The OSA created an aggregate $100 million annual assessment on all manufacturers and distributors licensed to sell or distribute opioids in New York. Each licensed manufacturer and distributor will be required to pay a portion of the assessment based on its ratable share, as determined by the state, of the total morphine milligram equivalents sold or distributed in New York during the applicable calendar year. The initial payment is due on January 1, 2019 for opioids sold or distributed during calendar year 2017.

We accrue for contingencies if it is probable that a liability has been incurred and the amount can be reasonably estimated. At this time, we believe that it is probable that we owe an amount under the OSA for calendar years 2017 and 2018, but we are unable to estimate the amount because of uncertainties with respect to the implementation of the assessment and because the information necessary to determine our share of the assessment is not yet available.

Legal Proceedings

We become involved from time to time in disputes, litigation and regulatory matters.

We may be named from time to time in *qui tam* actions initiated by private third parties. In such actions, the private parties purport to act on behalf of federal or state governments, allege that false claims have been submitted for payment by the government and may receive an award if their claims are successful. After a private party has filed a *qui tam* action, the government must investigate the private party's claim and determine whether to intervene in and take control over the litigation. These actions may remain under seal while the government makes this determination. If the government declines to intervene, the private party may nonetheless continue to pursue the litigation on his or her own purporting to act on behalf of the government .

From time to time, we become aware through employees, internal audits or other parties of possible compliance matters, such as complaints or concerns relating to accounting, internal accounting controls, financial reporting, auditing, or other ethical matters or relating to compliance with laws such as healthcare fraud and abuse, anti-corruption or anti-bribery laws. When we become aware of such possible compliance matters, we investigate internally and take appropriate corrective action. In addition, from time to time, we receive subpoenas or requests for information from various federal or state agencies relating to our business or to the business of a customer, supplier or other industry participants. Internal investigations, subpoenas or requests for information could lead to the assertion of claims or the commencement of legal proceedings against us or result in sanctions.

From time to time, we may determine that products we manufacture or market do not meet our specifications, regulatory requirements, or published standards. When we or a regulatory agency identify a potential quality or regulatory issue, we investigate and take appropriate corrective action. Such actions can lead to product recalls, costs to repair or replace affected products, temporary interruptions in product sales, action by regulators and product liability claims and lawsuits, including class actions. Even absent an identified regulatory or quality issue or product recall, we can become subject to product liability claims and lawsuits.

We accrue for contingencies related to disputes, litigation and regulatory matters if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Because these matters are inherently unpredictable and unfavorable developments or resolutions can occur, assessing contingencies is highly subjective and requires judgments about future events. We regularly review contingencies to determine whether our accruals and related disclosures are adequate. The amount of ultimate loss may differ from these estimates.

We recognize income from the favorable outcome of litigation when we receive the associated cash or assets.

We recognize estimated loss contingencies for certain litigation and regulatory matters and income from favorable resolution of litigation in litigation (recoveries)/charges in our consolidated statements of earnings.

Opioid Lawsuits

Pharmaceutical wholesale distributors, including us, have been named as defendants in over 1,000 lawsuits relating to the distribution of prescription opioid pain medications. These lawsuits have been filed in various federal, state, and other courts by a variety of plaintiffs, which are primarily counties, municipalities and political subdivisions from 48 states. Plaintiffs also include state attorneys general, unions and other health and welfare funds, hospital systems and other healthcare providers. Of these lawsuits, 32 are purported class actions. The lawsuits seek equitable relief and monetary damages based on a variety of legal theories including various common law claims, such as negligence, public nuisance, unjust enrichment as well as violations of controlled substance laws and various other

statutes. Many also name pharmaceutical manufacturers, retail pharmacy chains and other entities as defendants.

The vast majority of these lawsuits have been filed in U.S. federal court and have been transferred for consolidated pre-trial proceedings in a Multi-District Litigation proceeding in the United States District Court for the Northern District of Ohio. The court, among other things, ordered that three lawsuits proceed to trial in 2019 depending on the outcome of pre-trial motions. As a part of these proceedings, distributors have engaged in preliminary discussions with various parties, including state attorneys general, regarding possible resolution structures.

In addition, 39 state attorneys general have formed a multi-state task force to investigate the manufacturing, distribution, dispensing and prescribing practices of opioid medications. We have received requests related to this multi-state investigation, as well as civil investigative demands, subpoenas or requests for information from these and other state attorneys general offices. We are cooperating with the offices conducting these investigations.

We are vigorously defending ourselves in all of these opioid matters. Since all of the above-referenced lawsuits and investigations are in early stages, we are unable to predict their outcome or estimate a range of reasonably possible losses.

Product Liability Lawsuits

As of August 20, 2018, we are named as a defendant in 174 product liability lawsuits filed in Alameda County Superior Court in California involving claims by approximately 1,918 plaintiffs that allege personal injuries associated with the use of Cordis OptEase and TrapEase inferior vena cava (IVC) filter products. Another 20 lawsuits involving similar claims by approximately 21 plaintiffs are pending in other jurisdictions. These lawsuits seek a variety of remedies, including unspecified monetary damages. We are vigorously defending ourselves in these lawsuits.

At June 30, 2018, we had a total of $259 million , net of expected insurance recoveries, accrued for losses and legal defense costs related to the Cordis IVC filter lawsuits. While we have recorded accruals based on our assessment of these matters, because these lawsuits are in early stages, we are unable to estimate a range of reasonably possible losses in excess of this accrued amount.

10. Guarantees

In the ordinary course of business, we agree to indemnify certain other parties under acquisition and disposition agreements, customer agreements, intellectual property licensing agreements, and other agreements. Such indemnification obligations vary in scope and, when defined, in duration. In many cases, a maximum obligation is not explicitly stated, and therefore the overall maximum amount of the liability under such indemnification obligations cannot be reasonably estimated. Where appropriate, such indemnification obligations are recorded as a liability. Historically, we have not, individually or in the aggregate, made payments under these indemnification obligations in any material amounts. In certain circumstances, we believe that existing insurance arrangements, subject to the general deduction and exclusion provisions, would cover portions of the liability that may arise from these indemnification obligations. In addition, we believe that the likelihood of a material liability being triggered under these indemnification obligations is not probable.

From time to time we enter into agreements that obligate us to make fixed payments upon the occurrence of certain events. Such obligations primarily relate to obligations arising under acquisition transactions, where we have agreed to make payments based upon the achievement of certain financial performance measures by the acquired business. Generally, the obligation is capped at an explicit amount. See Note 11 for detail regarding contingent consideration obligations.

11. Fair Value Measurements

The following tables present the fair values for assets and (liabilities) measured on a recurring basis at June 30:

	2018			
(in millions)	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	$ 200	$ —	$ —	$ 200
Other investments (2)	117	—	—	117
Liabilities:				
Contingent consideration (3)	—	—	(1)	(1)
Forward contracts (4)	—	(76)	—	(76)

	2017			
(in millions)	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	$ 739	$ —	$ —	$ 739
Available-for-sale securities (1)	—	65	—	65
Other investments (2)	116	—	—	116
Liabilities:				
Contingent consideration (3)	—	—	(32)	(32)
Forward contracts (4)	—	(21)	—	(21)

(1) We invest in marketable securities, which are classified as available-for-sale and are carried at fair value in the consolidated balance sheets. Observable Level 2 inputs such as quoted prices for similar securities, interest rate spreads, yield curves and credit risk are used to determine the fair value. See Note 6 for additional information regarding available-for-sale securities.

(2) Level 1 other investments balance includes investments in mutual funds, which are used to offset fluctuations in deferred compensation liabilities. These mutual funds primarily invest in the equity securities of companies with large market capitalization and high quality fixed income debt securities. The fair value of these investments is determined using quoted market prices.

(3) Contingent consideration represents the obligations incurred in connection with acquisitions. We do not deem the fair value of the contingent consideration obligations under any single acquisition to be significant. The estimate of fair value of the contingent consideration obligations requires subjective assumptions to be made regarding future business results, discount rates, discount periods, and probabilities assigned to various potential business result scenarios and was determined using probability assessments with respect to the likelihood of reaching various targets or of achieving certain milestones. The fair value measurement is based on significant inputs unobservable in the market and thus represents a Level 3 measurement. Changes in current expectations of progress could change the probability of achieving the targets within the measurement periods and result in an increase or decrease in the fair value of the contingent consideration obligation.

(4) The fair value of interest rate swaps, foreign currency contracts and commodity contracts is determined based on the present value of expected future cash flows considering the risks involved, including non-performance risk, and using discount rates appropriate for the respective maturities. Observable Level 2 inputs are used to determine the present value of expected future cash flows. The fair value of these derivative contracts, which are subject to master netting arrangements under certain circumstances, is presented on a gross basis in the consolidated balance sheets.

The following table presents those liabilities measured at fair value on a recurring basis using unobservable inputs (Level 3):

(in millions)	Contingent Consideration Obligation
Balance at June 30, 2016	$ 19
Additions from acquisitions	21
Changes in fair value of contingent consideration (1)	(5)
Payment of contingent consideration	(3)
Balance at June 30, 2017	32
Additions from acquisitions	5
Changes in fair value of contingent consideration (1)	(2)
Payment of contingent consideration	(35)
Balance at June 30, 2018	**$ 1**

The sum of the components may not equal the total due to rounding.

(1) Amount is included in amortization and other acquisition-related costs in the consolidated statements of earnings.

12. Financial Instruments

We utilize derivative financial instruments to manage exposure to certain risks related to our ongoing operations. The primary risks managed through the use of derivative instruments include interest rate risk, currency exchange risk, and commodity price risk. We do not use derivative instruments for trading or speculative purposes. While the majority of our derivative instruments are designated as hedging instruments, we also enter into derivative instruments that are designed to hedge a risk, but are not designated as hedging instruments. These derivative instruments are adjusted to current fair value through earnings at the end of each period.

We are exposed to counterparty credit risk on all of our derivative instruments. Accordingly, we have established and maintain strict counterparty credit guidelines and only enter into derivative instruments with major financial institutions that are investment grade or better. We do not have significant exposure to any one counterparty and we believe the risk of loss is remote. Additionally, we do not require collateral under these agreements.

Interest Rate Risk Management

We are exposed to the impact of interest rate changes. Our objective is to manage the impact of interest rate changes on cash flows and the market value of our borrowings. We utilize a mix of debt maturities along with both fixed-rate and variable-rate debt to manage changes in interest rates. In addition, we enter into interest rate swaps to further manage our exposure to interest rate variations related to our borrowings and to lower our overall borrowing costs.

Currency Exchange Risk Management

We conduct business in several major international currencies and are subject to risks associated with changing foreign exchange rates. Our objective is to reduce earnings and cash flow volatility associated with foreign exchange rate changes to allow management to focus its attention on business operations. Accordingly, we enter into various contracts that change in value as foreign exchange rates change to protect the value of existing foreign currency assets and liabilities, commitments and anticipated foreign currency revenue and expenses.

Commodity Price Risk Management

We are exposed to changes in the price of certain commodities. Our objective is to reduce earnings and cash flow volatility associated with forecasted purchases of these commodities to allow management to focus its attention on business operations. Accordingly, we enter into derivative contracts when possible to manage the price risk associated with certain forecasted purchases.

The following table summarizes the fair value of our assets and liabilities related to derivatives designated as hedging instruments and the respective line items in which they were recorded in the consolidated balance sheets at June 30:

(in millions)	2018	2017
Assets:		
Foreign currency contracts (1)	**$ 3**	$ 3
Commodity contracts (1)	**2**	—
Total assets	**$ 5**	$ 3
Liabilities:		
Foreign currency contracts (3)	**$ 3**	$ 2
Pay-floating interest rate swaps (2)	**78**	19
Pay-floating interest rate swaps (3)	**$ —**	$ 2
Commodity contracts (3)	**—**	1
Total liabilities	**$ 81**	$ 24

(1) Included in prepaid expenses and other in the consolidated balance sheets.
(2) Included in deferred income taxes and other liabilities in the consolidated balance sheets.
(3) Included in other accrued liabilities in the consolidated balance sheets.

Fair Value Hedges

We enter into pay-floating interest rate swaps to hedge the changes in the fair value of fixed-rate debt resulting from fluctuations in interest rates. These contracts are designated and qualify as fair value hedges. Accordingly, the gain or loss recorded on the pay-floating interest rate swaps is directly offset by the change in fair value of the underlying debt. Both the derivative instrument and the underlying debt are adjusted to market value at the end of each period with any resulting gain or loss recorded in interest expense, net in the consolidated statements of earnings.

During fiscal 2018 and 2017 we entered into pay-floating interest rate swaps with total notional amounts of $1.1 billion and $700 million , respectively. These swaps have been designated as fair value hedges of our fixed rate debt and are included in deferred income taxes and other liabilities in the consolidated balance sheets.

During fiscal 2017 we terminated notional amounts of $600 million of pay-floating interest rate swaps that were previously designated as fair value hedges. During fiscal 2018 and 2017 , $550 million and $250 million , respectively, of pay-floating interest rate swaps matured.

The following tables summarize the outstanding interest rate swaps designated as fair value hedges at June 30:

	2018	
(in millions)	Notional Amount	Maturity Date
Pay-floating interest rate swaps	$ 2,313	Nov 2019 - Sep 2025

	2017	
(in millions)	Notional Amount	Maturity Date
Pay-floating interest rate swaps	$ 1,813	Jun 2018 - Sep 2025

The following table summarizes the gain/(loss) recognized in earnings for interest rate swaps designated as fair value hedges:

(in millions)	2018	2017	2016
Pay-floating interest rate swaps (1)	$ 11	$ 17	$ 23
Fixed-rate debt (1)	(11)	(17)	(23)

(1) Included in interest expense, net in the consolidated statements of earnings.

There was no ineffectiveness associated with these derivative instruments for any periods presented.

Cash Flow Hedges

We enter into derivative instruments to hedge our exposure to changes in cash flows attributable to interest rate, foreign currency and commodity price fluctuations associated with certain forecasted transactions. These derivative instruments are designated and qualify as cash flow hedges. Accordingly, the effective portion of the gain or loss on the derivative instrument is reported as a component of other comprehensive income and reclassified into earnings in the same line item associated with the forecasted transaction and in the same period during which the hedged transaction affects earnings. The ineffective portion of the gain or loss on the derivative instrument is recognized in earnings immediately.

During fiscal 2017 we entered into forward interest rate swaps with a total notional amount of $700 million to hedge probable, but not firmly committed, future transactions associated with our debt.

During fiscal 2017 we terminated $1.0 billion in forward interest rate swaps that were previously designated as cash-flow hedges.

We enter into foreign currency contracts to protect the value of anticipated foreign currency revenues and expenses. At June 30, 2018 and 2017 , we held contracts to hedge probable, but not firmly committed, revenue and expenses. The principal currencies hedged are the Canadian dollar, Thai baht, Euro, and Mexican peso.

We enter into commodity contracts to manage the price risk associated with forecasted purchases of certain commodities used in our Medical segment.

The following tables summarize the outstanding cash flow hedges at June 30:

	2018	
(in millions)	Notional Amount	Maturity Date
Foreign currency contracts	$ 124	Jul 2018 - Jun 2019
Commodity contracts	12	Jul 2018 - Oct 2020

	2017	
(in millions)	Notional Amount	Maturity Date
Foreign currency contracts	$ 162	Jul 2017 - Jun 2018
Commodity contracts	17	Jul 2017 - Apr 2020

The following table summarizes the gain/(loss) included in AOCI for derivative instruments designated as cash flow hedges at June 30:

(in millions)	2018	2017
Commodity contracts	2	(1)
Foreign currency contracts	(2)	—

The following table summarizes the gain/(loss) reclassified from AOCI into earnings for derivative instruments designated as cash flow hedges:

(in millions)	2018	2017	2016
Foreign currency contracts (1)	$ 1	$ (1)	$ 1
Foreign currency contracts (2)	—	(1)	5
Foreign currency contracts (3)	(2)	2	(3)
Commodity contracts (3)	—	(3)	(5)

(1) Included in revenue in the consolidated statements of earnings.

(2) Included in cost of products sold in the consolidated statements of earnings.

(3) Included in SG&A expenses in the consolidated statements of earnings.

The amount of ineffectiveness associated with these derivative instruments was immaterial for all periods presented.

Economic (Non-Designated) Hedges

We enter into foreign currency contracts to manage our foreign exchange exposure related to sales transactions, intercompany financing transactions and other balance sheet items subject to revaluation that do not meet the requirements for hedge accounting treatment. Accordingly, these derivative instruments are adjusted to current market value at the end of each period through earnings. The gain or loss recorded on these instruments is substantially offset by the remeasurement adjustment on the foreign currency denominated asset or liability. The settlement of the derivative instrument and the remeasurement adjustment on the foreign currency denominated asset or liability are both recorded in other (income)/expense, net. The principal currencies managed through foreign currency contracts are the Euro, Canadian dollar, British pound, Japanese yen, and Chinese renminbi.

The following tables summarize the outstanding economic (non-designated) derivative instruments at June 30:

	2018	
(in millions)	Notional Amount	Maturity Date
Foreign currency contracts	$ 550	Jul 2018 - Jun 2019

	2017	
(in millions)	Notional Amount	Maturity Date
Foreign currency contracts	$ 558	Jul 2017

The following table summarizes the gain/(loss) recognized in earnings for economic (non-designated) derivative instruments:

(in millions)	2018	2017	2016
Foreign currency contracts (1)	**$ (5)**	$ (5)	$ (17)

(1) Included in other income, net in the consolidated statements of earnings.

Fair Value of Financial Instruments

The carrying amounts of cash and equivalents, trade receivables, net, accounts payable, and other accrued liabilities at June 30, 2018 and 2017 approximate fair value due to their short-term maturities.

The following table summarizes the estimated fair value of our long-term obligations and other short-term borrowings compared to the respective carrying amounts at June 30:

(in millions)	2018	2017
Estimated fair value	**$ 8,852**	$ 10,713
Carrying amount	**9,013**	10,395

The fair value of our long-term obligations and other short-term borrowings is estimated based on either the quoted market prices for the same or similar issues or other inputs derived from available market information, which represents a Level 2 measurement.

The following table is a summary of the fair value gain/(loss) of our derivative instruments based upon the estimated amount that we would receive (or pay), considering counter-party credit risk, to terminate the contracts at June 30:

	2018		2017	
(in millions)	**Notional Amount**	**Fair Value Gain/(Loss)**	Notional Amount	Fair Value Gain/(Loss)
Pay-floating interest rate swaps	**$ 2,313**	**$ (78)**	$ 1,813	$ (19)
Foreign currency contracts	**674**	**—**	720	1
Commodity contracts	**12**	**—**	17	(1)

13. Redeemable Noncontrolling Interests

In connection with the acquisition of a 71 percent ownership interest in naviHealth during fiscal 2016 , we recognized redeemable noncontrolling interests with a fair value of $119 million at the acquisition date.

In August 2017, certain third-party noncontrolling interest holders exercised their put right on the noncontrolling interest representing 16 percent of naviHealth with a redemption value of $ 103 million and a carrying value of $ 109 million . We settled the put in September 2017 and our ownership in naviHealth increased to 98 percent , up from 82 percent at June 30, 2017 and 2016.

In June 2018, we entered into a Securities Purchase Agreement and related Contribution and Rollover Agreement to sell our 98 percent ownership interest in naviHealth, which closed on August 1, 2018. See Note 4 and Note 19 for more information.

The reconciliation of the changes in redeemable noncontrolling interests are as follows:

(in millions)	**Redeemable Noncontrolling Interests**
Balance at June 30, 2016	$ 117
Net earnings attributable to redeemable noncontrolling interests	4
Net purchase of redeemable noncontrolling interests	(3)
Balance at June 30, 2017	118
Net earnings attributable to redeemable noncontrolling interest	2
Net purchase of redeemable noncontrolling interests	(103)
Adjustment of redeemable noncontrolling interests to redemption value	(5)
Balance at June 30, 2018	**$ 12**

14. Shareholders' Equity

At June 30, 2018 and 2017 , authorized capital shares consisted of the following: 750 million Class A common shares, without par value; 5 million Class B common shares, without par value; and 500 thousand non-voting preferred shares, without par value. The Class A common shares and Class B common shares are collectively referred to below as “common shares”. Holders of common shares are entitled to share equally in any dividends declared by the Board of Directors and to participate equally in all distributions of assets upon liquidation. Generally, the holders of Class A common shares are entitled to one vote per share, and the holders of Class B common shares are entitled to one-fifth of one vote per share on proposals presented to shareholders for vote. Under certain circumstances, the holders of Class B common shares are entitled to vote as a separate class. Only Class A common shares were outstanding at June 30, 2018 and 2017 .

We repurchased $1.8 billion of our common shares, in the aggregate, through share repurchase programs during fiscal 2018 , 2017 and 2016 , as described below. We funded the repurchases with available cash and short term borrowings. The common shares repurchased are held in treasury to be used for general corporate purposes.

During fiscal 2018 , we repurchased 8.4 million common shares having an aggregate cost of $550 million . The average price paid per common share was $65.30 . These repurchases include $300 million purchased under an accelerated share repurchase ("ASR") program, which began on February 14, 2018 and was completed on March 21, 2018. We repurchased 4.3 million shares under the ASR at an average price paid per share of $69.26 .

During fiscal 2017 , we repurchased 8.1 million common shares having an aggregate cost of $600 million . The average price paid per common share was $74.08 .

During fiscal 2016 , we repurchased 8.2 million common shares having an aggregate cost of $651 million . The average price paid per common share was $78.98 .

During fiscal 2017 , we retired 37 million common shares in treasury. The retirement of these shares had no impact on total shareholders' equity; however, it did impact certain individual components of

shareholders' equity as follows: $2.5 billion decrease in common shares in treasury, $302 million decrease in common shares, and $2.2 billion decrease in retained earnings.

Accumulated Other Comprehensive Income/(Loss)

The following table summarizes the changes in the balance of accumulated other comprehensive income/(loss) by component and in total:

(in millions)	Foreign Currency Translation Adjustments and other	Unrealized Gain/(Loss) on Derivatives, net of tax	**Accumulated Other Comprehensive Income/(Loss)**
Balance at June 30, 2016	$ (123)	$ 7	**$ (116)**
Other comprehensive income/(loss), net before reclassifications	(25)	19	**(6)**
Amounts reclassified to earnings	—	(3)	**(3)**
Total other comprehensive loss attributable to Cardinal Health, Inc., net of tax of $9 million	(25)	16	**(9)**
Balance at June 30, 2017	(148)	23	**(125)**
Other comprehensive income/(loss), before reclassifications	58	—	**58**
Amounts reclassified to earnings	(23)	(2)	**(25)**
Total comprehensive income/(loss) attributable to Cardinal Health, Inc., net of tax of $1 million	35	(2)	**33**
Balance at June 30, 2018	**$ (113)**	**$ 21**	**$ (92)**

Activity related to realized and unrealized gains and losses on available-for-sale securities, as described in Note 6 , was immaterial during fiscal 2018 and 2017 .

15. Earnings Per Share Attributable to Cardinal Health, Inc.

The following table reconciles the computation of basic and diluted earnings per share attributable to Cardinal Health, Inc.:

(in millions, except per share amounts)	**2018**	2017	2016
Net earnings	**$ 259**	$ 1,294	$ 1,431
Net earnings attributable to noncontrolling interest	**(3)**	(6)	(4)
Net earnings attributable to Cardinal Health, Inc.	**$ 256**	$ 1,288	$ 1,427
Weighted-average common shares–basic	**313**	317	327
Effect of dilutive securities:			
Employee stock options, restricted share units, and performance share units	**2**	3	3
Weighted-average common shares–diluted	**315**	320	330
Basic earnings per common share attributable to Cardinal Health, Inc.:	**$ 0.82**	$ 4.06	$ 4.36
Diluted earnings per common share attributable to Cardinal Health, Inc.:	**0.81**	4.03	4.32

The potentially dilutive employee stock options, restricted share units and performance share units that were antidilutive for fiscal 2018 , 2017 and 2016 were 6 million , 3 million and 2 million , respectively.

16. Segment Information

Our operations are principally managed on a products and services basis and are comprised of two operating segments, which are the same as our reportable segments: Pharmaceutical and Medical. The factors for determining the reportable segments include the manner in which management evaluates performance for purposes of allocating resources and assessing performance combined with the nature of the individual business activities.

The Pharmaceutical segment distributes branded and generic pharmaceutical, specialty pharmaceutical and over-the-counter healthcare and consumer products in the United States. This segment also provides services to pharmaceutical manufacturers and healthcare providers to support the development, marketing, and distribution of specialty pharmaceutical products; operates nuclear pharmacies and radiopharmaceutical manufacturing facilities; provides pharmacy management services to hospitals as well as medication therapy management and patient outcomes services to hospitals, other healthcare providers and payers; and repackages generic pharmaceuticals and over-the-counter healthcare products.

Our Medical segment manufactures, sources and distributes Cardinal Health branded medical, surgical and laboratory products, which are sold in the United States, Canada, Europe, Asia and other markets. We further expanded this segment's portfolio of manufactured products through the acquisition of the Patient Recovery Business from Medtronic in July 2017, which includes incontinence, wound care, enteral feeding, urology, operating room supply, electrode and needle, syringe and sharps disposal product lines. In addition to distributing Cardinal Health branded products, this segment also distributes a broad range of national brand products and provides supply chain services and solutions to hospitals, ambulatory surgery centers, clinical laboratories and other healthcare providers in the United States and Canada .

The following table presents revenue for each reportable segment and Corporate:

(in millions)	**2018**	2017	2016
Pharmaceutical	**$ 121,241**	$ 116,463	$ 109,131
Medical	**15,581**	13,524	12,430
Total segment revenue	**136,822**	129,987	121,561
Corporate (1)	**(13)**	(11)	(15)
Total revenue	**$ 136,809**	$ 129,976	$ 121,546

(1) Corporate revenue consists of the elimination of inter-segment revenue and other revenue not allocated to the segments.

We evaluate segment performance based on segment profit, among other measures. Segment profit is segment revenue, less segment cost of products sold, less segment distribution, selling, general, and administrative ("SG&A") expenses. Segment SG&A expenses include share-based compensation expense as well as allocated corporate expenses for shared functions, including corporate

management, corporate finance, financial and customer care shared services, human resources, information technology, and legal and compliance. The results attributable to noncontrolling interests of consolidated entities are recorded within segment profit. Corporate expenses are allocated to the segments based on headcount, level of benefit provided, and other ratable allocation methodologies.

We do not allocate the following items to our segments: LIFO inventory charges/(credits); restructuring and employee severance; amortization and other acquisition-related costs; impairments and (gain)/loss on disposal of assets; litigation (recoveries)/charges, net; other income/expense, net; interest expense, net; loss on extinguishment of debt; and provision for/(benefit from) income taxes.

In addition, certain investment spending, certain portions of enterprise-wide incentive compensation, and other spending are not allocated to the segments. Investment spending generally includes the first-year spend for certain projects that require incremental investments in the form of additional operating expenses. We encourage our segments and corporate functions to identify investment projects that will promote innovation and provide future returns. As approval decisions for such projects are dependent upon executive management, the expenses for such projects are often retained at Corporate. Investment spending within Corporate was $43 million , $17 million and $34 million for fiscal 2018 , 2017 and 2016 , respectively.

The following tables present segment profit by reportable segment and Corporate:

(in millions)	2018	2017	2016
Pharmaceutical	$ 1,992	$ 2,187	$ 2,488
Medical	662	572	457
Total segment profit	2,654	2,759	2,945
Corporate	(2,528)	(639)	(486)
Total operating earnings	$ 126	$ 2,120	$ 2,459

The following tables present depreciation and amortization and additions to property and equipment by reportable segment and Corporate:

(in millions)	2018	2017	2016
Pharmaceutical	$ 156	$ 122	$ 128
Medical	278	156	136
Corporate	598	439	377
Total depreciation and amortization	$ 1,032	$ 717	$ 641

(in millions)	2018	2017	2016
Pharmaceutical	$ 58	$ 50	$ 88
Medical	127	123	96
Corporate	199	214	281
Total additions to property and equipment	$ 384	$ 387	$ 465

The following table presents total assets for each reportable segment and Corporate at June 30:

(in millions)	2018	2017	2016
Pharmaceutical	$ 21,421	$ 21,848	$ 20,662
Medical	16,066	10,688	10,236
Corporate	2,464	7,576	3,224
Total assets	$ 39,951	$ 40,112	$ 34,122

The following tables present revenue and property and equipment, net by geographic area:

(in millions)	2018	2017	2016
United States	$ 132,526	$ 125,006	$ 116,864
International	4,283	4,970	4,682
Total revenue	$ 136,809	$ 129,976	$ 121,546

(in millions)	2018	2017	2016
United States	$ 1,950	$ 1,623	$ 1,558
International	537	256	238
Property and equipment, net	$ 2,487	$ 1,879	$ 1,796

17. Share-Based Compensation

We maintain stock incentive plans (collectively, the “Plans”) for the benefit of certain of our officers, directors and employees. At June 30, 2018 , 19 million shares remain available for future grants under the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan ("2011 LTIP"). Under the 2011 LTIP's fungible share counting provisions, stock options are counted against the plan as one share for every share issued ; awards other than stock options are counted against the plan as two and one-half shares for every share issued . This means that only 8 million shares could be issued under awards other than stock options while 19 million shares could be issued under stock options. Shares are issued out of treasury shares when stock options are exercised and when restricted share units and performance share units vest.

The following table provides total share-based compensation expense by type of award:

(in millions)	2018	2017	2016
Restricted share unit expense	$ 73	$ 69	$ 69
Employee stock option expense	22	19	21
Performance share unit expense	(10)	8	21
Total share-based compensation expense	$ 85	$ 96	$ 111

The total tax benefit related to share-based compensation was $23 million , $34 million and $38 million for fiscal 2018 , 2017 and 2016 , respectively.

Restricted Share Units

Restricted share units granted under the Plans generally vest in equal annual installments over three years . Restricted share units accrue cash dividend equivalents that are payable upon vesting of the awards.

The following table summarizes all transactions related to restricted share units under the Plans:

(in millions, except per share amounts)	Restricted Share Units	Weighted-Average Grant Date Fair Value per Share
Nonvested at June 30, 2016	2	$ 71.73
Granted	1	82.34
Vested	(1)	69.23
Canceled and forfeited	—	—
Nonvested at June 30, 2017	2	76.72
Granted	1	65.97
Vested	(1)	78.92
Canceled and forfeited	—	—
Nonvested at June 30, 2018	**2**	**$ 71.58**

The following table provides additional data related to restricted share unit activity:

(in millions)	2018	2017	2016
Total compensation cost, net of estimated forfeitures, related to nonvested restricted share and share unit awards not yet recognized, pre-tax	**$ 78**	$ 73	$ 79
Weighted-average period in years over which restricted share and share unit cost is expected to be recognized (in years)	**2**	2	2
Total fair value of shares vested during the year	**$ 65**	$ 64	$ 65

Stock Options

Employee stock options granted under the Plans generally vest in equal annual installments over three years and are exercisable for a period up to ten years from the grant date. All stock options are exercisable at a price equal to the market value of the common shares underlying the option on the grant date.

The following table summarizes all stock option transactions under the Plans:

(in millions, except per share amounts)	Stock Options	Weighted-Average Exercise Price per Common Share
Outstanding at June 30, 2016	7	$ 54.09
Granted	1	83.09
Exercised	(2)	37.79
Canceled and forfeited	—	—
Outstanding at June 30, 2017	6	63.44
Granted	2	66.39
Exercised	(1)	43.12
Canceled and forfeited	—	—
Outstanding at June 30, 2018	**7**	**$ 64.50**
Exercisable at June 30, 2018	**5**	**$ 59.60**

The following table provides additional detail related to stock options:

(in millions, except per share amounts)	2018	2017	2016
Aggregate intrinsic value of outstanding options at period end	**$ 13**	$ 109	$ 181
Aggregate intrinsic value of exercisable options at period end	**13**	106	161
Aggregate intrinsic value of exercised options	**14**	73	63
Net proceeds/(withholding) from share-based compensation	**(3)**	26	6
Excess tax benefits from share based compensation	**10**	34	33
Total compensation cost, net of estimated forfeitures, related to unvested stock options not yet recognized, pre-tax	**17**	22	22
Total fair value of shares vested during the year	**19**	19	20
Weighted-average grant date fair value per stock option	**13.50**	16.67	17.40

(in years)	2018	2017	2016
Weighted-average remaining contractual life of outstanding options	**7**	7	6
Weighted-average remaining contractual life of exercisable options	**5**	6	5
Weighted-average period over which stock option compensation cost is expected to be recognized	**2**	2	2

Stock options are granted to our officers and certain employees. The fair values were estimated on the grant date using a lattice valuation model. We believe the lattice model provides reasonable estimates because it has the ability to take into account individual exercise patterns based on changes in our stock price and other variables, and it provides for a range of input assumptions, which are disclosed in the table below. The risk-free rate is based on the U.S. Treasury yield curve at the time of the grant. We analyzed historical data to estimate option exercise behaviors and employee terminations to be used within the lattice model. The expected life of the options granted was calculated from the option valuation model and represents the length of time in years that the options granted are expected to be outstanding. Expected volatilities are based on implied volatility from traded options on our common shares and historical volatility over a period of time commensurate with the contractual term of the option grant (up to ten years).

The following table provides the range of assumptions used to estimate the fair value of stock options:

	2018	2017	2016
Risk-free interest rate	**2.1%**	1.4% - 2.0%	1.5% - 1.9%
Expected volatility	**25%**	24%	23%
Dividend yield	**2.7% - 2.8%**	2.2% - 2.5%	1.8% - 2.0%
Expected life in years	**7**	7	7

Performance Share Units

Performance share units vest over a three -year performance period based on achievement of specific performance goals. Based on the extent to which the targets are achieved, vested shares may range from zero to 200 percent of the target award amount. Performance share units accrue cash dividend equivalents that are payable upon vesting of the awards.

The following table summarizes all transactions related to performance share units under the Plans (based on target award amounts):

(in millions, except per share amounts)	Performance Share Units	Weighted-Average Grant Date Fair Value per Share
Nonvested at June 30, 2016	0.8	$ 63.96
Granted	0.2	83.19
Vested (1)	(0.4)	51.49
Canceled and forfeited	—	—
Nonvested at June 30, 2017	0.6	77.83
Granted	0.2	66.43
Vested (2)	(0.2)	71.57
Canceled and forfeited	(0.2)	—
Nonvested at June 30, 2018	**0.4**	**$ 66.13**

(1) Vested at 170 percent of the target performance share units granted.

(2) Vested at 133 percent of the target performance share units granted.

The following table provides additional data related to performance share unit activity:

(in millions)	2018	2017	2016
Total compensation cost, net of estimated forfeitures, related to nonvested performance share units not yet recognized, pre-tax	**$ 1**	$ 13	$ 17
Weighted-average period over which performance share unit cost is expected to be recognized (in years)	**2**	2	2
Total fair value of shares vested during the year	**$ 14**	$ 19	$ 16

Employee Retirement Savings Plans

Substantially all of our domestic non-union employees are eligible to be enrolled in our company-sponsored contributory retirement savings plans, which include features under Section 401(k) of the Internal Revenue Code of 1986, and provide for matching and profit sharing contributions by us. Our contributions to the plans are determined by the Board of Directors subject to certain minimum requirements as specified in the plans. The total expense for our employee retirement savings plans was $129 million , $49 million and $84 million for fiscal 2018 , 2017 and 2016 , respectively.

18. Selected Quarterly Financial Data (Unaudited)

The following is selected quarterly financial data for fiscal 2018 and 2017 . The sum of the quarters may not equal year-to-date due to rounding.

(in millions, except per common share amounts)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal 2018				
Revenue	$ 32,641	$ 35,186	$ 33,633	**$ 35,349**
Gross margin (1)	1,672	1,861	1,913	**1,735**
Distribution, selling, general and administrative expenses	1,062	1,131	1,132	**1,270**
Net earnings/(loss) (2)	117	1,053	255	**(1,166)**
Less: Net earnings attributable to noncontrolling interests	(2)	—	—	—
Net earnings/(loss) attributable to Cardinal Health, Inc.	115	1,053	255	**(1,166)**
Net earnings/(loss) attributable to Cardinal Health, Inc. per common share:				
Basic	$ 0.36	$ 3.35	$ 0.81	**$ (3.76)**
Diluted (3)	0.36	3.33	0.81	**(3.76)**

(1) Gross margin was not impacted by LIFO benefit/(charges) in fiscal 2018.

(2) During the fourth quarter of fiscal 2018, we recognized a goodwill impairment charge of $ 1.4 billion related to our Medical segment. There was no tax benefit related to this goodwill impairment charge.

(3) Due to the net loss during the fourth quarter of fiscal 2018, dilutive potential common shares have not been included in the denominator of the dilutive per share computation due to their antidilutive effect.

(in millions, except per common share amounts)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal 2017				
Revenue	$ 32,039	$ 33,150	$ 31,821	$ 32,966
Gross margin (4)	1,590	1,602	1,728	1,623
Distribution, selling, general and administrative expenses	920	910	960	983
Net earnings	310	324	382	278
Less: Net earnings attributable to noncontrolling interests	(1)	—	(1)	(4)
Net earnings attributable to Cardinal Health, Inc.	309	324	381	274
Net earnings attributable to Cardinal Health, Inc. per common share:				
Basic	$ 0.97	$ 1.02	$ 1.21	$ 0.87
Diluted	0.96	1.02	1.20	0.86

(4) Gross margin is impacted by LIFO benefit/(charges) of $ 9 million and $(9) million in the second and third quarter, respectively. We did not have LIFO benefits/(charges) in the fourth quarter.

19. Subsequent Events

In June 2018, we entered into a Securities Purchase Agreement and related Contribution and Rollover Agreement with investor entities controlled by CD&R. Pursuant to those agreements, on August 1, 2018, we sold our 98% ownership interest in naviHealth in exchange for proceeds of $736 million (after adjusting for certain fees and expenses) and a 44% equity interest in a partnership that owns 100% of the equity interest of naviHealth. We also have certain call rights to reacquire naviHealth.

On August 16, 2018 we entered into an ASR program to purchase shares of our common stock for an aggregate purchase price of $ 600 million and received an initial delivery of 9.5 million shares of common stock using a reference price of $ 50.45 . The program is expected to conclude in the second quarter of fiscal 2019.

Schedule II **Valuation and Qualifying Accoun** ts

Cardinal Health, Inc. and Subsidiaries

Schedule II - Valuation and Qualifying Accounts [1]

(in millions)	Balance at Beginning of Period	Charged to Costs and Expenses (1)	Charged to Other Accounts (2)	Deductions (3)	Balance at End of Period
Fiscal 2018					
Accounts receivable	**$ 137**	**$ 113**	**$ 1**	**$ (111)**	**$ 139**
Finance notes receivable	**9**	**(2)**	**—**	**—**	**7**
Sales returns and allowances	**347**	**2,402**	**—**	**(2,270)**	**479**
Other	**1**	**—**	**—**	**—**	**1**
	$ 494	**$ 2,513**	**$ 1**	**$ (2,381)**	**$ 626**
Fiscal 2017					
Accounts receivable	$ 135	$ 59	$ 1	$ (58)	$ 137
Finance notes receivable	19	3	—	(13)	9
Sales returns and allowances	386	2,285	—	(2,324)	347
Other	1	—	—	—	1
	$ 541	$ 2,347	$ 1	$ (2,395)	$ 494
Fiscal 2016					
Accounts receivable	$ 135	$ 72	$ 2	$ (74)	$ 135
Finance notes receivable	14	6	—	(1)	19
Sales returns and allowances	305	2,207	—	(2,126)	386
Other	1	—	—	—	1
	$ 455	$ 2,285	$ 2	$ (2,201)	$ 541

(1) Fiscal 2018 , 2017 and 2016 include $3 million , $5 million and $5 million , respectively, for reserves related to customer pricing disputes, excluded from provision for bad debts on the consolidated statements of cash flows and classified as a reduction in revenue in the consolidated statements of earnings.

(2) Recoveries of amounts provided for or written off in prior years were $1 million , $1 million and $2 million for fiscal 2018 , 2017 and 2016 , respectively.

(3) Write-off of uncollectible accounts or actual sales returns.

The sum of the components may not equal the total due to rounding.

Directors, Executive Officers and Corporate Governance

The following is a list of our executive officers:

Name	Age	Position
George S. Barrett	63	Executive Chairman of the Board
Michael C. Kaufmann	55	Chief Executive Officer
Jorge M. Gomez	50	Chief Financial Officer
Jon L. Giacomin	53	Chief Executive Officer, Medical segment
Michele A. M. Holcomb	50	Executive Vice President, Strategy and Corporate Development
Pamela O. Kimmet	60	Chief Human Resources Officer
Craig S. Morford	59	Chief Legal and Compliance Officer
Patricia B. Morrison	59	Executive Vice President, Customer Support Services and Chief Information Officer

The business experience summaries provided below for our executive officers describe positions held during the last five years (unless otherwise indicated).

Mr. Barrett has served as Executive Chairman of the Board since January 2018. Prior to that, he served as Chairman and Chief Executive Officer from August 2009. He will retire in November 2018.

Mr. Kaufmann has served as Chief Executive Officer since January 2018. From November 2014 through December 2017, he served as Chief Financial Officer. From August 2009 until November 2014, he served as Chief Executive Officer, Pharmaceutical segment.

Mr. Gomez has served as Chief Financial Officer since January 2018. From June 2015 through December 2017, he served as Senior Vice President and CFO, Medical Segment. From February 2012 until June 2015, he was Senior Vice President and CFO, Pharmaceutical segment.

Mr. Giacomin has served as Chief Executive Officer, Medical segment since February 2018. From November 2014 to February 2018, he served as Chief Executive Officer, Pharmaceutical segment. From January 2011 until November 2014, he served as President, U.S. Pharmaceutical Distribution.

Ms. Holcomb has served as Executive Vice President, Strategy and Corporate Development since January 2017. She joined us from Teva Pharmaceutical Industries Ltd., where she served as Senior Vice President, Strategy, Portfolio, Search, and Partnerships and Chief Operating Officer, Global R&D from October 2015 to December 2016 and Senior Vice President, Chief Operating Officer, Global R&D from September 2012 to September 2015.

Ms. Kimmet has served as Chief Human Resources Officer since June 2016. Prior to joining us, Ms. Kimmet served as Senior Vice President, Human Resources at Coca-Cola Enterprises, Inc. from October 2010 to June 2016.

Mr. Morford has served as Chief Legal and Compliance Officer since May 2009.

Ms. Morrison has served as Executive Vice President, Customer Support Services and Chief Information Officer since June 2011. She will retire on September 1, 2018.

We have adopted *Standards of Business Conduct* that apply to all of our directors, officers and employees. The *Standards of Business Conduct* outline our corporate values and standards of integrity and behavior and are designed to protect and promote our reputation. The full text of the *Standards of Business Conduct* is posted on our website at www.cardinalhealth.com under "About Us — Corporate Citizenship — Ethics and Governance — Ethics and Compliance."

Any waiver of the *Standards of Business Conduct* for directors or executive officers must be approved by the Audit Committee. As required under SEC and New York Stock Exchange rules, we will disclose future amendments to our *Standards of Business Conduct* and waivers from the *Standards of Business Conduct* for our principal executive officer, principal financial officer, and principal accounting officer, or persons performing similar functions, and our other executive officers and directors on our website within four business days following the date of the amendment or waiver.

The other information called for by Item 10 of Form 10-K is incorporated by reference to our Definitive Proxy Statement (which will be filed with the SEC pursuant to Regulation 14A under the Exchange Act) relating to our 2018 Annual Meeting of Shareholders (our "2018 Proxy Statement") under the captions "Corporate Governance" and "Share Ownership Information."

Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The table below summarizes information relating to our equity compensation plans at June 30, 2018.

Equity Compensation Plan Information

Plan Category	Common Shares to be Issued Upon Exercise of Outstanding Options and Rights (#)	Weighted Average Exercise Price of Outstanding Options ($)	Common Shares Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a)) (#)
	(a)	(b)	(c)
Equity compensation plans approved by shareholders	**10,320,017** (1)	$ 64.50 (1)	19,305,951 (2)
Equity compensation plans not approved by shareholders	**4,203** (3)	— (3)	—
Total at June 30, 2018	**10,324,220**		19,305,951

(1) In addition to stock options outstanding under the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan (the "2011 LTIP") and the Cardinal Health, Inc. 2005 Long-Term Incentive Plan (the "2005 LTIP"), also includes 827,766 PSUs and 2,165,340 RSUs outstanding under the 2011 LTIP, 10,241 PSUs and 61,861 RSUs outstanding under the 2005 LTIP, and 165,024 RSUs outstanding under the 2007 Nonemployee Directors Equity Incentive Plan that are payable solely in common shares. PSUs and RSUs do not have an exercise price, and therefore were not included for purposes of computing the weighted-average exercise price. PSUs granted in fiscal 2015 are not reported in this table because they expired without any shares vesting. PSUs granted in fiscal 2016 and 2017 are reported in this table at the maximum payout level (200% of target) in accordance with SEC rules.

(2) Reflects common shares available under the 2011 LTIP in the form of stock options and other stock-based awards. Under the 2011 LTIP's fungible share counting provisions, stock options are counted against the plan as one share for every common share issued; awards other than stock options are counted against the plan as two and one-half shares for every common share issued. This means that only 7,722,380 shares could be issued under awards other than stock options while 19,305,951 shares could be issued under stock options.

(3) RSUs outstanding under the Cardinal Health, Inc. Amended and Restated Outside Directors Equity Incentive Plan that are payable solely in common shares. RSUs do not have an exercise price, and therefore were not included for purposes of computing the weighted-average exercise price.

The other information called for by Item 12 of Form 10-K is incorporated by reference to our 2018 Proxy Statement under the caption “Share Ownership Information.”

Exhibits, Financial Statement Schedules

(a)(1) The following financial statements are included in the "Financial Statements" section of this report:

(a)(2) The following Supplemental Schedule is included in this report:

All other schedules not listed above have been omitted as not applicable or because the required information is included in the Consolidated Financial Statements or in the Notes thereto.

Exhibit Number	Exhibit Description
2.1.1	Stock and Asset Purchase Agreement, dated April 18, 2017, between Cardinal Health, Inc. and Medtronic plc (incorporated by reference to Exhibit 2.1 to Cardinal Health's Current Report on Form 8-K filed on April 18, 2017, File No. 1-11373)
2.1.2	Amendment No. 1, dated as of July 28, 2017, to Stock and Asset Purchase Agreement, dated April 18, 2017, between Cardinal Health, Inc. and Medtronic plc (incorporated by reference to Exhibit 2.2.2 to Cardinal Health's Annual Report on Form 10-K for the year ended June 30, 2017, File No. 1-11373)
2.1.3	Letter Agreement, dated November 21, 2017, by and between Cardinal Health, Inc. and Medtronic, plc (incorporated by reference to Exhibit 2.2 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2017, File No. 1-11373)
3.1	Amended and Restated Articles of Incorporation of Cardinal Health, Inc., as amended (incorporated by reference to Exhibit 3.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, File No. 1-11373)
3.2	Cardinal Health, Inc. Restated Code of Regulations (incorporated by reference to Exhibit 3.2 to Cardinal Health's Current Report on Form 8-K filed on June 30, 2016, File No. 1-11373)
4.1	Specimen Certificate for Common Shares of Cardinal Health, Inc. (incorporated by reference to Exhibit 4.01 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2001, File No. 1-11373)
4.2.1	Indenture, dated as of June 2, 2008, between Cardinal Health, Inc. and The Bank of New York Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on June 2, 2008, File No. 1-11373)
4.2.2	Form of 4.625% Notes due 2020 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on December 14, 2010, File No. 1-11373)
4.2.3	Form of 3.200% Notes due 2022 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on May 21, 2012, File No. 1-11373)
4.2.4	Form of 1.700% Notes due 2018 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on February 22, 2013, File No. 1-11373)
4.2.5	Form of 3.200% Notes due 2023 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on February 22, 2013, File No. 1-11373)
4.2.6	Form of 4.600% Notes due 2043 (incorporated by reference to Exhibit 4.3 to Cardinal Health's Current Report on Form 8-K filed on February 22, 2013, File No. 1-11373)
4.2.7	Form of 2.400% Notes due 2019 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on November 19, 2014, File No. 1-11373)
4.2.8	Form of 3.500% Notes due 2024 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on November 19, 2014, File No. 1-11373)
4.2.9	Form of 4.500% Notes due 2044 (incorporated by reference to Exhibit 4.3 to Cardinal Health's Current Report on Form 8-K filed on November 19, 2014, File No. 1-11373)
4.2.10	Form of 1.950% Notes due 2018 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on June 23, 2015, File No. 1-11373)
4.2.11	Form of 3.750% Notes due 2025 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on June 23, 2015, File No. 1-11373)

Exhibits

4.2.12	Form of 4.900% Notes due 2045 (incorporated by reference to Exhibit 4.3 to Cardinal Health's Current Report on Form 8-K filed on June 23, 2015, File No. 1-11373)
4.2.13	Form of 1.948% notes due 2019 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on June 12, 2017, File No. 1-11373)
4.2.14	Form of 2.616% notes due 2022 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on June 12, 2017, File No. 1-11373)
4.2.15	Form of Floating rate notes due 2022 (incorporated by reference to Exhibit 4.3 to Cardinal Health's Current Report on Form 8-K filed on June 12, 2017, File No. 1-11373)
4.2.16	Form of 3.079% notes due 2024 (incorporated by reference to Exhibit 4.4 to Cardinal Health's Current Report on Form 8-K filed on June 12, 2017, File No. 1-11373)
4.2.17	Form of 3.410% notes due 2027 (incorporated by reference to Exhibit 4.5 to Cardinal Health's Current Report on Form 8-K filed on June 12, 2017, File No. 1-11373)
4.2.18	Form of 4.368% notes due 2047 (incorporated by reference to Exhibit 4.6 to Cardinal Health's Current Report on Form 8-K filed on June 12, 2017, File No. 1-11373)
4.3	Agreement to furnish to the Securities and Exchange Commission upon request a copy of instruments defining the rights of holders of certain long-term debt of Cardinal Health, Inc. and consolidated subsidiaries (incorporated by reference to Exhibit 4.07 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2005, File No. 1-11373)
10.1.1	Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K/A filed on November 4, 2011, File No. 1-11373)*
10.1.2	First Amendment to Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.2 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2014)*
10.1.3	Form of Nonqualified Stock Option Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2 to Cardinal Health's Current Report on Form 8-K/A filed on November 4, 2011, File No. 1-11373)*
10.1.4	Form of Nonqualified Stock Option Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.3 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2012, File No. 1-11373)*
10.1.5	Form of Restricted Share Units Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.7 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2013, File No. 1-11373)*
10.1.6	Form of Restricted Share Units Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.8 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2014)*
10.1.7	Form of Performance Share Units Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.4 to Cardinal Health's Current Report on Form 8-K/A filed on November 4, 2011, File No. 1-11373)*
10.1.8	Form of Amendment to Stock Option and Restricted Share Units Agreements under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan, the Cardinal Health, Inc. 2005 Long-Term Incentive Plan and the Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.1.9 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2013, File No. 1-11373)*
10.2.1	Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on November 7, 2016, File No. 1-11373)*
10.2.2	First Amendment to Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2.2 to Cardinal Health's Annual Report on Form 10-K for the fiscal year end June 30, 2017, File No. 1-11373)*
10.2.3	Form of Nonqualified Stock Option Agreement under the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2.3 to Cardinal Health's Annual Report on Form 10-K for the fiscal year end June 30, 2017, File No. 1-11373)*
10.2.4	Form of Restricted Share Units Agreement under the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2.4 to Cardinal Health's Annual Report on Form 10-K for the fiscal year end June 30, 2017, File No. 1-11373)*
10.2.5	Form of Performance Share Units Agreement under the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2.5 to Cardinal Health's Annual Report on Form 10-K for the fiscal year end June 30, 2017, File No. 1-11373)*
10.2.6	Form of Directors Restricted Share Units Agreement under the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2017, File No. 1-11373)
10.3.1	Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, File No. 1-11373)*
10.3.2	First Amendment to Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, File No. 1-11373)*
10.3.3	Second Amendment to Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.2 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, File No. 1-11373)*
10.3.4	Third Amendment to Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2.4 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2014)*
10.4.1	Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.4 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2007, File No. 1-11373)*
10.4.2	First Amendment to Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.2.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, File No. 1-11373)*
10.4.3	Second Amendment to the Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.5 to Cardinal Health's Quarterly Report on Form 10-Q for the Quarter ended December 31, 2011, File No. 1-11373)*
10.5.1	Cardinal Health Deferred Compensation Plan, as amended and restated effective January 1, 2016 (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2015, File No. 1-11373)*
10.5.2	First Amendment to the Cardinal Health Deferred Compensation Plan, as amended and restated effective as of January 1, 2016 (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)*
10.5.3	Second Amendment, effective as of January 1, 2018, to the Cardinal Health Deferred Compensation Plan, as amended and restated effective as of January 1, 2016 (incorporated by reference to Exhibit 10.2 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2017, File No. 1-11373)

Exhibits

10.6	Cardinal Health, Inc. Policy Regarding Shareholder Approval of Severance Agreements (incorporated by reference to Exhibit 10.09 to Cardinal Health's Current Report on Form 8-K filed on August 7, 2006, File No. 1-11373)*
10.7.1	Employment Agreement, dated September 4, 2012, between Cardinal Health, Inc. and George S. Barrett (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on September 6, 2012, File No. 1-11373)*
10.7.2	Amendment, dated August 5, 2015, to Employment Agreement, dated September 4, 2012, between Cardinal Health, Inc. and George S. Barrett (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on August 6, 2015, File No. 1-11373)*
10.7.3	Aircraft Time Sharing Agreement, effective August 5, 2015, between Cardinal Health, Inc. and George S. Barrett (incorporated by reference to Exhibit 10.2 to Cardinal Health's Current Report on Form 8-K filed on August 6, 2015, File No. 1-11373)*
10.7.4	Letter Agreement, dated November 5, 2017, between Cardinal Health, Inc. and George S. Barrett (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on November 6, 2017, File No. 1-11373)
10.8.1	Confidentiality and Business Protection Agreement, effective as of February 15, 2010, between Cardinal Health, Inc. and Michael C. Kaufmann (incorporated by reference to Exhibit 10.15 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2010, File No. 1-11373)*
10.8.2	Aircraft Time Sharing Agreement, effective as of February 8, 2018, by and between Cardinal Health, Inc. and Michael C. Kaufmann (incorporated by reference to Exhibit 10.2 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended March 31, 2018, File No. 1-11373)
10.9	Confidentiality and Business Protection Agreement, effective as of April 9, 2012, between Cardinal Health, Inc. and Donald M. Casey Jr. (incorporated by reference to Exhibit 10.14.1 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2012, File No. 1-11373)*
10.10	Confidentiality and Business Protection Agreement, effective as of September 9, 2014, between Cardinal Health, Inc. and Jon L. Giacomin (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, File No. 1-11373)*
10.11	Confidentiality and Business Protection Agreement, effective as of November 6, 2017, between Cardinal Health, Inc. and Jorge M. Gomez (incorporated by reference to Exhibit 10.4 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2017 , File No. 1-11373)
10.12.1	Confidentiality and Business Protection Agreement, effective as of June 28, 2018, between Cardinal Health, Inc. and Patricia B. Morrison
10.12.2	Letter Agreement, dated July 17, 2018, between Cardinal Health, Inc. and Patricia B. Morrison
10.13.1	Form of Indemnification Agreement between Cardinal Health, Inc. and certain individual directors (incorporated by reference to Exhibit 10.38 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2004, File No. 1-11373)
10.13.2	Form of Indemnification Agreement between Cardinal Health, Inc. and certain individual executive officers (incorporated by reference to Exhibit 10.39 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2004, File No. 1-11373)
10.14.1	Issuing and Paying Agency Agreement, dated August 9, 2006, between Cardinal Health, Inc. and The Bank of New York (incorporated by reference to Exhibit 10.01 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.14.2	First Amendment to Issuing and Paying Agency Agreement, dated February 28, 2007, between Cardinal Health, Inc. and The Bank of New York (incorporated by reference to Exhibit 10.01 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.14.3	Second Amendment to Issuing and Paying Agency Agreement, effective as of December 1, 2016, between Cardinal Health, Inc. and The Bank of New York (incorporated by reference to Exhibit 10.2 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)
10.14.4	Third Amendment to Issuing and Paying Agency Agreement, dated September 15, 2017, between Cardinal Health, Inc. and The Bank of New York (incorporated by reference to Exhibit 10.2 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, File No. 1-11373)
10.14.5	Commercial Paper Dealer Agreement, dated August 9, 2006, between Cardinal Health, Inc. and J.P. Morgan Securities Inc. (incorporated by reference to Exhibit 10.02 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.14.6	First Amendment to Commercial Paper Dealer Agreement, dated February 28, 2007, between Cardinal Health, Inc. and J.P. Morgan Securities Inc. (incorporated by reference to Exhibit 10.02 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.14.7	Second Amendment to Commercial Paper Dealer Agreement, effective as of December 31, 2012, between Cardinal Health, Inc. and J.P. Morgan Securities LLC (formerly known as J.P. Morgan Securities Inc.) (incorporated by reference to Exhibit 10.4 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.14.8	Commercial Paper Dealer Agreement between Cardinal Health, Inc. and J.P. Morgan Securities LLC, effective as of December 1, 2016 (incorporated by reference to Exhibit 10.6 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)
10.14.9	Commercial Paper Dealer Agreement, dated August 9, 2006, between Cardinal Health, Inc. and Banc of America Securities LLC (incorporated by reference to Exhibit 10.03 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.14.10	First Amendment to Commercial Paper Dealer Agreement, dated February 28, 2007, between Cardinal Health, Inc. and Banc of America Securities LLC (incorporated by reference to Exhibit 10.03 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.14.11	Second Amendment to Commercial Paper Dealer Agreement, effective as of December 31, 2012, between Cardinal Health, Inc. and Merrill Lynch, Pierce, Fenner & Smith Incorporated, f/k/a Banc of America Securities LLC (incorporated by reference to Exhibit 10.5 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.14.12	Commercial Paper Dealer Agreement between Cardinal Health, Inc. and Merrill Lynch, Pierce, Fenner & Smith Incorporated, effective as of December 1, 2016 (incorporated by reference to Exhibit 10.3 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)
10.14.13	Commercial Paper Dealer Agreement, dated August 9, 2006, between Cardinal Health, Inc. and Wachovia Capital Markets, LLC (incorporated by reference to Exhibit 10.04 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.14.14	First Amendment to Commercial Paper Dealer Agreement, dated February 28, 2007, between Cardinal Health, Inc. and Wachovia Capital Markets, LLC (incorporated by reference to Exhibit 10.04 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.14.15	Second Amendment to Commercial Paper Dealer Agreement, effective as of December 31, 2012, between Cardinal Health, Inc. and Wells Fargo Securities, LLC, as successor in interest to Wachovia Capital Markets, LLC (incorporated by reference to Exhibit 10.6 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.14.16	Commercial Paper Dealer Agreement between Cardinal Health, Inc. and Wells Fargo Securities, LLC, effective as of December 1, 2016 (incorporated by reference to Exhibit 10.5 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)
10.14.17	Commercial Paper Dealer Agreement, dated August 9, 2006, between Cardinal Health, Inc. and Goldman, Sachs & Co. (incorporated by reference to Exhibit 10.05 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)

Exhibits

10.14.18	First Amendment to Commercial Paper Dealer Agreement, dated February 28, 2007, between Cardinal Health, Inc. and Goldman, Sachs & Co. (incorporated by reference to Exhibit 10.05 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.14.19	Second Amendment to Commercial Paper Dealer Agreement, effective as of December 31, 2012, between Cardinal Health, Inc. and Goldman, Sachs & Co. (incorporated by reference to Exhibit 10.7 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.14.20	Commercial Paper Dealer Agreement between Cardinal Health, Inc. and Goldman Sachs & Co., effective as of December 1, 2016 (incorporated by reference to Exhibit 10.4 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)
10.14.21	Form of Commercial Paper Dealer Agreement between Cardinal Health, Inc. and SunTrust Robinson Humphrey, Inc. (incorporated by reference to Exhibit 10.2 to Cardinal Health's Current Report on Form 8-K filed on April 21, 2009, File No. 1-11373)
10.14.22	Form of First Amendment to Commercial Paper Dealer Agreement between Cardinal Health, Inc. and SunTrust Robinson Humphrey, Inc. (incorporated by reference to Exhibit 10.8 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.14.23	Commercial Paper Dealer Agreement between Cardinal Health, Inc. and SunTrust Robinson Humphrey, Inc., effective as of December 1, 2016 (incorporated by reference to Exhibit 10.7 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)
10.15.1	Amended and Restated Five-Year Credit Agreement, dated as of June 16, 2016, among Cardinal Health, Inc., JPMorgan Chase Bank, N.A. as Administrative Agent, Joint Lead Arranger and Joint Book Manager, Bank of America, N.A. as Syndication Agent, The Bank of Tokyo-Mitsubishi UFJ, Ltd., as Syndication Agent, Joint Lead Arranger and Joint Book Manager, Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, HSBC Bank USA, National Association, Morgan Stanley Senior Funding, Inc. and Wells Fargo Bank, National Association, as Documentation Agents, and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as Joint Lead Arranger and Joint Book Manager (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on June 21, 2016, File No. 1-11373)
10.15.2	Amendment No. 1, dated as of May 1, 2017, to Amended and Restated Five-Year Credit Agreement as of June 16, 2016 (incorporated by reference to Exhibit 10.2 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, File No. 1-11373)
10.15.3	Amendment No. 2 to Amended and Restated Five-Year Credit Agreement, dated as of August 26, 2017, by and between Cardinal Health, Inc. and JPMorgan Chase Bank, N.A., individually and as administrative agent (incorporated by reference to Exhibit 10.3 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, File No. 1-11373)
10.16.1	Fourth Amended and Restated Receivables Purchase Agreement, dated as of November 1, 2013, among Cardinal Health Funding, LLC, as Seller, Griffin Capital, LLC, as Servicer, the Conduits party thereto, the Financial Institutions Party thereto, the Managing Agents party thereto, and LC Banks party thereto and the Bank of Tokyo-Mitsubishi UFJ, Ltd., New York Branch, as the Agent (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2013, File No. 1-11373)
10.16.2	First Amendment and Joinder, dated as of November 3, 2014, to the Fourth Amended and Restated Receivables Purchase Agreement, dated as of November 1, 2013 (incorporated by reference to Exhibit 10.3 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, File No. 1-11373)
10.16.3	Second Amendment, dated as of November 14, 2016, to the Fourth Amended and Restated Receivables Purchase Agreement, dated as of November 1, 2013 (incorporated by reference to Exhibit 10.4.3 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, File No. 1-11373)
10.16.4	Third Amendment, dated as of August 30, 2017, to the Fourth Amended and Receivables Purchase Agreement, dated as of November 1, 2013 (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on August 31, 2017, File No. 1-11373)
10.17.1	Seventh Amended and Restated Performance Guaranty, dated as of November 14, 2016, executed by Cardinal Health, Inc. in favor of Cardinal Health Funding, LLC (incorporated by reference to Exhibit 10.5.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, File No. 1-11373)
10.17.2	Amendment No. 1 to Seventh Amended and Restated Performance Guaranty, dated as of November 14, 2016 (incorporated by reference to Exhibit 10.5.2 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2017, File No. 1-11373
10.18.1	Tax Matters Agreement, dated as of August 31, 2009, by and between Cardinal Health, Inc. and CareFusion Corporation (incorporated by reference to Exhibit 10.3 to Cardinal Health's Current Report on Form 8-K filed on September 4, 2009, File No. 1-11373)
10.18.2	First Amendment to Tax Matters Agreement, dated as of May 28, 2012, by and between Cardinal Health, Inc. and CareFusion Corporation (incorporated by reference to Exhibit 10.20.2 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2012, File No. 1-11373)
12.1	Computation of Ratio of Earnings to Fixed Charges
21.1	List of Subsidiaries of Cardinal Health, Inc.
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.1	Statement Regarding Forward-Looking Information
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Management contract or compensatory plan or arrangement.

Form 10-K Cross Reference Index

N/A Not applicable

(a) The information called for by Item 11 of Form 10-K is incorporated by reference to our 2018 Proxy Statement under the captions “Corporate Governance” and “Executive Compensation.”

(b) The information called for by Item 13 of Form 10-K is incorporated by reference to our 2018 Proxy Statement under the caption "Corporate Governance."

(c) The information called for by Item 14 of Form 10-K is incorporated by reference to our 2018 Proxy Statement under the caption “Audit Committee Matters.”

Signatures

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on August 22, 2018 .

Cardinal Health, Inc.

By: /s/ MICHAEL C. KAUFMANN
MICHAEL C. KAUFMANN
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed below by the following persons on behalf of the registrant and in the capacities indicated on August 22, 2018 .

Name	Title
/s/ MICHAEL C. KAUFMANN **Michael C. Kaufmann**	Chief Executive Officer and Director (principal executive officer)
/s/ JORGE M. GOMEZ **Jorge M. Gomez**	Chief Financial Officer (principal financial officer)
/s/ STUART G. LAWS **Stuart G. Laws**	Senior Vice President and Chief Accounting Officer (principal accounting officer)
/s/ GEORGE S. BARRETT **George S. Barrett**	Executive Chairman of the Board
/s/ DAVID J. ANDERSON **David J. Anderson**	Director
/s/ COLLEEN F. ARNOLD **Colleen F. Arnold**	Director
/s/ CARRIE S. COX **Carrie S. Cox**	Director
/s/ CALVIN DARDEN **Calvin Darden**	Director
/s/ BRUCE L. DOWNEY **Bruce L. Downey**	Director
/s/ PATRICIA A. HEMINGWAY HALL **Patricia A. Hemingway Hall**	Director
/s/ AKHIL JOHRI **Akhil Johri**	Director
/s/ CLAYTON M. JONES **Clayton M. Jones**	Director
/s/ GREGORY B. KENNY **Gregory B. Kenny**	Director
/s/ NANCY KILLEFER **Nancy Killefer**	Director
/s/ DAVID P. KING **David P. King**	Director

Exhibit 10.12.1

Confidentiality and Business Protection Agreement

This Confidentiality and Business Protection Agreement (“Agreement”) is hereby entered into by and between Patrice B. Morrison (“Executive”) and Cardinal Health, Inc., an Ohio Corporation (the “Company”), effective as of June 28, 2018.

It is hereby agreed as follows:

1. Consideration and Acknowledgements . The parties acknowledge that the provisions and covenants contained in this Agreement are ancillary and material to, and in consideration of, retirements benefits being negotiated between the parties and that the limitations contained herein are reasonable in geographic and temporal scope and do not impose a greater restriction or restraint than is necessary to protect the goodwill and other legitimate business interests of the Company. The parties also acknowledge and agree that the provisions of this Agreement do not adversely affect Executive's ability to earn a living in any capacity that does not violate the covenants contained herein. The parties further acknowledge and agree that the provisions of Section 9(a) below are accurate and necessary because (i) this Agreement is entered into in the State of Ohio, (ii) Ohio has a substantial relationship to the parties and to this transaction, (iii) Ohio is the headquarters state of the Company, which has operations worldwide and has a compelling interest in having its employees treated uniformly, (iv) the use of Ohio law provides certainty to the parties in any covenant litigation in the United States, and (v) enforcement of the provisions of this Agreement would not violate any fundamental public policy of Ohio or any other jurisdiction.

2. Confidential Information . Executive shall hold in a fiduciary capacity for the benefit of the Company and all of its subsidiaries, partnerships, joint ventures, limited liability companies and other affiliates (collectively, the "Cardinal Group"), all secret or confidential information, knowledge or data relating to the Cardinal Group and its businesses (including, without limitation, any proprietary and not publicly available information concerning any processes, methods, trade secrets, research, secret data, costs, names of users or purchasers of their respective products or services, business methods, operating procedures or programs or methods of promotion and sale) that Executive has obtained or obtains during Executive's employment by the Cardinal Group and that is not public knowledge (other than as a result of Executive's violation of this Agreement) ("Confidential Information"). For the purposes of this Agreement, information shall not be deemed to be publicly available merely because it is embraced by general disclosures or because individual features or combinations thereof are publicly available. Executive shall not communicate, divulge or disseminate Confidential Information at any time during or after Executive's employment with the Cardinal Group, except with prior written consent of the applicable Cardinal Group company, or as otherwise required by law or legal process. All records, files, memoranda, reports, customer lists, drawings, plans, documents and the like that Executive uses, prepares or comes into contact with during the course of Executive's employment shall remain the sole property of the Company or the Cardinal Group company, as applicable, and shall be turned over to the applicable Cardinal Group company upon termination of Executive's employment.

3. Non-Recruitment of Cardinal Group Employees, etc . Executive shall not, at any time during the Restricted Period (as defined below), without the prior written consent of the Company, engage in the following conduct (a "Solicitation"): (i) directly or indirectly, including via social media or professional networking services, solicit, recruit or employ (whether as an employee, officer, director, agent, consultant or independent contractor) any person who is or was at any time during the previous twelve months an employee, representative, officer or director of the Cardinal Group; or (ii) take any action to encourage or induce any employee, representative,

officer or director of the Cardinal Group to cease his or her relationship with the Cardinal Group for any reason. A "Solicitation" does not include any recruitment of employees within or for the Cardinal Group. The "Restricted Period" means the period from the date of this Agreement until twenty-four months after Executive's retirement date. The Restricted Period shall be extended and its expiration tolled by the time period in which Executive is in breach of any covenant in this Agreement to ensure that Executive does not benefit from any breach and that the Company receives the full benefit of two years protection from unfair competition on which it has relied in entering into this Agreement.

4. No Competition -- Solicitation of Business . During the Restricted Period, Executive shall not (either directly or indirectly or as an officer, agent, employee, partner, consultant or director of any other company, partnership or entity) solicit, service or accept on behalf of any competitor of the Cardinal Group the business of (i) any customer of the Cardinal Group during the time of Executive's employment or at date of termination of employment, or (ii) any potential customer of the Cardinal Group which Executive knew to be an identified, prospective purchaser of products or services of the Cardinal Group.

5. No Competition -- Employment by Competitor . During the Restricted Period, Executive shall not invest in (other than in a publicly traded company with a maximum investment of no more than 1% of outstanding shares), counsel, advise or be otherwise engaged or employed by any entity or enterprise that is in competition with the business conducted by any member of the Cardinal Group (other than a business that is not a significant business to the Cardinal Group as a whole or to the entity or enterprise as a whole).

6. No Disparagement .

(a) Executive and the Company shall at all times refrain from taking actions or making statements, written or oral, that (i) denigrate, disparage or defame the goodwill or reputation of Executive or the Cardinal Group, as the case may be, or any of its trustees, officers, security holders, partners, agents or former or current employees and directors, or (ii) are intended to, or may be reasonably expected to, adversely affect the morale of the employees of the Cardinal Group. Executive further agrees not to make any negative statements to third parties relating to Executive's employment or any aspect of the businesses of the Cardinal Group and not to make any statements to third parties about the circumstances of the termination of Executive's employment or about the Cardinal Group or its trustees, directors, officers, security holders, partners, agents or former or current employees and directors, except as may be required by a court or governmental body.

(b) Executive further agrees that, following termination of employment for any reason, Executive shall assist and cooperate with the Company with regard to any matter or project in which Executive was involved during Executive's employment with the Company, including but not limited to any litigation that may be pending or may arise after such termination of employment. Further, Executive agrees to notify the Company at the earliest opportunity of any contact that is made by any third parties concerning any such matter or project. The Company shall not unreasonably request such cooperation of Executive and shall cooperate with Executive in scheduling any assistance by Executive, taking into account Executive's business and personal affairs, and shall compensate Executive for any lost wages or expenses associated with such cooperation and assistance.

7. Inventions . All plans, discoveries and improvements, whether patentable or unpatentable, made or devised by Executive, whether alone or jointly with others, from the date of Executive's initial employment by the Company and continuing until the end of any period during which Executive is employed by the Cardinal Group, relating or pertaining in any way to

Executive's employment with or the business of the Cardinal Group, shall be promptly disclosed in writing to the Company's Chief Legal and Compliance Officer and are hereby transferred to and shall redound to the benefit of the Company, and shall become and remain its sole and exclusive property. Executive agrees to execute any assignment to the Company or its nominee, of Executive's entire right, title and interest in and to any such discoveries and improvements and to execute any other instruments and documents requisite or desirable in applying for and obtaining patents, trademarks or copyrights, at the expense of the Company, with respect thereto in the United States and in all foreign countries, that may be required by the Company. Executive further agrees at all times to cooperate to the extent and in the manner required by the Company in the prosecution or defense of any patent or copyright claims or any litigation or other proceeding involving any trade secrets, processes, discoveries or improvements covered by this Agreement, but all necessary expenses thereof shall be paid by the Company.

8. Acknowledgement and Enforcement . Executive acknowledges and agrees that: (a) the purpose of the foregoing covenants, including without limitation the noncompetition covenants of Sections 4 and 5, is to protect the goodwill, trade secrets and other Confidential Information of the Company; (b) because of the nature of the business in which the Cardinal Group is engaged and because of the nature of the Confidential Information to which Executive has access, the Company would suffer irreparable harm and it would be impractical and excessively difficult to determine the actual damages of the Cardinal Group in the event Executive breached any of the covenants of this Agreement; and (c) remedies at law (such as monetary damages) for any breach of Executive's obligations under this Agreement would be inadequate. Executive therefore agrees and consents that if Executive commits any breach of a covenant under this Agreement or threatens to commit any such breach, the Company shall have the right (in addition to, and not in lieu of, any other right or remedy that may be available to it) to temporary and permanent injunctive relief from a court of competent jurisdiction, without posting any bond or other security and without the necessity of proof of actual damage. If any of the covenants contained in this Agreement are finally held by a court to be invalid, illegal or unenforceable (whether in whole or in part), such covenant shall be deemed modified to the extent, but only to the extent, of such invalidity, illegality or unenforceability and the remaining covenants shall not be affected thereby; provided , however , that if any of such covenants is finally held by a court to be invalid, illegal or unenforceable because it exceeds the maximum scope or duration determined to be acceptable to permit such provision to be enforceable, such covenant will be deemed to be modified to the minimum extent necessary to modify such scope or duration in order to make such provision enforceable hereunder.

9. Miscellaneous .

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of Ohio, without reference to principles of conflict of laws. If, under any such law, any portion of this Agreement is at any time deemed to be in conflict with any applicable statute, rule, regulation or ordinance, such portion shall be deemed to be modified or altered to conform thereto. The parties hereto irrevocably agree to submit to the jurisdiction and venue of the courts of the State of Ohio in any action or proceeding brought with respect to or in connection with this Agreement. The captions of this Agreement are not part of the provisions hereof and shall have no force or effect. This Agreement constitutes the entire agreement of the parties with respect to the subject matter hereof. This Agreement may not be amended or modified otherwise than by a written agreement executed by the parties hereto or their respective successors and legal representatives. This Agreement is the product of negotiation and shall not be construed strictly for or against any party.

(b) All notices and other communications under this Agreement shall be in writing and shall be given by hand delivery to the other party or by registered or certified mail, return receipt requested, postage prepaid, addressed as follows:

If to Executive:	At the most recent address on file for Executive at the Company
If to the Company:	Cardinal Health, Inc. 7000 Cardinal Place Dublin, OH Attn: Chief Legal and Compliance Officer

or to such other address as either party shall have furnished to the other in writing in accordance herewith. Notice and communications shall be effective when actually received by the addressee.

(c) The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement. If any provision of this Agreement shall be held invalid or unenforceable in part, the remaining portion of such provision, together with all other provisions of this Agreement, shall remain valid and enforceable and continue in full force and effect to the fullest extent consistent with the law.

(d) Executive's or the Company's failure to insist upon strict compliance with any provision of this Agreement or the failure to assert any right Executive or the Company may have hereunder, shall not be deemed to be a waiver of such provision or right or any other provision or right of this Agreement.

IN WITNESS WHEREOF, Executive has hereunto set Executive's hand and the Company has caused these presents to be executed in its name and on its behalf, all as of the day and year first above written.

/s/ Patricia B. Morrison
Patricia B. Morrison
Execution Date: 6-28-18

CARDINAL HEALTH, INC.

/s/ Pamela O. Kimmet
By: Pamela O. Kimmet
Its: Chief Human Resources Officer
Execution Date: 6-28-18

Exhibit 10.12.2

[Cardinal Health Letterhead]

July 17, 2018

Ms. Patricia B. Morrison
#####
####### ######## #####

Dear Patty:

The purpose of this letter (referred to as this "Agreement") is to confirm the agreement between Cardinal Health, Inc. and its subsidiaries ("the Company") and you concerning your retirement from the Company and the retirement benefits to be provided to you in consideration of your many years of service and significant contributions to the Company.

Retirement Date
You will retire and cease to be an officer and employee of the Company on August 31, 2018 ("Retirement Date"). You agree to provide a letter of resignation to this effect for our corporate records.

Long-term incentive awards
You will be deemed to have "retired" for purposes of your long-term incentive awards. As a result, subject to the terms of the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan and the applicable award agreements, (i) a ratable portion of each unvested installment of your outstanding stock options will immediately vest and become exercisable upon your Retirement Date, and options, to the extent vested, may be exercised until their grant expiration term, (ii) a ratable portion of each unvested installment of your outstanding restricted share units will immediately vest upon your Retirement Date, and (ii) following the end of the applicable performance period, a ratable portion of your unvested performance share units, which would have vested if you had remained employed through the payment date, will vest.

In accordance with the Company's standard procedures, for receipt of this retirement treatment, you hereby release the Company and all of its affiliates and related entities, predecessors, successors and assigns (whether to all or any part of such entities' businesses), and all of such entities' officers, directors, agents, representatives, attorneys, and employees (current and former) and their employee benefit plans and programs and their administrators and fiduciaries from any and all claims and causes of action that may exist, whether known or unknown, as of the date of your execution of this Agreement, with the exception of any other claims that cannot be waived by law.

Successors
You, and anyone who succeeds to your rights and responsibilities, are bound by this Agreement, and this Agreement will accrue to the benefit of and may be enforced by the Company and its successors and assigns.

Severability
You agree that the validity or unenforceability of any part of this Agreement shall not affect the validity or enforceability of any remaining provisions.

Governing Law
You agree that all questions concerning the intention, validity or meaning of this Agreement shall be construed and resolved according to the laws of the State of Ohio. You also designate the federal and state courts in

Franklin County, Ohio as the courts of competent jurisdiction and venue for any actions or proceedings related to this Agreement, and hereby irrevocably consent to such designation, jurisdiction and venue.

By signing below, you agree to and accept all of the terms in this Agreement.

Sincerely,

CARDINAL HEALTH, INC.

/s/ Pamela O. Kimmet

Pamela O. Kimmet
Chief Human Resources Officer

Agreed to:

/s/ Patricia B. Morrison July 20, 2018
Patricia B. Morrison Date

Exhibit 12.1

Computation of Ratio of Earnings to Fixed Charges

(in millions, except ratios)	2014	2015	2016	2017	**2018**
Earnings/(loss) from continuing operations before income taxes	$ 1,798	$ 1,967	$ 2,276	$ 1,924	**$ (228)**
Plus fixed charges:					
Interest expense	129	137	178	187	**328**
Capitalized interest	1	2	6	9	**4**
Amortization of debt offering costs	4	8	6	6	**11**
Interest portion of rent expense	10	10	12	14	**16**
Fixed charges (1)	144	156	201	217	**359**
Plus: amortization of capitalized interest	3	2	3	4	**4**
Less: capitalized interest	(1)	(2)	(6)	(9)	**(4)**
Earnings (1)	$ 1,944	$ 2,124	$ 2,473	$ 2,135	**$ 131**
Ratio of earnings to fixed charges (1) (2)	13.5	13.6	12.3	9.9	**0.4**

(1) The sum of the components may not equal the total due to rounding.
(2) The ratio of earnings to fixed charges is computed by dividing fixed charges into earnings/(loss) from continuing operations before income taxes plus fixed charges and amortization of capitalized interest less capitalized interest. Fixed charges include interest expense, amortization of debt offering costs and the portion of rent expense that is deemed to be representative of the interest factor. Interest expense recorded on tax exposures has been recorded in income tax expense and has therefore been excluded from the calculation.

Exhibit 21.1

Subsidiaries of the Registrant

Listed below are majority-owned subsidiaries of Cardinal Health, Inc. as of June 30, 2018 . Subsidiaries excluded from the list below would not, considered in the aggregate as a single subsidiary, constitute a "significant subsidiary" of Cardinal Health, Inc. as that term is defined in Rule 1-02(w) of SEC Regulation S-X.

Subsidiary Name	State/Jurisdiction of Incorporation
A+ Secure Packaging, LLC	Tennessee
Access Closure, Inc.	California
Aero-Med, Ltd.	Connecticut
Allegiance Corporation	Delaware
AssuraMed, Inc.	Delaware
Bellwether Oncology Alliance, Inc.	Tennessee
Cardinal Health 2, LLC	Nevada
Cardinal Health 3, LLC	Delaware
Cardinal Health 5, LLC	Delaware
Cardinal Health 6, Inc.	Nevada
Cardinal Health 7, LLC	Delaware
Cardinal Health 100, Inc.	Indiana
Cardinal Health 104 LP	Ohio
Cardinal Health 105, Inc.	Ohio
Cardinal Health 107, LLC	Ohio
Cardinal Health 108, LLC	Delaware
Cardinal Health 110, LLC	Delaware
Cardinal Health 112, LLC	Delaware
Cardinal Health 113, LLC	Wisconsin
Cardinal Health 114, Inc.	Delaware
Cardinal Health 115, LLC	Ohio
Cardinal Health 116, LLC	Delaware
Cardinal Health 118, LLC	Delaware
Cardinal Health 119, LLC	Delaware
Cardinal Health 121, LLC	Delaware
Cardinal Health 122, LLC	Delaware
Cardinal Health 123, LLC	Delaware
Cardinal Health 124, LLC	Delaware
Cardinal Health 126, LLC	Delaware
Cardinal Health 127, Inc.	Kansas
Cardinal Health 200, LLC	Delaware
Cardinal Health 201, Inc.	Delaware
Cardinal Health 222 (Thailand) Ltd.	Thailand
Cardinal Health 247, Inc.	Colorado
Cardinal Health 249, LLC	Delaware
Cardinal Health 414, LLC	Delaware
Cardinal Health Australia 503 Pty. Ltd.	Australia
Cardinal Health Austria 504 GmbH	Austria
Cardinal Health Belgium 505 BVBA	Belgium
Cardinal Health Canada Inc.	Canada
Cardinal Health Canada Holdings Cooperative U.A.	Netherlands
Cardinal Health Colombia S.A.S.	Colombia
Cardinal Health do Brasil Ltd.	Brazil
Cardinal Health D.R. 203 II Ltd.	Bermuda
Cardinal Health Denmark ApS	Denmark
Cardinal Health Finland Oy	Finland
Cardinal Health Foundation	Ohio

Subsidiary Name	State/Jurisdiction of Incorporation
Cardinal Health France 506 SAS	France
Cardinal Health Funding, LLC	Nevada
Cardinal Health Germany 507 GmbH	Germany
Cardinal Health Germany Manufacturing GmbH	Germany
Cardinal Health International Philippines, Inc.	Philippines
Cardinal Health IPS, LLC	Delaware
Cardinal Health Ireland 419 Designated Activity Company	Ireland
Cardinal Health Ireland 508 Limited	Ireland
Cardinal Health Ireland Unlimited Company	Ireland
Cardinal Health Italy 509 Srl	Italy
Cardinal Health Japan G.K.	Japan
Cardinal Health Korea Limited	Korea
Cardinal Health Malaysia 211 Sdn. Bhd.	Malaysia
Cardinal Health Malta 212 Limited	Malta
Cardinal Health Managed Care Services, LLC	Delaware
Cardinal Health Medical Products India Private Limited	India
Cardinal Health Mexico 244 S. de R.L. de C.V.	Mexico
Cardinal Health Mexico 514 S. de R.L. de C.V.	Mexico
Cardinal Health Middle East FZ-LLC	United Arab Emirates
Cardinal Health Netherlands 502 B.V.	Netherlands
Cardinal Health Norway AS	Norway
Cardinal Health Pharmaceutical Contracting, LLC	Delaware
Cardinal Health Pharmacy Services, LLC	Delaware
Cardinal Health Poland Spółlka z ograniczonąa odpowiedzialnośściąa	Poland
Cardinal Health Portugal 513 Unipessoal Lda.	Portugal
Cardinal Health P.R. 120, Inc.	Puerto Rico
Cardinal Health P.R. 218, Inc.	Puerto Rico
Cardinal Health P.R. 220, LLC	Puerto Rico
Cardinal Health Singapore 225 Pte. Ltd.	Singapore
Cardinal Health Spain 511 S.L.	Spain
Cardinal Health Specialty Pharmacy, LLC	Delaware
Cardinal Health Sweden 512 A.B.	Sweden
Cardinal Health Switzerland 515 GmbH	Switzerland
Cardinal Health Systems, Inc.	Ohio
Cardinal Health Technologies, LLC	Nevada
Cardinal Health Technologies Switzerland GmbH	Switzerland
Cardinal Health U.K. 432 Limited	United Kingdom
Cardinal Health Medical Equipment Consulting (Shanghai) Co., Ltd.	China
Cirpro de Delicias S.A. de C.V.	Mexico
Convertors de Mexico S.A. de C.V.	Mexico
Cordis Cashel Company Unlimited	Ireland
Cordis Corporation	Florida
Cordis (Shanghai) Medical Devices Co., Ltd.	China
Cornerstone Partners G.P.O., L.P.	Tennessee

Subsidiary Name	State/Jurisdiction of Incorporation
Covidien Ireland Limited	Ireland
Covidien Manufacturing Solutions, S.A.	Costa Rica
Curaspan Health Group, Inc.	Delaware
EPIC Insurance Company	Vermont
Especialidades Medicas Kenmex S.A. de C.V.	Mexico
Griffin Capital, LLC	Nevada
Innovative Therapies, Inc.	Delaware
Instant Diagnostic Systems, Inc.	Alabama
Kendall Patient Recovery BVBA	Belgiuum
Kendall-Gammatron Limited	Thailand
KPR Australia Pty. Ltd.	Australia
KPR Italia S.r.l.	Italy
KPR Switzerland Sales Gmbh	Switzerland
KPR U.S., LLC	Delaware
Leader Drugstores, Inc.	Delaware
Limited Liability Company "Cardinal Health Russia"	Russian Federation
Marin Apothecaries	California
Medicine Shoppe International, Inc.	Delaware
Mediquip Sdn. Bhd.	Malaysia
NaviHealth, Inc.	Delaware
Nippon Covidien Ltd.	Japan
One Cloverleaf, LLC	Delaware
Outcomes Incorporated	Iowa
Pinnacle Intellectual Property Services, Inc.	Nevada
Pinnacle Intellectual Property Services-International, Inc.	Nevada
Post-Acute Care Center for Research, LLC	Delaware
Quiroproductos de Cuauhtemoc S. de R.L. de C.V.	Mexico
R Cubed, Inc.	Tennessee
RainTree GPO, LLC	Delaware
Renal Purchasing Group, LLC	Tennessee
RGH Enterprises, Inc.	Ohio
RightCare Solutions, Inc.	Delaware
Rxealtime, Inc.	Nevada
Sonexus Health, LLC	Texas
TelePharm, LLC	Iowa
The Harvard Drug Group, L.L.C.	Michigan
Tradex International, Inc.	Ohio
UroMed, Inc.	Georgia
WaveMark, Inc.	Delaware

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement on Form S-3 No. 333-215935 of Cardinal Health, Inc.,

(2) Registration Statements on Form S-4 No. 333-62938 and No. 333-74761 of Cardinal Health, Inc., and

(3) Registration Statements on Form S-8 No. 33-42357, No. 333-90423, No. 333-38192, No. 333-38198, No. 333-56010, No. 333-129725, No. 333-149107, No. 333-155156, No. 333-163128, No. 333-164736, No. 333-177728, No. 333-183471, No. 333-206339, No. 333-206340, No. 333-214412 and No. 333-219892 of Cardinal Health, Inc.;

of our reports dated August 22, 2018 , with respect to the consolidated financial statements and schedule of Cardinal Health, Inc. and subsidiaries and the effectiveness of internal control over financial reporting of Cardinal Health, Inc. and subsidiaries, included in this Annual Report (Form 10-K) of Cardinal Health, Inc. and subsidiaries for the year ended June 30, 2018 .

/s/ Ernst & Young LLP

Grandview Heights, Ohio
August 22, 2018

Exhibit 31.1

I, Michael C. Kaufmann , certify that:

1. I have reviewed this Form 10-K of Cardinal Health, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 22, 2018

/s/ M ICHAEL C. K AUFMANN

Michael C. Kaufmann

Chief Executive Officer

Exhibit 31.2

I, Jorge M. Gomez , certify that:

1. I have reviewed this Form 10-K of Cardinal Health, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 22, 2018

/s/ J ORGE M. G OMEZ

Jorge M. Gomez

Chief Financial Officer

Exhibit 32.1

Certification of the Chief Executive Officer and the Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Each of Michael C. Kaufmann, Chief Executive Officer of Cardinal Health, Inc. (the "Company"), and Jorge M. Gomez, Chief Financial Officer of the Company, certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) the Annual Report on Form 10-K for the fiscal year ended June 30, 2018 containing the financial statements of the Company (the "Periodic Report"), which this statement accompanies, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(2) the information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 22, 2018

/s/ MICHAEL C. KAUFMANN

Michael C. Kaufmann
Chief Executive Officer

/s/ JORGE M. GOMEZ

Jorge M. Gomez
Chief Financial Officer

Exhibit 99.1

Statement Regarding Forward-Looking Information

As used in this exhibit, “we,” “our,” “us” and similar pronouns refer to Cardinal Health, Inc. and its subsidiaries, unless the context requires otherwise. Our filings with the Securities and Exchange Commission, including this Annual Report on Form 10-K for the fiscal year ended June 30, 2018 (the “2018 Form 10-K”), our quarterly reports on Form 10-Q and our current reports on Form 8-K (along with any exhibits and amendments to such reports), as well as our news releases or any other written or oral statements made by or on behalf of us, including materials posted on our website, may include, directly or by incorporation by reference, forward-looking statements that reflect our current view (as of the date the forward-looking statement is first made) about future events, prospects, projections or financial performance. The matters discussed in these forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those projected, anticipated or implied in or by such statements. These risks and uncertainties include:

- competitive pressures in the markets in which we operate, including pricing pressures;
- uncertainties relating to the pricing of generic pharmaceuticals;
- uncertainties relating to the timing, frequency and profitability of generic pharmaceutical launches;
- our ability to maintain the benefits of our generic pharmaceutical sourcing venture with CVS Health Corporation;
- with respect to our distribution services agreements with branded pharmaceutical manufacturers, changes in the amount of service fees we receive or, in cases where part of our compensation under these agreements is based on branded pharmaceutical price appreciation, changes in the frequency or magnitude of such price appreciation;
- changes in manufacturer approaches to pricing branded pharmaceutical products and risks related to our compensation under contractual arrangements with manufacturers being set as a percentage of the wholesale acquisition cost of branded pharmaceuticals;
- changes in the timing or frequency of the introduction of branded pharmaceuticals;
- our high sales concentration with certain key customers, including CVS Health Corporation and OptumRx;
- actions of regulatory bodies and other governmental authorities, including the U.S. Drug Enforcement Administration, certain agencies within the U.S. Department of Health and Human Services (including the U.S. Food and Drug Administration, Centers for Medicare and Medicaid Services, the Office of Inspector General and the Office for Civil Rights), the U.S. Nuclear Regulatory Commission, the U.S. Federal Trade Commission, the U.S. Customs and Border Protection, various state boards of pharmacy, state controlled substance authorities, state health departments, state insurance departments, state Medicaid departments or comparable regulatory bodies or governmental authorities or foreign equivalents that, in each case, could delay, limit or suspend product development, manufacturing, distribution, importation or sales or result in warning letters, recalls, seizures, injunctions or monetary sanctions;
- any compromise of our information systems or of those of a third-party service provider, including unauthorized access to or use or disclosure of company or customer information, and ancillary risks associated with our ability to effectively manage any issues arising from any such compromise;
- possible losses that may arise or expenses that we may incur from the resolution and defense of the lawsuits and investigations in which we have been named relating to the distribution of prescription opioid pain medication;
- potential damage to our reputation, adverse operational impacts or other effects that may result from the national opioid epidemic and the allegations that have been made about our role in such epidemic;
- potential adverse impact to our financial results resulting from enacted and proposed state taxes or other assessments on the sale and distribution of opioid medications;
- risks and uncertainties relating to the acquisition of the Patient Care, Deep Vein Thrombosis and Nutritional Insufficiency businesses from Medtronic plc (the "Patient Recovery Business"), including the ability to retain the acquired business' customers and employees; the ability to successfully integrate the acquired business into our operations; the ability to achieve the expected synergies and accretion in earnings; unforeseen internal control, regulatory or compliance issues; and additional risks relating to regulatory matters, legal proceedings, tax laws or positions or foreign exchange rate volatility;
- uncertainties related to our ability to manage inventory and cost challenges within the Cordis business and to stop the decline in Cordis' performance;
- difficulties or delays in the development, production, manufacturing, sourcing and marketing of new or existing products and services, including difficulties or delays associated with obtaining requisite regulatory consents or approvals associated with those activities;
- manufacturing disruptions, whether due to regulatory action, production quality deviations, safety issues or raw material shortages or defects, or because a key product is manufactured at a single manufacturing facility with limited alternate facilities;
- risks arising from possible violations of healthcare fraud and abuse laws;
- costs or claims resulting from potential errors or defects in our manufacturing of medical devices or other products or in our compounding, repackaging, information systems or pharmacy management services that may injure persons or damage property or operations, including costs from remediation efforts or recalls and related product liability claims and lawsuits, including class action lawsuits;
- risks arising from possible violations of the U.S. Foreign Corrupt Practices Act and other similar anti-corruption laws in other jurisdictions and U.S. and foreign export control, trade embargo and customs laws;

- risks arising from our collecting, handling and maintaining patient-identifiable health information and other sensitive personal and financial information, which are subject to federal, state and foreign laws that regulate the use and disclosure of such information;
- risks arising from certain of our businesses being Medicare-certified suppliers or participating in other federal and state healthcare programs, such as state Medicaid programs and the federal 340B drug pricing program, which businesses are subject to accreditation and quality standards and other rules and regulations, including applicable reporting, billing, payment and record-keeping requirements;
- risks arising from certain of our businesses manufacturing pharmaceutical and medical products or repackaging pharmaceuticals that are purchased or reimbursed through, or are otherwise governed by, federal or state healthcare programs, which businesses are subject to federal and state laws that establish eligibility for reimbursement by such programs and other applicable standards and regulations;
- changes in laws or changes in the interpretation or application of laws or regulations, as well as possible failures to comply with applicable laws or regulations, including as a result of possible misinterpretations or misapplications;
- material reductions in purchases, pricing changes, non-renewal, early termination, or delinquencies or defaults under contracts with key customers;
- unfavorable changes to the terms of key customer or supplier relationships, or changes in customer mix;
- risks arising from changes in U.S. or foreign tax laws, including our ability to effectively implement and account for the recently enacted Tax Cuts and Jobs Act and unfavorable challenges to our tax positions and payments to settle these challenges;
- uncertainties due to government healthcare reform, including possible repeal or replacement of major parts of the Patient Protection and Affordable Care Act;
- reductions or limitations on governmental funding at the state or federal level or efforts by healthcare insurance companies to limit payments for products and services;
- changes in manufacturers' pricing, selling, inventory, distribution or supply policies or practices;
- changes in legislation or regulations governing prescription drug pricing, healthcare services or mandated benefits;
- changes in hospital buying groups or hospital buying practices;
- changes in distribution or sourcing models for pharmaceutical and medical and surgical products, including an increase in direct and limited distribution;
- the risks of counterfeit products in the supply chain;
- changes to the prescription drug reimbursement formula and related reporting requirements for generic pharmaceuticals under Medicaid;
- increasing consolidation in the healthcare industry, which could give the resulting enterprises greater bargaining power and may increase pressure on prices for our products and services or result in the loss of customers;
- disruption, damage or lack of access to, or failure of, our or our third-party service providers' information systems, our critical facilities, including our national logistics center, or our distribution networks;
- risks to our business and information and controls systems in the event that business process improvements, infrastructure modernizations or initiatives to use third-party service providers for key systems and processes are not effectively implemented;
- the results, costs, effects or timing of any commercial disputes, government contract compliance matters, patent infringement claims, *qui tam* actions, government investigations or other legal proceedings;
- possible losses relating to product liability lawsuits and claims regarding products for which we cannot obtain product liability insurance or for which such insurance may not be adequate to cover our losses, including the product liability lawsuits we are currently defending relating to alleged personal injuries associated with the use of Cordis inferior vena cava filter products;
- our ability to maintain adequate intellectual property protections;
- the costs, difficulties and uncertainties related to the integration of acquired businesses, including liabilities relating to the operations or activities of such businesses prior to their acquisition, and uncertainties relating to our ability to achieve the anticipated results from acquisitions;
- our ability to manage and complete divestitures or other strategic business combination transactions, including our ability to find buyers or other strategic exit opportunities and risks associated with the possibility that we could experience greater dis-synergies than anticipated or otherwise fail to achieve our strategic objectives;
- increased costs for commodities and other materials used in the Medical segment manufacturing, including various components, compounds, raw materials or energy such as oil-based resins, pulp, cotton, latex and other commodities;
- shortages in commodities, components, compounds, raw materials or energy used by our businesses, including supply disruptions of radioisotopes;
- the loss of, or default by, one or more key suppliers for which alternative suppliers may not be readily available;
- bankruptcy, insolvency or other credit failure of a customer or supplier that owes us a substantial amount;

- risks associated with global operations, including the effect of local economic environments, inflation, recession, currency volatility and global competition, in addition to risks associated with compliance with U.S. and international laws relating to global operations including currently proposed tariffs;
- risks associated with our use of and reliance on the global capital and credit markets, including our ability to access credit and our cost of credit, which may adversely affect our ability to efficiently fund our operations or undertake certain expenditures;
- our ability to introduce and market new products and our ability to keep pace with advances in technology;
- the costs, effects, timing or success of restructuring programs or plans;
- significant charges to earnings if goodwill or intangible assets become impaired;
- uncertainties relating to general political, business, industry, regulatory and market conditions; and
- other factors described in the “Risk Factors” section of the 2018 Form 10-K.

The words “expect,” “anticipate,” “intend,” “plan,” “believe,” “will,” “should,” “could,” “would,” “project,” “continue,” “likely,” and similar expressions generally identify “forward-looking statements,” which speak only as of the date the statements were made, and also include statements reflecting future results or guidance, statements of outlook and expense accruals. We undertake no obligation to update or revise any forward-looking statements, except to the extent required by applicable law.

Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended June 30, 2017

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File Number: 1-11373

Cardinal Health, Inc.

(Exact name of registrant as specified in its charter)

Ohio	**31-0958666**
(State or other jurisdiction of incorporation or organization)	***(IRS Employer Identification No.)***
7000 Cardinal Place, Dublin, Ohio	**43017**
(Address of principal executive offices)	***(Zip Code)***

(614) 757-5000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of class	*Name of each exchange on which registered*
Common shares (without par value)	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☑ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☑

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☑	Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐
Emerging growth company ☐	

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

The aggregate market value of voting stock held by non-affiliates or registrant on December 31, 2016 , was the following: $22,624,332,824 .

The number of the registrant's common shares, without par value, outstanding as of July 31, 2017, was the following: 316,453,664 .

Documents Incorporated by Reference:

Portions of the registrant's Definitive Proxy Statement to be filed for its 2017 Annual Meeting of Shareholders are incorporated by reference into the sections of this Form 10-K addressing the requirements of Part III of Form 10-K.

Cardinal Health

Fiscal 2017 Form 10-K

Table of Contents

Introduction

References to Cardinal Health and Fiscal Years

As used in this report, "we," "our," "us," "Cardinal Health" and similar pronouns refer to Cardinal Health, Inc. and its subsidiaries, unless the context requires otherwise. Our fiscal year ends on June 30. References to fiscal 2017 , 2016 , 2015 , 2014 and 2013 and to FY17 , FY16 , FY15 , FY14 and FY13 are to the fiscal years ended June 30, 2017 , 2016 , 2015 , 2014 and 2013 , respectively. Except as otherwise specified, information in this report is provided as of June 30, 2017 .

Non-GAAP Financial Measures

In this report, including in the "Fiscal 2017 Overview" section of Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A"), we use financial measures that are derived from consolidated financial data but are not presented in our financial statements that are prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). These measures are considered “non-GAAP financial measures” under the Securities and Exchange Commission (“SEC”) rules. The reasons we use these non-GAAP financial measures and the reconciliations to their most directly comparable GAAP financial measures are included in the “Explanation and Reconciliation of Non-GAAP Financial Measures” section following MD&A in this report.

Important Information Regarding Forward-Looking Statements

This report (including information incorporated by reference) includes forward-looking statements addressing expectations, prospects, estimates and other matters that are dependent upon future events or developments. Many forward-looking statements appear in MD&A, but there are others throughout this report, which may be identified by words such as “expect,” “anticipate,” “intend,” “plan,” “believe,” “will,” “should,” “could,” “would,” “project,” “continue,” “likely,” and similar expressions, and include statements reflecting future results or guidance, statements of outlook and expense accruals. These matters are subject to risks and uncertainties that could cause actual results to differ materially from those projected, anticipated or implied. The most significant of these risks and uncertainties are described in “Risk Factors” in this report and in Exhibit 99.1 to the Form 10-K included in this report. Forward-looking statements in this report speak only as of the date of this document. Except to the extent required by applicable law, we undertake no obligation to update or revise any forward-looking statement.

Available Information

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports are available free of charge on our website (www.cardinalhealth.com), under the “Investors — Financial Reporting — SEC Filings” caption, as soon as reasonably practicable after we electronically file them with, or furnish them to, the SEC. You may read and copy any materials we file with the SEC at the SEC’s Public Reference Room at 100 F Street, NE, Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website (www.sec.gov) where you can search for annual, quarterly and current reports, proxy and information statements, and other information regarding us and other public companies.

Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A)

About Cardinal Health

Cardinal Health, Inc. is an Ohio corporation formed in 1979 and is a global, integrated healthcare services and products company providing customized solutions for hospitals, healthcare systems, pharmacies, ambulatory surgery centers, clinical laboratories and physician offices. We provide medical products and pharmaceuticals and cost-effective solutions that enhance supply chain efficiency. We connect patients, providers, payers, pharmacists and manufacturers for integrated care coordination and better patient management. We manage our business and report our financial results in two segments: Pharmaceutical and Medical.

Pharmaceutical Segment

Our Pharmaceutical segment distributes branded and generic pharmaceutical, specialty pharmaceutical, and over-the-counter healthcare and consumer products in the United States. This segment also provides services to pharmaceutical manufacturers and healthcare providers to support the development, marketing, and distribution of specialty pharmaceutical products; operates nuclear pharmacies and radiopharmaceutical manufacturing facilities; provides pharmacy management services to hospitals, as well as medication therapy management and patient outcomes services to hospitals, other healthcare providers and payers; and repackages generic pharmaceuticals and over-the-counter healthcare products. This segment also imports and distributes pharmaceuticals, over-the-counter healthcare and consumer products and provides specialty pharmacy and other services in China.

Medical Segment

Our Medical segment manufactures, sources and distributes Cardinal Health branded medical, surgical and laboratory products, which are sold in the United States, Canada, Europe, Asia and other markets. In addition to distributing Cardinal Health branded products, this segment also distributes a broad range of national brand products and provides supply chain services and solutions to hospitals, ambulatory surgery centers, clinical laboratories and other healthcare providers in the United States, Canada and China. This segment also distributes medical products to patients' homes and provides post-acute care management and transition services and software to hospitals, other healthcare providers and payers in the United States.

Consolidated Results

Fiscal 2017 Overview

Revenue
Revenue for fiscal 2017 was $130.0 billion , a 7 percent increase from the prior year, due primarily to sales growth from pharmaceutical distribution customers.

GAAP and Non-GAAP Operating Earnings

(in millions)	2017	2016	Change
GAAP	**$ 2,120**	$ 2,459	**(14)%**
Restructuring and employee severance	**56**	25	
Amortization and other acquisition-related costs	**527**	459	
Impairments and (gain)/loss on disposal of assets	**18**	21	
Litigation (recoveries)/charges, net	**48**	(69)	
Non-GAAP	**$ 2,769**	$ 2,895	**(4)%**

The sum of the components may not equal the total due to rounding.

During fiscal 2017 , GAAP operating earnings decreased 14 percent to $2.1 billion and non-GAAP operating earnings decreased 4 percent to $2.8 billion . The decreases in both GAAP and non-GAAP operating earnings were primarily due to generic pharmaceutical customer pricing changes and the previously disclosed loss of a large pharmaceutical distribution customer. The decreases were partially offset by the benefits of Red Oak Sourcing within our Pharmaceutical segment generics program and growth from our Medical segment. Changes in litigation (recoveries)/charges, net and amortization of acquisition-related intangible assets related to the acquisition of Cordis also contributed to the decrease in GAAP operating earnings during fiscal 2017 .

GAAP and Non-GAAP Diluted EPS

($ per share)	2017	2016	Change
GAAP	**$ 4.03**	$ 4.32	**(7)%**
Restructuring and employee severance	**0.11**	0.05	
Amortization and other acquisition-related costs	**1.13**	0.96	
Impairments and (gain)/loss on disposal of assets	**0.04**	0.04	
Litigation (recoveries)/charges, net	**0.09**	(0.13)	
Non-GAAP	**$ 5.40**	$ 5.24	**3 %**

The sum of the components may not equal the total due to rounding.

During fiscal 2017 , GAAP diluted earnings per share from continuing operations attributable to Cardinal Health, Inc. ("diluted EPS") decreased 7 percent to $4.03 and non-GAAP diluted EPS increased 3 percent to $5.40 . GAAP diluted EPS decreased due to lower GAAP operating earnings, partially offset by a lower effective tax rate and fewer shares outstanding as a result of share repurchases. Non-GAAP diluted EPS increased primarily due to a lower effective tax rate and fewer shares outstanding as a result of share repurchases, partially offset by lower non-GAAP operating earnings.

Cash and Equivalents
Our cash and equivalents balance was $6.9 billion at June 30, 2017 compared to $2.4 billion at June 30, 2016 . The increase in cash and equivalents during fiscal 2017 was driven by the proceeds from a $5.2 billion debt issuance and $1.2 billion provided by operating activities, partially offset by $600 million paid for share repurchases, $577 million paid in dividends, $387 million in capital expenditures and $310 million in debt repayments.

In July 2017, we used $6.1 billion to fund the acquisition of the Patient Care, Deep Vein Thrombosis and Nutritional Insufficiency businesses from Medtronic plc, as discussed below, and used $403 million to redeem our 1.7% notes due 2018.

Significant Developments in Fiscal 2017 and Trends

Acquisition of Medtronic's Patient Recovery Business

On July 29, 2017, we acquired the Patient Care, Deep Vein Thrombosis, and Nutritional Insufficiency businesses (the "Patient Recovery Business") from Medtronic plc ("Medtronic") for $6.1 billion in cash. The Patient Recovery Business manufactures 23 medical product categories sold into multiple healthcare channels, and includes numerous industry-leading brands, such as Curity, Kendall, Dover, Argyle and Kangaroo. The acquisition further expands the Medical segment's portfolio of self-manufactured products. We funded the acquisition through $4.5 billion in new long-term debt, the use of existing cash, and borrowings under our existing credit arrangements .

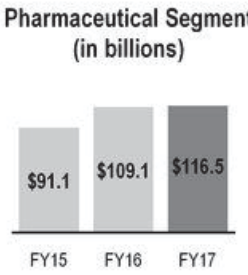
Trends

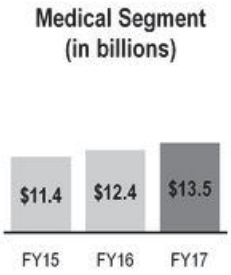
Within our Pharmaceutical segment, we expect fiscal 2018 segment profit to be less than our fiscal 2017 segment profit due primarily to generic pharmaceutical customer pricing changes, which also negatively impacted Pharmaceutical segment profit during fiscal 2017. However, as is generally the case, the frequency, timing, magnitude, and profit impact of pharmaceutical customer pricing changes and branded and generic pharmaceutical manufacturer pricing changes remain uncertain and their impact on Pharmaceutical segment profit and consolidated operating earnings in fiscal 2018 could be more or less than we expect.

In fiscal 2018, we expect the acquisition of the Patient Recovery Business will significantly increase the Medical segment's revenue and segment profit. We also expect the acquisition will significantly increase amortization and acquisition-related costs in fiscal 2018 due to the size and complexity of the acquisition. We expect our interest expense, net to increase in fiscal 2018 primarily due to the debt issued to fund a portion of the purchase price of the acquisition of the Patient Recovery Business.

Results of Operations

Revenue





	Revenue			Change	
(in millions)	**2017**	2016	2015	**2017**	2016
Pharmaceutical	**$ 116,463**	$109,131	$ 91,116	**7%**	20%
Medical	**13,524**	12,430	11,395	**9%**	9%
Total segment revenue	**129,987**	121,561	102,511	**7%**	19%
Corporate	**(11)**	(15)	20	**N.M.**	N.M.
Total revenue	**$ 129,976**	$121,546	$102,531	**7%**	19%

Fiscal 2017 Compared to Fiscal 2016

Pharmaceutical Segment
Fiscal 2017 Pharmaceutical segment revenue grew primarily due to sales growth from the addition of OptumRx and from other pharmaceutical distribution customers, including continued branded pharmaceutical price appreciation, all of which increased revenue by $7.0 billion.

Medical Segment
Fiscal 2017 Medical segment revenue grew primarily due to sales growth from new and existing customers and $212 million in contributions from acquisitions.

Fiscal 2016 Compared to Fiscal 2015

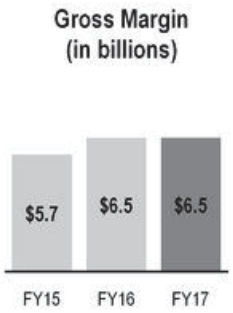
Pharmaceutical Segment
Fiscal 2016 Ph armaceutical segment revenue grew primarily due to sales growth from the addition of OptumRx and from other pharmaceutical distribution customers, including continued branded pharmaceutical price appreciation, all of which increased revenue by $16.9 billion. Acquisitions also contributed $2.1 billion to revenue growth.

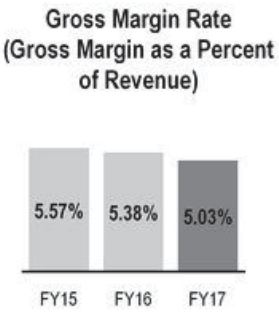
Medical Segment
Fiscal 2016 Medical segment revenue grew primarily due to acquisitions, net of divestitures, which contributed $645 million, and sales growth from existing businesses.

Cost of Products Sold

Cost of products sold f or fiscal 2017 and 2016 increased $8.4 billion (7 percent) and $18.2 billion (19 percent) compared to the prior-year periods, respectively, as a result of the same factors affecting the changes in revenue and gross margin.

Gross Margin





	Consolidated Gross Margin			Change	
(in millions)	**2017**	2016	2015	**2017**	2016
Gross margin	**$ 6,544**	$ 6,543	$ 5,712	**N.M.**	15%

Fiscal 2017 Compared to Fiscal 2016

Fiscal 2017 consolidated gross margin was essentially flat versus the prior-year period.

Consolidated gross margin for fiscal 2017 was positively impacted by sales growth from pharmaceutical distribution customers ($260 million) and acquisitions in both segments ($132 million) and was negatively impacted by the previously disclosed loss of a large pharmaceutical distribution customer.

Gross margin rate contracted during fiscal 2017 , primarily due to generic pharmaceutical customer pricing changes, partially offset by the benefits from Red Oak Sourcing within our Pharmaceutical segment generics program.

Fiscal 2016 Compared to Fiscal 2015

Fiscal 2016 consolidated gross margin increased $831 million (15 percent), and was favorably impacted by sales growth from pharmaceutical distribution customers ($510 million) and acquisitions, net of divestitures ($576 million).

Gross margin rate contracted during fiscal 2016 , primarily due to changes in product mix driven by the on-boarding of a new mail order customer, OptumRx, starting in October 2015, and also due to the adverse impact of customer pricing changes. Our gross margin rate was favorably impacted by performance under our Pharmaceutical segment generics program. Our generics program had strong year-over-year performance from Red Oak Sourcing.

Distribution, Selling, General and Administrative ("SG&A") Expenses

	SG&A Expenses			Change	
(in millions)	**2017**	2016	2015	**2017**	2016
SG&A expenses	**$ 3,775**	$ 3,648	$ 3,240	**3%**	13%

Fiscal 2017 Compared to Fiscal 2016

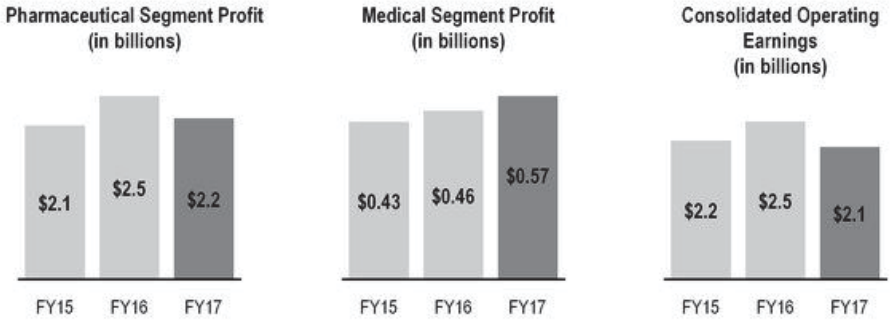
Fiscal 2017 SG&A expenses increased primarily due to acquisitions ($112 million) and costs related to a multi-year project to replace certain Pharmaceutical segment finance and operating information systems, partially offset by reduced enterprise-wide incentive compensation.

Fiscal 2016 Compared to Fiscal 2015

Fiscal 2016 SG&A expenses increased primarily due to acquisitions, net of divestitures ($370 million).

Segment Profit

We evaluate segment performance based on segment profit, among other measures. See Note 15 of the "Notes to Consolidated Financial Statements" for additional information on segment profit.



	Segment Profit and Operating Earnings			Change	
(in millions)	**2017**	2016	2015	**2017**	2016
Pharmaceutical	**$ 2,187**	$ 2,488	$ 2,094	**(12)%**	19%
Medical	**572**	457	433	**25 %**	6%
Total segment profit	**2,759**	2,945	2,527	**(6)%**	17%
Corporate	**(639)**	(486)	(366)	**31 %**	33%
Total consolidated operating earnings	**$ 2,120**	$ 2,459	$ 2,161	**(14)%**	14%

Fiscal 2017 Compared to Fiscal 2016

Pharmaceutical Segment Profit
Fiscal 2017 Pharmaceutical segment profit decreased largely due to generic pharmaceutical customer pricing changes. The previously disclosed loss of a large pharmaceutical distribution customer, the adverse impact of customer repricings and reduced levels of branded pharmaceutical price appreciation also contributed to the decrease in Pharmaceutical segment profit. These were partially offset by the benefits of Red Oak Sourcing within our generics program.

Medical Segment Profit
Fiscal 2017 Medical segment profit increased due to strong performance from naviHealth, contributions from Cardinal Health branded products, reduced enterprise-wide incentive compensation, and contributions from distribution services. Cardinal Health branded products growth includes the prior year unfavorable impact on cost of products sold from the Cordis inventory fair value step up.

Corporate
As discussed further in sections that follow, the principal drivers for the change in Corporate during fiscal 2017 were the change in litigation (recoveries)/charges, net and higher amortization and other acquisition-related costs.

Fiscal 2016 Compared to Fiscal 2015

Pharmaceutical Segment Profit
Fiscal 2016 Pharmaceutical segment profit increased due to sales growth from pharmaceutical distribution customers and performance under our generics program, partially offset by the adverse impact of customer pricing changes. Acquisitions also contributed to Pharmaceutical segment profit growth. Our generics program benefited from strong year-over-year performance from Red Oak Sourcing.

Medical Segment Profit
Fiscal 2016 Medical segment profit increased due to the contribution from Cardinal Health branded products. Acquisitions, net of divestitures, which included the unfavorable impact on cost of products sold from the fair value step up of inventory acquired with Cordis, also contributed to segment profit growth. Fiscal 2016 Medical segment profit growth was partially offset by a decline in the results from our Canada business.

Corporate
As discussed further in sections that follow, the principal driver for the change in Corporate in fiscal 2016 was increased amortization and other acquisition-related costs primarily related to the acquisitions of Cordis and Harvard Drug, partially offset by litigation recoveries.

Other Components of Consolidated Operating Earnings

In addition to revenue, gross margin, and SG&A expenses discussed previously, consolidated operating earnings were impacted by the following:

(in millions)	2017	2016	2015
Restructuring and employee severance	**$ 56**	$ 25	$ 44
Amortization and other acquisition-related costs	**527**	459	281
Impairments and (gain)/loss on disposal of assets, net	**18**	21	(19)
Litigation (recoveries)/charges, net	**48**	(69)	5

Amortization and Other Acquisition-Related Costs
Amortization of acquisition-related intangible assets was $392 million, $355 million and $189 million for fiscal 2017 , 2016 and 2015 , respectively. The increase in amortization of acquisition-related intangible assets during fiscal 2017 and fiscal 2016 was largely due to the acquisition of Cordis. Transaction and integration costs associated with the Cordis acquisition were $61 million and $78 million during fiscal 2017 and 2016 , respectively.

Transaction and integration costs associated with the acquisition of the Patient Recovery Business were $54 million during fiscal 2017 .

Litigation (Recoveries)/Charges, Net
During fiscal 2017 , we incurred litigation charges of $45 million due to accrued expenses relating to the Cordis-related IVC filter product liability claims and the settlement of the State of West Virginia matter. See Note 8 of the "Notes to Consolidated Financial Statements" for additional information.

During fiscal 2016 and 2015 , we received and recognized income of $80 million and $71 million, respectively, from settlements of class action antitrust lawsuits in which we were a class member. During fiscal 2015 , we incurred litigation charges of $68 million related to government investigations.

Earnings From Continuing Operations Before Income Taxes

In addition to the items discussed above, earnings from continuing operations before income taxes was impacted by the following:

	Earnings from Continuing Operations Before Income Taxes			Change	
(in millions)	2017	2016	2015	2017	2016
Other (income)/expense, net	**$ (5)**	$ 5	$ (7)	**N.M.**	N.M.
Interest expense, net	**201**	178	141	**13%**	26 %
Loss on extinguishment of debt	**—**	—	60	**N.M.**	(100)%

Interest Expense, Net
Fiscal 2017 interest expense increased primarily due to $5.2 billion of new long-term debt issued in June 2017, $4.5 billion of which was used to fund the acquisition of the Patient Recovery Business in July 2017. Fees relating to a commitment for an unsecured bridge term loan facility obtained in connection with the acquisition also contributed to the increase in interest expense. No amounts were drawn under the bridge loan facility and we terminated the commitment letter in June 2017.

Fiscal 2016 interest expense increased primarily as a result of the additional $1.5 billion of debt issued in June 2015 to fund the Harvard Drug and Cordis acquisitions.

Loss on Extinguishment of Debt
In fiscal 2015, we redeemed certain debt resulting in a loss on the extinguishment of debt of $60 million ($37 million, net of tax).

Provision for Income Taxes

The provision for income taxes decreased in fiscal 2017 primarily due to a decrease in earnings from continuing operations and a 4.4 percentage point decrease in the effective tax rate as discussed below.

Generally, fluctuations in the effective tax rate are due to changes in the distribution of income among non-U.S. taxing jurisdictions with lower income tax rates and other reconciling items. A reconciliation of the provision based on the federal statutory income tax rate to our effective income tax rate from continuing operations is as follows (see Note 7 of the "Notes to Consolidated Financial Statements" for additional information):

	2017	2016	2015
Provision at Federal statutory rate	**35.0 %**	35.0 %	35.0 %
State and local income taxes, net of federal benefit	**1.0**	1.5	4.1
Foreign tax rate differential	**(0.2)**	(0.6)	(2.4)
Nondeductible/nontaxable items	**0.2**	1.0	0.7
Other	**(3.3)**	0.2	1.0
Effective income tax rate	**32.7 %**	37.1 %	38.4 %

Fiscal 2017

The fiscal 2017 effective income tax rate was favorably impacted by the change in other items, which decreased 3.5 percentage points from fiscal 2016 primarily due to the realignment of foreign subsidiaries in anticipation of closing the acquisition of the Patient Recovery Business and also with deductions related to U.S. production activities. The state and local income tax rate decreased 0.5 percentage points primarily due to resolutions with state taxing authorities.

Ongoing Audits

The IRS is currently conducting audits of fiscal years 2008 through 2014.

Fiscal 2016 and Fiscal 2015

The fiscal 2016 effective income tax rate was favorably impacted by the state and local income tax rate, which decreased 2.6 percentage points from fiscal 2015 due to resolutions with state taxing authorities and a shift in the distribution of income among jurisdictions. The foreign tax rate differential decreased 1.8 percentage points primarily due to the deferred tax benefits recognized in fiscal 2015.

The fiscal 2015 effective income tax rate was unfavorably impacted by the state and local income tax rate, which increased 1.9 percentage points due to the de-recognition of certain state tax benefits. The foreign tax rate differential also increased 1.2 percentage points primarily due to recognition of deferred tax benefits resulting from new tax legislation. In addition, the change in measurement of uncertain tax positions increased 1.3 percentage points primarily as a result of proposed assessment of additional tax.

Liquidity and Capital Resources

We currently believe that, based on available capital resources (cash on hand and committed credit facilities) and projected operating cash flow, we have adequate capital resources to fund working capital needs; currently anticipated capital expenditures; currently anticipated business growth and expansion; contractual obligations; tax payments; and current and projected debt service requirements, dividends, and share repurchases. If we decide to engage in one or more additional acquisitions, depending on the size and timing of such transactions, we may need to access capital markets for additional financing.

Cash and Equivalents

Our cash and equivalents balance was $6.9 billion at June 30, 2017 compared to $2.4 billion at June 30, 2016 . The increase in cash and equivalents during fiscal 2017 was driven by the proceeds from the $5.2 billion debt issuance and $1.2 billion provided by operating activities, partially offset by $600 million paid for share repurchases, $577 million paid in dividends, $387 million in capital expenditures and $310 million in debt repayments. The $1.8 billion decrease in net cash provided by operating activities was primarily due to an increase in working capital as a result of changes in timing of customer and vendor payments, some of which related to implementation of the new Pharmaceutical segment finance and operating information systems. At June 30, 2017 , our cash and equivalents were held in cash depository accounts with major banks or invested in high quality, short-term liquid investments. On July 29, 2017, we acquired the Patient Recovery Business for $6.1 billion in cash.

The cash and equivalents balance at June 30, 2017 included $569 million of cash held by subsidiaries outside of the United States. Although the vast majority of cash is available for repatriation, bringing the cash into the United States could trigger U.S federal, state and local income tax obligations. Because the earnings are considered permanently reinvested, no U.S. tax provision has been accrued related to the repatriation of these earnings. It is not practicable to evaluate the amount of U.S. tax that might be payable on the remittance of such earnings.

The decrease in cash and equivalents during fiscal 2016 of $2.2 billion was driven by $3.6 billion deployed for acquisitions, $651 million paid for share repurchases, $512 million paid in dividends and $465 million in capital expenditures, partially offset by net cash provided by operating activities of $3.0 billion , which was positively impacted by increased net earnings and working capital improvements.

During fiscal 2015 we deployed $1.0 billion of cash on share repurchases, $503 million on acquisitions and $460 million on dividends. Net cash provided by operating activities of $2.5 billion benefited from a net working capital decrease in excess of $500 million as a result of the Walgreens contract expiration.

Changes in working capital, which impact operating cash flow, can vary significantly depending on factors such as the timing of customer payments, inventory purchases and payments to vendors in the regular course of business, as well as fluctuating working capital needs driven by customer and product mix.

Other Financing Arrangements and Financial Instruments

Credit Facilities and Commercial Paper

In addition to cash and equivalents and operating cash flow, other sources of liquidity at June 30, 2017 include a $1.75 billion revolving credit facility and a $700 million committed receivables sales facility program. We also have a $1.75 billion commercial paper program, backed by our revolving credit facility. At June 30, 2017 , we had no amounts outstanding under our revolving credit facility or our committed receivables sales facility program. Under our commercial paper program, we had a maximum amount outstanding of $855 million and an average daily amount outstanding of $58 million during fiscal 2017.

Our revolving credit facility and committed receivables sales facility programs require us to maintain a consolidated leverage ratio of no more than 3.25-to-1 as of the last day of each quarter. As a result of the acquisition of the Patient Recovery Business , we temporarily increased this ratio to 4.25-to-1. As of June 30, 2017 , we were in compliance with these financial covenants.

Long-Term Obligations

At June 30, 2017 , we had total long-term obligations of $9.1 billion .

In June 2017, we sold $1 billion aggregate principal amount of 1.948% notes due 2019, $1.15 billion aggregate principal amount of 2.616% notes due 2022, $350 million aggregate principal amount of floating rate notes due 2022, $750 million aggregate principal amount of 3.079% notes due 2024, $1.35 billion aggregate principal amount of 3.410% notes due 2027 and $600 million aggregate principal amount of 4.368% notes due 2047. In addition to funding a portion of the purchase price of the acquisition of the Patient Recovery Business described below, in July 2017 we used a portion of the debt proceeds to redeem our $400 million 1.7% notes due 2018.

Funding for Acquisition of Medtronic's Patient Recovery Business

On July 29, 2017 , we acquired the Patient Recovery Business from Medtronic for $6.1 billion in cash. We funded the acquisition using $4.5 billion of the proceeds from long-term debt issued in June 2017, cash on hand, $400 million in commercial paper and $300 million borrowed under our receivables sales facility. The new long-term debt was issued in June 2017 primarily to fund a portion of the purchase price of this acquisition. We also had obtained a commitment letter in April 2017 from a financial institution for a $4.5 billion unsecured bridge term loan facility that could have been used to complete the acquisition. We incurred fees related to the facility, which are included in interest expense, net. No amounts were drawn under the bridge term loan facility and we terminated the commitment letter in June 2017.

Available-for-Sale Securities

At June 30, 2017 and 2016 , we held $65 million and $200 million , respectively, of marketable securities, which are classified as available-for-sale. In July 2017, we liquidated $65 million of our marketable securities.

Risk Management

We use interest rate swaps, foreign currency contracts and commodity contracts to manage our exposure to cash flow variability. We also use interest rate swaps to protect the value of our debt and use foreign currency forward contracts to protect the value of our existing and forecasted foreign currency assets and liabilities. See the "Quantitative and Qualitative Disclosures About Market Risk" section as well as Note 1 and Note 11 of the “Notes to Consolidated Financial Statements” for information regarding the use of financial instruments and derivatives as well as foreign currency, interest rate and commodity exposures.

Capital Deployment

Capital Expenditures

Capital expenditures during fiscal 2017 , 2016 and 2015 were $387 million , $465 million and $300 million , respectively.

We expect capital expenditures in fiscal 2018 to be between $500 million and $540 million primarily for information technology projects, growth projects in our core business and for integration of the acquisition of the Patient Recovery Business.

Dividends

During fiscal 2017 , we paid quarterly dividends totaling $1.80 per share, an increase of 16 percent from fiscal 2016 .

On May 3, 2017, our Board of Directors approved a quarterly dividend of $0.4624 per share, or $1.85 per share on an annualized basis, which was paid on July 15, 2017 to shareholders of record on July 3, 2017.

Share Repurchases

During fiscal 2017, we repurchased $600 million of our common shares. We funded the repurchases with available cash. At June 30, 2017, we had $443 million remaining under our existing $1.0 billion share repurchase program.

Acquisition of Medtronic's Patient Recovery Business

Described above under "Funding for Acquisition of Medtronic's Patient Recovery Business."

Long-Term Obligations Repayment Plans

We plan to reduce our long-term obligations by approximately $500 million in each of fiscal 2018, 2019 and 2020 by paying off long-term debt as it comes due.

Contractual Obligations

At June 30, 2017 , our contractual obligations, including estimated payments due by period, are as follows:

(in millions)	2018	2019 to 2020	2021 to 2022	There-after	Total
Long-term debt and short-term borrowings (1)	$ 1,328	$ 1,950	$ 1,750	$ 5,424	**$ 10,452**
Interest on long-term debt	320	590	542	2,250	**3,702**
Capital lease obligations (2)	2	5	2	2	**11**
Other liabilities (3)	4	—	—	—	**4**
Operating leases (4)	110	171	100	107	**488**
Purchase obligations and other payments (5)	341	331	234	244	**1,150**
Total contractual obligations (6)	**$ 2,105**	**$ 3,047**	**$ 2,628**	**$ 8,027**	**$ 15,807**

(1) Represents maturities of our long-term debt obligations and other short-term borrowings excluding capital lease obligations described below. See Note 6 of the "Notes to Consolidated Financial Statements" for further information.

(2) Represents maturities of our capital lease obligations included within long-term obligations in our consolidated balance sheets.

(3) Represents cash outflows by period for certain of our liabilities in which cash outflows could be reasonably estimated. Long-term liabilities, such as unrecognized tax benefits and deferred taxes, have been excluded from the table above because of the inherent uncertainty of the underlying tax positions or because of the inability to reasonably estimate the timing of any cash outflows. See Note 7 of the "Notes to Consolidated Financial Statements" for further discussion of income taxes. Additionally, the carrying value of redeemable noncontrolling interests are excluded from the table, as the ultimate amount and timing of any future cash payments related to the redemption amount are uncertain. See Note 1 and Note 12 of the "Notes to Consolidated Financial Statements" for additional information regarding redeemable noncontrolling interests.

(4) Represents minimum rental payments for operating leases having initial or remaining non-cancelable lease terms as described in Note 8 of the "Notes to Consolidated Financial Statements."

(5) A purchase obligation is defined as an agreement to purchase goods or services that is legally enforceable and specifies all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and approximate timing of the transaction. The purchase obligation amounts disclosed above represent estimates of the minimum for which we are obligated and the time period in which cash outflows will occur. Purchase orders and authorizations to purchase that involve no firm commitment from either party are excluded from the above table. In addition, contracts that can be unilaterally canceled with no termination fee or with proper notice are excluded from our total purchase obligations except for the amount of the termination fee or the minimum amount of goods that must be purchased during the requisite notice period. Purchase obligations and other payments also includes quarterly payments of $45.6 million that we are required to pay CVS Health Corporation ("CVS"), in connection with the establishment of Red Oak Sourcing and will be in place for the remaining seven years of the agreement. See Note 8 of the "Notes to Consolidated Financial Statements" for additional information.

(6) Excludes obligations from acquisitions not closed as of June 30, 2017.

Off-Balance Sheet Arrangements

We had no significant "off-balance sheet arrangements" at June 30, 2017 , as that term is defined in the SEC rules.

Recent Financial Accounting Standards

See Note 1 of the "Notes to Consolidated Financial Statements" for a discussion of recent financial accounting standards.

Critical Accounting Policies and Sensitive Accounting Estimates

Critical accounting policies are those accounting policies that (i) can have a significant impact on our financial condition and results of operations and (ii) require the use of complex and subjective estimates based upon past experience and management's judgment. Other people applying reasonable judgment to the same facts and circumstances could develop different estimates. Because estimates are inherently uncertain, actual results may differ. In this section, we describe the significant policies applied in preparing our consolidated financial statements that management believes are the most dependent on estimates and assumptions. For further discussion of accounting policies for items within this section and of additional accounting policies, see Note 1 of the "Notes to Consolidated Financial Statements."

Allowance for Doubtful Accounts

The allowance for doubtful accounts includes general and specific reserves. We determine our allowance for doubtful accounts by reviewing accounts receivable aging, industry trends, customer financial strength and credit standing, historical write-off trends and payment history. We regularly evaluate how changes in economic conditions may affect credit risks. See Note 1 of the "Notes to Consolidated Financial Statements" for further information on our policy for Receivables and Allowance for Doubtful Accounts.

A hypothetical 0.1 percent increase or decrease in the reserve as a percentage of trade receivables at June 30, 2017 , would result in an increase or decrease in bad debt expense of $8 million . We believe the reserve maintained and expenses recorded in fiscal 2017 are appropriate. At this time, we are not aware of any analytical findings or customer issues that are likely to lead to a significant future increase in the allowance for doubtful accounts as a percentage of revenue.

The following table presents information regarding the allowance for doubtful accounts over the past three fiscal years:

(in millions, except percentages)	2017	2016	2015
Allowance for doubtful accounts	**$ 137**	$ 135	$ 135
Reduction to allowance for customer deductions and write-offs	**58**	74	66
Charged to costs and expenses	**60**	74	64
Allowance as a percentage of customer receivables	**1.7%**	1.8%	2.0%
Allowance as a percentage of revenue	**0.11%**	0.11%	0.13%

Inventories

A substantial portion of our inventories (56 percent and 58 percent at June 30, 2017 and 2016 , respectively) are valued at the lower of cost, using the last-in, first-out ("LIFO") method, or market. These are primarily merchandise inventories at the core pharmaceutical distribution facilities within our Pharmaceutical segment ("distribution facilities"). The LIFO impact on the consolidated statements of earnings depends on pharmaceutical manufacturer price appreciation or deflation and our fiscal year-end inventory levels, which can be meaningfully influenced by customer buying behavior immediately preceding our fiscal year-end. Prices for branded pharmaceuticals generally tend to rise, resulting in an increase in cost of products sold, whereas prices for generic pharmaceuticals generally tend to decline, resulting in a decrease in cost of products sold. See Note 1 of the "Notes to Consolidated Financial Statements" for further information on our policy for Inventories.

Using LIFO, if there is a decrease in inventory levels that have experienced pharmaceutical price appreciation, the result generally will be a decrease in future cost of products sold as our older inventory is held at a lower cost. Conversely, if there is a decrease in inventory levels that have experienced a pharmaceutical price decline, the result generally will be an increase in future cost of products sold as our older inventory is held at a higher cost.

We believe that the average cost method of inventory valuation provides a reasonable approximation of the current cost of replacing inventory within these distribution facilities. As such, the LIFO reserve is the difference between (a) inventory at the lower of LIFO cost or market and (b) inventory at replacement cost determined using the average cost method of inventory valuation. If we had used the average cost method of inventory valuation for all inventory within the distribution facilities, the value of our inventories would not have changed in fiscal 2017 or 2016 because inventories valued at LIFO were $46 million and $9 million higher than the average cost value at June 30, 2017 and 2016 , respectively. We do not record inventories in excess of replacement cost. As such, we did not record any changes in our LIFO reserve in fiscal 2017 and 2016 .

Our remaining inventory that is not valued at the lower of LIFO or market is stated at the lower of cost, using the first-in, first-out method, or market. Inventories presented in the consolidated balance sheets are net of reserves for excess and obsolete inventory which were $76 million and $79 million at June 30, 2017 and 2016 , respectively. We reserve for inventory obsolescence using estimates based on historical experience, historical and projected sales trends, specific categories of inventory, age of on-hand inventory and manufacturer return policies. If actual conditions are less favorable than our assumptions, additional inventory reserves may be required.

Business Combinations

The assets acquired and liabilities assumed in a business combination, including identifiable intangible assets, are recorded at their estimated fair values as of the acquisition date. For further discussion of the Business Combinations accounting policy, see Note 1 of the "Notes to Consolidated Financial Statements."

Critical estimates and assumptions include: expected future cash flows for customer relationships, trademarks, trade names, patents, developed technology, in-process research and development ("IPR&D") and other identifiable intangible assets; discount rates that reflect the risk factors associated with future cash flows; and estimates of useful lives. See Note 2 of the "Notes to Consolidated Financial Statements" for additional information regarding our acquisitions.

Goodwill and Other Intangible Assets

Purchased goodwill and intangible assets with indefinite lives are tested for impairment annually or when indicators of impairment exist. Goodwill impairment testing involves a comparison of the estimated fair value of reporting units to the respective carrying amount, which may be performed utilizing either a qualitative or quantitative assessment. A reporting unit is defined as an operating segment or one level below an operating segment (also known as a component).

We have two operating segments, which are the same as our reportable segments: Pharmaceutical and Medical. These operating segments are comprised of divisions (components), for which discrete financial information is available. Components are aggregated into reporting units for purposes of goodwill impairment testing to the extent that they share similar economic characteristics. Our reporting units are: Pharmaceutical operating segment (excluding our Nuclear Pharmacy Services division and Cardinal Health China - Pharmaceutical division); Nuclear Pharmacy Services division; Cardinal Health China - Pharmaceutical division; Medical operating segment (excluding our Cardinal Health at Home division and naviHealth division) ("Medical Unit"); Cardinal Health at Home division; and naviHealth division.

Goodwill impairment testing involves judgment, including the identification of reporting units and the estimation of the fair value of each reporting unit and, if necessary, the estimation of the implied fair value of goodwill. Our determination of estimated fair value of our reporting units is based on a combination of the income-based and market-based approaches. We use discount rates that are commensurate with the risks and uncertainty inherent in the respective reporting units and in our internally-developed forecasts. Under the market-based approach, we determine fair value by comparing our reporting units to similar businesses or guideline companies whose securities are actively traded in public markets.

Estimating the fair value of reporting units requires the use of estimates and significant judgments that are based on a number of factors including actual operating results. The use of alternate estimates and assumptions or changes in the industry or peer groups could materially affect the determination of fair value for each reporting unit and potentially result in goodwill impairment. If a reporting unit fails to achieve expected earnings or otherwise fails to meet current financial plans, or if there were changes to any other key assumptions used in the tests, the reporting unit could incur a goodwill impairment in a future period.

We performed annual impairment testing in fiscal 2017, 2016 and 2015 and concluded that there were no impairments of goodwill as the estimated fair value of each reporting unit exceeded its carrying value. For our annual impairment test in fiscal 2017, the fair value of our Medical Unit exceeded its carrying value of $6.8 billion by approximately 6 percent, which is lower than in past years due to recent performance of our Cordis acquisition. For this test, we used a discount rate of 8.5 percent and a terminal growth rate of 2.0 percent. The goodwill balance for our Medical Unit is $2.6 billion. A decrease in future cash flows, an increase in the discount rate or a decrease in the terminal growth rate, among other things, could result in a goodwill impairment for the Medical Unit. If we were to alter our impairment testing in fiscal 2017 by increasing the discount rate by 1.0 percent, there would have been an impairment indicator for our Medical Unit and we would have performed Step 2 of the goodwill impairment test. Similarly, changes in other key assumptions used in the test could result in an impairment indicator for our Medical Unit. For any of our other reporting units, there would not have been an impairment indicator for fiscal 2017 if we raised the discount rate by 1.0 percent. Subsequent to June 30, 2017, we acquired the Patient Recovery Business as discussed in Note 18, which will be included in the Medical Unit going forward and is expected to significantly contribute to the profit of this unit.

Intangible assets with finite lives are amortized using a combination of straight-line and accelerated methods based on the expected cash flows from the asset over their estimated useful lives. We review intangible assets with finite lives for impairment whenever events or changes in circumstances indicate that the related carrying amounts may not be recoverable.

The impairment test for indefinite-lived intangibles other than goodwill (primarily IPR&D) requires comparing the fair value of the indefinite-lived intangible asset to the carrying value of the asset as of the impairment testing date.

We estimate the fair value of our indefinite-lived intangibles under the income approach using a discounted cash flow model. We use our internal forecasts to estimate future cash flows, which we believe are consistent with those of a market participant, and include an estimate of long-term growth rates based on our most recent views of the long-term outlook for the indefinite-lived intangible including, among other factors, assumptions on regulatory approval for IPR&D.

Determining whether an impairment of indefinite-lived intangibles occurred requires estimating future undiscounted cash flows expected to be generated by the asset group. Actual results may differ materially from those used in our forecasts.

See Note 1 of "Notes to Consolidated Financial Statements" for additional information regarding goodwill and other intangible assets.

Vendor Reserves

In the ordinary course of business, our vendors may dispute deductions taken against payments otherwise due to them or assert other disputes. These disputed transactions are researched and resolved based upon findings of the research performed. At any given time, there are outstanding items in various stages of research and resolution. In determining appropriate reserves for areas of exposure with our vendors, we assess historical experience and current outstanding claims. We have established various levels of reserves based on the type of claim and status of review. For further discussion on the Vendor Reserves, see Note 1 of "Notes to Consolidated Financial Statements."

Vendor reserves were $50 million and $62 million at June 30, 2017 and 2016 , respectively. Approximately 77 percent of the vendor reserve at the end of fiscal 2017 pertained to the Pharmaceutical segment compared to 66 percent at the end of fiscal 2016 . The reserve balance will fluctuate due to variations in outstanding claims from period-to-period, timing of resolutions and specific vendor issues.

The ultimate outcome of specific claims may be different than our original estimate and may require adjustment. We believe, however, that reserves recorded for such disputes are reasonable based upon current facts and circumstances.

Loss Contingencies and Self-Insurance

We accrue for contingencies related to disputes, litigation and regulatory matters if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated.

Because these matters are inherently unpredictable and unfavorable developments or outcomes can occur, assessing contingencies is highly subjective and requires judgments about future events.

We also self-insure for employee healthcare, certain product liability matters, auto liability, property and workers' compensation and maintain insurance for individual losses exceeding certain limits when available.

Self-insurance accruals include an estimate for expected settlements on pending claims, defense costs, administrative fees, claims adjustment costs and an estimate for claims incurred but not reported.

For certain types of exposures, we develop the estimate of expected ultimate costs to settle each claim which is based on specific information related to each claim if available. Other estimates are based on an assessment of outstanding claims, historical analysis and current payment trends. For claims incurred but not reported, the liabilities are calculated and derived in accordance with generally accepted actuarial practices or using an estimated lag period.

We regularly review contingencies and self-insurance accruals to determine whether our accruals and related disclosures are adequate. The amount of loss may differ from these estimates. See Note 8 of the "Notes to Consolidated Financial Statements" for additional information regarding loss contingencies and product liability lawsuits.

Provision for Income Taxes

Our income tax expense, deferred income tax assets and liabilities, and unrecognized tax benefits reflect management's assessment of estimated future taxes to be paid on items in the consolidated financial statements.

The following table presents information about our tax position at June 30:

(in millions)	2017	2016
Total deferred income tax assets (1)	**$ 692**	$ 567
Valuation allowance for deferred income tax assets (2)	**(237)**	(93)
Net deferred income tax assets	**455**	474
Total deferred income tax liabilities	**(2,331)**	(2,130)
Net deferred income tax liability	**$ (1,876)**	$ (1,656)

(1) Total deferred income tax assets included $378 million and $193 million of loss and tax credit carryforwards at June 30, 2017 and 2016 , respectively.

(2) The valuation allowance primarily relates to federal, state and international loss carryforwards for which the ultimate realization of future benefits is uncertain.

Expiring loss and credit carryforwards and the required valuation allowances are adjusted quarterly. After applying the valuation allowances, we do not anticipate any limitations on our use of any of the other net deferred income tax assets described above.

We believe that our estimates for the valuation allowances against deferred tax assets and unrecognized tax benefits are appropriate based on current facts and circumstances. The amount we ultimately pay when matters are resolved may differ from the amounts accrued. For a further discussion on Provision for Income Taxes, see Note 1 of the "Notes to the Consolidated Financial Statements."

Tax benefits from uncertain tax positions are recognized when it is more likely than not that the position will be sustained upon examination of the technical merits of the position, including resolutions of any related appeals or litigation processes. The amount recognized is measured as the largest amount of tax benefit that is greater than 50 percent likely of being realized upon settlement.

If any of our assumptions or estimates were to change, an increase or decrease in our effective income tax rate by 1 percent would have caused income tax expense to increase or decrease $19 million for fiscal 2017 . See Note 7 of the "Notes to Consolidated Financial Statements" for additional information regarding unrecognized tax benefits.

Share-Based Compensation

Employee share-based compensation is recognized in the consolidated statements of earnings based on the grant date fair value of the awards. The grant date market price of our common shares determines the fair value of restricted share units and performance share units. The fair value of stock options is determined using a lattice valuation model. We believe the lattice model provides reasonable estimates because it takes into account employee exercise patterns based on changes in our stock price and other variables and it provides for a range of input assumptions.

We analyze historical data to estimate option exercise behaviors and post-vesting forfeitures to be used within the lattice model. The expected life of the options granted, which represents the length of time in years that the options granted are expected to be outstanding, is calculated from the option valuation model. Expected volatilities are based on implied volatility from traded options on our common shares and historical volatility over a period of time commensurate with the contractual term of the option grant (up to ten years).The forfeiture estimates are adjusted as circumstances change and ultimately reflect actual forfeitures when an award vests. Actual forfeitures in future reporting periods could be higher or lower than our current estimates. Compensation expense for nonvested performance share units depends on our periodic assessment of the probability of the targets being achieved and our estimate, which may vary over time, of the number of shares that ultimately will be issued. See Note 16 of the "Notes to Consolidated Financial Statements" for additional information regarding share-based compensation.

Explanation and Reconciliation of Non-GAAP Financial Measures

This report, including the "Fiscal 2017 Overview" section within MD&A, contains financial measures that are not calculated in accordance with GAAP. In addition to analyzing our business based on financial information prepared in accordance with GAAP, we use these non-GAAP financial measures internally to evaluate our performance, evaluate the balance sheet, engage in financial and operational planning, and determine incentive compensation because we believe that these measures provide additional perspective on and, in some circumstances are more closely correlated to, the performance of our underlying, ongoing business. We provide these non-GAAP financial measures to investors as supplemental metrics to assist readers in assessing the effects of items and events on our financial and operating results on a year-over-year basis and in comparing our performance to that of our competitors. However, the non-GAAP financial measures that we use may be calculated differently from, and therefore may not be comparable to, similarly titled measures used by other companies. The non-GAAP financial measures disclosed by us should not be considered a substitute for, or superior to, financial measures calculated in accordance with GAAP, and the financial results calculated in accordance with GAAP and reconciliations to those financial statements set forth below should be carefully evaluated.

Exclusions from Non-GAAP Financial Measures

Management believes it is useful to exclude the following items from the non-GAAP measures presented in this report for its own and for investors' assessment of the business for the reasons identified below:

- LIFO charges and credits are excluded because the factors that drive last-in first-out ("LIFO") inventory charges or credits, such as pharmaceutical manufacturer price appreciation or deflation and year-end inventory levels (which can be meaningfully influenced by customer buying behavior immediately preceding our fiscal year-end), are largely out of our control and cannot be accurately predicted. The exclusion of LIFO charges from non-GAAP metrics allows for a better comparison of our current financial results to our historical financial results and to our peer group companies' financial results.
- Restructuring and employee severance costs are excluded because they relate to programs in which we fundamentally change our operations and because they are not part of the ongoing operations of our underlying business.
- Amortization and other acquisition-related costs are excluded primarily for consistency with the presentation of the financial results of our peer group companies. Additionally, costs for amortization of acquisition-related intangible assets are non-cash amounts, which are variable in amount and frequency and are significantly impacted by the timing and size of acquisitions, so their exclusion allows for better comparison of historical, current and forecasted financial results. We also exclude other acquisition-related costs, which are directly related to an acquisition but do not meet the criteria to be recognized on the acquired entity's initial balance sheet as part of the purchase price allocation. These costs are also significantly impacted by the timing, complexity and size of acquisitions.
- Impairments and gain or loss on disposal of assets are excluded because they do not occur in or reflect the ordinary course of our ongoing business operations and their exclusion results in a metric that more meaningfully reflects the sustainability of our operating performance.
- Litigation recoveries or charges, net are excluded because they often relate to events that may have occurred in prior or multiple periods, do not occur in or reflect the ordinary course of our business and are inherently unpredictable in timing and amount. Beginning in the third quarter of fiscal 2017, consistent with the presentation of financial results by peer medical device companies, in litigation recoveries or charges, net we began to classify accrued losses and legal fees, net of expected recoveries, related to mass tort product liability claims, including claims for injuries allegedly caused by Cordis OptEase and TrapEase inferior vena cava (IVC) filter products. Such amounts would not have materially affected litigation recoveries or charges, net in prior periods, so have not been reclassified for those periods.
- Loss on extinguishment of debt is excluded because it does not typically occur in the normal course of business and may obscure analysis of trends and financial performance. Additionally, the amount and frequency of this type of charge is not consistent and is significantly impacted by the timing and size of debt financing transactions.

The tax effect for each of the items listed above is determined using the tax rate and other tax attributes applicable to the item and the jurisdiction(s) in which the item is recorded. The gross, tax and net impact of each item are presented with our GAAP to non-GAAP reconciliations.

Definitions

Growth rate calculation : growth rates in this report are determined by dividing the difference between current period results and prior period results by prior period results.

Non-GAAP operating earnings : operating earnings excluding (1) LIFO charges/(credits), (2) restructuring and employee severance, (3) amortization and other acquisition-related costs, (4) impairments and (gain)/loss on disposal of assets and (5) litigation (recoveries)/charges, net.

Non-GAAP earnings before income taxes : earnings before income taxes excluding (1) LIFO charges/(credits), (2) restructuring and employee severance, (3) amortization and other acquisition-related costs, (4) impairments and (gain)/loss on disposal of assets, (5) litigation (recoveries)/charges, net and (6) loss on extinguishment of debt.

Non-GAAP net earnings attributable to Cardinal Health, Inc. : net earnings attributable to Cardinal Health, Inc. excluding (1) LIFO charges/(credits), (2) restructuring and employee severance, (3) amortization and other acquisition-related costs, (4) impairments and (gain)/loss on disposal of assets, (5) litigation (recoveries)/charges, net and (6) loss on extinguishment of debt, each net of tax.

Non-GAAP diluted EPS attributable to Cardinal Health, Inc. : non-GAAP net earnings attributable to Cardinal Health, Inc. divided by diluted weighted-average shares outstanding.

Explanation and Reconciliation of Non-GAAP Financial Measures

GAAP to Non-GAAP Reconciliations

(in millions, except per common share amounts)	Operating Earnings	Operating Earnings Growth Rate	Earnings Before Income Taxes	Provision for Income Taxes	Net Earnings [1,2]	Net Earnings [1,2] Growth Rate	Diluted EPS [1,2]	Diluted EPS [1,2] Growth Rate
				Fiscal Year 2017				
GAAP	**$ 2,120**	**(14)%**	**$ 1,924**	**$ 630**	**$ 1,288**	**(10)%**	**$ 4.03**	**(7)%**
Restructuring and employee severance	56		56	20	36		0.11	
Amortization and other acquisition-related costs	527		527	165	362		1.13	
Impairments and loss on disposal of assets	18		18	6	12		0.04	
Litigation (recoveries)/charges, net	48		48	19	29		0.09	
Non-GAAP	**$ 2,769**	**(4)%**	**$ 2,572**	**$ 839**	**$ 1,727**	**— %**	**$ 5.40**	**3 %**
				Fiscal Year 2016				
GAAP	$ 2,459	14 %	$ 2,276	$ 845	$ 1,427	18 %	$ 4.32	20 %
Restructuring and employee severance	25		25	9	16		0.05	
Amortization and other acquisition-related costs	459		459	143	316		0.96	
Impairments and loss on disposal of assets	21		21	6	15		0.04	
Litigation (recoveries)/charges, net	(69)		(69)	(27)	(42)		(0.13)	
Non-GAAP	$ 2,895	17 %	$ 2,711	$ 976	$ 1,732	18 %	$ 5.24	20 %
				Fiscal Year 2015				
GAAP	$ 2,161	15 %	$ 1,967	$ 755	$ 1,212	4 %	$ 3.61	7 %
Restructuring and employee severance	44		44	15	29		0.09	
Amortization and other acquisition-related costs	281		281	100	181		0.54	
Impairments and (gain)/loss on disposal of assets	(19)		(19)	(10)	(9)		(0.03)	
Litigation (recoveries)/charges, net	5		5	(14)	19		0.06	
Loss on extinguishment of debt	—		60	23	37		0.11	
Non-GAAP	$ 2,472	16 %	$ 2,339	$ 870	$ 1,469	11 %	$ 4.38	14 %
				Fiscal Year 2014				
GAAP	$ 1,885	89 %	$ 1,798	$ 635	$ 1,163	247 %	$ 3.37	247 %
Restructuring and employee severance	31		31	11	20		0.06	
Amortization and other acquisition-related costs	223		223	79	144		0.42	
Impairments and (gain)/loss on disposal of assets	15		15	5	10		0.03	
Litigation (recoveries)/charges, net	(21)		(21)	(8)	(13)		(0.04)	
Non-GAAP	$ 2,133	4 %	$ 2,047	$ 722	$ 1,324	3 %	$ 3.84	3 %
				Fiscal Year 2013				
GAAP	$ 996	(44)%	$ 888	$ 553	$ 335	(69)%	$ 0.97	(68)%
Restructuring and employee severance	71		71	27	44		0.13	
Amortization and other acquisition-related costs	158		158	52	106		0.31	
Impairments and (gain)/loss on disposal of assets	859		859	37	822		2.39	
Litigation (recoveries)/charges, net	(38)		(38)	(15)	(23)		(0.07)	
Non-GAAP	$ 2,046	10 %	$ 1,938	$ 654	$ 1,284	15 %	$ 3.73	16 %

1 from continuing operations
2 attributable to Cardinal Health, Inc.

The sum of the components may not equal the total due to rounding.
We apply varying tax rates depending on the item's nature and tax jurisdiction where it is incurred.

Selected Financial Data

The consolidated financial data below includes all business combinations as of the date of acquisition that occurred during these periods. The following selected consolidated financial data should be read in conjunction with the consolidated financial statements and related notes and MD&A.

(in millions, except per common share amounts)	2017	2016	2015	2014	2013 (1)
Earnings Data:					
Revenue	**$ 129,976**	$ 121,546	$ 102,531	$ 91,084	$ 101,093
Operating earnings	**2,120**	2,459	2,161	1,885	996
Earnings from continuing operations	**1,294**	1,431	1,212	1,163	335
Earnings/(loss) from discontinued operations, net of tax	**—**	—	3	3	(1)
Net earnings	**1,294**	1,431	1,215	1,166	334
Less: Net earnings attributable to noncontrolling interests	**(6)**	(4)	—	—	—
Net earnings attributable to Cardinal Health, Inc.	**$ 1,288**	$ 1,427	$ 1,215	$ 1,166	$ 334
Basic earnings per common share attributable to Cardinal Health, Inc.:					
Continuing operations	**$ 4.06**	$ 4.36	$ 3.65	$ 3.41	$ 0.98
Discontinued operations	**—**	—	0.01	0.01	—
Net basic earnings per common share attributable to Cardinal Health, Inc.	**$ 4.06**	$ 4.36	$ 3.66	$ 3.42	$ 0.98
Diluted earnings per common share attributable to Cardinal Health, Inc.:					
Continuing operations	**$ 4.03**	$ 4.32	$ 3.61	$ 3.37	$ 0.97
Discontinued operations	**—**	—	0.01	0.01	—
Net diluted earnings per common share attributable to Cardinal Health, Inc.	**$ 4.03**	$ 4.32	$ 3.62	$ 3.38	$ 0.97
Cash dividends declared per common share	**$ 1.8091**	$ 1.6099	$ 1.4145	$ 1.2500	$ 1.0900
Balance Sheet Data:					
Total assets	**$ 40,112**	$ 34,122	$ 30,142	$ 26,033	$ 25,819
Long-term obligations, less current portion	**9,068**	4,952	5,211	3,171	3,686
Total Cardinal Health, Inc. shareholders' equity	**6,808**	6,554	6,256	6,401	5,975

(1) During fiscal 2013, we recognized a non-cash goodwill impairment charge of $829 million ($799 million, net of tax) related to our Nuclear Pharmacy Services division.

Quantitative and Qualitative Disclosures About Market Risk

We are exposed to cash flow and earnings fluctuations as a result of certain market risks. These market risks primarily relate to foreign exchange, interest rate, and commodity price-related changes. We maintain a hedging program to manage volatility related to these market exposures which employs operational, economic, and derivative financial instruments in order to mitigate risk. See Note 1 and Note 11 of the "Notes to Consolidated Financial Statements" for further discussion regarding our use of derivative instruments.

Foreign Exchange Rate Sensitivity

By the nature of our global operations, we are exposed to cash flow and earnings fluctuations resulting from foreign exchange rate variation. These exposures are transactional and translational in nature. Principal drivers of this foreign exchange exposure include the Canadian dollar, Euro, Thai baht, Mexican peso, Japanese yen, Chinese renminbi, Philippine peso, Singapore dollar, Russian ruble, and Australian dollar.

Transactional Exposure

Transactional exposure arises from the purchase and sale of goods and services in currencies other than our functional currency or the functional currency of our subsidiaries. As part of our risk management program, at the end of each fiscal year we perform a sensitivity analysis on our forecasted transactional exposure for the upcoming fiscal year. These analyses include the estimated impact of our hedging program, which is designed to mitigate transactional exposure. Our forecasted transactional exposure at June 30, 2017 increased from the prior year primarily as a result of the increased transaction volume in foreign currencies due to the acquisition of Cordis, and we expect our transactional exposure to further increase in fiscal 2018 due to our acquisition of the Patient Recovery Business . At June 30, 2017 and 2016 , we had hedged approximately 25 and 29 percent of transactional exposures, respectively.

The following table summarizes the analysis as it relates to transactional exposure and the impact of a hypothetical 10 percent fluctuation in foreign currency exchange rates, assuming rates collectively shift in the same direction and we are unable to change customer pricing in response to those shifts, for the upcoming fiscal year:

	June 30	
(in millions)	**2017 (1)**	2016
Net hypothetical transactional exposure	**$ 638**	$ 621
Sensitivity gain/loss	**$ 64**	$ 62
Estimated offsetting impact of hedges	**(16)**	(18)
Hypothetical net gain/loss	**$ 48**	$ 44

(1) This analysis excludes exposures that may be added as a result of acquisitions that have not yet closed as of June 30, 2017.

Translational Exposure

We have exposure related to the translation of financial statements of our foreign operations into U.S. dollars, our functional currency. We perform a similar analysis to that previously described related to this translational exposure. Our forecasted translational exposure at June 30, 2017 was essentially flat compared to the prior period, however we expect our translational exposure to increase in fiscal 2018 due to our acquisition of the Patient Recovery Business . We have not typically hedged any of our translational exposure and no hedging impact was included in our analysis at June 30, 2017 and 2016 .

The following table summarizes translational exposure and the impact of a hypothetical 10 percent strengthening or weakening in the U.S. dollar, assuming rates collectively shift in the same direction, for the upcoming fiscal year:

	June 30	
(in millions)	**2017 (1)**	2016
Net hypothetical translational exposure	**$ 199**	$ 201
Sensitivity gain/loss	**20**	20

(1) This analysis excludes exposures that may be added as a result of acquisitions that have not yet closed as of June 30, 2017.

Interest Rate Sensitivity

We are exposed to changes in interest rates primarily as a result of our borrowing and investing activities to maintain liquidity and fund operations. The nature and amount of our long-term and short-term debt can be expected to fluctuate as a result of business requirements, market conditions and other factors. Our policy is to manage exposures to interest rates using a mix of fixed and floating rate debt as deemed appropriate by management. We utilize interest rate swap instruments to mitigate our exposure to interest rate movements.

As part of our risk management program, we perform an annual sensitivity analysis on our forecasted exposure to interest rates for the upcoming fiscal year. This analysis assumes a hypothetical 50 basis point change in interest rates. At June 30, 2017 and 2016 , the potential increase or decrease in annual interest expense under this analysis as a result of this hypothetical change was $16 million and $9 million, respectively.

We are also exposed to market risk from changes in interest rates related to our cash and cash equivalents, which includes marketable securities that are classified as available-for-sale and are carried at fair value in the consolidated balance sheets. The fair value of our cash and cash equivalents is subject to change primarily as a result of changes in market interest rates and investment risk related to the issuers' credit worthiness. At both June 30, 2017 and 2016 , a hypothetical increase or decrease of 50 basis points in interest rates would cause a potential increase or decrease of up to $1 million and $11 million, respectively, in the estimated fair value.

Commodity Price Sensitivity

We are directly exposed to market price changes for certain commodities, including oil-based resins, nitrile, cotton, diesel fuel and latex. We typically purchase raw materials at either market prices or prices tied to a commodity index and some finished goods at prices based in part on a commodity price index. We also are indirectly exposed to fluctuations in certain commodity prices through the purchase of finished goods and various energy-related commodities, including natural gas and electricity, through our normal course of business where our contracts are not directly tied to a commodity index. As part of our risk management program, we perform sensitivity analysis on our forecasted commodity exposure for the upcoming fiscal year. Our forecasted commodity exposure at June 30, 2017 was essentially flat compared to the prior period, however we expect our commodity exposure to increase in fiscal 2018 due to our acquisition of the Patient Recovery Business . At June 30, 2017 and 2016 , we had hedged a portion of these direct commodity exposures (see Note 11 of the “Notes to Consolidated Financial Statements” for further discussion).

The table below summarizes our analysis of these forecasted direct and indirect commodity exposures and the potential gain/loss given a hypothetical 10 percent fluctuation in commodity prices, assuming pricing collectively shifts in the same direction and we are unable to change customer pricing in response to those shifts, for the upcoming fiscal year:

	June 30	
(in millions)	**2017 (1)**	2016
Hypothetical commodity exposure	**$ 411**	$ 417
Sensitivity gain/loss	**$ 41**	$ 42
Hypothetical offsetting impact of hedges	**(1)**	(1)
Hypothetical net gain/loss	**$ 40**	$ 41

(1) This analysis excludes exposures that may be added as a result of acquisitions that have not yet closed as of June 30, 2017.

We believe our total gross range of direct and indirect exposure to commodities, excluding exposure that may be added as a result of the acquisition of the Patient Recovery Business , is $400 million to $500 million for fiscal 2018.

Business

General

Cardinal Health, Inc. is a global, integrated healthcare services and products company providing customized solutions for hospitals, healthcare systems, pharmacies, ambulatory surgery centers, clinical laboratories and physician offices. We provide medical products and pharmaceuticals and cost-effective solutions that enhance supply chain efficiency from hospital to home. We connect patients, providers, payers, pharmacists and manufacturers for integrated care coordination and better patient management.

Pharmaceutical Segment

In the United States, our Pharmaceutical segment:

- distributes branded and generic pharmaceutical and over-the-counter healthcare and consumer products through its Pharmaceutical Distribution division to retailers (including chain and independent drug stores and pharmacy departments of supermarkets and mass merchandisers), hospitals and other healthcare providers. This division:
  - maintains prime vendor relationships that streamline the purchasing process resulting in greater efficiency and lower costs for our retail, hospital and other healthcare provider customers;
  - provides services to pharmaceutical manufacturers, including distribution, inventory management, data reporting, new product launch support and chargeback administration;
  - provides pharmacy management services to hospitals as well as medication therapy management and patient outcomes services to hospitals, other healthcare providers and payers, and operates pharmacies in community health centers; and
  - repackages generic pharmaceuticals and over-the-counter healthcare products;
- distributes specialty pharmaceutical products to hospitals and other healthcare providers; provides consulting, patient support and other services for specialty pharmaceutical products to pharmaceutical manufacturers and healthcare providers; and provides specialty pharmacy services through its Specialty Solutions division; and
- operates nuclear pharmacies and manufacturing facilities through its Nuclear Pharmacy Services division, which manufactures, prepares and delivers radiopharmaceuticals for use in nuclear imaging and other procedures in hospitals and physician offices. During fiscal 2017, this division also began operating a facility to contract manufacture a radiopharmaceutical treatment (Xofigo) and acquired the North American rights to Lymphoseek, a radiopharmaceutical diagnostic imaging agent.

In China, the Pharmaceutical segment distributes branded, generic and specialty pharmaceutical, over-the-counter healthcare and consumer products, provides logistics, marketing and other services and operates direct-to-patient specialty pharmacies through Cardinal Health China. In July 2017, we announced that we are exploring strategic alternatives for the Cardinal Health China pharmaceutical and medical distribution businesses. Our other medical product businesses in China, including Cordis and the Patient Recovery Business acquired from Medtronic, are not part of this exploration.

See Note 15 of the "Notes to Consolidated Financial Statements" for Pharmaceutical segment revenue, profit and assets for fiscal 2017 , 2016 and 2015 .

Pharmaceutical Distribution

Our Pharmaceutical Distribution division's gross margin includes margin from our generic pharmaceutical program, from distribution services agreements with branded pharmaceutical manufacturers and from over-the-counter healthcare and consumer products. It also includes manufacturer cash discounts.

Margin from our generic pharmaceutical program includes price discounts and rebates from manufacturers and may include price appreciation on some products. Our earnings on generic pharmaceuticals are generally highest during the period immediately following the initial launch of a product, because generic pharmaceutical selling prices are generally highest during that period and tend to decline over time.

Margin from distribution services agreements with branded pharmaceutical manufacturers relates primarily to fees we receive for providing a range of distribution and related services to manufacturers and also, to a lesser extent, includes benefits from price appreciation on branded pharmaceutical products.

Sourcing Venture With CVS Health Corporation

In July 2014, we established Red Oak Sourcing, a U.S.-based generic pharmaceutical sourcing venture with CVS with an initial term of 10 years. Red Oak Sourcing negotiates generic pharmaceutical supply contracts on behalf of both companies.

Specialty Pharmaceutical Products and Services

We refer to products and services offered by our Specialty Solutions division as "specialty pharmaceutical products and services." The Specialty Solutions division distributes oncology, rheumatology, urology, nephrology and other pharmaceutical products ("specialty pharmaceutical products") and human-derived plasma products to hospitals, dialysis clinics, physician offices and other healthcare providers; provides consulting, patient support, logistics, group purchasing and other services to pharmaceutical manufacturers and healthcare providers primarily supporting the development, marketing and distribution of specialty pharmaceutical products; and provides specialty pharmacy services. Our use of the

terminology "specialty pharmaceutical products and services" may not be comparable to the terminology used by other industry participants.

Medical Segment

Our Medical segment manufactures and sources Cardinal Health branded medical, surgical and laboratory products, including cardiovascular and endovascular products; wound care products; single-use surgical drapes, gowns and apparel; exam and surgical gloves; and fluid suction and collection systems. We further expanded this segment's portfolio of manufactured products through the acquisition of the Patient Recovery Business from Medtronic in July 2017, which includes incontinence, wound care, enteral feeding, urology, operating room supply, electrode and needle, syringe and sharps disposal product lines. Our manufactured products are sold directly or through third-party distributors in the United States, Canada, Europe, Asia and other markets.

The Medical segment also distributes a broad range of national brand products and provides supply chain services and solutions to hospitals, ambulatory surgery centers, clinical laboratories and other healthcare providers in the United States, Canada and China.

This segment also distributes medical products to patients' homes in the United States through our Cardinal Health at Home division and provides services and software to hospitals, other healthcare providers and payers to help manage the complex processes of patient discharge from an acute-care facility (“post-acute care”) through naviHealth.

This segment also assembles and sells sterile and non-sterile procedure kits. It also provides supply chain services, including spend management, distribution management and inventory management services, to healthcare providers.

See Note 15 of the “Notes to Consolidated Financial Statements” for Medical segment revenue, profit and assets for fiscal 2017 , 2016 and 2015 .

Acquisitions

We have acquired a number of businesses over the years that have enhanced our core strategic areas of self-manufactured medical products, generic pharmaceutical distribution and services, specialty pharmaceutical products and services, international and post-acute care. We expect to continue to pursue additional acquisitions in the future.

During the last five fiscal years, we completed the following three large acquisitions:

Date	Company	Location	Lines of Business	Acquisition Price (in millions)
10/15	Cordis business of Johnson & Johnson	Fremont, CA	Cardiovascular and endovascular products	$1,944
07/15	The Harvard Drug Group	Livonia, MI	Pharmaceutical product distribution	$1,115
03/13	AssuraMed, Inc.	Twinsburg, OH	Medical product distribution to patients' homes	$2,070

We have also completed several smaller acquisitions during the last five fiscal years, including: in fiscal 2017, the acquisition of the North American rights to Lymphoseek, a radiopharmaceutical diagnostic imaging agent, from Navidea Biopharmaceuticals, Inc.; in fiscal 2016, the acquisition of an 82 percent ownership interest in naviHealth, a provider of post-acute care management services, and CuraSpan Health Group, Inc., a provider of discharge planning and care transition software; in fiscal 2015, the acquisitions of Tradex International, Inc., a supplier of disposable gloves, and Metro Medical Supply, Inc., a distributor of specialty pharmaceuticals and medical and surgical products; and in fiscal 2014, the acquisition of Access Closure, Inc., a manufacturer and distributor of extravascular closure devices.

As discussed above, on July 29, 2017, we acquired the Patient Recovery Business from Medtronic for $6.1 billion in cash.

Customers

Our largest customers, CVS and OptumRx, accounted for 23 percent and 11 percent of our fiscal 2017 revenue, respectively. In the aggregate, our five largest customers, including CVS and OptumRx, accounted for 50 percent of our fiscal 2017 revenue. Our pharmaceutical distribution agreements with CVS extend through June 2019.

We have agreements with group purchasing organizations ("GPOs") that act as agents to negotiate vendor contracts on behalf of their members. Our two largest GPO relationships in terms of member revenue are with Vizient Inc. and Premier, Inc. Sales to members of these two GPOs, under numerous contracts across all of our businesses, collectively accounted for 21 percent of our revenue in fiscal 2017 .

Suppliers

We rely on many different suppliers. Products obtained from our five largest suppliers accounted for an aggregate of 27 percent of our revenue during fiscal 2017 , but no single supplier's products accounted for more than 7 percent of revenue.

Competition

We operate in a highly competitive environment in the distribution of pharmaceuticals and related healthcare services. We also operate in a highly competitive environment in the development, manufacturing and distribution of medical and surgical products. We compete on many levels, including price, service offerings, support services, breadth of product lines and product quality and efficacy.

In the Pharmaceutical segment, we compete with wholesale distributors with national reach (including McKesson Corporation and AmerisourceBergen Corporation), regional wholesale distributors, self-warehousing chains, specialty distributors, third-party logistics companies, companies that provide specialty pharmaceutical services and nuclear pharmacies, among others. In addition, the Pharmaceutical segment has experienced competition from a number of organizations offering generic pharmaceuticals, including telemarketers. We also compete with manufacturers that sell their products directly.

In the Medical segment, our manufacturing and procedural kit businesses compete with diversified healthcare companies as well as companies that are more focused on specific product categories. We also compete with many different national medical product distributors, including Medline Industries, Inc. and Owens & Minor, Inc., regional medical product distributors, companies that distribute medical products to patients' homes and third-party logistics companies. In addition, we compete with manufacturers that sell their products directly.

Employees

At June 30, 2017 , we had approximately 28,000 employees in the United States and approximately 12,400 employees outside of the United States. In July 2017, we added approximately 3,500 employees in the United States and approximately 5,900 employees outside the United States through the acquisition of the Patient Recovery Business . Overall, we consider our employee relations to be good.

Intellectual Property

We rely on a combination of trade secret, patent, copyright and trademark laws, nondisclosure and other contractual provisions, and technical measures to protect our products, services and intangible assets. We hold patents, and continue to pursue patent protection throughout the world, relating to the manufacture, operation and use of various medical and surgical products, to certain distribution and logistics systems, to the production and distribution of our nuclear pharmacy products and to other service offerings. We also operate under licenses for certain proprietary technologies, and in certain instances we license our technologies to third parties.

We believe that we have taken all necessary steps to protect our proprietary rights, but no assurance can be given that we will be able to successfully enforce or protect our rights in the event that they are infringed upon by a third party. While all of these proprietary rights are important to our operations, we do not consider any particular patent, trademark, license, franchise or concession to be material to our overall business.

Regulatory Matters

Our business is highly regulated in the United States, at both the federal and state level, and in foreign countries. Depending upon the specific business, we may be subject to regulation by government entities including:

- the U.S. Drug Enforcement Administration (the “DEA”);
- state controlled substance authorities and boards of pharmacy;
- certain agencies within the U.S. Department of Health and Human Services, including the U.S. Food and Drug Administration (the “FDA”), the Centers for Medicare and Medicaid Services, the Office of Inspector General and the Office for Civil Rights;
- state health departments, insurance departments, Medicaid departments or other comparable state agencies;
- the U.S. Nuclear Regulatory Commission (the “NRC”);
- the U.S. Federal Trade Commission (the "FTC");
- U.S. Customs and Border Protection; and
- agencies comparable to those listed above in markets outside the United States.

These regulatory agencies have a variety of civil, administrative and criminal sanctions at their disposal for failure to comply with applicable legal or regulatory requirements. They can suspend our ability to manufacture and distribute products, initiate product recalls, seize products or impose criminal, civil and administrative sanctions.

Distribution

The FDA, DEA and various state authorities regulate the marketing, purchase, storage and distribution of pharmaceutical and medical products under various federal and state statutes including the federal Prescription Drug Marketing Act of 1987, Drug Quality and Security Act of 2013 (the “DQSA”), and Controlled Substances Act (the "CSA"). The CSA governs the sale, packaging, storage and distribution of controlled substances. Wholesale distributors of controlled substances must hold valid DEA registrations and state-level licenses, meet various security and operating standards, and comply with the CSA.

Manufacturing and Marketing

We sell our manufactured products in the United States, Canada, Europe, Asia and other markets. The FDA and other governmental agencies in the United States, as well as foreign governmental agencies, administer requirements that cover the design, testing, safety, effectiveness, manufacturing (including good manufacturing practices), quality systems, labeling, promotion and advertising (including restrictions on promoting or advertising a product other than for the product's cleared or approved uses), distribution, importation and post-market surveillance for most of our manufactured products. In addition, we need specific approval or clearance from, and registrations with, regulatory authorities before we can market and sell some products in the United States and certain other countries, including countries in the European Union ("EU").

In the United States, authorization to commercially market a medical device is generally received in one of two ways. The first, known as pre-market notification or the 510(k) process, requires us to demonstrate that a medical device is substantially equivalent to a legally marketed medical device. The second more rigorous process, known as pre-market approval (“PMA”), requires us to independently demonstrate that a medical device is safe and effective. Many of our Medical segment products are cleared through the 510(k) process and certain Cordis products must be approved through the PMA process.

In the EU, we are required to comply with applicable Medical Device Directives ("MDDs") and obtain CE Mark Certification in order to market medical devices. The EU regulatory bodies finalized a new Medical Device Regulation ("MDR") in 2017, which replaces the existing MDDs after a three-year transition period. Among other things, the MDR clarifies that private label distributors are deemed to be the manufacturer, which will increase our regulatory obligations in the EU with respect to private label products.

It can be costly and time-consuming to obtain regulatory approvals, clearances and registrations of medical devices, and they might not be granted on a timely basis, if at all. Even after we obtain approval or clearance to market a product or obtain product registrations, the product and our manufacturing processes are subject to continued regulatory oversight, including periodic inspection of manufacturing facilities by FDA and other regulatory authorities both in the United States and internationally.

From time to time, we may determine that products we manufacture or market do not meet our specifications, regulatory requirements or published standards. When we or a regulatory agency identify a quality or regulatory issue, we investigate and take appropriate corrective action, which may include recalling the product, correcting the product at the customer location, revising product labeling and notifying customers.

Nuclear Pharmacies and Related Businesses

Our nuclear pharmacies and radiopharmaceutical manufacturing facilities (including for Xofigo) require licenses or permits and must abide by regulations issued by the NRC, applicable state boards of pharmacy and the radiologic health agency or department of health of each state in which we operate, including pharmacy sterile compounding standards and practices. In addition, our radiopharmaceutical manufacturing facilities also must comply with FDA regulations, including good manufacturing practices.

Product Tracing and Supply Chain Integrity

Title II of the DQSA, known as the Drug Supply Chain Security Act, establishes a phased-in national system for tracing pharmaceutical products through the pharmaceutical distribution supply chain to prevent the introduction of counterfeit, adulterated or mislabeled drugs. The first phase of implementation began in 2015, and upon full implementation in 2023, we and other supply chain stakeholders will participate in an electronic, interoperable, prescription drug tracing system. In addition, the FDA also has issued regulations requiring most medical device labeling to bear a unique device identifier. These regulations are being phased in through 2020. The

MDR finalized in the EU in 2017 also introduces a new unique device identifier requirement with a three-year transition period.

Government Healthcare Programs

We are subject to U.S. federal healthcare fraud and abuse laws. These laws generally prohibit persons from soliciting, offering, receiving or paying any compensation in order to induce someone to order, recommend or purchase products or services that are in any way paid for by Medicare, Medicaid or other federally-funded healthcare programs. They also prohibit submitting any fraudulent claim for payment by the federal government. There are similar state healthcare fraud and abuse laws that apply to Medicaid and other state-funded healthcare programs. Violations of these laws may result in criminal or civil penalties, as well as breach of contract claims and *qui tam* actions (false claims cases initiated by private parties purporting to act on behalf of federal or state governments).

Some businesses within each of our segments are Medicare-certified suppliers or participate in other federal and state healthcare programs, such as state Medicaid programs and the federal 340B drug pricing program. These businesses are subject to accreditation and quality standards and other rules and regulations, including applicable reporting, billing, payment and record-keeping requirements. Other businesses within each segment manufacture pharmaceutical or medical products or repackage pharmaceuticals that are purchased or reimbursed through, or are otherwise governed by, federal or state healthcare programs. Failure to comply with applicable eligibility requirements, standards and regulations could result in civil or criminal sanctions, including the loss of our ability to participate in Medicare, Medicaid and other federal and state healthcare programs.

Our U.S. federal and state government contracts are subject to specific procurement requirements. Failure to comply with applicable rules or regulations or with contractual or other requirements may result in monetary damages and criminal or civil penalties as well as termination of our government contracts or our suspension or debarment from government contract work.

Health and Personal Information Practices

We collect, handle and maintain patient-identifiable health information. The U.S. Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as augmented by the Health Information Technology for Economic and Clinical Health Act, and state laws regulate the use and disclosure of patient-identifiable health information, including requiring specified privacy and security measures. We also collect, handle and maintain other sensitive personal and financial information that is subject to U.S. federal and state laws protecting such information.

The processing and disclosure of personal information is also highly regulated in many other countries in which we operate. In Europe, for example, we are subject to the EU data protection regulations, including the current EU Directive on Data Protection, which requires member states to impose minimum restrictions on the collection, use and transfer of personal data. A new EU General Data Protection Regulation ("GDPR") that will become effective in 2018 and will apply uniformly across the EU includes, among other things, a requirement for prompt notice of data breaches to data subjects and supervisory authorities in certain circumstances and significant fines for non-compliance. The GDPR also requires companies processing personal data of individuals residing in the EU to comply with EU privacy and data protection rules.

Antitrust Laws

The U.S. federal government, most U.S. states and many foreign countries have laws that prohibit certain types of conduct deemed to be anti-competitive. Violations of these laws can result in various sanctions, including criminal and civil penalties. Private plaintiffs also could bring civil lawsuits against us in the United States for alleged antitrust law violations, including claims for treble damages.

Environmental, Health and Safety Laws

In the United States and other countries, we are subject to various federal, state and local environmental laws, as well as laws relating to safe working conditions and laboratory practices.

Laws Relating to Foreign Trade and Operations

U.S. and foreign laws require us to abide by standards relating to the import and export of finished goods, raw materials and supplies and the handling of information. We also must comply with various export control and trade embargo laws, which may require licenses or other authorizations for transactions within some countries or with some counterparties.

Similarly, we are subject to U.S. and foreign laws concerning the conduct of our foreign operations, including the U.S. Foreign Corrupt Practices Act, Chinese anti-corruption laws, the U.K. Bribery Act and other foreign anti-bribery laws. Among other things, these laws generally prohibit companies and their intermediaries from offering, promising or making payments to officials of foreign governments for the purpose of obtaining or retaining business.

Other Information

Although our agreements with manufacturers sometimes require us to maintain inventory levels within specified ranges, our distribution businesses are generally not required by our customers to maintain particular inventory levels other than as needed to meet service level requirements. Certain supply contracts with U.S. government entities require us to maintain sufficient inventory to meet emergency demands, but we do not believe those requirements materially affect inventory levels.

Our customer return policies generally require that the product be physically returned, subject to restocking fees. We only allow customers to return products that can be added back to inventory and resold at full value, or that can be returned to vendors for credit.

We offer market payment terms to our customers.

Revenue and Long-Lived Assets by Geographic Area

See Note 15 of the "Notes to Consolidated Financial Statements" for revenue and long-lived assets by geographic area.

Risk Factors

The risks described below could materially and adversely affect our results of operations, financial condition, liquidity or cash flows. These are not the only risks we face. Our businesses also could be affected by risks that we are not presently aware of or that we currently consider immaterial to our operations.

We could suffer the adverse effects of competitive pressures.
As described in greater detail in the "Business" section, we operate in markets that are highly competitive. Because of competition, our businesses face continued pricing pressure from our customers and suppliers. If we are unable to offset margin reductions caused by these pricing pressures through steps such as sourcing or cost control measures, additional service offerings and sales of higher margin products, our results of operations and financial condition could be adversely affected.

Our Pharmaceutical segment's generic pharmaceutical program could be adversely affected by pricing changes and fewer product launches.
Prices for generic pharmaceuticals generally decline over time. During fiscal 2017, generic pharmaceutical customer pricing changes negatively impacted Pharmaceutical segment profit and our consolidated operating earnings and are expected to have a similar negative effect in fiscal 2018. At times, some generic pharmaceuticals may experience price appreciation, which can positively affect our margins. The number of generic pharmaceuticals experiencing price appreciation or declines and the magnitude of pricing changes is uncertain in future fiscal years, and could adversely affect our margins.

The number of new generic pharmaceutical launches also varies from year to year, and the margin impact of these launches varies from product to product. Fewer product launches or launches that are less profitable than prior launches could adversely affect our margins.

Our generic pharmaceutical program has benefited from sourcing generic pharmaceuticals through our Red Oak Sourcing venture with CVS, which sources for both us and CVS. If the venture does not continue to be successful, our margins could be adversely affected.

Our Pharmaceutical segment's margins under our distribution services agreements with branded pharmaceutical manufacturers are affected by service fees we receive from the manufacturers and prices established by the manufacturers.
Our distribution services agreements with branded pharmaceutical manufacturers generally provide that we receive fees from the manufacturers to compensate us for the services we provide them. Under some agreements, branded pharmaceutical price appreciation also serves as part of our compensation. If our service fees are reduced or, in cases where our compensation is based in part on branded pharmaceutical price appreciation, if manufacturers determine not to increase prices or to implement only small increases, our margins could be adversely affected.

Our business is subject to rigorous regulatory and licensing requirements.
As described in greater detail in the "Business" section, our business is highly regulated in the United States, at both the federal and state level, and in foreign countries. If we fail to comply with regulatory requirements, or if allegations are made that we fail to comply, our results of operations and financial condition could be adversely affected.

To lawfully operate our businesses, we are required to obtain and hold permits, product registrations, licenses and other regulatory approvals from, and to comply with operating and security standards of, numerous governmental bodies. For example, as a wholesale distributor of controlled substances, we must hold valid DEA registrations and state-level licenses, meet various security and operating standards, and comply with the CSA. Failure to maintain or renew necessary permits, product registrations, licenses or approvals, or to comply with required standards, could have an adverse effect on our results of operations and financial condition.

Products that we manufacture, source, distribute or market must comply with regulatory requirements. Noncompliance or concerns over noncompliance may result in suspension of our ability to distribute, import or manufacture products, product bans, recalls or seizures, or criminal or civil sanctions, which, in turn, could result in product liability claims and lawsuits, including class actions. In addition, it can be costly and time-consuming to obtain regulatory approvals or product registrations to market a medical device, and such approvals or registrations might not be granted on a timely basis, if at all.

We are required to comply with laws relating to healthcare fraud and abuse. The requirements of these laws are complex and subject to varying interpretations, and it is possible that regulatory authorities could challenge our policies and practices. If we fail to comply with these laws, we could be subject to federal or state government investigations or *qui tam* actions (false claims cases initiated by private parties purporting to act on behalf of federal or state governments), which could result in civil or criminal sanctions, including the loss of licenses or the ability to participate in Medicare, Medicaid and other federal and state healthcare programs. Such sanctions and damages could adversely affect our results of operations and financial condition.

Some businesses within each of our segments are Medicare-certified suppliers or participate in other federal and state healthcare programs, such as state Medicaid program and the federal 340B drug pricing program. In addition, other businesses within each segment manufacture pharmaceutical or medical products or repackage pharmaceuticals that are purchased or reimbursed through, or are otherwise governed by, federal or state healthcare programs. Failure to comply with applicable eligibility requirements, standards and regulations could result in civil or criminal sanctions, including the loss of our ability to participate in Medicare, Medicaid and other federal and state healthcare programs.

Our government contracts are subject to specific procurement requirements. Failure to comply with applicable rules or regulations or with contractual or other requirements may result in monetary damages and criminal or civil penalties as well as termination of our government contracts or our suspension or debarment from government contract work.

We collect, handle and maintain patient-identifiable health information and other sensitive personal and financial information, which are subject to federal, state and foreign laws that regulate the use and disclosure of such information. Regulations currently in place continue to evolve, and new laws in this area could further restrict our ability to collect, handle and maintain personal or patient information, or could require us to incur additional compliance costs, either of which could have an adverse impact on our results of operations. Violations of federal, state or foreign laws concerning privacy and data protection could subject us to civil or criminal penalties, breach of contract claims, costs for remediation and harm to our reputation.

Our global operations are required to comply with the U.S. Foreign Corrupt Practices Act, Chinese anti-corruption laws, the U.K. Bribery Act and similar anti-bribery laws in other jurisdictions and U.S. and foreign export control, trade embargo and customs laws. If we fail to comply with any of these laws, we could suffer civil or criminal sanctions.

Our China operations are subject to national, regional and local regulations. The regulatory environment in China is evolving, and officials in the Chinese government exercise broad discretion in deciding how to interpret and apply regulations. It is possible that the Chinese government's current or future interpretation and application of existing or new regulations will negatively impact our China operations, result in regulatory investigations or lead to fines or penalties.

CVS is a large customer that generates a significant amount of our revenue.
Our sales and credit concentration is significant. CVS accounted for 23 percent of our fiscal 2017 revenue and 20 percent of our gross trade receivable balance at June 30, 2017 . Our pharmaceutical distribution agreements with CVS extend through June 2019. If CVS does not renew our agreements with them, terminates the agreements due to an alleged default by us, defaults in payment or significantly reduces its purchases from us, our results of operations and financial condition could be adversely affected.

We could be subject to adverse changes in the tax laws or challenges to our tax positions.
We are a large multinational corporation with operations in the United States and many foreign countries. As a result, we are subject to the tax laws of many jurisdictions.

From time to time, legislative initiatives are proposed in the United States and other jurisdictions in which we operate that could adversely affect our tax positions, effective tax rate or tax payments. Examples of such initiatives include the repeal of the LIFO (last-in, first-out) method of inventory accounting for income tax purposes, a change in the current U.S. taxation treatment of income from foreign operations, new U.S. import tariffs or taxes, the establishment or increase in taxation at the U.S. state level on the basis of gross revenues, recommendations of the base erosion and profit shifting project undertaken by the Organization for Economic Cooperation and Development and the European Commission's investigation into illegal state aid.

Tax laws are complex and subject to varying interpretations. Tax authorities have challenged some of our tax positions and it is possible that they will challenge others. These challenges may adversely affect our effective tax rate or tax payments.

Changes to the U.S. healthcare environment may not be favorable to us.
In recent years, the U.S. healthcare industry has undergone significant changes designed to increase access to medical care, improve safety and patient outcomes, contain costs and increase efficiencies. These changes include adoption of the Patient Protection and Affordable Care Act, a general decline in Medicare and Medicaid reimbursement levels, efforts by healthcare insurance companies to limit or reduce payments to pharmacies and providers, the basis for payments beginning to transition from a fee-for-service model to value-based payments and risk-sharing models, and the industry shifting away from traditional healthcare venues like hospitals and into clinics, physician offices and patients' homes.

We expect the U.S. healthcare industry to continue to change significantly in the future. Possible changes include repeal and replacement of major parts of the Patient Protection and Affordable Care Act, further reduction or limitations on governmental funding at the state or federal level, efforts by healthcare insurance companies to further limit payments for products and services or changes in legislation or regulations governing prescription pharmaceutical pricing, healthcare services or mandated benefits. These possible changes, and the uncertainty surrounding these possible changes, may cause healthcare industry participants to reduce the amount of products and services they purchase from us or the price they are willing to pay for our products and services, which could adversely affect us.

Consolidation in the U.S. healthcare industry may negatively impact our results of operations.
In recent years, U.S. healthcare industry participants, including distributors, manufacturers, healthcare providers, insurers and pharmacy chains, have consolidated or formed strategic alliances. Consolidations create larger enterprises with greater negotiating power, and also could result in the possible loss of a customer where the combined enterprise selects one distributor from two incumbents. If this consolidation trend continues, it could adversely affect our results of operations.

Our business and operations depend on the proper functioning of information systems, critical facilities and distribution networks. Our business could be adversely affected if we experience a cyber-attack or other systems breach.
We rely on our and third-party service providers' information systems for a wide variety of critical operations, including to obtain, rapidly process, analyze and manage data to:

- facilitate the purchase and distribution of inventory items from numerous distribution centers;

- receive, process and ship orders on a timely basis;
- manage accurate billing and collections for thousands of customers;
- process payments to suppliers;
- facilitate manufacturing and assembly of medical products; and
- generate financial information.

Our business also depends on the proper functioning of our critical facilities, including our national logistics center, and our distribution networks. Our results of operations could be adversely affected if our or a service provider's information systems, critical facilities or distribution networks are disrupted (including disruption of access), are damaged or fail, whether due to physical disruptions, such as fire, natural disaster, pandemic or power outage, or due to cyber-security incidents, ransomware or other actions of third parties, including labor strikes, political unrest and terrorist attacks. Manufacturing disruptions also can occur due to regulatory action, production quality deviations, safety issues or raw material shortages or defects, or because a key product is manufactured at a single manufacturing facility with limited alternate facilities.

The Pharmaceutical segment is in a multi-year project to replace certain of its finance and operating information systems. If these new systems are not effectively implemented or they fail to operate as intended, it could adversely affect the Pharmaceutical segment's supply chain operations and our internal control over financial reporting. In addition, from time to time, other businesses perform business process improvements or infrastructure modernizations or use service providers for key systems and processes, such as receiving and processing customer orders, customer service and accounts payable. If any of these initiatives are not successfully or efficiently implemented or maintained, they could adversely affect our business and our internal control over financial reporting.

Our business relies on the secure transmission, storage and hosting of patient-identifiable health information, financial information and other sensitive information relating to our customers, company and workforce. We have programs in place to detect, contain and respond to information security incidents. However, because the techniques used to obtain unauthorized access, disable or degrade service or sabotage systems change frequently and may be difficult to detect for long periods of time, we may be unable to anticipate these techniques or to implement adequate preventative measures. In addition, hardware, software or applications developed internally or procured from third parties may contain defects in design or manufacture or other problems that could unexpectedly compromise information security. Unauthorized parties also may attempt to gain access to our or a service provider's systems or facilities through fraud, trickery or other forms of deception. Any compromise of our or a service provider's information systems, including unauthorized access to or use or disclosure of sensitive information, could adversely impact our operations, results of operations or our ability to satisfy legal requirements, including those related to patient-identifiable health information.

We may become involved in legal proceedings that could adversely impact our cash flows or results of operations.

Due to the nature of our business, which includes the distribution of controlled substances and the manufacture of medical products, we may from time to time become involved in disputes, litigation and regulatory matters. Litigation is inherently unpredictable and the unfavorable outcome of one or more of these legal proceedings could adversely affect our results of operations or financial condition.

For example, a number of governmental entities (including counties and municipalities) have filed lawsuits against pharmaceutical wholesale distributors (including us), pharmaceutical manufacturers and retail chains relating to the distribution of prescription opioid pain medications. Some states and other governmental entities have indicated they are considering filing similar lawsuits. We are vigorously defending ourselves in these lawsuits. The defense and resolution of these current and future lawsuits could adversely affect our results of operations and financial condition. See Note 8 of the "Notes to Consolidated Financial Statements" regarding these matters.

Some of the products that we distribute or manufacture have been and may in the future be alleged to cause personal injury, subjecting us to product liability claims. For example, we are a defendant in product liability lawsuits that allege personal injuries associated with the use of Cordis OptEase and TrapEase inferior vena cava (IVC) filter products and we have accrued an amount for losses and legal defense costs related to these lawsuits, which are discussed in Note 8 of the "Notes to Consolidated Financial Statements." Any settlement of or judgment for a product liability claim that is not covered by insurance and is in excess of any prior accruals could adversely affect our results of operations and financial condition.

We also operate in an industry characterized by extensive intellectual property litigation. Patent litigation can result in significant damage awards and injunctions that could prevent the manufacture and sale of affected products or force us to make royalty payments in order to continue selling the affected products.

Acquisitions can have unanticipated results.

An important element of our growth strategy has been to acquire other businesses that expand or complement our existing businesses. In fiscal 2017 , we spent $132 million to acquire other businesses and in July 2017, we acquired the Patient Recovery Business from Medtronic for $6.1 billion . The acquisition of the Patient Recovery Business as well as other acquisitions involve the following risks: we may overpay for a business or fail to realize the synergies and other benefits we expect from the acquisition; our management's attention may be diverted to integration efforts; we may fail to retain key personnel of the acquired business; future developments may impair the value of our purchased goodwill or intangible assets; we may face difficulties or delays establishing, integrating or combining operations and systems; we may assume liabilities related to legal proceedings involving the acquired business; we may face challenges retaining the customers of the acquired business; or we may encounter unforeseen internal control, regulatory or compliance issues.

We depend on certain suppliers to make their raw materials and products available to us and are subject to fluctuations in costs of raw materials and products.

We depend on the availability of various components, compounds, raw materials and energy supplied by others for our operations. In some instances, for reasons of quality assurance, cost effectiveness, or availability, we procure certain components and raw materials from a sole supplier. Any of our supplier relationships could be interrupted due to events beyond our control, including natural disasters, or could be terminated. In addition, due to the stringent regulations and requirements of the FDA regarding the manufacture of our products, we may not be able to quickly establish additional or replacement sources for certain components or materials. A sustained supply reduction or interruption, and an inability to develop alternative sources for such supply, could have an adverse effect on our business.

Our manufacturing businesses use oil-based resins, pulp, cotton, latex and other commodities as raw materials in many products. Prices of oil and gas also affect our distribution and transportation costs. Prices of these commodities are volatile and can fluctuate significantly, causing our costs to produce and distribute our products to fluctuate. Due to competitive dynamics and contractual limitations, we may be unable to pass along cost increases through higher prices. If we cannot fully offset cost increases through other cost reductions, or recover these costs through price increases or surcharges, our results of operations could be adversely affected.

Our results of operations may suffer upon the bankruptcy, insolvency, or other credit failure of a customer that has a substantial amount owed to us.
Most of our customers buy products and services from us on credit, which is made available to customers based on our assessment of creditworthiness. The bankruptcy, insolvency or other credit failure of any customer that has a substantial amount owed to us could adversely affect our results of operations.

Recent acquisitions have increased the extent of our exposure to the economic, political and currency risks of international operations.
We conduct our operations in various regions of the world outside of the United States, including Europe and Asia. The scope and complexity of our international operations expanded with the acquisitions of Cordis and the Patient Recovery Business and we may continue to expand our operations outside the United States. Global developments can affect our business in many ways. Our global operations are affected by local economic environments, including inflation, recession and competition. In addition, we conduct our business in U.S. dollars and various functional currencies of our foreign subsidiaries. Changes in foreign currency exchange rates could adversely affect our financial results, which are reported in U.S. dollars. We may not be able to hedge to protect us against these exposures, and any hedges may not successfully mitigate these exposures. Political changes also can disrupt our global operations, as well as our customers and suppliers, in a particular location. Divergent or unfamiliar regulatory systems and labor markets also can increase the risks and burdens of operating in numerous countries.

Our goodwill may become impaired, which would require us to record a significant charge to earnings in accordance with generally accepted accounting principles.
U.S. GAAP requires us to test our goodwill for impairment on an annual basis, or more frequently if indicators for potential impairment exist. The testing required by GAAP involves estimates and judgments by management. Although we believe our assumptions and estimates are reasonable and appropriate, any changes in key assumptions, including a failure to meet business plans or other unanticipated events and circumstances such as a rise in interest rates, may affect the accuracy or validity of such estimates. We may be required to record a significant charge to earnings in our consolidated financial statements during the period in which any impairment of our goodwill is determined, which charge could adversely affect our results of operations. See "Critical Accounting Policies and Sensitive Accounting Estimates" in MD&A above for more information regarding goodwill impairment testing.

Economic conditions may adversely affect demand for our products and services.
Deterioration in general economic conditions in the United States and other countries in which we do business could adversely affect the amount of prescriptions filled and the number of medical procedures undertaken and, therefore, reduce purchases of our products and services, which could adversely affect our results of operations. In addition, deteriorating economic conditions may increase bankruptcies, insolvencies or other credit failures of customers or suppliers, which, if they have a substantial amount owed to us, also could adversely affect our results of operations.

Properties

In the United States and Puerto Rico, at June 30, 2017 , the Pharmaceutical segment operated 24 primary pharmaceutical distribution facilities and one national logistics center; six specialty distribution facilities; and more than 140 nuclear pharmacy and radiopharmaceutical manufacturing facilities. The Medical segment operated more than 70 medical-surgical distribution, assembly, manufacturing and other operating facilities in the United States and Puerto Rico. Our U.S. operating facilities are located in 45 states.

Outside the United States and Puerto Rico, at June 30, 2017 , our Medical segment operated 20 facilities in Canada, the Dominican Republic, Malaysia, Malta, Mexico and Thailand that engage in manufacturing, distribution or research. In addition, our Pharmaceutical and Medical segments utilized various distribution and pharmacy facilities in China.

At June 30, 2017 , we owned more than 70 operating facilities and leased more than 230 operating facilities around the world. Our principal executive offices are headquartered in an owned building located at 7000 Cardinal Place in Dublin, Ohio.

In connection with the acquisition of the Patient Recovery Business in July 2017, we acquired nine manufacturing facilities in the United States and eight manufacturing facilities outside the United States in Canada, Costa Rica, Germany, Ireland, Japan, Malaysia, Mexico and Thailand.

We consider our operating properties to be in satisfactory condition and adequate to meet our present needs. However, we regularly evaluate operating properties and may make further additions and improvements or consolidate locations as we seek opportunities to expand or enhance the efficiency of our business.

Legal Proceedings

The legal proceedings described in Note 8 of the "Notes to Consolidated Financial Statements" are incorporated in this "Legal Proceedings" section by reference.

Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common shares are listed on the New York Stock Exchange under the symbol “CAH.” The following table reflects the range of the reported high and low closing prices of our common shares as reported on the New York Stock Exchange Composite Tape and the per share dividends declared for the fiscal years ended June 30, 2017 and 2016 and paid quarterly. It also reflects the range of the reported high and low closing prices of our common shares from July 1, 2017 through the period ended on July 31, 2017 and the per share dividends declared from July 1, 2017 through the period ended on July 31, 2017:

	High	Low	Dividends Declared
Fiscal 2016			
Quarter Ended:			
September 30, 2015	$ 87.02	$ 76.72	$ 0.3870
December 31, 2015	90.85	77.12	0.3870
March 31, 2016	89.68	76.16	0.3870
June 30, 2016	87.20	73.69	0.4489
Fiscal 2017			
Quarter Ended:			
September 30, 2016	$ 84.92	$ 75.26	$ 0.4489
December 31, 2016	76.71	65.17	0.4489
March 31, 2017	83.80	72.47	0.4489
June 30, 2017	82.71	71.18	0.4624
Fiscal 2018	$ 78.69	$ 76.29	$ —

At July 31, 2017 there were approximately 8,239 shareholders of record of our common shares.

We anticipate that we will continue to pay quarterly cash dividends in the future. The payment and amount of future dividends remain, however, within the discretion of our Board of Directors and will depend upon our future earnings, financial condition, capital requirements and other factors.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs (2)	Approximate Dollar Value of Shares That May Yet be Purchased Under the Programs (2) (in millions)
April 2017	104	$ 72.21	—	$ 443
May 2017	104	72.33	—	443
June 2017	104	75.55	—	443
Total	**312**	**$ 73.36**	—	**$ 443**

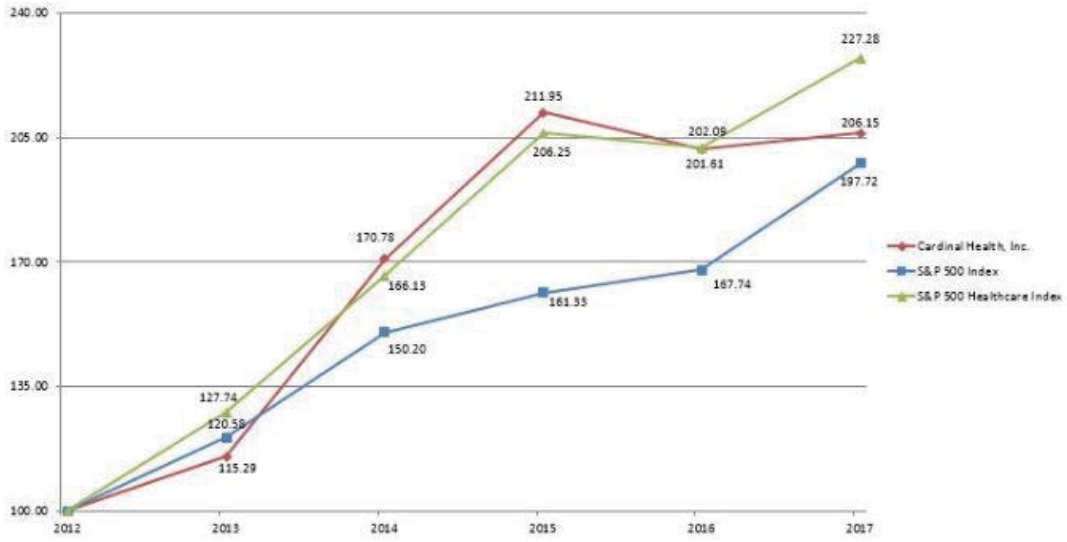
(1) Reflects 104 , 104 and 104 common shares purchased in April, May and June 2017 , respectively, through a rabbi trust as investments of participants in our Deferred Compensation Plan.

(2) On May 4, 2016, our Board of Directors approved a $1.0 billion share repurchase program that expires on December 31, 2019. During the three months ended June 30, 2017 , we repurchased no common shares under this program. We have $443 million available under this program.

Market for Registrant's Common Equity

Five Year Performance Graph

The following line graph compares the cumulative total return of our common shares with the cumulative total return of the Standard & Poor's Composite—500 Stock Index (the "S&P 500 Index") and the Standard & Poor's Composite—500 Healthcare Index (the "S&P 500 Healthcare Index"). The line graph assumes, in each case, an initial investment of $100 on June 30, 2012, based on the market prices at the end of each fiscal year through and including June 30, 2017 , and reinvestment of dividends. The S&P 500 Index and S&P 500 Healthcare Index investments are weighted on the basis of market capitalization at the beginning of each period.



	June 30					
	2012	2013	2014	2015	2016	**2017**
Cardinal Health, Inc.	$ 100.00	$ 115.29	$ 170.78	$ 211.95	$ 201.61	**$ 206.15**
S&P 500 Index	100.00	120.58	150.20	161.33	167.74	**197.72**
S&P 500 Healthcare Index	100.00	127.74	166.13	206.25	202.09	**227.28**

Management Reports

Evaluation of Disclosure Controls and Procedures

We evaluated, with the participation of our principal executive officer and principal financial officer, the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) as of June 30, 2017 . Based on this evaluation, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures were effective as of June 30, 2017 to provide reasonable assurance that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms and that such information is accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act. Our internal control system is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, controls deemed effective now may become inadequate in the future because of changes in conditions, or because compliance with policies or procedures has deteriorated or been circumvented.

Management assessed the effectiveness of our internal control over financial reporting as of June 30, 2017 . In making this assessment, management used the criteria established in the Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the "COSO criteria"). Based on management's assessment and the COSO criteria, management believes that our internal control over financial reporting was effective as of June 30, 2017 .

Our independent registered public accounting firm, Ernst & Young LLP, has issued a report on our internal control over financial reporting. Ernst & Young LLP's report appears following this "Management Reports" section and expresses an unqualified opinion on the effectiveness of our internal control over financial reporting.

Changes in Internal Control Over Financial Reporting

The Pharmaceutical segment is in a multi-year project to replace certain finance and operating information systems, which is affecting internal control over financial reporting. During the quarter ended June 30, 2017, we continued to transition selected processes to the new systems. If these new systems are not effectively implemented or fail to operate as intended, it could adversely affect our internal control over financial reporting. Except for the changes made in connection with implementing the new systems described above, there were no changes in our internal control over financial reporting during the quarter ended June 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Reports

Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting

The Board of Directors and Shareholders of Cardinal Health, Inc.

We have audited Cardinal Health, Inc. and subsidiaries' internal control over financial reporting as of June 30, 2017 , based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Cardinal Health, Inc. and subsidiaries' management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying “Management's Report on Internal Control Over Financial Reporting.” Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Cardinal Health, Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of June 30, 2017 , based on the COSO criteria .

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Cardinal Health, Inc. and subsidiaries as of June 30, 2017 and 2016 and the related consolidated statements of earnings, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended June 30, 2017 of Cardinal Health, Inc. and subsidiaries and our report dated August 10, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Columbus, Ohio

August 10, 2017

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of Cardinal Health, Inc.

We have audited the accompanying consolidated balance sheets of Cardinal Health, Inc. and subsidiaries as of June 30, 2017 and 2016 , and the related consolidated statements of earnings, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended June 30, 2017 . Our audits also included the financial statement schedule listed in the Index at Item 15(a)(2). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Cardinal Health, Inc. and subsidiaries at June 30, 2017 and 2016 , and the consolidated results of their operations and their cash flows for each of the three years in the period ended June 30, 2017 , in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Cardinal Health, Inc. and subsidiaries' internal control over financial reporting as of June 30, 2017 , based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated August 10, 2017 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Columbus, Ohio
August 10, 2017

Financial Statements and Supplementary Data

Financial Statements

Consolidated Statements of Earnings

(in millions, except per common share amounts)	2017	2016	2015
Revenue	$ 129,976	$ 121,546	$ 102,531
Cost of products sold	123,432	115,003	96,819
Gross margin	6,544	6,543	5,712
Operating expenses:			
Distribution, selling, general and administrative expenses	3,775	3,648	3,240
Restructuring and employee severance	56	25	44
Amortization and other acquisition-related costs	527	459	281
Impairments and (gain)/loss on disposal of assets, net	18	21	(19)
Litigation (recoveries)/charges, net	48	(69)	5
Operating earnings	2,120	2,459	2,161
Other (income)/expense, net	(5)	5	(7)
Interest expense, net	201	178	141
Loss on extinguishment of debt	—	—	60
Earnings from continuing operations before income taxes	1,924	2,276	1,967
Provision for income taxes	630	845	755
Earnings from continuing operations	1,294	1,431	1,212
Earnings from discontinued operations, net of tax	—	—	3
Net earnings	1,294	1,431	1,215
Less: Net earnings attributable to noncontrolling interests	(6)	(4)	—
Net earnings attributable to Cardinal Health, Inc.	$ 1,288	$ 1,427	$ 1,215
Basic earnings per common share attributable to Cardinal Health, Inc.:			
Continuing operations	$ 4.06	$ 4.36	$ 3.65
Discontinued operations	—	—	0.01
Net basic earnings per common share attributable to Cardinal Health, Inc.	$ 4.06	$ 4.36	$ 3.66
Diluted earnings per common share attributable to Cardinal Health, Inc.:			
Continuing operations	$ 4.03	$ 4.32	$ 3.61
Discontinued operations	—	—	0.01
Net diluted earnings per common share attributable to Cardinal Health, Inc.	$ 4.03	$ 4.32	$ 3.62
Weighted-average number of common shares outstanding:			
Basic	317	327	332
Diluted	320	330	335

The accompanying notes are an integral part of these consolidated statements.

Consolidated Statements of Comprehensive Income

(in millions)	2017	2016	2015
Net earnings	$ 1,294	$ 1,431	$ 1,215
Other comprehensive income/(loss):			
Foreign currency translation adjustments and other	(25)	(82)	(104)
Net unrealized gain/(loss) on derivative instruments, net of tax	16	(11)	11
Total other comprehensive loss, net of tax	(9)	(93)	(93)
Total comprehensive income	1,285	1,338	1,122
Less: comprehensive income attributable to noncontrolling interests	(6)	(4)	—
Total comprehensive income attributable to Cardinal Health, Inc.	$ 1,279	$ 1,334	$ 1,122

The accompanying notes are an integral part of these consolidated statements.

Financial Statements

Consolidated Balance Sheets

(in millions)	June 30 2017	2016
Assets		
Current assets:		
Cash and equivalents	$ **6,879**	$ 2,356
Trade receivables, net	**8,048**	7,405
Inventories, net	**11,301**	10,615
Prepaid expenses and other	**2,117**	1,580
Total current assets	**28,345**	21,956
Property and equipment, net	**1,879**	1,796
Goodwill and other intangibles, net	**9,207**	9,426
Other assets	**681**	944
Total assets	$ **40,112**	$ 34,122
Liabilities, Redeemable Noncontrolling Interests and Shareholders' Equity		
Current liabilities:		
Accounts payable	$ **17,906**	$ 17,306
Current portion of long-term obligations and other short-term borrowings	**1,327**	587
Other accrued liabilities	**1,988**	1,808
Total current liabilities	**21,221**	19,701
Long-term obligations, less current portion	**9,068**	4,952
Deferred income taxes and other liabilities	**2,877**	2,781
Redeemable noncontrolling interests	**118**	117
Shareholders' equity:		
Preferred shares, without par value:		
Authorized— **500 thousand** shares, Issued— **none**	—	—
Common shares, without par value:		
Authorized— **755 million** shares, Issued— **327 million** shares and 364 million shares at **June 30, 2017** and 2016, respectively	**2,697**	3,010
Retained earnings	**4,967**	6,419
Common shares in treasury, at cost: **11 million** shares and 42 million shares at **June 30, 2017** and 2016, respectively	**(731)**	(2,759)
Accumulated other comprehensive loss	**(125)**	(116)
Total Cardinal Health, Inc. shareholders' equity	**6,808**	6,554
Noncontrolling interests	**20**	17
Total shareholders' equity	**6,828**	6,571
Total liabilities, redeemable noncontrolling interests and shareholders' equity	$ **40,112**	$ 34,122

The accompanying notes are an integral part of these consolidated statements.

Financial Statements

Consolidated Statements of Shareholders' Equity

(in millions)	Common Shares Shares Issued	Common Shares Amount	Retained Earnings	Treasury Shares Shares	Treasury Shares Amount	Accumulated Other Comprehensive Income/(Loss)	Noncontrolling Interests	Total Shareholders' Equity
Balance at June 30, 2014	364	$ 2,980	$ 4,774	(27)	$ (1,423)	$ 70	$ —	$ 6,401
Net earnings			1,215					1,215
Other comprehensive loss, net of tax						(93)		(93)
Employee stock plans activity, including tax impact of $52 million	—	23		4	214			237
Treasury shares acquired				(13)	(1,036)			(1,036)
Dividends declared			(471)					(471)
Other			3					3
Balance at June 30, 2015	364	3,003	5,521	(36)	(2,245)	(23)	—	6,256
Net earnings			1,427				3	1,430
Other comprehensive loss, net of tax						(93)		(93)
Purchase of noncontrolling interests							(7)	(7)
Employee stock plans activity, including tax benefit of $33 million	—	7		2	137			144
Treasury shares acquired				(8)	(651)			(651)
Dividends declared			(529)					(529)
Other			—				21	21
Balance at June 30, 2016	364	3,010	6,419	(42)	(2,759)	(116)	17	6,571
Net earnings			1,288				2	1,290
Other comprehensive loss, net of tax						(9)		(9)
Purchase of noncontrolling interests							(1)	(1)
Employee stock plans activity, including tax benefit of $34 million	—	(11)		2	167			156
Treasury shares acquired				(8)	(600)			(600)
Dividends declared			(580)					(580)
Other			(1)				2	1
Retirement of Treasury Shares	(37)	(302)	(2,159)	37	2,461			—
Balance at June 30, 2017	**327**	**$ 2,697**	**$ 4,967**	**(11)**	**$ (731)**	**$ (125)**	**$ 20**	**$ 6,828**

The accompanying notes are an integral part of these consolidated statements.

Financial Statements

Consolidated Statements of Cash Flows

(in millions)	2017	2016	2015
Cash flows from operating activities:			
Net earnings	**$ 1,294**	$ 1,431	$ 1,215
Earnings from discontinued operations, net of tax	**—**	—	(3)
Earnings from continuing operations	**1,294**	1,431	1,212
Adjustments to reconcile earnings from continuing operations to net cash provided by operating activities:			
Depreciation and amortization	**717**	641	451
Loss on extinguishment of debt	**—**	—	60
(Gain)/Loss on sale of other investments	**4**	—	(5)
Impairments and (gain)/loss on disposal of assets, net	**18**	21	(19)
Share-based compensation	**96**	111	110
Provision for deferred income taxes	**291**	87	219
Provision for bad debts	**63**	73	52
Change in fair value of contingent consideration obligation	**(5)**	(16)	8
Change in operating assets and liabilities, net of effects from acquisitions:			
Increase in trade receivables	**(665)**	(866)	(870)
Increase in inventories	**(673)**	(1,179)	(779)
Increase in accounts payable	**564**	2,815	1,948
Other accrued liabilities and operating items, net	**(520)**	(147)	153
Net cash provided by operating activities	**1,184**	2,971	2,540
Cash flows from investing activities:			
Acquisition of subsidiaries, net of cash acquired	**(132)**	(3,614)	(503)
Additions to property and equipment	**(387)**	(465)	(300)
Purchase of available-for-sale securities and other investments	**(194)**	(200)	(342)
Proceeds from sale of available-for-sale securities and other investments	**228**	136	206
Proceeds from maturities of available-for-sale securities	**77**	50	37
Proceeds from divestitures and disposal of property and equipment and held for sale assets	**3**	13	53
Net cash used in investing activities	**(405)**	(4,080)	(849)
Cash flows from financing activities:			
Payment of contingent consideration obligation	**(3)**	(25)	(7)
Net change in short-term borrowings	**3**	26	(12)
Net purchase of noncontrolling interests	**(12)**	(10)	—
Reduction of long-term obligations	**(310)**	(6)	(1,221)
Proceeds from interest rate swap terminations	**14**	—	—
Proceeds from long-term obligations, net of issuance costs	**5,171**	—	2,672
Net tax proceeds/(withholding) from share-based compensation	**26**	6	72
Excess tax benefits from share-based compensation	**34**	33	52
Dividends on common shares	**(577)**	(512)	(460)
Purchase of treasury shares	**(600)**	(651)	(1,036)
Net cash provided by/(used in) financing activities	**3,746**	(1,139)	60
Effect of exchange rates changes on cash and equivalents	**(2)**	(12)	—
Net increase/(decrease) in cash and equivalents	**4,523**	(2,260)	1,751
Cash and equivalents at beginning of period	**2,356**	4,616	2,865
Cash and equivalents at end of period	**$ 6,879**	$ 2,356	$ 4,616
Supplemental Information:			
Cash payments for interest	**$ 200**	$ 174	$ 150
Cash payments for income taxes	**686**	635	529

The accompanying notes are an integral part of these consolidated statements.

Notes to Consolidated Financial Statements

1. Basis of Presentation and Summary of Significant Accounting Policies

Cardinal Health, Inc. is a global, integrated healthcare services and products company providing customized solutions for hospitals, healthcare systems, pharmacies, ambulatory surgery centers, clinical laboratories and physician offices. The company provides medical products and pharmaceuticals and cost-effective solutions that enhance supply chain efficiency from hospital to home. Cardinal Health, Inc. connects patients, providers, payers, pharmacists, and manufacturers for integrated care coordination and better patient management. References to “we”, “our” and similar pronouns in these consolidated financial statements are to Cardinal Health, Inc. and its majority-owned or controlled subsidiaries unless the context otherwise requires.

Our fiscal year ends on June 30. References to fiscal 2017 , 2016 and 2015 in these consolidated financial statements are to the fiscal years ended June 30, 2017 , 2016 and 2015 , respectively.

Basis of Presentation

Our consolidated financial statements include the accounts of all majority-owned or controlled subsidiaries, and all significant intercompany transactions and amounts have been eliminated. To conform to the current year presentation, certain prior year amounts have been reclassified. The results of businesses acquired or disposed of are included in the consolidated financial statements from the date of the acquisition or up to the date of disposal, respectively.

Use of Estimates

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (“GAAP”). The preparation of financial statements in accordance with GAAP requires us to make estimates, judgments and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Estimates, judgments and assumptions are used in the accounting and disclosure related to, among other items, allowance for doubtful accounts, inventory valuation, business combinations, goodwill and other intangible asset impairment, vendor reserves, loss contingencies, self-insurance accruals, income taxes and share-based compensation. Actual amounts could ultimately differ from these estimated amounts.

Cash Equivalents

We consider liquid investments purchased with an initial maturity of three months or less to be cash equivalents. The carrying value of cash equivalents approximates fair value.

Receivables and Allowance for Doubtful Accounts

Trade receivables are presented net of an allowance for doubtful accounts of $137 million and $135 million at June 30, 2017 and 2016 , respectively. An account is considered past due on the first day after its due date. In accordance with contract terms, we generally have the ability to charge customers service fees or higher prices if an account is considered past due. We regularly monitor past due accounts and establish appropriate reserves to cover potential losses, which are based primarily on historical collection rates and the credit worthiness of the customer. We write off any amounts deemed uncollectible against the established allowance for doubtful accounts.

We provide financing to various customers. Such financing arrangements range from 1 year to 5 years at interest rates that are generally subject to fluctuation. Interest income on these arrangements is recognized as it is earned. The financings may be collateralized, guaranteed by third parties or unsecured. Finance notes and related accrued interest were $171 million (current portion $53 million) and $145 million (current portion $31 million) at June 30, 2017 and 2016 , respectively, and are included in other assets (current portion is included in prepaid expenses and other) in the consolidated balance sheets. Finance notes receivable allowance for doubtful accounts were $9 million and $19 million at June 30, 2017 and 2016 , respectively. We estimate an allowance for these financing receivables based on historical collection rates and the credit worthiness of the customer. We write off any amounts deemed uncollectible against the established allowance for doubtful accounts.

Concentrations of Credit Risk

We maintain cash depository accounts with major banks, and we invest in high quality, short-term liquid instruments, and in marketable securities. Our short-term liquid instruments mature within three months and we have not historically incurred any related losses. Investments in marketable debt securities consist of a portfolio of high-grade instruments. Such investments are made only in instruments issued by highly-rated institutions, whose financial condition we monitor.

Our trade receivables and finance notes and related accrued interest are exposed to a concentration of credit risk with customers in the retail and healthcare sectors. Credit risk can be affected by changes in reimbursement and other economic pressures impacting the healthcare industry. Such credit risk is limited due to supporting collateral and the diversity of the customer base, including its wide geographic dispersion. We perform regular credit evaluations of our customers’ financial conditions and maintain reserves for losses through the established allowance for doubtful accounts. Historically, such losses have been within our expectations. Refer to the "Receivables and Allowance for Doubtful Accounts" section within this Note for additional information on the accounting treatment of reserves for allowance for doubtful accounts.

Major Customers

CVS Health Corporation ("CVS") and OptumRx, which are primarily serviced through our Pharmaceutical segment, are our only customers that individually account for at least 10 percent of revenue and gross trade receivables.

The table below summarizes historical percent of revenue and gross trade receivables from CVS and OptumRx.

	Percent of Revenue			Percent of Gross Trade Receivables at June 30	
	2017	2016	2015	**2017**	2016
CVS	**23%**	25%	27%	**20%**	22%
OptumRx	**11%**	7%	0%	**1%**	1%

Our pharmaceutical distribution contract with OptumRx began in fiscal 2016 and did not exceed 10 percent until fiscal 2017 .

We have entered into agreements with group purchasing organizations (“GPOs”) which act as purchasing agents that negotiate vendor contracts on behalf of their members. Vizient, Inc. and Premier, Inc. are our two largest GPO member relationships in terms of revenue. Sales to members of these two GPOs collectively accounted for 21 percent , 17 percent and 18 percent of revenue for fiscal 2017 , 2016 and 2015 , respectively. Our trade receivable balances are with individual members of the GPO, and therefore no significant concentration of credit risk exists with these types of arrangements.

Inventories

A substantial portion of our inventories (56 percent and 58 percent at June 30, 2017 and 2016 , respectively) are valued at the lower of cost, using the last-in, first-out ("LIFO") method, or market. These inventories are included within the core pharmaceutical distribution facilities of our Pharmaceutical segment (“distribution facilities”) and are primarily merchandise inventories. The LIFO method presumes that the most recent inventory purchases are the first items sold, so LIFO helps us better match current costs and revenue. We believe that the average cost method of inventory valuation provides a reasonable approximation of the current cost of replacing inventory within the distribution facilities. As such, the LIFO reserve is the difference between (a) inventory at the lower of LIFO cost or market and (b) inventory at replacement cost determined using the average cost method of inventory valuation.

If we had used the average cost method of inventory valuation for all inventory within the distribution facilities, the value of our inventories would not have changed in fiscal 2017 or 2016 because inventories valued at LIFO were $46 million and $9 million higher than the average cost value at June 30, 2017 and 2016 , respectively. We do not record inventories in excess of replacement cost. As such, we did not record any changes in our LIFO reserve in fiscal 2017 and 2016 .

Our remaining inventory that is not valued at the lower of LIFO or market is stated at the lower of cost, using the first-in, first-out method, or market. Inventories presented in the consolidated balance sheets are net of reserves for excess and obsolete inventory which were $76 million and $79 million at June 30, 2017 and 2016 , respectively. We reserve for inventory obsolescence using estimates based on historical experience, historical and projected sales trends, specific categories of inventory and age of on-hand inventory.

Cash Discounts

Manufacturer cash discounts are recorded as a component of inventory cost and recognized as a reduction of cost of products sold when the related inventory is sold.

Property and Equipment

Property and equipment are carried at cost less accumulated depreciation. Property and equipment held for sale are recorded at the lower of cost or fair value less cost to sell. When certain events or changes in operating conditions occur, an impairment assessment may be performed on the recoverability of the carrying amounts.

Depreciation expense is computed using the straight-line method over the estimated useful lives of the assets, including capital lease assets which are depreciated over the terms of their respective leases. We generally use the following range of useful lives for our property and equipment categories: buildings and improvements— 3 to 39 years ; machinery and equipment— 3 to 20 years ; and furniture and fixtures— 3 to 7 years . We recorded depreciation expense of $314 million , $277 million and $254 million for fiscal 2017 , 2016 and 2015 , respectively.

The following table presents the components of property and equipment, net at June 30:

(in millions)		**2017**		2016
Land, building and improvements	**$**	**1,637**	$	1,735
Machinery and equipment		**2,860**		2,608
Furniture and fixtures		**130**		133
Total property and equipment, at cost		**4,627**		4,476
Accumulated depreciation and amortization		**(2,748)**		(2,680)
Property and equipment, net	**$**	**1,879**	$	1,796

Repairs and maintenance expenditures are expensed as incurred. Interest on long-term projects is capitalized using a rate that approximates the weighted-average interest rate on long-term obligations, which was 3 percent at June 30, 2017 . The amount of capitalized interest was immaterial for all periods presented.

Business Combinations

The assets acquired and liabilities assumed in a business combination, including identifiable intangible assets, are recorded at their estimated fair values as of the acquisition date. The excess of the purchase price over the estimated fair value of the identifiable net assets acquired is recorded as goodwill. We base the fair values of identifiable intangible assets on detailed valuations that require management to make significant judgments, estimates and assumptions. Critical estimates and assumptions include: expected future cash flows for customer relationships, trade names and other identifiable intangible assets; discount rates that reflect the risk factors associated with future cash flows; and estimates of useful lives. When an acquisition involves contingent consideration, we recognize a liability equal to the fair value of the contingent consideration obligation at the acquisition date. The estimate of fair value of a contingent consideration obligation requires subjective assumptions to be made regarding future business results, discount rates, discount periods and probabilities assigned to various potential business result scenarios. See Note 2 for additional information regarding our acquisitions.

Goodwill and Other Intangible Assets

Purchased goodwill and intangible assets with indefinite lives are not amortized, but instead are tested for impairment annually or when indicators of impairment exist.

Goodwill impairment testing involves a comparison of the estimated fair value of reporting units to the respective carrying amount, which may be performed utilizing either a qualitative or quantitative assessment. A reporting unit is defined as an operating segment or one level below an operating segment (also known as a component). Goodwill impairment testing involves judgment, including the identification of reporting units and the estimation of the fair value of each reporting unit and, if necessary, the estimation of the implied fair value of goodwill.

We have two operating segments, which are the same as our reportable segments: Pharmaceutical and Medical. These operating segments are comprised of divisions (components), for which discrete financial information is available. Components are aggregated into reporting units for purposes of goodwill impairment testing to the extent that they share similar economic characteristics. Our reporting units are: Pharmaceutical operating segment (excluding our Nuclear Pharmacy Services division and Cardinal Health China - Pharmaceutical division); Nuclear Pharmacy Services division; Cardinal Health China - Pharmaceutical division; Medical operating segment (excluding our Cardinal Health at Home division and naviHealth division); Cardinal Health at Home division; and naviHealth division.

Fair value can be determined using market, income or cost-based approaches. Our determination of estimated fair value of the reporting units is based on a combination of the income-based and market-based approaches. Under the income-based approach, we use a discounted cash flow model in which cash flows anticipated over several future periods, plus a terminal value at the end of that time horizon, are discounted to their present value using an appropriate risk-adjusted rate of return. We use our internal forecasts to estimate future cash flows, which we believe are consistent with those of a market participant, and include an estimate of long-term growth rates based on our most recent views of the long-term outlook for each reporting unit. Actual results may differ materially from those used in our forecasts. We use discount rates that are commensurate with the risks and uncertainty inherent in the respective reporting units and in our internally-developed forecasts. Discount rates used in our reporting unit valuations ranged from 8.5 percent to 12.5 percent . Under the market-based approach, we determine fair value by comparing our reporting units to similar businesses or guideline companies whose securities are actively traded in public markets. To further confirm fair value, we compare the aggregate fair value of our reporting units to our total market capitalization. Estimating the fair value of reporting units requires the use of estimates and significant judgments that are based on a number of factors including forecasted operating results. The use of alternate estimates and assumptions or changes in the industry or peer groups could materially affect the determination of fair value for each reporting unit and potentially result in goodwill impairment.

We performed annual impairment testing in fiscal 2017 , 2016 and 2015 and concluded that there were no impairments of goodwill as the estimated fair value of each reporting unit exceeded its carrying value.

The impairment test for indefinite-lived intangibles other than goodwill (primarily in-process research and development ("IPR&D")) consists of a comparison of the fair value of the indefinite-lived intangible asset to the carrying value of the asset as of the impairment testing date. If the carrying amount of the indefinite-lived intangible exceeds its fair value, an impairment loss must be recognized in an amount equal to that excess. We estimate the fair value of our indefinite-lived intangibles under the income approach using a discounted cash flow model. We use our internal forecasts, which we believe are consistent with those of a market participant, to estimate future cash flows and include an estimate of long-term growth rates based on our most recent views of the long-term outlook for the indefinite-lived intangible including, among other factors, assumptions on regulatory approval for IPR&D.

Intangible assets with finite lives, primarily customer relationships; trademarks, trade names and patents; and developed technology, are amortized using a combination of straight-line and accelerated methods based on the expected cash flows from the asset over their estimated useful lives. We review intangible assets with finite lives for impairment whenever events or changes in circumstances indicate that the related carrying amounts may not be recoverable. Determining whether an impairment loss occurred requires a comparison of the carrying amount to the sum of the future forecasted undiscounted cash flows expected to be generated by the asset group. Actual results may differ materially from those used in our forecasts.

Investments

Investments in non-marketable equity securities are accounted for under either the cost or equity method of accounting and are included in other assets in the consolidated balance sheets. For investments in which we can exercise significant influence, we use the equity method of accounting. Our share of the earnings and losses was immaterial, both individually and in the aggregate, for all periods presented and is recorded in other income, net in the consolidated statements of the earnings. We monitor investments for other-than-temporary impairment by considering factors such as the operating performance of the investment and current economic and market conditions.

Marketable securities are classified as available-for-sale and are carried at fair value in the consolidated balance sheets. Unrealized gains and losses on available-for-sale securities, net of applicable taxes, are included within shareholders' equity in accumulated other comprehensive income ("AOCI"). We monitor these securities for other-than-temporary impairment by considering factors such as the duration that, and the extent to which, the fair value is below cost, the operating performance and credit worthiness of the issuer of the securities and current economic and market conditions. See Note 5 for additional information regarding available-for-sale securities.

Vendor Reserves

In the ordinary course of business, our vendors may dispute deductions taken against payments otherwise due to them or assert other disputes. These disputes are researched and resolved based upon the findings of the research performed. At any given time, there are outstanding items in various stages of research and resolution. In determining appropriate reserves for areas of exposure with our vendors, we assess historical experience and current outstanding claims. We have established various levels of reserves based on the type of claim and status of review. Though the claim types are relatively consistent, we periodically refine our methodology by updating the reserve estimate percentages to reflect actual historical experience. The ultimate outcome of certain claims may be different than our original estimate and may require an adjustment. All adjustments to vendor reserves are included in cost of products sold. In addition, the reserve balance will fluctuate due to variations of outstanding claims from period-to-period, timing of settlements and specific vendor issues, such as bankruptcies. Vendor reserves were $50 million and $62 million at June 30, 2017 and 2016 , respectively, excluding third-party returns. See separate section within this Note for a description of third-party returns.

Distribution Services Agreement and Other Vendor Fees

Our Pharmaceutical segment recognizes fees received from distribution services agreements and other fees received from vendors related to the purchase or distribution of the vendors' inventory when those fees have been earned and we are entitled to payment. Since the benefit provided to a vendor is related to the purchase and distribution of the vendor's inventory, we recognize the fees as a reduction in the carrying value of the inventory that generated the fees, and as such, a reduction of cost of products sold in our consolidated statements of earnings when the inventory is sold.

Loss Contingencies and Self-Insurance

We accrue for contingencies related to disputes, litigation and regulatory matters if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. We also self-insure for employee healthcare, general liability, certain product liability matters, auto liability, property and workers' compensation. Self-insurance accruals include an estimate for expected settlements or pending claims, defense costs, administrative fees, claim adjustment costs and an estimate for claims incurred but not reported. Because these matters are inherently unpredictable and unfavorable developments or resolutions can occur, assessing contingencies and other liabilities is highly subjective and requires judgments about future events. We regularly review contingencies and our self-insurance accruals to determine whether our accruals and related disclosures are adequate. The amount of ultimate loss may differ from these estimates. See Note 8 for additional information regarding loss contingencies and product liability lawsuits.

Income Taxes

We account for income taxes using the asset and liability method. Deferred tax assets and liabilities are measured using enacted tax rates in the respective jurisdictions in which we operate. Deferred taxes are not provided on the unremitted earnings of subsidiaries outside of the United States when it is expected that these earnings are permanently reinvested.

Tax benefits from uncertain tax positions are recognized when it is more likely than not that the position will be sustained upon examination of the technical merits of the position, including resolutions of any related appeals or litigation processes. The amount recognized is measured as the largest amount of tax benefit that is greater than 50 percent likely of being realized upon settlement. See Note 7 for additional information regarding income taxes.

Other Accrued Liabilities

Other accrued liabilities represent various current obligations, including certain accrued operating expenses and taxes payable.

Noncontrolling Interests and Redeemable Noncontrolling Interests

Noncontrolling interests represent the portion of net earnings, comprehensive income and net assets that is not attributable to Cardinal Health, Inc.

The redeemable noncontrolling interests relate to our ownership interest in naviHealth Holdings, LLC ("naviHealth"), which we acquired during fiscal 2016. The redeemable noncontrolling interests are redeemable at the option of the third-party noncontrolling interest holders at any time after the two-year anniversary of the closing, or earlier if a trigger event occurs. As such, the noncontrolling interests have been presented as redeemable noncontrolling interests in our consolidated balance sheets. The noncontrolling interests will be adjusted each period for net earnings and dividends attributable to the noncontrolling interests and changes in the noncontrolling ownership interests, if any. An additional adjustment to the carrying value of the noncontrolling interests may be required if the redemption value under the terms of the agreement exceeds the carrying value. Changes in the carrying value of the noncontrolling interests related to a change in the redemption value will be recorded through retained earnings and will not affect net earnings attributable to Cardinal Health, Inc. See Note 2 and Note 12 for additional information regarding redeemable noncontrolling interests.

Share-Based Compensation

Share-based compensation provided to employees is recognized in the consolidated statements of earnings based on the grant date fair value of the awards. The fair value of stock options is determined on the grant date using a lattice valuation model. The fair value of restricted share units and performance share units is determined by the grant date market price of our common shares. The compensation expense associated with nonvested performance share units is dependent on our periodic assessment of the probability of the targets being achieved and our estimate, which may vary over time, of the number of shares that ultimately will be issued. The compensation expense recognized for share-based awards is net of estimated forfeitures and is recognized ratably over the service period of the awards. We classify share-based compensation expense in distribution, selling, general and administrative ("SG&A") expenses to correspond with the same line item as the majority of the cash compensation paid to employees. If awards are modified in connection with a restructuring activity, the incremental share-based

compensation expense is classified in restructuring and employee severance. See Note 16 for additional information regarding share-based compensation.

Dividends

We paid cash dividends per common share of $1.80 , $1.55 and $1.37 in fiscal 2017 , 2016 and 2015 , respectively.

Revenue Recognition

We recognize revenue when persuasive evidence of an arrangement exists, product delivery has occurred or the services have been rendered, the price is fixed or determinable, and collectability is reasonably assured.

Pharmaceutical Segment

The Pharmaceutical segment recognizes distribution revenue when title transfers to its customers and we have no further obligation to provide services related to such merchandise.

Revenue for deliveries that are directly shipped to customers from the manufacturer when we act as an intermediary in the ordering and delivery of products is recorded gross. This is in accordance with accounting standards addressing reporting revenue on a gross basis as a principal versus on a net basis as an agent. This revenue is recorded on a gross basis since we incur credit risk from the customer, bear the risk of loss for incomplete shipments and do not receive a separate fee or commission for the transaction and, as such, are the primary obligor. Revenue from these sales is recognized when title transfers to the customer and we have no further obligation to provide services related to such merchandise.

Radiopharmaceutical revenue is recognized upon delivery of the product to the customer and we have no further obligation to provide services related to such merchandise.

Medical Segment

The Medical segment recognizes revenue when title transfers to its customers and we have no further obligation to provide services related to such products.

Sales Returns and Allowances

Revenue is recorded net of sales returns and allowances. Our customer return policies generally require that the product be physically returned, subject to restocking fees, in a condition suitable to be added back to inventory and resold at full value, or returned to vendors for credit (“merchantable product”). Product returns are generally consistent throughout the year and typically are not specific to any particular product or customer.

We accrue for estimated sales returns and allowances at the time of sale based upon historical customer return trends, margin rates and processing costs. Our accrual for sales returns is reflected as a reduction of revenue and cost of products sold for the sales price and cost, respectively. At June 30, 2017 and 2016 , the accrual for estimated sales returns and allowances was $347 million and $386 million , respectively, the impact of which is reflected in trade receivables, net and inventories, net in the consolidated balance sheets. Sales returns and allowances were $2.3 billion , $2.2 billion and $2.0 billion , for fiscal 2017 , 2016 and 2015 , respectively.

Third-Party Returns

Since we generally do not accept non-merchantable product returns from our customers, many of our customers return non-merchantable pharmaceutical products to the manufacturer through third parties. Since our customers generally do not have a direct relationship with manufacturers, our vendors pass the value of such returns to us (usually in the form of an accounts payable deduction) for distribution to customers. We, in turn, pass the value received, less an administrative fee, to our customer. In certain instances, we pass the estimated value of the return to our customer prior to our receipt of the value from the vendor. Although we believe we have satisfactory protections, we could be subject to claims from customers or vendors if our administration of this overall process was deficient in some respect or our contractual terms with vendors are in conflict with our contractual terms with our customers. We have maintained reserves for some of these situations based on their nature and our historical experience with their resolution.

Shipping and Handling

Shipping and handling costs are primarily included in SG&A expenses in our consolidated statements of earnings. Shipping and handling costs include all delivery expenses as well as all costs to prepare the product for shipment to the end customer. Shipping and handling costs were $496 million , $504 million and $454 million , for fiscal 2017 , 2016 and 2015 , respectively. Revenue received for shipping and handling was immaterial for all periods presented.

Restructuring and Employee Severance

We consider restructuring activities to be programs by which we fundamentally change our operations, such as closing and consolidating facilities, changing the way we manufacture or distribute our products, moving manufacturing of a product to another location, changes in production or business process sourcing, employee severance (including rationalizing headcount or other significant changes in personnel) and realigning operations (including realignment of the management structure of a business unit in response to changing market conditions). See Note 3 for additional information regarding our restructuring activities.

Amortization and Other Acquisition-Related Costs

We classify certain costs incurred in connection with acquisitions as amortization and other acquisition-related costs in our consolidated statements of earnings. These costs consist of amortization of acquisition-related intangible assets, transaction costs, integration costs and changes in the fair value of contingent consideration obligations. Transaction costs are incurred during the initial evaluation of a potential acquisition and primarily relate to costs to analyze, negotiate and consummate the transaction as well as due diligence activities. Integration costs relate to activities required to combine the operations of an acquired enterprise into our operations and, in the case of the Cordis business, to stand-up the systems and processes needed to support its global footprint. We record changes in the fair value of contingent consideration obligations relating to acquisitions as income or expense in amortization and other acquisition-related costs. See Note 4 for additional information regarding amortization of acquisition-related intangible assets and

Note 10 for additional information regarding contingent consideration.

Translation of Foreign Currencies

Financial statements of our subsidiaries outside the United States are generally measured using the local currency as the functional currency. Adjustments to translate the assets and liabilities of these foreign subsidiaries into U.S. dollars are accumulated in shareholders' equity through AOCI utilizing period-end exchange rates. Revenues and expenses of these foreign subsidiaries are translated using average exchange rates during the year.

The foreign currency translation gains/(losses) included in AOCI at June 30, 2017 and 2016 are presented in Note 13 . Foreign currency transaction gains and losses for the period are included in the consolidated statements of earnings in their respective financial statement line item.

Interest Rate, Currency and Commodity Risk

All derivative instruments are recognized at fair value on the consolidated balance sheets and all changes in fair value are recognized in net earnings or shareholders' equity through AOCI, net of tax.

For contracts that qualify for hedge accounting treatment, the hedge contracts must be effective at reducing the risk associated with the exposure being hedged and must be designated as a hedge at the inception of the contract. Hedge effectiveness is assessed periodically. Any contract not designated as a hedge, or so designated but ineffective, is adjusted to fair value and recognized immediately in net earnings. If a fair value or cash flow hedge ceases to qualify for hedge accounting treatment, the contract continues to be carried on the balance sheet at fair value until settled and future adjustments to the contract's fair value are recognized immediately in net earnings. If a forecasted transaction is probable not to occur, amounts previously deferred in AOCI are recognized immediately in net earnings. See Note 11 for additional information regarding our derivative instruments, including the accounting treatment for instruments designated as fair value, cash flow and economic hedges.

Fair Value Measurements

Fair value is defined as the price that would be received upon selling an asset or the price paid to transfer a liability on the measurement date. It focuses on the exit price in the principal or most advantageous market for the asset or liability in an orderly transaction between willing market participants. A three-tier fair value hierarchy is established as a basis for considering such assumptions and for inputs used in the valuation methodologies in measuring fair value. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair values are:

Level 1 - Observable prices in active markets for identical assets and liabilities.

Level 2 - Observable inputs other than quoted prices in active markets for identical assets and liabilities.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

See Note 10 for additional information regarding fair value measurements.

Recent Financial Accounting Standards

In May 2017, the Financial Accounting Standards Board ("FASB") issued final guidance that clarifies when changes to the terms or conditions of a share-based payment award must be accounted for as modifications. Entities will apply the modification accounting guidance if the value, vesting conditions or classification of the award changes. This guidance will be effective for us in the first quarter of fiscal 2019 and the impact of this new guidance is dependent on future events.

In February 2017, the FASB clarified the guidance on how to account for the derecognition of nonfinancial assets (e.g., real estate, land, buildings, intangibles) and in-substance nonfinancial assets once an entity adopts the new revenue recognition guidance that is discussed in more detail in this section below. The guidance also defines what constitutes an in-substance nonfinancial asset. This guidance will be effective for us in the first quarter of fiscal 2019. We are currently evaluating the impact of this standard on our consolidated financial statements.

In January 2017, the FASB issued amended accounting guidance that simplifies the accounting for goodwill impairment by eliminating the step of measuring a goodwill impairment by estimating the implied fair value of goodwill. Instead, goodwill impairment will be measured as the amount by which the reporting unit's carrying value exceeds its fair value, limited to the carrying value of the goodwill. This guidance will be effective for us in the first quarter of fiscal 2021, with early adoption permitted. We are currently evaluating the timing of adoption. The impact of this new guidance is dependent on future events.

Also in January 2017, the FASB issued new accounting guidance that changes the definition of a business when evaluating whether a set of transferred assets and activities is considered a business. This guidance will be effective for us in the first quarter of fiscal 2019, with early adoption permitted. We are currently evaluating the timing of adoption. The impact of adoption is dependent on future events.

In November 2016, the FASB issued amended accounting guidance on the presentation of restricted cash and restricted cash equivalents in the statement of cash flows. The guidance requires an entity to include restricted cash and restricted cash equivalents with cash and cash equivalents when reconciling the beginning-of-period and end-of-period amounts shown on the statements of cash flows. This amendment will be effective for us in the first quarter of fiscal 2019, with early adoption permitted. We are currently evaluating the timing of adoption and the impact of this standard on our consolidated financial statements.

In October 2016, the FASB issued amended accounting guidance that requires an entity to recognize the income tax effect of intercompany sales and transfers of assets other than inventory at the time that the transfer occurs rather than when the asset is sold

to a third party. This amendment will be effective for us in the first quarter of fiscal 2019. We are currently evaluating the impact of this standard on our consolidated financial statements.

In August 2016, the FASB issued accounting guidance which clarifies the classification of certain cash receipts and cash payments in the statement of cash flows, including those related to contingent consideration payments made after a business combination, distributions received from equity method investees, debt prepayment or debt extinguishment costs and proceeds from the settlement of insurance claims. This guidance will be effective for us in the first quarter of fiscal 2019. We are currently evaluating the impact of this standard on our consolidated financial statements.

In June 2016, the FASB issued amended accounting guidance that will require entities to measure credit losses on trade and other receivables, held-to-maturity debt securities, loans and other instruments using an "expected credit loss" model that considers historical experience, current conditions and reasonable supportable forecasts. This guidance also requires that credit losses on available-for-sale debt securities with unrealized losses be recognized as allowances rather than as deductions in the amortized cost of the securities. This guidance will be effective for us in the first quarter of fiscal 2021. We are currently evaluating the impact of adoption on our consolidated financial statements.

In March 2016, the FASB issued amended accounting guidance that will change the accounting for certain aspects of share-based compensation to employees. The guidance requires all income tax effects of share-based awards to be recognized in the statement of earnings as awards vest or are settled. Additionally, the guidance increases the amount employers can withhold in shares to cover employee income taxes without requiring liability classification and allows a policy election for accounting for forfeitures. We anticipate the primary impact of the adoption will result in the recognition of excess tax benefits in the income statement on a prospective basis, rather than as a component of equity, and therefore we expect to recognize an immaterial discrete tax benefit or expense in income tax expense on our consolidated financial statements upon adoption in the first quarter of fiscal 2018. The inclusion of excess tax benefits and deficiencies as a component of our income tax expense will increase volatility within our provision for income taxes as the amount of excess tax benefits or deficiencies from share-based compensation awards depends on our stock price at the date the awards vest.

In February 2016, the FASB issued amended accounting guidance that requires lessees to recognize most leases on the balance sheet as a lease liability and corresponding right-of-use asset. This guidance will be effective for us in the first quarter of fiscal 2020, with early adoption permitted. We are currently evaluating the impact of the adoption on our consolidated financial statements.

In July 2015, the FASB issued amended accounting guidance that simplifies the current guidance surrounding the measurement of inventory. Under this amended guidance, inventory is measured at the lower of cost and net realizable value, which eliminates the need to determine replacement cost and evaluate whether the inventory is above or below net realizable value. Net realizable value is defined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. The amended guidance does not apply to inventory measured under the LIFO method. We adopted this guidance in the fourth quarter of fiscal 2017. The adoption of this guidance did not impact our consolidated financial statements.

In April 2015, the FASB issued amended accounting guidance that clarifies the circumstances under which a cloud computing customer would account for the arrangement as a license of internal-use software. If it is determined that a software license does not exist in the arrangement, the customer would account for this arrangement as a service contract. We adopted this guidance in the first quarter of fiscal 2017. The adoption of this guidance did not have a material impact on our financial position or results of operations.

Also in April 2015, the FASB issued amended accounting guidance related to the presentation of debt issuance costs in the financial statements. This guidance requires an entity to present such costs in the balance sheet as a direct deduction from the related debt rather than as an asset. We adopted this guidance in the first quarter of fiscal 2017. Upon adoption of this guidance, debt issuance costs of $29 million were reclassified from other assets to long-term obligations, less current portion within the consolidated balance sheet.

In August 2014, the FASB issued amended accounting guidance related to uncertainties about an entity's ability to continue as a going concern. This guidance requires management to evaluate whether there is substantial doubt about a company's ability to continue as a going concern. We adopted this guidance in the fourth quarter of fiscal 2017. The adoption of this guidance did not impact our financial statement disclosures.

In May 2014, the FASB issued amended accounting guidance related to revenue recognition. This guidance is based on the principle that revenue is recognized in an amount that reflects the consideration to which an entity expects to be entitled in exchange for the transfer of goods or services to customers. The guidance also requires additional disclosure about the nature, amount, timing, and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. The FASB also subsequently issued several amendments to the standard, including clarification on principal versus agent considerations, performance obligations and licensing, and certain scope improvements and practical expedients.

We continue to make progress on our evaluation of the amended guidance, including identification of revenue streams and customer contract reviews. Our revenue is primarily distribution revenue, which we recognize at a point in time when title transfers to customers and we have no further obligation to provide services related to such merchandise. Although we are continuing to assess the impact of the amended guidance, we generally anticipate that the timing of recognition of distribution revenue will be substantially unchanged under the amended guidance.

The amended guidance will be effective for us in the first quarter of fiscal 2019 and permits adoption under either the full retrospective

approach (recognize effects of the amended guidance in each prior reporting period presented) or the modified retrospective approach (recognize the cumulative effect of adoption as an adjustment to retained earnings at the date of initial application). We are still evaluating our method of adoption.

2. Acquisitions

While we have completed acquisitions impacting the Pharmaceutical segment during fiscal 2017 , the pro forma results of operations and the results of operations for acquired businesses since the acquisition dates have not been separately disclosed because the effects were not significant compared to the consolidated financial statements, individually or in the aggregate. The cash paid for these acquisitions, net of cash acquired, was $ 132 million . During the three months ended June 30, 2017 , we completed the largest of these acquisitions for a purchase price of approximately $ 80 million , which was paid in cash, and potential maximum contingent payments of $ 230 million . As of June 30, 2017 , we recorded a $19 million contingent consideration obligation in connection with this acquisition.

Cordis

On October 2, 2015 , we acquired Cordis from Ethicon, Inc., a wholly-owned subsidiary of Johnson & Johnson, for $1.9 billion using cash on hand and proceeds from our debt offering in June 2015 . The acquisition of Cordis, a global manufacturer and distributor of interventional cardiology devices and endovascular solutions with operations in more than 50 countries, expands our Medical segment's portfolio of self-manufactured products and its geographic scope. We closed the Cordis acquisition in 20 principal countries on October 2, 2015 , and acquired control of, as described in GAAP, and the rights to, the net economic benefit from the entire Cordis business in the remaining countries at that time.

Transaction and integration costs associated with the acquisition of Cordis were $61 million and $78 million during fiscal 2017 and 2016 , respectively, and are included in amortization and other acquisition-related costs in the consolidated statements of earnings.

naviHealth

On August 26, 2015 , we acquired a 71 percent ownership interest in naviHealth for $238 million , net of cash acquired of $53 million . We funded the acquisition with cash on hand. The acquisition of naviHealth, a leader in post-acute care management solutions, expands our ability to serve hospitals, other healthcare providers, and payers. We consolidate the results of naviHealth in our consolidated financial statements and report its consolidated results in our Medical segment. The terms of the agreement provide us with the option to acquire any remaining noncontrolling interests at any time after the two -year anniversary of the closing. The third-party noncontrolling interest holders also hold an option, which allows them to sell their noncontrolling interests to us at any time after the two-year anniversary of the closing, or earlier if a trigger event occurs. Refer to Note 12 for further information on the redeemable noncontrolling interests. We also completed acquisitions within naviHealth during fiscal 2016 for $242 million , which were paid in cash and increased our ownership interest to 82 percent .

Harvard Drug

On July 2, 2015 , we completed the acquisition of The Harvard Drug Group ("Harvard Drug") for $1.1 billion using cash on hand and proceeds from our debt offering in June 2015 . The acquisition of Harvard Drug, a distributor of generic pharmaceuticals, over-the-counter healthcare and related products to retail, institutional, and alternate care customers, enhances our Pharmaceutical segment's generic pharmaceutical distribution and related services businesses. Harvard Drug also repackages generic pharmaceuticals and over-the-counter healthcare products.

Fair Value of Assets Acquired and Liabilities Assumed

The allocation of the fair value of assets acquired and liabilities assumed for the acquisitions of Cordis, Harvard Drug and naviHealth were finalized during the fiscal year ended June 30, 2017 .

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed as of the acquisition dates for Cordis, naviHealth and Harvard Drug:

(in millions)	Cordis	naviHealth	Harvard Drug
Identifiable intangible assets:			
Customer relationships (1)	$ 225	$ 38	$ 470
Trade names (2)	125	16	130
Developed technology (3)	395	61	—
In-process research and development (4)	55	—	—
Total identifiable intangible assets acquired	800	115	600
Cash and equivalents	—	53	44
Trade receivables	—	31	67
Inventories	205	—	49
Prepaid expenses and other	4	14	11
Property and equipment	97	5	16
Other assets	44	1	—
Accounts payable	(82)	(2)	(47)
Other accrued liabilities	(85)	(95)	(37)
Deferred income taxes and other liabilities	(13)	(33)	(188)
Redeemable noncontrolling interests	—	(119)	—
Total identifiable net assets/(liabilities) acquired	970	(30)	515
Goodwill	914	321	634
Total net assets acquired	**$ 1,884**	**$ 291**	**$ 1,149**

(1) The weighted-average useful lives of customer relationships range from 4 to 13 years.

(2) The weighted-average useful lives of trade names range from 10 to 20 years.

(3) The weighted-average useful life of developed technology is 10 years.

(4) Acquired in-process research and development intangible assets have an indefinite life.

3. Restructuring and Employee Severance

The following tables summarize restructuring and employee severance costs:

(in millions)	2017	2016	2015
Employee-related costs (1)	$ 51	$ 15	$ 34
Facility exit and other costs (2)	5	10	10
Total restructuring and employee severance	**$ 56**	$ 25	$ 44

(1) Employee-related costs primarily consist of termination benefits provided to employees who have been involuntarily terminated and duplicate payroll costs during transition periods.

(2) Facility exit and other costs primarily consist of lease termination costs, accelerated depreciation, equipment relocation costs, project consulting fees and costs associated with restructuring our delivery of information technology infrastructure services.

The following table summarizes activity related to liabilities associated with restructuring and employee severance:

(in millions)	Employee-Related Costs	Facility Exit and Other Costs	Total
Balance at June 30, 2015	$ 22	$ —	**$ 22**
Additions	17	2	**19**
Payments and other adjustments	(24)	(1)	**(25)**
Balance at June 30, 2016	15	1	**16**
Additions	43	1	**44**
Payments and other adjustments	(17)	(2)	**(19)**
Balance at June 30, 2017	**$ 41**	**$ —**	**$ 41**

4. Goodwill and Other Intangible Assets

Goodwill

The following table summarizes the changes in the carrying amount of goodwill by segment and in total:

(in millions)	Pharmaceutical (1)	Medical	Total
Balance at June 30, 2015	$ 2,199	$ 2,871	**$ 5,070**
Goodwill acquired, net of purchase price adjustments	738	1,382	**2,120**
Foreign currency translation adjustments and other	(18)	(5)	**(23)**
Balance at June 30, 2016	2,919	0 4,248	**7,167**
Goodwill acquired, net of purchase price adjustments	29	35	**64**
Foreign currency translation adjustments and other	(9)	(1)	**(10)**
Balance at June 30, 2017	**$ 2,939**	**$ 4,282**	**$ 7,221**

(1) At June 30, 2017 the accumulated goodwill impairment loss was $829 million .

The increase in the Pharmaceutical segment goodwill during fiscal 2017 is due to acquisitions. Goodwill recognized in connection with acquisitions primarily represents the expected benefits from synergies of integrating this business, the existing workforce of the acquired entity and the expected growth from new customers.

The increase in the Medical segment goodwill during fiscal 2017 is primarily due to the Cordis acquisition. During fiscal 2017, we recorded additional goodwill for Cordis, substantially all of which was to increase an accrual for assumed pre-acquisition product liability lawsuits. The majority of the goodwill acquired in connection with the acquisition of Cordis is deductible for tax purposes. See Note 8 for further discussion of the product liability lawsuits.

See Note 2 for further discussion of these acquisitions.

Other Intangible Assets

The following tables summarize other intangible assets by class at June 30:

	2017			
(in millions)	Gross Intangible	Accumulated Amortization	Net Intangible	Weighted-Average Remaining Amortization Period (Years)
Indefinite-life intangibles:				
IPR&D, trademarks and other	**$ 61**	**$ —**	**$ 61**	**N/A**
Total indefinite-life intangibles	**61**	**—**	**61**	**N/A**
Definite-life intangibles:				
Customer relationships	**1,966**	**967**	**999**	**9**
Trademarks, trade names, and patents	**509**	**195**	**314**	**14**
Developed technology and other	**916**	**304**	**612**	**10**
Total definite-life intangibles	**3,391**	**1,466**	**1,925**	**10**
Total other intangible assets	**$ 3,452**	**$ 1,466**	**$ 1,986**	**N/A**

	2016		
(in millions)	Gross Intangible	Accumulated Amortization	Net Intangible
Indefinite-life intangibles:			
IPR&D, trademarks and other	$ 72	$ —	$ 72
Total indefinite-life intangibles	72	—	72
Definite-life intangibles:			
Customer relationships	1,946	737	1,209
Trademarks, trade names, and patents	508	140	368
Developed technology and other	808	198	610
Total definite-life intangibles	3,262	1,075	2,187
Total other intangible assets	$ 3,334	$ 1,075	$ 2,259

Total amortization of intangible assets was $395 million , $355 million and $191 million for fiscal 2017 , 2016 and 2015 , respectively. The estimated annual amortization for intangible assets, excluding intangible assets that may be added as a result of acquisitions that had not yet closed as of June 30, 2017, for fiscal 2018 through 2022 is as follows: $370 million , $301 million , $270 million , $219 million and $195 million .

5. Available-for-Sale Securities

We invest in marketable securities, which are classified as available-for-sale and are carried at fair value in the consolidated balance sheets. We held the following investments in marketable securities at fair value at June 30:

(in millions)	2017	2016
Current available-for-sale securities:		
Commercial paper	$ —	$ —
Treasury bills	25	3
International bonds	3	2
Corporate bonds	30	58
U.S. agency bonds	3	6
Asset-backed securities	3	28
International equity securities	1	2
U.S. agency mortgage-backed securities	—	14
Total current available-for-sale securities	65	113
Long-term available-for-sale securities:		
Treasury bills	—	10
International bonds	—	1
Corporate bonds	—	36
U.S. agency bonds	—	9
Asset-backed securities	—	17
U.S. agency mortgage-backed securities	—	14
Total long-term available-for-sale securities	—	87
Total available-for-sale securities	$ 65	$ 200

Gross unrealized gains and losses were immaterial at both June 30, 2017 and 2016 . During fiscal 2017 , 2016 and 2015 gross realized gains and losses were immaterial and we did not recognize any other-than-temporary-impairments. At June 30, 2017 , the weighted-average effective maturity of our current investments is approximately 7 months .

6. Long-Term Obligations and Other Short-Term Borrowings

The following table summarizes long-term obligations and other short-term borrowings at June 30:

(in millions) (1)	2017	2016
1.9% Notes due 2017	$ —	$ 251
1.7% Notes due 2018	400	405
1.95% Notes due 2018	547	554
1.948% Notes due 2019	996	—
2.4% Notes due 2019	453	461
4.625% Notes due 2020	519	528
2.616% Notes due 2022	1,142	—
3.2% Notes due 2022	248	253
Floating Rate Notes due 2022	347	—
3.2% Notes due 2023	544	549
3.079% Notes due 2024	744	—
3.5% Notes due 2024	396	398
3.75% Notes due 2025	481	505
3.410% Notes due 2027	1,340	—
4.6% Notes due 2043	346	349
4.5% Notes due 2044	341	345
4.9% Notes due 2045	445	450
4.368% Notes due 2047	594	—
7.8% Debentures due 2016	—	37
7.0% Debentures due 2026	124	124
Other obligations	388	330
Total	10,395	5,539
Less: current portion of long-term obligations and other short-term borrowings	1,327	587
Long-term obligations, less current portion	$ 9,068	$ 4,952

(1) Maturities are presented on a calendar year basis.

Maturities of existing long-term obligations and other short-term borrowings for fiscal 2018 through 2022 and thereafter are as follows: $1,327 million , $998 million , $454 million , $521 million , $1,738 million and $5,357 million .

Long-Term Debt

All the notes represent unsecured obligations of Cardinal Health, Inc. and rank equally in right of payment with all of our existing and future unsecured and unsubordinated indebtedness. The 7.0% and 7.8% Debentures represent unsecured obligations of Allegiance Corporation (a wholly-owned subsidiary), which Cardinal Health, Inc. has guaranteed. None of these obligations are subject to a sinking fund and the Allegiance obligations are not redeemable prior to maturity. Interest is paid pursuant to the terms of the obligations. These notes are effectively subordinated to the liabilities of our subsidiaries, including trade payables of $17.9 billion .

In June 2017, we issued additional debt with the aggregate principal amount of $5.2 billion to fund a portion of the acquisition of the Patient Care, Deep Vein Thrombosis and Nutritional Insufficiency businesses (the " Patient Recovery Business ") from Medtronic plc ("Medtronic"),

which closed on July 29, 2017 , to redeem the 1.7% Notes due 2018 and for general corporate purposes. The notes issued in conjunction with the acquisition are 1.948% Notes due 2019, 2.616% Notes due 2022, 3.079% Notes due 2024, 3.410% Notes due 2027, 4.368% Notes due 2047, and floating rate Notes due 2022. The amount of the notes issued net of discounts, premiums, mark-to-market of any interest rate swaps and debt issuance costs was $5.2 billion . We also had obtained a commitment letter in April 2017 from a financial institution for a $4.5 billion unsecured bridge term loan facility that could have been used to complete the acquisition of the Patient Recovery Business. We incurred fees related to the facility, which are included in interest expense, net. No amounts were drawn under the bridge term loan facility and we terminated the commitment letter in June 2017.

In June 2015, we sold $550 million aggregate principal amount of 1.95% Notes that mature on June 15, 2018, $500 million aggregate principal amount of 3.75% Notes that mature on September 15, 2025, and $450 million aggregate principal amount of 4.9% Notes that mature on September 15, 2045. We used the net proceeds from the offering to pay part of the purchase price to acquire Harvard Drug on July 2, 2015 and Cordis on October 2, 2015 , as discussed further in Note 2 .

In November 2014, we sold $450 million aggregate principal amount of 2.4% Notes that mature on November 15, 2019, $400 million aggregate principal amount of 3.5% Notes that mature on November 15, 2024 and $350 million aggregate principal amount of 4.5% Notes that mature on November 15, 2044.

In December 2014, we redeemed certain outstanding notes at a redemption price equal to 100% of the principal amount and any accrued but unpaid interest, plus the applicable make-whole premium. As a result of the redemption, we incurred a loss on the extinguishment of debt of $60 million ($37 million , net of tax), which included a make-whole premium of $80 million , write-off of $2 million of unamortized debt issuance costs, and an offsetting $22 million fair value adjustment to the respective debt related to previously terminated interest rate swaps.

If we undergo a change of control, as defined in the notes, and if the notes receive specified ratings below investment grade by each of Standard & Poors Ratings Services, Moody's Investors Services and Fitch Ratings, any holder of the notes, excluding the debentures, can require with respect to the notes owned by such holder, or we can offer, to repurchase the notes at 101% of the principal amount plus accrued and unpaid interest.

Other Financing Arrangements

In addition to cash and equivalents and operating cash flow, other sources of liquidity include a $1.75 billion revolving credit facility and a $700 million committed receivables sales facility program. In November 2016, we renewed our committed receivables sales facility program through Cardinal Health Funding, LLC ("CHF") through November 1, 2019. CHF was organized for the sole purpose of buying receivables and selling undivided interests in those receivables to third-party purchasers. Although consolidated with Cardinal Health, Inc. in accordance with GAAP, CHF is a separate legal entity from Cardinal Health, Inc. and from our subsidiary that sells receivables to CHF. CHF is designed to be a special purpose, bankruptcy-remote entity whose assets are available solely to satisfy the claims of its creditors.

We also maintain a commercial paper program, backed by our revolving credit facility, which we increased in December 2015 from $1.5 billion to $1.75 billion . At June 30, 2017 , we had no amounts outstanding under the revolving credit facility; however, availability was reduced by outstanding letters of credit of $20 million and $14 million at June 30, 2017 and 2016 , respectively. We also had no amounts outstanding under the committed receivables sales facility program; however, availability was reduced by outstanding standby letters of credit of $46 million and $40 million at June 30, 2017 and 2016 , respectively. Under our commercial paper program, we had a maximum amount outstanding of $855 million and an average daily amount outstanding of $58 million during the fiscal year ended June 30, 2017 . We had no amount outstanding as of June 30, 2017 .

Our revolving credit facility and committed receivables sales facility program require us to maintain a consolidated leverage ratio of no more than 3.25 -to-1. As a result of the acquisition of the Patient Recovery Business, we temporarily increased this ratio to 4.25 -to-1. As of June 30, 2017 , we were in compliance with these financial covenants.

We also maintain other short-term credit facilities and an unsecured line of credit that allowed for borrowings up to $690 million and $699 million at June 30, 2017 and 2016 , respectively. The $388 million and $330 million balance of other obligations at June 30, 2017 and 2016 , respectively, consisted of short-term borrowings and capital leases.

7. Income Taxes

The following table summarizes earnings from continuing operations before income taxes:

(in millions)	2017	2016	2015
U.S. operations	$ 1,772	$ 2,050	$ 1,733
Non-U.S. operations	152	226	234
Earnings from continuing operations before income taxes	$ 1,924	$ 2,276	$ 1,967

The following table summarizes the components of provision for income taxes from continuing operations:

(in millions)	2017	2016	2015
Current:			
Federal	$ 273	$ 633	$ 424
State and local	10	52	83
Non-U.S.	56	73	29
Total current	$ 339	$ 758	$ 536
Deferred:			
Federal	$ 258	$ 96	$ 196
State and local	37	12	24
Non-U.S.	(4)	(21)	(1)
Total deferred	291	87	219
Provision for income taxes	$ 630	$ 845	$ 755

The following table presents a reconciliation of the provision based on the federal statutory income tax rate to our effective income tax rate from continuing operations:

	2017	2016	2015
Provision at federal statutory rate	**35.0 %**	35.0 %	35.0 %
State and local income taxes, net of federal benefit	**1.0**	1.5	4.1
Foreign tax rate differential	**(0.2)**	(0.6)	(2.4)
Nondeductible/nontaxable items	**0.2**	1.0	0.7
Other	**(3.3)**	0.2	1.0
Effective income tax rate	**32.7 %**	37.1 %	38.4 %

At June 30, 2017 , we had $700 million of undistributed earnings from non-U.S. subsidiaries that are intended to be permanently reinvested in non-U.S. operations. Because these earnings are considered permanently reinvested, no U.S. tax provision has been accrued related to the repatriation of these earnings. It is not practicable to estimate the amount of U.S. tax that might be payable on the eventual remittance of such earnings. This amount decreased from the prior year due to the realignment of foreign subsidiaries in anticipation of closing the acquisition of the Patient Recovery Business.

Deferred income taxes arise from temporary differences between financial reporting and tax reporting bases of assets and liabilities and operating loss and tax credit carryforwards for tax purposes. The following table presents the components of the deferred income tax assets and liabilities at June 30:

(in millions)	2017	2016
Deferred income tax assets:		
Receivable basis difference	**$ 42**	$ 44
Accrued liabilities	**125**	133
Share-based compensation	**53**	56
Loss and tax credit carryforwards	**378**	193
Deferred tax assets related to uncertain tax positions	**51**	95
Other	**43**	46
Total deferred income tax assets	**692**	567
Valuation allowance for deferred income tax assets	**(237)**	(93)
Net deferred income tax assets	**$ 455**	$ 474
Deferred income tax liabilities:		
Inventory basis differences	**$ (1,578)**	$ (1,351)
Property-related	**(183)**	(172)
Goodwill and other intangibles	**(570)**	(607)
Total deferred income tax liabilities	$ (2,331)	$ (2,130)
Net deferred income tax liability	**$ (1,876)**	$ (1,656)

Deferred income tax assets and liabilities in the preceding table, after netting by taxing jurisdiction, are in the following captions in the consolidated balance sheets at June 30:

(in millions)	2017	2016
Noncurrent deferred income tax asset (1)	**73**	42
Noncurrent deferred income tax liability (2)	**(1,949)**	(1,698)
Net deferred income tax liability	**$ (1,876)**	$ (1,656)

(1) Included in other assets in the consolidated balance sheets.

(2) Included in deferred income taxes and other liabilities in the consolidated balance sheets.

At June 30, 2017 we had gross federal, state and international loss and credit carryforwards of $225 million , $1,406 million and $590 million , respectively, the tax effect of which is an aggregate deferred tax asset of $378 million . Substantially all of these carryforwards are available for at least three years. Approximately $223 million of the valuation allowance at June 30, 2017 applies to certain federal, state and international loss carryforwards that, in our opinion, are more likely than not to expire unutilized. However, to the extent that tax benefits related to these carryforwards are realized in the future, the reduction in the valuation allowance would reduce income tax expense. The increase in international loss carryforwards and valuation allowances are due to the realignment of foreign subsidiaries in anticipation of closing the acquisition of the Patient Recovery Business.

We had $417 million , $527 million and $542 million of unrecognized tax benefits at June 30, 2017 , 2016 and 2015 , respectively. The June 30, 2017 , 2016 and 2015 balances include $268 million , $355 million and $357 million , respectively, of unrecognized tax benefits that, if recognized, would have an impact on the effective tax rate. The remaining unrecognized tax benefits relate to tax positions for which ultimate deductibility is highly certain but for which there is uncertainty as to the timing of such deductibility. Recognition of these tax benefits would not affect our effective tax rate. We include the full amount of unrecognized tax benefits in deferred income taxes and other liabilities in the consolidated balance sheets. The following table presents a reconciliation of the beginning and ending amounts of unrecognized tax benefits:

(in millions)	2017	2016	2015
Balance at beginning of fiscal year	**$ 527**	$ 542	$ 510
Additions for tax positions of the current year	**29**	22	15
Additions for tax positions of prior years	**23**	42	69
Reductions for tax positions of prior years	**(8)**	(48)	(42)
Settlements with tax authorities	**(154)**	(30)	(10)
Expiration of the statute of limitations	**—**	(1)	—
Balance at end of fiscal year	**$ 417**	$ 527	$ 542

It is reasonably possible that there could be a change in the amount of unrecognized tax benefits within the next 12 months due to activities of the U.S. Internal Revenue Service ("IRS") or other taxing authorities, possible settlement of audit issues, reassessment of existing unrecognized tax benefits or the expiration of statutes of

limitations. We estimate that the range of the possible change in unrecognized tax benefits within the next 12 months is a net decrease of $0 million to $45 million , exclusive of penalties and interest.

We recognize accrued interest and penalties related to unrecognized tax benefits in the provision for income taxes. At June 30, 2017 , 2016 and 2015 , we had $99 million , $145 million and $169 million , respectively, accrued for the payment of interest and penalties. These balances are gross amounts before any tax benefits and are included in deferred income taxes and other liabilities in the consolidated balance sheets. During fiscal 2017 and 2015 , we recognized $12 million and $24 million of expense for interest and penalties in income tax expense, respectively. During fiscal 2016 , we recognized $9 million of benefit for interest and penalties in income tax expense.

We file income tax returns in the U.S. federal jurisdiction, various U.S. state and local jurisdictions, and various foreign jurisdictions. During the twelve months ended June 30, 2017 , the IRS closed audits of fiscal years 2006 and 2007, which is reflected in our consolidated financial statements and in our evaluation of uncertain tax positions. The settlement had an immaterial impact to our provision for income taxes. With few exceptions, we are subject to audit by taxing authorities for fiscal years 2008 through the current fiscal year.

We are a party to a tax matters agreement with CareFusion Corporation ("CareFusion"), which has been acquired by Becton, Dickinson and Company. Under the tax matters agreement, CareFusion is obligated to indemnify us for certain tax exposures and transaction taxes prior to our fiscal 2010 spin-off of CareFusion. The indemnification receivable was $142 million and $172 million at June 30, 2017 and 2016 , respectively, and is included in other assets in the consolidated balance sheets.

8. Commitments, Contingent Liabilities and Litigation

Commitments

Operating Leases

The future minimum rental payments for operating leases having initial or remaining non-cancelable lease terms in excess of one year at June 30, 2017 for fiscal 2018 through 2022 and thereafter are as follows: $110 million , $94 million , $77 million , $59 million , $41 million and $107 million . Rental expense relating to operating leases was $159 million , $126 million and $104 million in fiscal 2017 , 2016 and 2015 , respectively. Sublease rental income was immaterial for all periods presented.

Generic Sourcing Venture With CVS Health Corporation

In July 2014 , we established Red Oak Sourcing, LLC ("Red Oak Sourcing"), a U.S.-based generic pharmaceutical sourcing venture with CVS for an initial term of 10 years . Red Oak Sourcing negotiates generic pharmaceutical supply contracts on behalf of both companies. Due to the achievement of predetermined milestones, we are required to make quarterly payments of $45.6 million to CVS for the remainder of the initial term.

Legal Proceedings

We become involved from time to time in disputes, litigation and regulatory matters.

We may be named from time to time in *qui tam* actions initiated by private third parties. In such actions, the private parties purport to act on behalf of federal or state governments, allege that false claims have been submitted for payment by the government and may receive an award if their claims are successful. After a private party has filed a *qui tam* action, the government must investigate the private party's claim and determine whether to intervene in and take control over the litigation. These actions may remain under seal while the government makes this determination. If the government declines to intervene, the private party may nonetheless continue to pursue the litigation on his or her own purporting to act on behalf of the government.

From time to time, we become aware through employees, internal audits or other parties of possible compliance matters that we investigate internally, such as complaints or concerns relating to accounting, internal accounting controls, financial reporting, auditing, or other ethical matters or relating to compliance with laws such as healthcare fraud and abuse, anti-corruption or anti-bribery laws. In addition, from time to time, we receive subpoenas or requests for information from various government agencies relating to our business or to the business of a customer, supplier or other industry participants. Internal investigations, subpoenas or requests for information could lead to the assertion of claims or the commencement of legal proceedings against us or result in sanctions.

From time to time, we may determine that products we manufacture or market do not meet our specifications, regulatory requirements, or published standards. When we or a regulatory agency identify a quality or regulatory issue, we investigate and take appropriate corrective action. Such actions can lead to product recalls, costs to repair or replace affected products, temporary interruptions in product sales, action by regulators and product liability claims and lawsuits, including class actions. Even absent an identified regulatory or quality issue or product recall, we can become subject to product liability claims and lawsuits.

We accrue for contingencies related to disputes, litigation and regulatory matters if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Because these matters are inherently unpredictable and unfavorable developments or resolutions can occur, assessing contingencies is highly subjective and requires judgments about future events. We regularly review contingencies to determine whether our accruals and related disclosures are adequate. The amount of ultimate loss may differ from these estimates.

We recognize income from the favorable outcome of litigation when we receive the associated cash or assets.

We recognize estimated loss contingencies for certain litigation and regulatory matters, including mass tort product liability claims, and income from favorable resolution of litigation in litigation (recoveries)/charges, net in our consolidated statements of earnings.

State of West Virginia vs. Cardinal Health, Inc.

In January 2017, we agreed , without admitting liability, to pay $20 million to the State of West Virginia to settle a lawsuit filed against us by the West Virginia Attorney General in June 2012. As previously

disclosed, the West Virginia Attorney General had filed complaints in the Circuit Court of Boone County, West Virginia against a number of pharmaceutical wholesale distributors, including us, alleging, among other things, that, between 2007 and 2012, the distributors had failed to maintain effective controls to guard against diversion of controlled substances in West Virginia and had failed to report suspicious orders of controlled substances in accordance with the West Virginia Uniform Controlled Substances Act.

Opioid Lawsuits

As of August 8, 2017, 26 counties and municipalities in New York, Ohio, Oregon and West Virginia, as well as the Cherokee Nation, have filed lawsuits against pharmaceutical wholesale distributors (including us), pharmaceutical manufacturers and retail chains relating to the distribution of prescription opioid pain medications. The lawsuits, which have been filed in various federal, state and other courts, allege violations of controlled substance laws and various other statutes as well as common law claims, including negligence, public nuisance and unjust enrichment, and seek equitable relief and monetary damages. We are vigorously defending ourselves in these lawsuits. Since these lawsuits are at early stages, we are unable to predict the outcome of these lawsuits or estimate a range of reasonably possible losses.

Product Liability Lawsuits

As of August 8, 2017, we are named as a defendant in 68 product liability lawsuits filed in Alameda County Superior Court in California involving claims by approximately 750 plaintiffs that allege personal injuries associated with the use of Cordis OptEase and TrapEase inferior vena cava (IVC) filter products. Another 8 similar lawsuits involving claims by approximately 10 plaintiffs are pending in other jurisdictions. These lawsuits seek a variety of remedies, including unspecified monetary damages. We are vigorously defending ourselves in these lawsuits.

In fiscal 2017, we recorded an accrual of $79 million ($53 million , net of tax) for estimated losses and legal defense costs as an adjustment to pre-acquisition liabilities assumed in the Cordis acquisition. We record additional accruals for losses and legal defense costs as litigation (recoveries)/charges, net in our consolidated statements of earnings. At June 30, 2017, we had a total of $98 million , net of expected insurance recoveries, accrued for losses and legal defense costs related to the Cordis IVC filter lawsuits, which includes the $79 million accrual referenced above. While we have recorded accruals based on our assessment of these matters, because these lawsuits are at early stages, we are unable to estimate a range of reasonably possible losses in excess of this accrued amount.

Antitrust Litigation Proceeds

We received and recognized income resulting from settlements of class action antitrust lawsuits, in which we were a class member, of $1 million , $80 million and $71 million during fiscal 2017 , 2016 and 2015 , respectively.

9. Guarantees

In the ordinary course of business, we agree to indemnify certain other parties under acquisition and disposition agreements, customer agreements, intellectual property licensing agreements, and other agreements. Such indemnification obligations vary in scope and, when defined, in duration. In many cases, a maximum obligation is not explicitly stated, and therefore the overall maximum amount of the liability under such indemnification obligations cannot be reasonably estimated. Where appropriate, such indemnification obligations are recorded as a liability. Historically, we have not, individually or in the aggregate, made payments under these indemnification obligations in any material amounts. In certain circumstances, we believe that existing insurance arrangements, subject to the general deduction and exclusion provisions, would cover portions of the liability that may arise from these indemnification obligations. In addition, we believe that the likelihood of a material liability being triggered under these indemnification obligations is not probable.

From time to time we enter into agreements that obligate us to make fixed payments upon the occurrence of certain events. Such obligations primarily relate to obligations arising under acquisition transactions, where we have agreed to make payments based upon the achievement of certain financial performance measures by the acquired business. Generally, the obligation is capped at an explicit amount. See Note 10 for detail regarding contingent consideration obligations.

10. Fair Value Measurements

The following tables present the fair values for assets and (liabilities) measured on a recurring basis at June 30:

	2017			
(in millions)	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	$ 739	$ —	$ —	$ 739
Forward contracts (1)	—	(21)	—	(21)
Available-for-sale securities (2)	—	65	—	65
Other investments (3)	116	—	—	116
Liabilities:				
Contingent consideration (4)	—	—	(32)	(32)

	2016			
(in millions)	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	$ 516	$ —	$ —	$ 516
Forward contracts (1)	—	19	—	19
Available-for-sale securities (2)	—	200	—	200
Other investments (3)	103	—	—	103
Liabilities:				
Contingent consideration (4)	—	—	(19)	(19)

(1) The fair value of interest rate swaps, foreign currency contracts and commodity contracts is determined based on the present value of expected future cash flows considering the risks involved, including non-performance risk, and using discount rates appropriate for the respective maturities. Observable Level 2 inputs are used to determine the present value of expected future cash flows. The fair value of these derivative contracts, which are subject to master netting arrangements under certain circumstances, is presented on a gross basis in the consolidated balance sheets.

(2) We invest in marketable securities, which are classified as available-for-sale and are carried at fair value in the consolidated balance sheets. Observable Level 2 inputs such as quoted prices for similar securities, interest rate spreads, yield curves and credit risk are used to determine the fair value. See Note 5 for additional information regarding available-for-sale securities.

(3) Level 1 other investments balance includes investments in mutual funds, which are used to offset fluctuations in deferred compensation liabilities. These mutual funds primarily invest in the equity securities of companies with large market capitalization and high quality fixed income debt securities. The fair value of these investments is determined using quoted market prices.

(4) Contingent consideration represents the obligations incurred in connection with acquisitions. We do not deem the fair value of the contingent consideration obligations under any single acquisition to be significant. The estimate of fair value of the contingent consideration obligations requires subjective assumptions to be made regarding future business results, discount rates, discount periods, and probabilities assigned to various potential business result scenarios and was determined using probability assessments with respect to the likelihood of reaching various targets or of achieving certain milestones. The fair value measurement is based on significant inputs unobservable in the market and thus represents a Level 3 measurement. Changes in current expectations of progress could change the probability of achieving the targets within the measurement periods and result in an increase or decrease in the fair value of the contingent consideration obligation.

The following table presents those liabilities measured at fair value on a recurring basis using unobservable inputs (Level 3):

(in millions)	Contingent Consideration Obligation
Balance at June 30, 2015	$ 53
Additions from acquisitions	7
Changes in fair value of contingent consideration (1)	(16)
Payment of contingent consideration	(25)
Balance at June 30, 2016	19
Additions from acquisitions	21
Changes in fair value of contingent consideration (1)	(5)
Payment of contingent consideration	(3)
Balance at June 30, 2017	**$ 32**

(1) Amount is included in amortization and other acquisition-related costs in the consolidated statements of earnings.

11. Financial Instruments

We utilize derivative financial instruments to manage exposure to certain risks related to our ongoing operations. The primary risks managed through the use of derivative instruments include interest rate risk, currency exchange risk, and commodity price risk. We do not use derivative instruments for trading or speculative purposes. While the majority of our derivative instruments are designated as hedging instruments, we also enter into derivative instruments that are designed to hedge a risk, but are not designated as hedging instruments. These derivative instruments are adjusted to current fair value through earnings at the end of each period.

We are exposed to counterparty credit risk on all of our derivative instruments. Accordingly, we have established and maintain strict counterparty credit guidelines and only enter into derivative instruments with major financial institutions that are investment grade or better. We do not have significant exposure to any one counterparty and we believe the risk of loss is remote. Additionally, we do not require collateral under these agreements.

Interest Rate Risk Management

We are exposed to the impact of interest rate changes. Our objective is to manage the impact of interest rate changes on cash flows and the market value of our borrowings. We utilize a mix of debt maturities along with both fixed-rate and variable-rate debt to manage changes in interest rates. In addition, we enter into interest rate swaps to further manage our exposure to interest rate variations related to our borrowings and to lower our overall borrowing costs.

Currency Exchange Risk Management

We conduct business in several major international currencies and are subject to risks associated with changing foreign exchange rates. Our objective is to reduce earnings and cash flow volatility associated with foreign exchange rate changes to allow management to focus its attention on business operations. Accordingly, we enter into various contracts that change in value as foreign exchange rates change to protect the value of existing foreign currency assets and liabilities, commitments and anticipated foreign currency revenue and expenses.

Commodity Price Risk Management

We are exposed to changes in the price of certain commodities. Our objective is to reduce earnings and cash flow volatility associated with forecasted purchases of these commodities to allow management to focus its attention on business operations. Accordingly, we enter into derivative contracts when possible to manage the price risk associated with certain forecasted purchases.

The following table summarizes the fair value of our assets and liabilities related to derivatives designated as hedging instruments and the respective line items in which they were recorded in the consolidated balance sheets at June 30:

(in millions)	2017	2016
Assets:		
Foreign currency contracts (1)	$ 3	$ 1
Pay-floating interest rate swaps (2)	—	33
Pay-floating interest rate swaps (1)	—	1
Total assets	$ 3	$ 35
Liabilities:		
Foreign currency contracts (3)	$ 2	$ 3
Forward interest rate swaps (4)	—	10
Pay-floating interest rate swaps (3)	2	—
Pay-floating interest rate swaps (4)	19	—
Commodity contracts (3)	1	2
Commodity contracts (4)	—	1
Total liabilities	$ 24	$ 16

(1) Included in prepaid expenses and other in the consolidated balance sheets.
(2) Included in other assets in the consolidated balance sheets.
(3) Included in other accrued liabilities in the consolidated balance sheets.
(4) Included in deferred income taxes and other liabilities in the consolidated balance sheets.

Fair Value Hedges

We enter into pay-floating interest rate swaps to hedge the changes in the fair value of fixed-rate debt resulting from fluctuations in interest rates. These contracts are designated and qualify as fair value hedges. Accordingly, the gain or loss recorded on the pay-floating interest rate swaps is directly offset by the change in fair value of the underlying debt. Both the derivative instrument and the underlying debt are adjusted to market value at the end of each period with any resulting gain or loss recorded in interest expense, net in the consolidated statements of earnings.

During fiscal 2017 and 2016 we entered into pay-floating interest rate swaps with total notional amounts of $700 million and $600 million , respectively. These swaps have been designated as fair value hedges of our fixed rate debt and are included in deferred income taxes and other liabilities in the consolidated balance sheets.

During fiscal 2017 and 2016 we terminated notional amounts of $600 million and $250 million , respectively, of pay-floating interest rate swaps that were previously designated as fair value hedges. In June 2017, $250 million of pay-floating interest rate swaps matured.

The following tables summarize the outstanding interest rate swaps designated as fair value hedges at June 30:

	2017	
(in millions)	Notional Amount	Maturity Date
Pay-floating interest rate swaps	$ 1,813	Jun 2018 - Sep 2025

	2016	
(in millions)	Notional Amount	Maturity Date
Pay-floating interest rate swaps	$ 1,963	Jun 2017 - Sep 2025

The following table summarizes the gain/(loss) recognized in earnings for interest rate swaps designated as fair value hedges:

(in millions)	2017	2016	2015
Pay-floating interest rate swaps (1) (2)	$ 17	$ 23	$ 14
Fixed-rate debt (1)	(17)	(23)	(14)

(1) Included in interest expense, net in the consolidated statements of earnings.
(2) Fiscal 2015 excludes $22 million fair value adjustment to the previously terminated interest rate swaps as a result of the December 2014 debt extinguishment as disclosed in Note 6 .

There was no ineffectiveness associated with these derivative instruments for any periods presented.

Cash Flow Hedges

We enter into derivative instruments to hedge our exposure to changes in cash flows attributable to interest rate, foreign currency and commodity price fluctuations associated with certain forecasted transactions. These derivative instruments are designated and qualify as cash flow hedges. Accordingly, the effective portion of the gain or loss on the derivative instrument is reported as a component of other comprehensive income and reclassified into earnings in the same line item associated with the forecasted transaction and in the same period during which the hedged transaction affects earnings. The ineffective portion of the gain or loss on the derivative instrument is recognized in earnings immediately.

During fiscal 2017 and 2016 we entered into forward interest rate swaps with a total notional amount of $700 million and $300 million , respectively, to hedge probable, but not firmly committed, future transactions associated with our debt.

Additionally, during fiscal 2017 we terminated $1.0 billion in forward interest rate swaps that were previously designated as cash-flow hedges. At June 30, 2017 , we had no outstanding forward interest rate swaps.

We enter into foreign currency contracts to protect the value of anticipated foreign currency revenues and expenses. At June 30, 2017 and 2016 , we held contracts to hedge probable, but not firmly committed, revenue and expenses. The principal currencies hedged are the Canadian dollar, Euro, Thai baht, Mexican peso and Chinese renminbi.

We enter into commodity contracts to manage the price risk associated with forecasted purchases of certain commodities used in our Medical segment.

The following tables summarize the outstanding cash flow hedges at June 30:

	2017	
(in millions)	Notional Amount	Maturity Date
Foreign currency contracts	**162**	**Jul 2017 - Jun 2018**
Commodity contracts	**17**	**Jul 2017 - Apr 2020**

	2016	
(in millions)	Notional Amount	Maturity Date
Forward interest rate swaps	$ 300	Jun 2018 - Jun 2028
Foreign currency contracts	183	Jul 2016 - Jun 2017
Commodity contracts	22	Jul 2016 - Mar 2019

The following table summarizes the gain/(loss) included in AOCI for derivative instruments designated as cash flow hedges at June 30:

(in millions)	2017	2016
Forward interest rate swaps	**$ —**	$ (10)
Commodity contracts	**(1)**	(3)
Foreign currency contracts	**—**	(4)

The following table summarizes the gain/(loss) reclassified from AOCI into earnings for derivative instruments designated as cash flow hedges:

(in millions)	2017	2016	2015
Foreign currency contracts (1)	**$ (1)**	$ 1	$ 1
Foreign currency contracts (2)	**(1)**	5	4
Foreign currency contracts (3)	**2**	(3)	(2)
Commodity contracts (3)	**(3)**	(5)	(1)

(1) Included in revenue in the consolidated statements of earnings.

(2) Included in cost of products sold in the consolidated statements of earnings.

(3) Included in SG&A expenses in the consolidated statements of earnings.

The amount of ineffectiveness associated with these derivative instruments was immaterial for all periods presented.

Economic (Non-Designated) Hedges

We enter into foreign currency contracts to manage our foreign exchange exposure related to intercompany financing transactions and other balance sheet items subject to revaluation that do not meet the requirements for hedge accounting treatment. Accordingly, these derivative instruments are adjusted to current market value at the end of each period through earnings. The gain or loss recorded on these instruments is substantially offset by the remeasurement adjustment on the foreign currency denominated asset or liability. The settlement of the derivative instrument and the remeasurement adjustment on the foreign currency denominated asset or liability are both recorded in other (income)/expense, net. The principal currencies managed through foreign currency contracts are the Canadian dollar, Euro, Thai baht, British pound and Chinese renminbi.

The following tables summarize the outstanding economic (non-designated) derivative instruments at June 30:

	2017	
(in millions)	Notional Amount	Maturity Date
Foreign currency contracts	**$ 558**	**Jul 2017**

	2016	
(in millions)	Notional Amount	Maturity Date
Foreign currency contracts	$ 492	Jul 2016

The following table summarizes the gain/(loss) recognized in earnings for economic (non-designated) derivative instruments:

(in millions)	2017	2016	2015
Foreign currency contracts (1)	**$ (5)**	$ (17)	$ (45)

(1) Included in other income, net in the consolidated statements of earnings.

Fair Value of Financial Instruments

The carrying amounts of cash and equivalents, trade receivables, net, accounts payable, and other accrued liabilities at June 30, 2017 and 2016 approximate fair value due to their short-term maturities.

The following table summarizes the estimated fair value of our long-term obligations and other short-term borrowings compared to the respective carrying amounts at June 30:

(in millions)	2017	2016
Estimated fair value	**$ 10,713**	$ 5,780
Carrying amount	**10,395**	5,539

The fair value of our long-term obligations and other short-term borrowings is estimated based on either the quoted market prices for the same or similar issues or other inputs derived from available market information, which represents a Level 2 measurement.

The following table is a summary of the fair value gain/(loss) of our derivative instruments based upon the estimated amount that we would receive (or pay), considering counter-party credit risk, to terminate the contracts at June 30:

	2017		2016	
(in millions)	Notional Amount	Fair Value Gain/(Loss)	Notional Amount	Fair Value Gain/(Loss)
Pay-floating interest rate swaps	**$ 1,813**	**$ (19)**	$ 1,963	$ 34
Foreign currency contracts	**720**	**1**	675	(2)
Forward interest rate swaps	**—**	**—**	300	(10)
Commodity contracts	**17**	**(1)**	22	(3)

12. Redeemable Noncontrolling Interests

In connection with the acquisition of a 71 percent ownership interest in naviHealth during fiscal 2016 as described in Note 2 , we recognized redeemable noncontrolling interests with a fair value of $119 million at the acquisition date. Our ownership interest in naviHealth was 82 percent at both June 30, 2017 and 2016 .

The reconciliation of the changes in redeemable noncontrolling interests are as follows:

(in millions)	Redeemable Noncontrolling Interests
Balance at June 30, 2015	$ —
Redeemable noncontrolling interests acquired	119
Net earnings attributable to redeemable noncontrolling interests	1
Net purchase of redeemable noncontrolling interests	(3)
Balance at June 30, 2016	117
Net earnings attributable to redeemable noncontrolling interests	4
Net purchase of redeemable noncontrolling interests	(3)
Balance at June 30, 2017	**$ 118**

13. Shareholders' Equity

At June 30, 2017 and 2016 , authorized capital shares consisted of the following: 750 million Class A common shares, without par value; 5 million Class B common shares, without par value; and 500 thousand non-voting preferred shares, without par value. The Class A common shares and Class B common shares are collectively referred to below as “common shares”. Holders of common shares are entitled to share equally in any dividends declared by the Board of Directors and to participate equally in all distributions of assets upon liquidation. Generally, the holders of Class A common shares are entitled to one vote per share, and the holders of Class B common shares are entitled to one-fifth of one vote per share on proposals presented to shareholders for vote. Under certain circumstances, the holders of Class B common shares are entitled to vote as a separate class. Only Class A common shares were outstanding at June 30, 2017 and 2016 .

We repurchased $2.3 billion of our common shares, in the aggregate, through share repurchase programs during fiscal 2017 , 2016 and 2015 , as described below. We funded the repurchases with available cash. The common shares repurchased are held in treasury to be used for general corporate purposes.

During fiscal 2017 , we repurchased 8.1 million common shares having an aggregate cost of $600 million . The average price paid per common share was $74.08 .

During fiscal 2016 , we repurchased 8.2 million common shares having an aggregate cost of $651 million . The average price paid per common share was $78.98 .

During fiscal 2015 , we repurchased 13.1 million common shares having an aggregate cost of $1.0 billion . The average price paid per common share was $79.02 .

During fiscal 2017 , we retired 37 million common shares in treasury. The retirement of these shares had no impact on total shareholders' equity; however, it did impact certain individual components of shareholders' equity as follows: $2.5 billion decrease in common shares in treasury, $302 million decrease in common shares, and $2.2 billion decrease in retained earnings.

Accumulated Other Comprehensive Income/(Loss)

The following table summarizes the changes in the balance of accumulated other comprehensive income/(loss) by component and in total:

(in millions)	Foreign Currency Translation Adjustments and other	Unrealized Gain/(Loss) on Derivatives, net of tax	Accumulated Other Comprehensive Income/(Loss)
Balance at June 30, 2015	$ (41)	$ 18	**$ (23)**
Other comprehensive income/(loss), net before reclassifications	(82)	(9)	**(91)**
Amounts reclassified to earnings	—	(2)	**(2)**
Total other comprehensive loss, net of tax of $6 million	(82)	(11)	**(93)**
Balance at June 30, 2016	(123)	7	**(116)**
Other comprehensive income/(loss), before reclassifications	(25)	19	**(6)**
Amounts reclassified to earnings	—	(3)	**(3)**
Total comprehensive net loss of tax of $9 million attributable to Cardinal Health, Inc.	(25)	16	**(9)**
Balance at June 30, 2017	**$ (148)**	**$ 23**	**$ (125)**

Activity related to realized and unrealized gains and losses on available-for-sale securities, as described in Note 5 , was immaterial during fiscal 2017 and 2016 .

14. Earnings Per Share Attributable to Cardinal Health, Inc.

The following table reconciles the computation of basic and diluted earnings per share attributable to Cardinal Health, Inc.:

(in millions, except per share amounts)	2017	2016	2015
Earnings from continuing operations	$ 1,294	$ 1,431	$ 1,212
Net earnings attributable to noncontrolling interest	(6)	(4)	—
Net earnings from continuing operations attributable to Cardinal Health, Inc.	1,288	1,427	1,212
Earnings from discontinued operations, net of tax	—	—	3
Net earnings attributable to Cardinal Health, Inc.	**$ 1,288**	$ 1,427	$ 1,215
Weighted-average common shares–basic	317	327	332
Effect of dilutive securities:			
Employee stock options, restricted share units, and performance share units	3	3	3
Weighted-average common shares–diluted	**320**	330	335
Basic earnings per common share attributable to Cardinal Health, Inc.:			
Continuing operations	$ 4.06	$ 4.36	$ 3.65
Discontinued operations	—	—	0.01
Net basic earnings per common share attributable to Cardinal Health, Inc.	**$ 4.06**	$ 4.36	$ 3.66
Diluted earnings per common share attributable to Cardinal Health, Inc.:			
Continuing operations	$ 4.03	$ 4.32	$ 3.61
Discontinued operations	—	—	0.01
Net diluted earnings per common share attributable to Cardinal Health, Inc.	**$ 4.03**	$ 4.32	$ 3.62

The potentially dilutive employee stock options, restricted share units and performance share units that were antidilutive for fiscal 2017 , 2016 and 2015 were 3 million , 2 million and 1 million , respectively.

15. Segment Information

Our operations are principally managed on a products and services basis and are comprised of two operating segments, which are the same as our reportable segments: Pharmaceutical and Medical. The factors for determining the reportable segments include the manner in which management evaluates performance for purposes of allocating resources and assessing performance combined with the nature of the individual business activities.

The Pharmaceutical segment distributes branded and generic pharmaceutical, specialty pharmaceutical and over-the-counter healthcare and consumer products in the United States. This segment also provides services to pharmaceutical manufacturers and healthcare providers to support the development, marketing, and distribution of specialty pharmaceutical products; operates nuclear pharmacies and radiopharmaceutical manufacturing facilities; provides pharmacy management services to hospitals as well as medication therapy management and patient outcomes services to hospitals, other healthcare providers and payers; and repackages generic pharmaceuticals and over-the-counter healthcare products. This segment also imports and distributes pharmaceuticals, over-the-counter healthcare and consumer products and provides specialty pharmacy and other services in China.

Our Medical segment manufactures, sources and distributes Cardinal Health branded medical, surgical and laboratory products, which are sold in the United States, Canada, Europe, Asia and other markets. In addition to distributing Cardinal Health branded products, this segment also distributes a broad range of national brand products and provides supply chain services and solutions to hospitals, ambulatory surgery centers, clinical laboratories and other healthcare providers in the United States, Canada and China. This segment also distributes medical products to patients' homes and provides post-acute care management and transition services and software to hospitals, other healthcare providers and payers in the United States.

The following table presents revenue for each reportable segment and Corporate:

(in millions)	2017	2016	2015
Pharmaceutical	$ 116,463	$ 109,131	$ 91,116
Medical	13,524	12,430	11,395
Total segment revenue	129,987	121,561	102,511
Corporate (1)	(11)	(15)	20
Total revenue	**$ 129,976**	$ 121,546	$ 102,531

(1) Corporate revenue consists of the elimination of inter-segment revenue and other revenue not allocated to the segments.

We evaluate segment performance based on segment profit, among other measures. Segment profit is segment revenue, less segment cost of products sold, less segment distribution, selling, general, and administrative ("SG&A") expenses. Segment SG&A expenses include share-based compensation expense as well as allocated corporate expenses for shared functions, including corporate management, corporate finance, financial and customer care shared services, human resources, information technology, and legal and compliance. The results attributable to noncontrolling interests of consolidated entities are recorded within segment profit. Corporate expenses are allocated to the segments based on headcount, level of benefit provided, and other ratable allocation methodologies.

We do not allocate the following items to our segments: LIFO inventory charges/(credits); restructuring and employee severance; amortization and other acquisition-related costs; impairments and (gain)/loss on disposal of assets; litigation (recoveries)/charges, net; other income, net; interest expense, net; loss on extinguishment of debt; and provision for income taxes.

In addition, certain investment spending, certain portions of enterprise-wide incentive compensation, and other spending are not allocated to the segments. Investment spending generally includes the first-year spend for certain projects that require incremental investments in the form of additional operating expenses. We encourage our segments and corporate functions to identify investment projects that will promote innovation and provide future

returns. As approval decisions for such projects are dependent upon executive management, the expenses for such projects are often retained at Corporate. Investment spending within Corporate was $17 million , $34 million and $26 million for fiscal 2017 , 2016 and 2015 , respectively.

The following tables present segment profit by reportable segment and Corporate:

(in millions)	2017	2016	2015
Pharmaceutical	$ 2,187	$ 2,488	$ 2,094
Medical	572	457	433
Total segment profit	2,759	2,945	2,527
Corporate	(639)	(486)	(366)
Total operating earnings	$ 2,120	$ 2,459	$ 2,161

The following tables present depreciation and amortization and additions to property and equipment by reportable segment and Corporate:

(in millions)	2017	2016	2015
Pharmaceutical	$ 122	$ 128	$ 124
Medical	156	136	119
Corporate	439	377	208
Total depreciation and amortization	$ 717	$ 641	$ 451

(in millions)	2017	2016	2015
Pharmaceutical	$ 50	$ 88	$ 90
Medical	123	96	87
Corporate	214	281	123
Total additions to property and equipment	$ 387	$ 465	$ 300

The following table presents total assets for each reportable segment and Corporate at June 30:

(in millions)	2017	2016	2015
Pharmaceutical	$ 21,848	$ 20,662	$ 17,385
Medical	10,688	10,236	7,095
Corporate	7,576	3,224	5,662
Total assets	$ 40,112	$ 34,122	$ 30,142

The following tables present revenue and property and equipment, net by geographic area:

(in millions)	2017	2016	2015
United States	$ 125,006	$ 116,864	$ 98,435
International	4,970	4,682	4,096
Total revenue	$ 129,976	$ 121,546	$ 102,531

(in millions)	2017	2016	2015
United States	$ 1,623	$ 1,558	$ 1,327
International	256	238	179
Property and equipment, net	$ 1,879	$ 1,796	$ 1,506

16. Share-Based Compensation

We maintain stock incentive plans (collectively, the “Plans”) for the benefit of certain of our officers, directors and employees. At June 30, 2017 , 23 million shares remain available for future grants under the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan ("2011 LTIP"). Under the 2011 LTIP's fungible share counting provisions, stock options are counted against the plan as one share for every share issued ; awards other than stock options are counted against the plan as two and one-half shares for every share issued . This means that only 9 million shares could be issued under awards other than stock options while 23 million shares could be issued under stock options. Shares are issued out of treasury shares when stock options are exercised and when restricted share units and performance share units vest.

The following table provides total share-based compensation expense by type of award:

(in millions)	2017	2016	2015
Restricted share unit expense	$ 69	$ 69	$ 69
Employee stock option expense	19	21	21
Performance share unit expense	8	21	20
Total share-based compensation expense from continuing operations	$ 96	$ 111	$ 110

The total tax benefit related to share-based compensation was $34 million , $38 million and $38 million for fiscal 2017 , 2016 and 2015 , respectively.

Restricted Share Units

Restricted share units granted under the Plans generally vest in equal annual installments over three years . Restricted share units accrue cash dividend equivalents that are payable upon vesting of the awards.

The following table summarizes all transactions related to restricted share units under the Plans:

(in millions, except per share amounts)	Restricted Share Units	Weighted-Average Grant Date Fair Value per Share
Nonvested at June 30, 2015	3	$ 59.69
Granted	1	83.89
Vested	(2)	54.29
Canceled and forfeited	—	—
Nonvested at June 30, 2016	2	71.73
Granted	1	82.34
Vested	(1)	69.23
Canceled and forfeited	—	—
Nonvested at June 30, 2017	**2**	**$ 76.72**

The following table provides additional data related to restricted share unit activity:

(in millions)	2017	2016	2015
Total compensation cost, net of estimated forfeitures, related to nonvested restricted share and share unit awards not yet recognized, pre-tax	$ 73	$ 79	$ 77
Weighted-average period in years over which restricted share and share unit cost is expected to be recognized (in years)	2	2	2
Total fair value of shares vested during the year	$ 64	$ 65	$ 61

Stock Options

Employee stock options granted under the Plans generally vest in equal annual installments over three years and are exercisable for periods ranging from seven to ten years from the grant date. All stock options are exercisable at a price equal to the market value of the common shares underlying the option on the grant date.

The following table summarizes all stock option transactions under the Plans:

(in millions, except per share amounts)	Stock Options	Weighted-Average Exercise Price per Common Share
Outstanding at June 30, 2015	8	$ 46.50
Granted	1	84.11
Exercised	(2)	39.06
Canceled and forfeited	—	—
Outstanding at June 30, 2016	7	54.09
Granted	1	83.09
Exercised	(2)	37.79
Canceled and forfeited	—	—
Outstanding at June 30, 2017	**6**	**$ 63.44**
Exercisable at June 30, 2017	**4**	**$ 52.86**

The following table provides additional detail related to stock options:

(in millions, except per share amounts)	2017	2016	2015
Aggregate intrinsic value of outstanding options at period end	$ 109	$ 181	$ 281
Aggregate intrinsic value of exercisable options at period end	106	161	193
Aggregate intrinsic value of exercised options	73	63	132
Net proceeds from share-based compensation	26	6	72
Excess tax benefits from share based compensation	34	33	52
Total compensation cost, net of estimated forfeitures, related to unvested stock options not yet recognized, pre-tax	22	22	23
Total fair value of shares vested during the year	19	20	20
Weighted-average grant date fair value per stock option	16.67	17.40	15.80

(in years)	2017	2016	2015
Weighted-average remaining contractual life of outstanding options	7	6	6
Weighted-average remaining contractual life of exercisable options	6	5	5
Weighted-average period over which stock option compensation cost is expected to be recognized	2	2	2

Stock options are granted to our officers and certain employees. The fair values were estimated on the grant date using a lattice valuation model. We believe the lattice model provides reasonable estimates because it has the ability to take into account individual exercise patterns based on changes in our stock price and other variables, and it provides for a range of input assumptions, which are disclosed in the table below. The risk-free rate is based on the U.S. Treasury yield curve at the time of the grant. We analyzed historical data to estimate option exercise behaviors and employee terminations to be used within the lattice model. The expected life of the options granted was calculated from the option valuation model and represents the length of time in years that the options granted are expected to be outstanding. Expected volatilities are based on implied volatility from traded options on our common shares and historical volatility over a period of time commensurate with the contractual term of the option grant (up to ten years).

The following table provides the range of assumptions used to estimate the fair value of stock options:

	2017	2016	2015
Risk-free interest rate	**1.4% - 2.0%**	1.5% - 1.9%	1.8% - 2.1%
Expected volatility	**24%**	23%	26%
Dividend yield	**2.2% - 2.5%**	1.8% - 2.0%	1.7% - 1.9%
Expected life in years	**7**	7	7

Performance Share Units

Performance share units vest over a three -year performance period based on achievement of specific performance goals. Based on the extent to which the targets are achieved, vested shares may range

from zero to 200 percent of the target award amount. Performance share units accrue cash dividend equivalents that are payable upon vesting of the awards.

The following table summarizes all transactions related to performance share units under the Plans (based on target award amounts):

(in millions, except per share amounts)	Performance Share Units	Weighted-Average Grant Date Fair Value per Share
Nonvested at June 30, 2015	0.9	$ 50.31
Granted	0.3	84.26
Vested (1)	(0.4)	39.81
Canceled and forfeited	—	—
Nonvested at June 30, 2016	0.8	63.96
Granted	0.2	83.19
Vested (2)	(0.4)	51.49
Canceled and forfeited	—	—
Nonvested at June 30, 2017	**0.6**	**$ 77.83**

(1) Vested based on achievement of 133 percent of the target performance goal.

(2) Vested based on achievement of 170 percent of the target performance goal.

The following table provides additional data related to performance share unit activity:

(in millions)	2017	2016	2015
Total compensation cost, net of estimated forfeitures, related to nonvested performance share units not yet recognized, pre-tax	**$ 13**	$ 17	$ 16
Weighted-average period over which performance share unit cost is expected to be recognized (in years)	**2**	2	2
Total fair value of shares vested during the year	**$ 19**	$ 16	$ 8

Employee Retirement Savings Plans

Substantially all of our domestic non-union employees are eligible to be enrolled in our company-sponsored contributory retirement savings plans, which include features under Section 401(k) of the Internal Revenue Code of 1986, and provide for matching and profit sharing contributions by us. Our contributions to the plans are determined by the Board of Directors subject to certain minimum requirements as specified in the plans. The total expense for our employee retirement savings plans was $49 million , $84 million and $91 million for fiscal 2017 , 2016 and 2015 , respectively.

17. Selected Quarterly Financial Data (Unaudited)

The following is selected quarterly financial data for fiscal 2017 and 2016 . The sum of the quarters may not equal year-to-date due to rounding.

(in millions, except per common share amounts)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal 2017				
Revenue	$ 32,039	$ 33,150	$ 31,821	**$ 32,966**
Gross margin (1)	1,590	1,602	1,728	**1,623**
Distribution, selling, general and administrative expenses	920	910	960	**983**
Earnings from continuing operations	310	324	382	**278**
Earnings from discontinued operations, net of tax	—	—	—	—
Net earnings	310	324	382	**278**
Less: Net earnings attributable to noncontrolling interests	(1)	—	(1)	**(4)**
Net earnings attributable to Cardinal Health, Inc.	309	324	381	**274**
Net earnings from continuing operations attributable to Cardinal Health, Inc. per common share:				
Basic	$ 0.97	$ 1.02	$ 1.21	**$ 0.87**
Diluted	0.96	1.02	1.20	**0.86**

(1) Gross margin is impacted by LIFO benefit/(charges) of $9 million and ($9) million in the second and third quarter, respectively. We did not have LIFO benefits/(charges) in the fourth quarter.

(in millions, except per common share amounts)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal 2016				
Revenue	$ 28,055	$ 31,445	$ 30,662	$ 31,384
Gross margin (2)	1,579	1,609	1,689	1,665
Distribution, selling, general and administrative expenses	842	922	914	970
Earnings from continuing operations	384	326	386	335
Earnings from discontinued operations, net of tax	—	—	—	—
Net earnings	384	326	386	335
Less: Net earnings attributable to noncontrolling interests	(1)	—	—	(2)
Net earnings attributable to Cardinal Health, Inc.	383	326	386	333
Net earnings from continuing operations attributable to Cardinal Health, Inc. per common share:				
Basic	$ 1.17	$ 0.99	$ 1.18	$ 1.03
Diluted	1.15	0.98	1.17	1.02

(2) Gross margin is impacted by LIFO benefit/(charges) of ($39) million , ($12) million and $51 million in the second, third and fourth quarter, respectively.

18. Subsequent Events

On July 29, 2017 , we acquired the Patient Recovery Business from Medtronic for $6.1 billion in cash. We funded the acquisition using $4.5 billion in long-term debt issued in June 2017, cash on hand, $400 million in commercial paper and $300 million borrowed under our committed receivables sales facility program. The Patient Recovery Business manufactures 23 medical product categories sold into multiple healthcare channels, and includes numerous industry-leading brands, such as Curity, Kendall, Dover, Argyle and Kangaroo. The acquisition further expands the Medical segment's portfolio of self-manufactured products.

The information needed to perform a preliminary assessment of the fair value of assets acquired and liabilities assumed in the acquisition of the Patient Recovery Business was not available at the time these consolidated financial statements were prepared.

In July 2017, we redeemed our 1.7% notes due 2018 before maturity for $403 million , including a make-whole premium and accrued interest.

Cardinal Health, Inc. and Subsidiaries

Schedule II - Valuation and Qualifying Accounts [1]

(in millions)	Balance at Beginning of Period	Charged to Costs and Expenses (2)	Charged to Other Accounts (3)	Deductions (4)	Balance at End of Period
Fiscal 2017					
Accounts receivable	**$ 135**	**$ 59**	**$ 1**	**$ (58)**	**$ 137**
Finance notes receivable	**19**	**3**	**—**	**(13)**	**9**
Sales returns and allowances	**386**	**2,285**	**—**	**(2,324)**	**347**
Other	**1**	**—**	**—**	**—**	**1**
	$ 541	**$ 2,347**	**$ 1**	**$ (2,395)**	**$ 494**
Fiscal 2016					
Accounts receivable	$ 135	$ 72	$ 2	$ (74)	$ 135
Finance notes receivable	14	6	—	(1)	19
Sales returns and allowances	305	2,207	—	(2,126)	386
Other	1	—	—	—	1
	$ 455	$ 2,285	$ 2	$ (2,201)	$ 541
Fiscal 2015					
Accounts receivable	$ 137	$ 59	$ 5	$ (66)	$ 135
Finance notes receivable	18	—	—	(4)	14
Sales returns and allowances	273	1,988	—	(1,956)	305
Other	1	—	—	—	1
	$ 429	$ 2,047	$ 5	$ (2,026)	$ 455

(1) Amounts included herein pertain to the continuing operations of the Company.

(2) Fiscal 2017 , 2016 and 2015 include $5 million , $5 million and $7 million , respectively, for reserves related to customer pricing disputes, excluded from provision for bad debts on the consolidated statements of cash flows and classified as a reduction in revenue in the consolidated statements of earnings.

(3) Recoveries of amounts provided for or written off in prior years were $1 million , $2 million and $1 million for fiscal 2017 , 2016 and 2015 , respectively.

(4) Write-off of uncollectible accounts or actual sales returns.

Directors, Executive Officers and Corporate Governance

The following is a list of our executive officers:

Name	Age	Position
George S. Barrett	62	Chairman and Chief Executive Officer
Michael C. Kaufmann	54	Chief Financial Officer
Donald M. Casey, Jr.	57	Chief Executive Officer, Medical segment
Jon L. Giacomin	52	Chief Executive Officer, Pharmaceutical segment
Michele A. M. Holcomb	49	Executive Vice President, Strategy and Corporate Development
Pamela O. Kimmet	59	Chief Human Resources Officer
Craig S. Morford	58	Chief Legal and Compliance Officer
Patricia B. Morrison	58	Executive Vice President, Customer Support Services and Chief Information Officer

The business experience summaries provided below for our executive officers describe positions held during the last five years (unless otherwise indicated).

Mr. Barrett has served as Chairman and Chief Executive Officer since August 2009.

Mr. Kaufmann has served as Chief Financial Officer since November 2014. From August 2009 until November 2014, he served as Chief Executive Officer, Pharmaceutical segment.

Mr. Casey has served as Chief Executive Officer, Medical segment, since April 2012.

Mr. Giacomin has served as Chief Executive Officer, Pharmaceutical segment since November 2014. From January 2011 until November 2014, he served as President, U.S. Pharmaceutical Distribution.

Ms. Holcomb has served as Executive Vice President, Strategy and Corporate Development since January 2017. She joined us from Teva Pharmaceutical Industries Ltd., where she served as Senior Vice President, Strategy, Portfolio, Search, and Partnerships and Chief Operating Officer, Global R&D from October 2015 to December 2016, Senior Vice President, Chief Operating Officer, Global R&D from September 2012 to September 2015 and Vice President, Corporate Strategy and Operational Planning from April 2010 to September 2012.

Ms. Kimmet has served as Chief Human Resources Officer since June 2016. Prior to joining us, Ms. Kimmet served as Senior Vice President, Human Resources at Coca-Cola Enterprises, Inc. from October 2010 to June 2016.

Mr. Morford has served as Chief Legal and Compliance Officer since May 2009.

Ms. Morrison has served as Executive Vice President, Customer Support Services and Chief Information Officer since June 2011.

We have adopted *Standards of Business Conduct* that apply to all of our directors, officers and employees. The *Standards of Business Conduct* outline our corporate values and standards of integrity and behavior and are designed to protect and promote our reputation. The full text of the *Standards of Business Conduct* is posted on our website at www.cardinalhealth.com under "About Us — Corporate Citizenship — Ethics and Governance — Ethics and Compliance."

Any waiver of the *Standards of Business Conduct* for directors or executive officers must be approved by the Audit Committee. As required under SEC and New York Stock Exchange rules, we will disclose future amendments to our *Standards of Business Conduct* and waivers from the *Standards of Business Conduct* for our principal executive officer, principal financial officer, and principal accounting officer, or persons performing similar functions, and our other executive officers and directors on our website within four business days following the date of the amendment or waiver.

The other information called for by Item 10 of Form 10-K is incorporated by reference to our Definitive Proxy Statement (which will be filed with the SEC pursuant to Regulation 14A under the Exchange Act) relating to our 2017 Annual Meeting of Shareholders (our "2017 Proxy Statement") under the captions "Proposal 1—Election of Directors," "Share Ownership Information" and "Corporate Governance."

Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The table below summarizes information relating to our equity compensation plans at June 30, 2017.

Equity Compensation Plan Information

Plan Category	Common Shares to be Issued Upon Exercise of Outstanding Options and Rights (#)	Weighted Average Exercise Price of Outstanding Options ($)	Common Shares Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (a)) (#)
	(a)	(b)	(c)
Equity compensation plans approved by shareholders	**9,320,347** (1)	$ 63.35 (1)	23,114,284 (2)
Equity compensation plans not approved by shareholders	**4,203** (3)	— (3)	—
Total at June 30, 2017	**9,324,550**		23,114,284

(1) In addition to stock options outstanding under the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan (the "2011 LTIP") and the Cardinal Health, Inc. 2005 Long-Term Incentive Plan (the "2005 LTIP"), also includes 849,674 PSUs and 1,723,379 RSUs outstanding under the 2011 LTIP, 10,214 PSUs and 61,681 RSUs outstanding under the 2005 LTIP, and 167,471 RSUs outstanding under the 2007 Nonemployee Directors Equity Incentive Plan that are payable solely in common shares. PSUs and RSUs do not have an exercise price, and therefore were not included for purposes of computing the weighted-average exercise price. PSUs granted in fiscal 2015 are reported in this table at the actual amount that vested (133% of target). PSUs granted in fiscal 2016 and 2017 are reported in this table at the maximum payout level (200% of target) in accordance with SEC rules.

(2) Reflects common shares available under the 2011 LTIP in the form of stock options and other stock-based awards. Under the 2011 LTIP's fungible share counting provisions, stock options are counted against the plan as one share for every common share issued; awards other than stock options are counted against the plan as two and one-half shares for every common share issued. This means that only 9,245,714 shares could be issued under awards other than stock options while 23,114,284 shares could be issued under stock options.

(3) RSUs outstanding under the Cardinal Health, Inc. Amended and Restated Outside Directors Equity Incentive Plan that are payable solely in common shares. RSUs do not have an exercise price, and therefore were not included for purposes of computing the weighted-average exercise price.

The other information called for by Item 12 of Form 10-K is incorporated by reference to our 2017 Proxy Statement under the caption “Share Ownership Information.”

Exhibits

Exhibits, Financial Statement Schedules

(a)(1) The following financial statements are included in the "Financial Statements" section of this report:

(a)(2) The following Supplemental Schedule is included in this report:

All other schedules not listed above have been omitted as not applicable or because the required information is included in the Consolidated Financial Statements or in the Notes thereto.

Exhibit Number	Exhibit Description
2..1.1	Stock and Asset Purchase Agreement, dated March 1, 2015, between Ethicon, Inc. and Cardinal Health, Inc. (incorporated by reference to Exhibit 2.1 to Cardinal Health's Current Report on Form 8-K filed on May 28, 2015, File No. 1-11373)
2.1.2	Letter Agreement, dated May 29, 2015, between Ethicon, Inc. and Cardinal Health, Inc. relating to mechanics of agreeing to purchase price allocation (incorporated by reference to Exhibit 2.3 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2015, File No. 1-11373)
2.1.3	Amendment No. 1, dated as of October 2, 2015, to the Stock and Asset Purchase Agreement, dated as of March 1, 2015, between Ethicon, Inc. and Cardinal Health, Inc. (incorporated by reference to Exhibit 2.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, File No. 1-11373)
2.1.4	Letter Agreement, dated August 8, 2016, between Ethicon, Inc. and Cardinal Health, Inc. relating to pre-closing product registration transfer process for certain Day 2 Countries (incorporated by reference to Exhibit 2.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2016, File No. 1-11373)
2.2.1	Stock and Asset Purchase Agreement, dated April 18, 2017, between Cardinal Health, Inc. and Medtronic plc (incorporated by reference to Exhibit 2.1 to Cardinal Health's Current Report on Form 8-K filed on April 18, 2017, File No. 1-11373)
2.2.2	Amendment No. 1, dated as of July 28, 2017, to Stock and Asset Purchase Agreement, dated April 18, 2017, between Cardinal Health, Inc. and Medtronic plc
3.1	Amended and Restated Articles of Incorporation of Cardinal Health, Inc., as amended (incorporated by reference to Exhibit 3.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, File No. 1-11373)
3.2	Cardinal Health, Inc. Restated Code of Regulations (incorporated by reference to Exhibit 3.2 to Cardinal Health's Current Report on Form 8-K filed on June 30, 2016, File No. 1-11373)
4.1	Specimen Certificate for Common Shares of Cardinal Health, Inc. (incorporated by reference to Exhibit 4.01 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2001, File No. 1-11373)
4.2.1	Indenture, dated as of June 2, 2008, between Cardinal Health, Inc. and The Bank of New York Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on June 2, 2008, File No. 1-11373)
4.2.2	Form of 4.625% Notes due 2020 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on December 14, 2010, File No. 1-11373)
4.2.3	Form of 1.900% Notes due 2017 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on May 21, 2012, File No. 1-11373)
4.2.4	Form of 3.200% Notes due 2022 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on May 21, 2012, File No. 1-11373)
4.2.5	Form of 1.700% Notes due 2018 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on February 22, 2013, File No. 1-11373)
4.2.6	Form of 3.200% Notes due 2023 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on February 22, 2013, File No. 1-11373)
4.2.7	Form of 4.600% Notes due 2043 (incorporated by reference to Exhibit 4.3 to Cardinal Health's Current Report on Form 8-K filed on February 22, 2013, File No. 1-11373)
4.2.8	Form of 2.400% Notes due 2019 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on November 19, 2014, File No. 1-11373)

Exhibits

4.2.9	Form of 3.500% Notes due 2024 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on November 19, 2014, File No. 1-11373)
4.2.10	Form of 4.500% Notes due 2044 (incorporated by reference to Exhibit 4.3 to Cardinal Health's Current Report on Form 8-K filed on November 19, 2014, File No. 1-11373)
4.2.11	Form of 1.950% Notes due 2018 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on June 23, 2015, File No. 1-11373)
4.2.12	Form of 3.750% Notes due 2025 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on June 23, 2015, File No. 1-11373)
4.2.13	Form of 4.900% Notes due 2045 (incorporated by reference to Exhibit 4.3 to Cardinal Health's Current Report on Form 8-K filed on June 23, 2015, File No. 1-11373)
4.2.14	Form of 1.948% notes due 2019 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on June 12, 2017, File No. 1-11373)
4.2.15	Form of 2.616% notes due 2022 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on June 12, 2017, File No. 1-11373)
4.2.16	Form of Floating rate notes due 2022 (incorporated by reference to Exhibit 4.3 to Cardinal Health's Current Report on Form 8-K filed on June 12, 2017, File No. 1-11373)
4.2.17	Form of 3.079% notes due 2024 (incorporated by reference to Exhibit 4.4 to Cardinal Health's Current Report on Form 8-K filed on June 12, 2017, File No. 1-11373)
4.2.18	Form of 3.410% notes due 2027 (incorporated by reference to Exhibit 4.5 to Cardinal Health's Current Report on Form 8-K filed on June 12, 2017, File No. 1-11373)
4.2.19	Form of 4.368% notes due 2047 (incorporated by reference to Exhibit 4.6 to Cardinal Health's Current Report on Form 8-K filed on June 12, 2017, File No. 1-11373)
4.3	Agreement to furnish to the Securities and Exchange Commission upon request a copy of instruments defining the rights of holders of certain long-term debt of Cardinal Health, Inc. and consolidated subsidiaries (incorporated by reference to Exhibit 4.07 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2005, File No. 1-11373)
10.1.1	Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K/A filed on November 4, 2011, File No. 1-11373)*
10.1.2	First Amendment to Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.2 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2014)*
10.1.3	Form of Nonqualified Stock Option Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2 to Cardinal Health's Current Report on Form 8-K/A filed on November 4, 2011, File No. 1-11373)*
10.1.4	Form of Nonqualified Stock Option Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.3 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2012, File No. 1-11373)*
10.1.5	Form of Nonqualified Stock Option Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.4 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2013, File No. 1-11373)*
10.1.6	Form of Restricted Share Units Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.7 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2013, File No. 1-11373)*
10.1.7	Form of Restricted Share Units Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.8 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2014)*
10.1.8	Form of Performance Share Units Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.4 to Cardinal Health's Current Report on Form 8-K/A filed on November 4, 2011, File No. 1-11373)*
10.1.9	Form of Amendment to Stock Option and Restricted Share Units Agreements under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan, the Cardinal Health, Inc. 2005 Long-Term Incentive Plan and the Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.1.9 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2013, File No. 1-11373)*
10.2.1	Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on November 7, 2016, File No. 1-11373)*
10.2.2	First Amendment to Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan*
10.2.3	Form of Nonqualified Stock Option Agreement under the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan*
10.2.4	Form of Restricted Share Units Agreement under the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan*
10.2.5	Form of Performance Share Units Agreement under the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan*
10.3.1	Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, File No. 1-11373)*
10.3.2	First Amendment to Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, File No. 1-11373)*
10.3.3	Second Amendment to Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.2 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, File No. 1-11373)*
10.3.4	Third Amendment to Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2.4 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2014)*
10.3.5	Form of Nonqualified Stock Option Agreement under the Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.3 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, File No. 1-11373)*
10.3.6	Form of Nonqualified Stock Option Agreement under the Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.11 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2010, File No. 1-11373)*
10.4.1	Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.4 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2007, File No. 1-11373)*
10.4.2	First Amendment to Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.2.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, File No. 1-11373)*

Exhibits

10.4.3	Second Amendment to the Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.5 to Cardinal Health's Quarterly Report on Form 10-Q for the Quarter ended December 31, 2011, File No. 1-11373)*
10.4.4	Form of Directors' Restricted Share Units Agreement under the Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.5.7 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2013, File No. 1-11373)*
10.5.1	Cardinal Health Deferred Compensation Plan, as amended and restated effective January 1, 2016 (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2015, File No. 1-11373)*
10.5.2	First Amendment to the Cardinal Health Deferred Compensation Plan, as amended and restated effective as of January 1, 2016 (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)*
10.6	Cardinal Health, Inc. Management Incentive Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Periodic Report on Form 8-K filed on November 10, 2014, File No. 1-11373)*
10.7	Cardinal Health, Inc. Policy Regarding Shareholder Approval of Severance Agreements (incorporated by reference to Exhibit 10.09 to Cardinal Health's Current Report on Form 8-K filed on August 7, 2006, File No. 1-11373)*
10.8.1	Employment Agreement, dated September 4, 2012, between Cardinal Health, Inc. and George S. Barrett (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on September 6, 2012, File No. 1-11373)*
10.8.2	Amendment, dated August 5, 2015, to Employment Agreement, dated September 4, 2012, between Cardinal Health, Inc. and George S. Barrett (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on August 6, 2015, File No. 1-11373)*
10.8.3	Aircraft Time Sharing Agreement, effective August 5, 2015, between Cardinal Health, Inc. and George S. Barrett (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on August 6, 2015, File No. 1-11373)*
10.9	Confidentiality and Business Protection Agreement, effective as of February 15, 2010, between Cardinal Health, Inc. and Michael C. Kaufmann (incorporated by reference to Exhibit 10.15 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2010, File No. 1-11373)*
10.10	Confidentiality and Business Protection Agreement, effective as of April 9, 2012, between Cardinal Health, Inc. and Donald M. Casey Jr. (incorporated by reference to Exhibit 10.14.1 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2012, File No. 1-11373)*
10.11	Confidentiality and Business Protection Agreement, effective as of September 9, 2014, between Cardinal Health, Inc. and Jon L. Giacomin (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, File No. 1-11373)*
10.12.1	Form of Indemnification Agreement between Cardinal Health, Inc. and certain individual directors (incorporated by reference to Exhibit 10.38 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2004, File No. 1-11373)
10.12.2	Form of Indemnification Agreement between Cardinal Health, Inc. and certain individual executive officers (incorporated by reference to Exhibit 10.39 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2004, File No. 1-11373)
10.13.1	Issuing and Paying Agency Agreement, dated August 9, 2006, between Cardinal Health, Inc. and The Bank of New York (incorporated by reference to Exhibit 10.01 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.13.2	First Amendment to Issuing and Paying Agency Agreement, dated February 28, 2007, between Cardinal Health, Inc. and The Bank of New York (incorporated by reference to Exhibit 10.01 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.13.3	Second Amendment to Issuing and Paying Agency Agreement, effective as of December 1, 2016, between Cardinal Health, Inc. and The Bank of New York (incorporated by reference to Exhibit 10.2 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)
10.13.4	Commercial Paper Dealer Agreement, dated August 9, 2006, between Cardinal Health, Inc. and J.P. Morgan Securities Inc. (incorporated by reference to Exhibit 10.02 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.13.5	First Amendment to Commercial Paper Dealer Agreement, dated February 28, 2007, between Cardinal Health, Inc. and J.P. Morgan Securities Inc. (incorporated by reference to Exhibit 10.02 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.13.6	Second Amendment to Commercial Paper Dealer Agreement, effective as of December 31, 2012, between Cardinal Health, Inc. and J.P. Morgan Securities LLC (formerly known as J.P. Morgan Securities Inc.) (incorporated by reference to Exhibit 10.4 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.13.7	Commercial Paper Dealer Agreement between Cardinal Health, Inc. and J.P. Morgan Securities LLC, effective as of December 1, 2016 (incorporated by reference to Exhibit 10.6 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)
10.13.8	Commercial Paper Dealer Agreement, dated August 9, 2006, between Cardinal Health, Inc. and Banc of America Securities LLC (incorporated by reference to Exhibit 10.03 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.13.9	First Amendment to Commercial Paper Dealer Agreement, dated February 28, 2007, between Cardinal Health, Inc. and Banc of America Securities LLC (incorporated by reference to Exhibit 10.03 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.13.10	Second Amendment to Commercial Paper Dealer Agreement, effective as of December 31, 2012, between Cardinal Health, Inc. and Merrill Lynch, Pierce, Fenner & Smith Incorporated, f/k/a Banc of America Securities LLC (incorporated by reference to Exhibit 10.5 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.13.11	Commercial Paper Dealer Agreement between Cardinal Health, Inc. and Merrill Lynch, Pierce, Fenner & Smith Incorporated, effective as of December 1, 2016 (incorporated by reference to Exhibit 10.3 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)
10.13.12	Commercial Paper Dealer Agreement, dated August 9, 2006, between Cardinal Health, Inc. and Wachovia Capital Markets, LLC (incorporated by reference to Exhibit 10.04 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.13.13	First Amendment to Commercial Paper Dealer Agreement, dated February 28, 2007, between Cardinal Health, Inc. and Wachovia Capital Markets, LLC (incorporated by reference to Exhibit 10.04 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.13.14	Second Amendment to Commercial Paper Dealer Agreement, effective as of December 31, 2012, between Cardinal Health, Inc. and Wells Fargo Securities, LLC, as successor in interest to Wachovia Capital Markets, LLC (incorporated by reference to Exhibit 10.6 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.13.15	Commercial Paper Dealer Agreement between Cardinal Health, Inc. and Wells Fargo Securities, LLC, effective as of December 1, 2016 (incorporated by reference to Exhibit 10.5 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)
10.13.16	Commercial Paper Dealer Agreement, dated August 9, 2006, between Cardinal Health, Inc. and Goldman, Sachs & Co. (incorporated by reference to Exhibit 10.05 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)

Exhibits

10.13.17	First Amendment to Commercial Paper Dealer Agreement, dated February 28, 2007, between Cardinal Health, Inc. and Goldman, Sachs & Co. (incorporated by reference to Exhibit 10.05 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.13.18	Second Amendment to Commercial Paper Dealer Agreement, effective as of December 31, 2012, between Cardinal Health, Inc. and Goldman, Sachs & Co. (incorporated by reference to Exhibit 10.7 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.13.19	Commercial Paper Dealer Agreement between Cardinal Health, Inc. and Goldman Sachs & Co., effective as of December 1, 2016 (incorporated by reference to Exhibit 10.4 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)
10.13.20	Form of Commercial Paper Dealer Agreement between Cardinal Health, Inc. and SunTrust Robinson Humphrey, Inc. (incorporated by reference to Exhibit 10.2 to Cardinal Health's Current Report on Form 8-K filed on April 21, 2009, File No. 1-11373)
10.13.21	Form of First Amendment to Commercial Paper Dealer Agreement between Cardinal Health, Inc. and SunTrust Robinson Humphrey, Inc. (incorporated by reference to Exhibit 10.8 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.13.22	Commercial Paper Dealer Agreement between Cardinal Health, Inc. and SunTrust Robinson Humphrey, Inc., effective as of December 1, 2016 (incorporated by reference to Exhibit 10.7 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2016, File No. 1-11373)
10.14.1	Amended and Restated Five-Year Credit Agreement, dated as of June 16, 2016, among Cardinal Health, Inc., JPMorgan Chase Bank, N.A. as Administrative Agent, Joint Lead Arranger and Joint Book Manager, Bank of America, N.A. as Syndication Agent, The Bank of Tokyo-Mitsubishi UFJ, Ltd., as Syndication Agent, Joint Lead Arranger and Joint Book Manager, Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, HSBC Bank USA, National Association, Morgan Stanley Senior Funding, Inc. and Wells Fargo Bank, National Association, as Documentation Agents, and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as Joint Lead Arranger and Joint Book Manager (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on June 21, 2016, File No. 1-11373)
10.14.2	Amendment No. 1, dated as of May 1, 2017, to Amended and Restated Five-Year Credit Agreement as of June 16, 2016 (incorporated by reference to Exhibit 10.8 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended March 31, 2017, File No. 1-11373)
10.15	Commitment Letter, dated April 18, 2017, by and among Goldman Sachs Bank USA and Goldman Sachs Lending Partners LLC and Cardinal Health, Inc. (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on April 18, 2017, File No. 1-11373)
10.16.1	Tax Matters Agreement, dated as of August 31, 2009, by and between Cardinal Health, Inc. and CareFusion Corporation (incorporated by reference to Exhibit 10.3 to Cardinal Health's Current Report on Form 8-K filed on September 4, 2009, File No. 1-11373)
10.16.2	First Amendment to Tax Matters Agreement, dated as of May 28, 2012, by and between Cardinal Health, Inc. and CareFusion Corporation (incorporated by reference to Exhibit 10.20.2 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2012, File No. 1-11373)
12.1	Computation of Ratio of Earnings to Fixed Charges
21.1	List of Subsidiaries of Cardinal Health, Inc.
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.1	Statement Regarding Forward-Looking Information
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Management contract or compensatory plan or arrangement.

Form 10-K Cross Reference Index

N/A Not applicable

(a) The information called for by Item 11 of Form 10-K is incorporated by reference to our 2017 Proxy Statement under the captions “Compensation Discussion and Analysis,” “Executive Compensation” and “Director Compensation.”

(b) The information called for by Item 13 of Form 10-K is incorporated by reference to our 2017 Proxy Statement under the caption "Corporate Governance."

(c) The information called for by Item 14 of Form 10-K is incorporated by reference to our 2017 Proxy Statement under the caption “Audit Committee Report and Audit Matters.”

Additional Information

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on August 10, 2017 .

Cardinal Health, Inc.

By: /s/ GEORGE S. BARRETT

George S. Barrett

Chairman and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed below by the following persons on behalf of the registrant and in the capacities indicated on August 10, 2017 .

Name	Title
/s/ GEORGE S. BARRETT **George S. Barrett**	Chairman and Chief Executive Officer and Director (principal executive officer)
/s/ MICHAEL C. KAUFMANN **Michael C. Kaufmann**	Chief Financial Officer (principal financial officer)
/s/ STUART G. LAWS **Stuart G. Laws**	Senior Vice President and Chief Accounting Officer (principal accounting officer)
/s/ DAVID J. ANDERSON **David J. Anderson**	Director
/s/ COLLEEN F. ARNOLD **Colleen F. Arnold**	Director
/s/ CARRIE S. COX **Carrie S. Cox**	Director
/s/ CALVIN DARDEN **Calvin Darden**	Director
/s/ BRUCE L. DOWNEY **Bruce L. Downey**	Director
/s/ PATRICIA A. HEMINGWAY HALL **Patricia A. Hemingway Hall**	Director
/s/ CLAYTON M. JONES **Clayton M. Jones**	Director
/s/ GREGORY B. KENNY **Gregory B. Kenny**	Director
/s/ NANCY KILLEFER **Nancy Killefer**	Director
/s/ DAVID P. KING **David P. King**	Director

EXHIBIT 2.2.2

AMENDMENT NO. 1

TO

STOCK AND ASSET PURCHASE AGREEMENT

This AMENDMENT NO. 1, dated as of July 28, 2017 (this " Amendment "), to the Stock and Asset Purchase Agreement, dated as of April 18, 2017 (the " Purchase Agreement "), is by and between Medtronic plc, an Irish public limited company (" Seller "), and Cardinal Health, Inc., an Ohio corporation (" Buyer ").

WHEREAS, pursuant to and in accordance with Section 11.05 of the Purchase Agreement, the parties desire to amend certain provisions of the Purchase Agreement as set forth in this Amendment; and

WHEREAS, terms used herein and not defined shall have the meanings ascribed thereto in the Purchase Agreement.

NOW, THEREFORE, in consideration of the mutual agreements set forth in the Purchase Agreement and this Amendment, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Buyer and Seller hereby agree as follows:

RECITALS

The second recital of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"WHEREAS, Seller desires to sell (or to cause to be sold), and Buyer desires to purchase or cause certain of its Affiliates to purchase (or otherwise acquire), certain assets, including the Transferred Equity Interests (as defined below), related to the Business as a going concern and Buyer is willing to assume or cause certain of its Affiliates to assume certain liabilities related to the Business, in each case upon the terms and subject to the conditions set forth herein."

ARTICLE 1
Purchase Agreement; Disclosure Letter; Other Matters

Section 1.01 Definitions . Section 1.01(a) of the Purchase Agreement (Definitions) is hereby amended as follows:

(i) The definition of the term " Ancillary Agreements " in Section 1.01(a) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"' Ancillary Agreements ' means, other than this Agreement, the agreements and instruments, including any Country Transfer Agreements and any related instruments of transfer, the General Assignment, the Assumption Agreement,

the Patent Assignment, the Trademark Assignment, the U.S. Merger Agreement, the Transition Services Agreement, the Master Manufacturing and Supply Agreement, the Sorting Service Agreement, the Undisclosed Agency Agreement, the Escrow Agreement, the French Offer Letter, the Dutch Offer Letter, the Lease Assignment and Assumption Agreements and the Trademark License Agreements, executed and delivered in connection with the transactions contemplated by this Agreement."

(ii) The definition of the term " Assumed Liabilities " in Section 1.01(a) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"' Assumed Liabilities ' means the obligations and liabilities set forth or described on Annex 2.02(c) , which expressly exclude the Excluded Liabilities."

(iii) The definition of the term " Buyer Tax Act " in Section 1.01(a) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"' Buyer Tax Act ' means the following: (A) at or after the Closing, any election made by Buyer or any of its Affiliates (including any Transferred Company) under any provision of the Code or non-U.S. Tax Law for any Pre-Closing Tax Period, which election is made at or after the Closing with respect to any Transferred Company, the Transferred Assets or the Business, but not (i) any such election that is set forth on a Tax Return required to be filed by Buyer under Section 7.08(a)(i) or Section 7.08(a)(ii) and which election is consistent with past practice, (ii) any such election that is expressly required by this Agreement, or (iii) any such election that is made with Seller's consent (which consent shall not be unreasonably withheld, conditioned or delayed), (B) any failure to comply with Item 2, 3 or 4 of Schedule 1.01(a) to the Disclosure Letter or any failure of the statement in Item 1 of Schedule 1.01(a) to the Disclosure Letter to be true, correct, and complete, and (C) any action taken by Buyer on the Closing Date after such Closing other than (i) in the ordinary course of business, (ii) as required or contemplated by this Agreement or applicable Law, or (iii) with Seller's consent (which consent shall not be unreasonably withheld, conditioned or delayed). For the absence of doubt, none of the Section 338(g) Elections or any action undertaken by Seller and its Affiliates, prior to the Closing, pursuant to the Internal Restructuring Steps shall constitute a Buyer Tax Act."

(iv) The definition of the term " Disclosure Letter " in Section 1.01(a) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"' Disclosure Letter ' means the confidential disclosure letter delivered to Buyer by Seller prior to or simultaneously with entering into the Purchase Agreement, as amended by Amendment No. 1 to the Purchase Agreement, dated as of July 28, 2017."

(v) The definition of the term " Employee of the Business " in Section 1.01(a) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"' Employee of the Business ' means each employee of Seller or its Affiliates who is set forth on Schedule 1.01(b) to the Disclosure Letter (as such schedule may be updated in accordance with this Agreement), including each such employee who, as of the Closing Date (or, with respect to Deferred Employees, the applicable Deferred Closing Date) is on leave of absence (including medical leave, military leave, workers compensation leave and short-term or long-term disability or vacation)."

(vi) The definition of the term " Inventory " in Section 1.01(a) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"' Inventory ' means the inventory of all finished Products (including consignment stock) (" Finished Goods Inventory "), Product specific work in process and Product specific raw materials."

(vii) The definition of the term " Legacy Product " in Section 1.01(a) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"' Legacy Product ' means any product that is not a Product as of the Closing, but (a) is a prior product design, form, version or implementation (whether commercialized or not) of Seller, an Affiliate of Seller or a Transferred Company which product design, form, version or implementation (whether commercialized or not) was at any time prior to the Closing superseded by a Product design, form, version or implementation, (b) was within one of the product groups set forth on Exhibit A-1 and (c) in which product design, form, version or implementation by Seller, any of its Affiliates or any Transferred Company owns or has the valid right to use the IP Rights."

(viii) The definition of the term " Permitted Liens " in Section 1.01(a) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"' Permitted Liens ' means (a) mechanics', carriers', workmen's, repairmen's or other like Liens imposed by Law arising or incurred in the ordinary course of business, (b) Liens arising under purchase price conditional sales contracts or equipment leases with third parties entered into in the ordinary course of business consistent with past practice, (c) Liens for Taxes or other governmental charges that are not yet delinquent and may thereafter be paid without penalty, or that the taxpayer is contesting in good faith through appropriate proceedings and for which adequate reserves have been established in the accounting books and records prior to the date hereof, (d) restrictions under leases, subleases, licenses or occupancy agreements that constitute Transferred Assets, none of which materially interferes with the present use of the related real property, (e) easements, covenants, rights-of-

way and other similar restrictions of record, none of which materially interferes with the present use of the related real property, (f) zoning, building and other similar restrictions, none of which materially interferes with the present use of the related real property, (g) Liens created by or for the benefit of Buyer or its Affiliates, (h) Liens that are removed prior to the Closing or, with respect to Deferred Assets, the applicable Deferred Closing and (i) with respect to real property, other imperfections of title or encumbrances, if any, which do not materially interfere with the present use of such real property."

(ix) The definition of the term " Transactions " in Section 1.01(a) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"' Transactions ' mean, collectively, the transactions contemplated by this Agreement and the other Transaction Documents, including the purchase and sale of the Transferred Assets and the Transferred Equity Interests (including pursuant to the U.S. Merger) and the assumption of the Assumed Liabilities."

(x) The definition of the term " Transferred Employee " in Section 1.01(a) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"' Transferred Employee ' means each Employee of the Business who, as of the Closing Date (or, with respect to Deferred Employees, the applicable Deferred Closing Date) (or, if applicable, such later date that such employee commences employment with Buyer or one of its Affiliates), becomes an employee of Buyer or one of its Affiliates whether by operation of Law, pursuant to the transfer (directly or indirectly) of the Transferred Equity Interests to Buyer or by acceptance of Buyer's or one of its Affiliate's offer of employment pursuant to Section 8.01 ."

(xi) Section 1.01(a) of the Purchase Agreement is amended to include the following new definitions in the appropriate alphabetical positions:

"' Cardinal Merger Sub Common Stock ' means common stock, par value $0 per share, of Cardinal Merger Sub."

"' Deferred Beneficiary ' means Buyer or its applicable Affiliate designated in accordance with Section 2.02(f) that will be entitled to receive the relevant Deferred Assets and the relevant Deferred Liabilities at the applicable Deferred Closing."

"' Deferred Business ' means the part of the Business in respect of which a Deferred Title Holder has Deferred Assets or Deferred Liabilities. For the avoidance of doubt, the portion of the Business conducted by any of the Transferred Companies shall not be part of the Deferred Business in any country."

"‘ Deferred Business Taxes ’ means, with respect to any Deferred Asset, any Deferred Liability or any portion of the Deferred Business in each Deferred Closing Country, all Taxes (other than Excluded Deferred Taxes) in each case, incurred by the applicable Deferred Title Holder and/or its Affiliates in connection with (a) the operation (or ownership) of the Deferred Assets, Deferred Liabilities or any portion of the Deferred Business during the Deferred Period or (b) the receipt of goods or services in support and furtherance of the operation (or ownership) of the Deferred Assets, Deferred Liabilities, or Deferred Business during the Deferred Period."

"‘ Deferred Inventory Closing Date ’ means the date on which the Undisclosed Agency Agreement is terminated, pursuant to the terms thereof, with respect to the relevant Deferred Inventory or Distribution Services."

"‘ Deferred Inventory Period ’ means, with respect to the Deferred Inventory and the provision of Distribution Services, the period from the Closing until the applicable Deferred Inventory Closing Date."

"‘ Deferred Inventory Taxes ’ means, with respect to any Deferred Inventory or any Distribution Services, all Taxes (other than Excluded Deferred Taxes) in each case, incurred by Seller and/or its Affiliates in connection with (a) the ownership of the Deferred Inventory during the Deferred Inventory Period, or (b) the receipt of goods or services in support and furtherance of the ownership of the Deferred Inventory during the Deferred Inventory Period."

"‘ Deferred Period ’ means, with respect to the Deferred Business in each Deferred Closing Country, the period from the Closing until the applicable Deferred Closing."

"‘ Deferred Taxes ’ means, together, Deferred Business Taxes and Deferred Inventory Taxes."

"‘ Deferred Title Holder ’ means Seller or one or more of its Affiliates that has Deferred Assets or Deferred Liabilities during the applicable Deferred Period."

"‘ Escrow Account ’ means the segregated escrow trust account established pursuant to the Escrow Agreement to hold the Escrow Amount (or any replacement therefor contemplated by the last sentence of Section 2.03(a))."

"‘ Escrow Agent ’ means U.S. Bank National Association (or any replacement therefor contemplated by the last sentence of Section 2.03(a))."

"‘ Estimated Swiss Tax Basis ’ means the amount set forth in Schedule 6.11(a) to the Disclosure Letter."

"‘ Excluded Deferred Business Taxes ’ means (a) sales Taxes, VAT and other Taxes imposed on Seller or any of its Affiliates (including, for the avoidance of doubt, any Deferred Title Holder) to the extent Seller or any of its Affiliates (including, for the avoidance of doubt, any Deferred Title Holder) actually receives, in cash (or through a reduction of amounts otherwise payable), reimbursement or payment in respect of such Tax such that neither Seller nor any of its Affiliates (including, for the avoidance of doubt, any Deferred Title Holder) bears economic responsibility for such Tax, (b) Recoverable VAT, (c) Taxes (other than VAT) attributable to the NEB Return on Sales Amount owed to Seller or its Affiliates, and (d) except to the extent otherwise provided pursuant to any Ancillary Agreement, Taxes attributable to amounts owed to Seller or any of its Affiliates (including, for the avoidance of doubt, any Deferred Title Holder) under the Ancillary Agreements; provided, that for the avoidance of doubt, any Taxes allocated to any party pursuant to any Ancillary Agreement shall continue to be the responsibility of such party."

"‘ Excluded Deferred Inventory Taxes ’ means (a) sales Taxes, VAT and other Taxes imposed on Seller or any of its Affiliates to the extent Seller or any of its Affiliates actually receives, in cash (or through a reduction of amounts otherwise payable), reimbursement or payment in respect of such Tax such that neither Seller nor any of its Affiliates bears economic responsibility for such Tax, (b) Recoverable VAT, and (c) except to the extent otherwise provided pursuant to any Ancillary Agreement, Taxes attributable to amounts owed to Seller or any of its Affiliates under the Ancillary Agreements; provided that, for the avoidance of doubt, any Taxes allocated to any party pursuant to any Ancillary Agreement shall continue to be the responsibility of such party."

"‘ Excluded Deferred Taxes ’ means, together, Excluded Deferred Business Taxes and Excluded Deferred Inventory Taxes."

"‘ InnerDyne Common Stock ’ means common stock, par value $1.00 per share, of InnerDyne Holdings."

"‘ Integration Amount ’ means the amount set forth on Schedule 2.09(h) to the Disclosure Letter, which payment is, subject to the terms of this Agreement, to be made in respect of integration and other information technology costs and expenses incurred or to be incurred by Seller and its Affiliates in connection with the transactions contemplated hereby."

"‘ NEB Distribution Fee ’ means, for any given period during the Deferred Period: (a) the NEB Revenue Amount, *minus* (b) the NEB Return on Sales Amount, *minus* (c) the NEB Services Reimbursement Amount."

"‘ NEB Return on Sales Amount ’ means, for any given period during the Deferred Period, solely with respect to the Deferred Business in each

Deferred Closing Country, an amount equal to (i) the percentage set forth under the heading 'ROS%' on Annex A to the Disclosure Letter corresponding to the Deferred Closing Country set forth opposite such percentage on Annex A to the Disclosure Letter *multiplied by* (ii) the net sales (determined using the Accounting Policies) of the Deferred Business derived in such Deferred Closing Country during the Deferred Period."

"' NEB Revenue Amount ' means, for any given period during the Deferred Period, solely with respect to the Deferred Business in each Deferred Closing Country, an amount equal to the net sales (determined using the Accounting Policies) of the Deferred Business (" Net Sales "), *minus* an amount equal to the applicable percentage of such net sales set forth in Annex C to the Disclosure Letter with respect to the region containing the Deferred Closing Country for which the applicable portion of such NEB Revenue Amount relates (such percentage, the " Bad Debt Rate ")."

"' NEB Services Reimbursement Amount ' means, for any given period during the Deferred Period, solely with respect to the Deferred Business in each Deferred Closing Country, an amount equal to the aggregate of (i) freight and duties expenses, (ii) sales force salary and commissions, (iii) ordinary course marketing expenses incurred consistent with past practice, (iv) any other expenses to the extent incurred at Buyer's or its Affiliates' direction and (v) Deferred Business Taxes, which in the case of clauses (i), (ii) and (iii) shall be determined by multiplying the Net Sales for such Deferred Closing Country by the percentage set forth under the heading 'Reimbursement % (OPC and DD)' on Annex A to the Disclosure Letter opposite such Deferred Closing Country; provided , that for the avoidance of doubt 'NEB Services Reimbursement Amount' shall not include (x) any general and administrative expenses and (y) solely to avoid any duplication of Buyer or its Affiliates paying for the same expense more than once, expenses that have otherwise been reimbursed to Seller or its Affiliates by Buyer or its Affiliates pursuant to any Ancillary Agreement."

"' Non-Commercial Employees ' means the Employees of the Business set forth in Annex D to the Disclosure Letter."

"' Recoverable VAT ' means any VAT to the extent Seller and/or any of its Affiliates (including, for the avoidance of doubt, any Deferred Title Holder) actually receives in cash (or through a reduction of Taxes otherwise payable) a refund, deduction, or credit of such VAT from the relevant Taxing Authority; provided , however , that, notwithstanding anything to the contrary herein, if and to the extent the relevant Taxing Authority subsequently disallows such refund, deduction, or credit, Buyer shall promptly pay to Seller or its Affiliates an amount equal to such disallowed refund, deduction, or credit, except where the disallowance of

such refund, deduction or credit results from the fraud, willful misconduct or intentional breach of this Agreement by Seller and/or any of its Affiliates."

"' Transferred Inventory ' means all Inventory owned or held by Seller or any of its Affiliates at the time of the Closing."

Section 1.02 Interpretation and Construction . Section 1.02 of the Purchase Agreement (Interpretation and Construction) is hereby amended as follows:

(i) Section 1.02(c) of the Purchase Agreement is hereby amended and restated in its entirety as follows:

"Except as provided in Section 2.03(b) and Section 8.02(a) , whenever conversion of values from any Foreign Currency for a particular date or period shall be required, such conversion shall be made using the rate provided by Bloomberg at 7:00 a.m. New York City time (the " Exchange Rate ") three (3) business days prior to the applicable date or dates."

(ii) Section 1.02(d) of the Purchase Agreement is hereby amended by adding the following to the end of the section:

"For purposes of Section 2.11 , Section 7.08 and Article X , to the extent permitted by applicable Law and foreign currency regulations, if requested by either Seller or Buyer to the other party to make or receive payments through any of their respective Affiliates, the parties agree to cooperate in good faith with respect to such request, taking into account, among other matters, the costs or other burdens of complying with such request."

Section 1.03 Closing; Deferred Closings . Article II of the Purchase Agreement (Closing; Deferred Closings) is hereby amended as follows:

(i) Section 2.01 of the Purchase Agreement (Closing) is hereby amended and restated in its entirety as follows:

"The closing of the purchase and sale of the Transferred Assets and Transferred Equity Interests (including the U.S. Merger) and the assumption of the Assumed Liabilities (the " Closing ") shall take place at the offices of Wachtell, Lipton, Rosen & Katz in New York, New York, at 10:00 a.m., New York City time, on the later of (a) the second business day following the satisfaction (or, to the extent permitted by applicable Law, waiver) of the conditions set forth in Article V and (b) the first calendar day of the first fiscal month of Seller immediately following the fiscal month of Seller in which such satisfaction (or waiver) occurs (excluding in each case those conditions intended to be satisfied at the Closing but subject to their satisfaction or, to the extent permitted by

applicable Law, waiver at such time) (provided that the Closing shall not occur prior to July 29, 2017), or on such other date as the parties hereto may agree. The date on which the Closing occurs is referred to in this Agreement as the " Closing Date ." The Closing shall be deemed to occur and be effective at 12:01 A.M., local time, on the Closing Date. The parties hereto specifically acknowledge that time is of the essence because Seller's intention to exit the Business is or will become known to its employees, customers, suppliers and others having dealings with Seller."

(ii) Section 2.02(a) of the Purchase Agreement (Transferred Assets and Transferred Equity Interests) is hereby amended and restated in its entirety as follows:

"Pursuant to the terms and subject to the conditions set forth in this Agreement, at the Closing, Seller will, and will cause the relevant Asset Selling Affiliates to, in accordance with Exhibit L (the " Closing Structure "), sell, convey, assign, and transfer to Buyer, and Buyer will purchase, acquire and accept, the Transferred Assets, free and clear of all Liens other than Permitted Liens. Accordingly, Seller will, or will cause the relevant Asset Selling Affiliates to, execute and deliver at the Closing a general assignment and bill of sale substantially in the form of Exhibit B (the " General Assignment "), a general patent assignment substantially in the form of Exhibit C (the " Patent Assignment ") and a general trademark assignment substantially in the form of Exhibit D (the " Trademark Assignment ") and at the Closing such other instruments of conveyance, assignment and transfer as Buyer reasonably requests (the form and substance of which shall be mutually agreed between the parties), in each case to convey to Buyer all of Seller's and/or each Asset Selling Affiliate's right, title and interest in and to the applicable Transferred Assets. In addition, pursuant to the terms and subject to the conditions set forth in this Agreement, at the Closing, Seller will, and will cause the relevant Stock Selling Affiliates to, in accordance with the Closing Structure, sell, convey, assign, and transfer to Buyer or Buyer's applicable Affiliates designated in accordance with Section 2.02(f) , and Buyer or its applicable Affiliates designated in accordance with Section 2.02(f) will purchase, acquire and accept (including indirectly by means of the U.S. Merger), the Transferred Equity Interests (and will indirectly acquire and accept by means of such purchase acquisition and acceptance, the Transferred Equity Interests in any Transferred Company that is a subsidiary of another Transferred Company), free and clear of all Liens. Accordingly, Seller will, or will cause the relevant Stock Selling Affiliates to, deliver at the Closing stock certificates representing the Transferred Equity Interests, together with a stock power endorsed in blank, to the extent that such Transferred Equity Interests are in certificated form, and to the extent such Transferred Equity Interests are not in certificated form, other evidence of assignment."

(iii) Section 2.02(e) of the Purchase Agreement (Country Transfer Agreements) is hereby amended and restated in its entirety as follows:

> "To the extent required by applicable Law or as deemed necessary by either of the parties hereto, the transfer of each Country Unit will be effected pursuant to a short-form agreement or one or more instruments of transfer, such as a bill of sale, share transfer agreement, business transfer agreement, real estate transfer agreement or other asset assignment document, which agreement shall be prepared by Seller and shall be on terms mutually agreed between the parties hereto and consistent with and as close as reasonably possible to the applicable terms of this Agreement (each, a " Country Transfer Agreement "). Unless otherwise agreed by Buyer and Seller, the parties shall enter into the Country Transfer Agreements as soon as reasonably practicable after the date hereof and not later than the Closing. For the avoidance of doubt, Country Transfer Agreements with respect to each Deferred Closing Country will not be executed or delivered prior to or on the Closing Date, but shall instead be executed in connection with the applicable Deferred Closing."

(iv) Section 2.02(f) of the Purchase Agreement (Designation of Affiliates) is hereby amended and restated in its entirety as follows:

> "To the extent that any of the Transferred Assets or Transferred Equity Interests are under the control of any of Seller's Affiliates, Seller shall cause its Affiliates to promptly take such legal action as may be necessary to consummate the transfer to Buyer and its Affiliates of such Transferred Assets or Transferred Equity Interests under terms and conditions which are consistent with and subject to the terms of this Agreement. Prior to, and in any event at least thirty (30) days in advance of, the Closing or the applicable Deferred Closing (as applicable), Buyer may designate, with the consent of Seller (which consent shall not be unreasonably withheld), one or more Affiliates to, at the Closing or the applicable Deferred Closing (as applicable), (i) acquire all or part of the Transferred Assets (or applicable Deferred Assets) or Transferred Equity Interests, (ii) assume all or part of the Assumed Liabilities (or applicable Deferred Liabilities) or (iii) pay the Deferred Closing Country Amount pursuant to Section 2.11(h) , in each case related to the applicable Country Unit, as the case may be, in which event all references herein to Buyer will be deemed to refer to such Affiliates, as appropriate; provided , however , that no such designation will in any event limit or affect the obligations of Buyer under this Agreement to the extent not performed by such Affiliates."

(v) Section 2.02(g) of the Purchase Agreement (Transferred Assets Subject to Third-Party Consent) is hereby amended and restated in its entirety as follows:

> "With respect to each Product, the parties shall use reasonable best efforts to ensure that, effective as of the Closing or the applicable Deferred Closing (as applicable), or as soon as reasonably practicable thereafter, either (A) (1) the Product Registrations that constitute Transferred Assets shall have transferred to, or shall have been approved in writing by the applicable Governmental Entity for transfer to, Buyer or its designee or (2) Buyer shall have obtained a Product Registration (including any re-registrations) that enables Buyer or its designee to manufacture, distribute and market such Product in each applicable jurisdiction, or (B) Buyer or its designee otherwise shall have either (1) acceded to Seller's or its Affiliate's rights in respect of manufacturing, distributing and marketing such Products under such Product Registrations, including by Seller or an Affiliate of Seller designating Buyer or its designee as an authorized agent with respect to such Products, or (2) been designated as a manufacturing, sales or distribution agent with respect to the Products under such Product Registrations, in the case of this clause (B), pursuant to reasonable, lawful and customary arrangements to effectuate the foregoing (the time at which any of the foregoing occurs with respect to a Product Registration (or, if earlier, the expiration of such Product Registration in accordance with its terms), the " Product Registration Transfer Time "). If the Product Registration Transfer Time shall not have occurred on the Closing Date or the applicable Deferred Closing Date (as applicable) with respect to any such Product Registration, until such Product Registration Transfer Time with respect to such Product Registration, (X) the parties will continue to use reasonable best efforts to ensure that the Product Registration Transfer Time with respect to such Product occurs as soon as reasonably practicable after the Closing or the applicable Deferred Closing Date (as applicable), (Y) Seller shall, and shall cause its subsidiaries to, consent to Buyer's and its Affiliates' use of such Product Registration for the continued operation of the Business with respect to such Product after the Closing or the applicable Deferred Closing Date (as applicable), and (Z) if requested by Buyer, Seller shall, and shall cause its subsidiaries to, provide Buyer, to the fullest extent possible, pursuant to an arrangement reasonably satisfactory to Seller and Buyer, the exclusive net benefit of such Product Registration (including, to the extent not able to be conducted by Buyer and its Affiliates after the Closing or the applicable Deferred Closing Date (as applicable) as result of the failure of the Product Registration Transfer Time to occur, by Seller and its subsidiaries continuing to conduct the Business with respect to such Product in substantially the same manner and with substantially the same level of efforts and resources as conducted by Seller and its subsidiaries prior to the Closing) by passing through all revenues received by Seller and its

subsidiaries with respect to the Products under such Product Registration from the Closing Date or the applicable Deferred Closing Date (as applicable) through such Product Registration Transfer Time, less only such amount of costs and expenses (including Taxes) as Seller and its Affiliates incur or become liable for in connection with any such arrangements with respect to such Products (other than any such costs and expenses that are duplicative of documented costs and expenses actually incurred by Buyer and its Affiliates in connection the conduct of the Business with respect to such Products). The parties agree they will cooperate to minimize the costs and expenses incurred in connection with the foregoing arrangements, including by using commercially reasonable efforts to avoid duplicative or incremental costs and expenses. Furthermore, the parties agree that Seller and its Affiliates shall be permitted to utilize their respective ordinary course transfer pricing in connection with the foregoing arrangements, including in connection with any sale of Products from Seller or its Affiliates to Buyer or its Affiliates. In the case of the occurrence of the Product Registration Transfer Time under clause (B) of the definition thereof with respect to any Product Registration, (x) unless the parties agree otherwise, the arrangements contemplated by such clause (B) with respect to a Product shall terminate reasonably promptly upon the occurrence of any of the events contemplated by clause (A) of the definition of Product Registration Transfer Time and (y) unless Buyer requests otherwise, the parties will continue to use reasonable best efforts to ensure that one of the events contemplated by clause (A) of the definition of Product Registration Transfer Time occurs with respect to such Product Registration as soon as reasonably practicable after the Closing or the applicable Deferred Closing (as applicable). In addition to the foregoing, to the extent that the sale, assignment, transfer, conveyance or delivery or attempted sale, assignment, transfer, conveyance or delivery to Buyer (or one of its Affiliates) of any Transferred Asset is prohibited by any applicable Law or would require any governmental or third-party authorizations, approvals (including Anti-Trust Approvals), consents or waivers and such authorizations, approvals, consents or waivers shall not have been obtained prior to the Closing or the applicable Deferred Closing (as applicable), this Agreement shall not constitute a sale, assignment, transfer, conveyance or delivery thereof. From the date hereof until eighteen (18) months after the Closing Date, the parties shall use their respective reasonable best efforts to cooperate with each other to obtain promptly such authorizations, approvals, consents or waivers and to give any notices required for the transfer of such Transferred Asset and to obtain from third parties an approval or consent to establish a new contract with Buyer or its designated Affiliate with respect to the portion of any Commingled Contract related to the Business, pursuant to which Buyer or its designated Affiliate will have access to the rights and benefits of such

Commingled Contract with respect to the Business on substantially the same terms and conditions provided to Seller and its Affiliates prior to the Closing, or to assign such portion to Buyer or its designated Affiliate; provided , however , that Seller shall not be required to pay any consideration (other than customary filing and application fees typically paid by a seller or transferee) or make any concession therefor. If such authorization, approval, consent or waiver is obtained, Seller shall promptly assign, transfer, convey or deliver any such Transferred Asset or, if applicable, that portion of any Commingled Contract, as the case may be, to Buyer or its designee pursuant to Section 2.02(f) at no additional cost. Pending the earlier of obtaining such authorization, approval, consent or waiver or the expiration of such eighteen-month (18 month) period, insofar as reasonably practicable and to the extent permitted by applicable Law, Seller shall hold such Transferred Assets for the benefit of Buyer and shall operate such Transferred Assets in a manner to place Buyer in a substantially similar position as if such Transferred Assets had been sold, conveyed, assigned and transferred. Buyer shall use its reasonable best efforts to cooperate with Seller in connection with any actions taken by Seller pursuant to this Section 2.02(g) . Buyer further agrees that, if Seller shall have complied with its obligations under this Agreement with respect to using reasonable best efforts to obtain such authorization, approval, consent or waiver, Seller shall not be in breach of this Agreement solely as a result of the failure to obtain any such authorization, approval, consent or waiver. From the date hereof until eighteen (18) months after the Closing Date, the parties shall use their respective reasonable best efforts to cooperate with each other with respect to the portion of any Commingled Contracts set forth on Schedule 2.02(a)(xi) such that Seller or its designated Affiliate will have access to the rights and benefits of such Commingled Contract with respect to the portion of the Commingled Contract not related to the Business on substantially the same terms and conditions provided to Seller and its Affiliates prior to the Closing; provided, however, that Buyer shall not be required to pay any consideration (other than customary filing and application fees typically paid by a seller or transferee) or make any concession therefor."

(vi) Section 2.03(a) of the Purchase Agreement (Purchase Price; Purchase Price Escrow) is hereby amended and restated in its entirety as follows:

"On or prior to the last business day before the anticipated Closing Date, Seller, Buyer and the Escrow Agent shall execute and deliver the Escrow Agreement. On the last business day before the anticipated Closing Date, subject to the terms and conditions of this Agreement, Buyer shall (or shall cause one or more of its Affiliates as Buyer may designate pursuant to Section 2.02(f) to) deposit in immediately available funds by wire transfer

to the Escrow Account cash in U.S. dollars in an amount exclusive of any Transfer Taxes equal to the Purchase Price plus the Integration Amount (such aggregate, the " Escrow Amount "). The Escrow Amount shall be held in the Escrow Account in accordance with the terms of this Agreement and the Escrow Agreement, and, in connection with the Closing, Buyer shall deliver to the Escrow Agent the Escrow Instructions to release and pay to Seller (or one or more of its Affiliates as Seller may designate) the Escrow Amount by wire transfer of immediately available funds on the next business day immediately following the Closing Date, and subject to the next two succeeding sentences, upon Buyer's delivery of the Escrow Instructions, Buyer shall have no other obligations hereunder in respect of payment of the Purchase Price. Buyer shall not, and shall cause its subsidiaries and representatives not to, take any action that would prevent, impede or delay the Escrow Agent from so delivering the Escrow Amount to Seller pursuant to the preceding sentence and the Escrow Agreement. If the Closing occurs, Buyer shall remain liable to Seller for the Escrow Amount if the Escrow Amount is not so received by Seller as a result of a breach of the preceding sentence. In the event that the Closing does not occur on such anticipated Closing Date, the parties shall enter into a replacement escrow agreement substantially in the form of the Escrow Agreement (or in a form the parties otherwise reasonably agree) (with references to the Escrow Agreement herein being deemed to be references to such replacement escrow agreement) with an escrow agent (who may be the Escrow Agent) and shall follow the steps set forth in the foregoing provisions of this Section 2.03(a) , *mutatis mutandis.* "

(vii) Section 2.03(b) of the Purchase Agreement (Purchase Price; Purchase Price Escrow) is hereby amended and restated in its entirety as follows:

"The parties acknowledge that the portion of the Purchase Price allocable to the Country Unit specified on Schedule 2.03(b) to the Disclosure Letter as set forth in the Initial Allocation (the " Required Local Payment ") will be paid by Buyer to Seller on the Closing Date in U.S. dollars. Within three (3) business days following the Closing Date, (i) Seller shall reimburse to Buyer, in U.S. dollars, the amount of such Required Local Payment and (ii) Buyer's local country Affiliate shall (and Buyer will cause such local country Affiliate to) pay Seller's local country Affiliate an amount, in local currency, equal to the local currency equivalent of such Required Local Payment (as determined using the Exchange Rate) by wire transfer of immediately available funds to the bank account designated by Seller on the date of this Agreement."

(viii) Section 2.04(b) of the Purchase Agreement (Purchase Price Adjustment) is hereby amended and restated in its entirety as follows:

> "Within ninety (90) days after the Closing Date, Seller shall prepare and deliver to Buyer a statement (the " Price Adjustment Statement "), setting forth the following amounts, in each case as of immediately prior to the Closing: (i) the book value of the Inventory, prepared in accordance with the Accounting Policies (the " Closing Inventory ") (it being understood that the Closing Inventory shall include the Inventory of the entire Business as of immediately prior to the Closing) and (ii) the Cash Amount. If the book value of the Closing Inventory is greater than the Inventory Target or less than the Inventory Target by the amounts specified in Section 2.04(f) below, the Purchase Price shall be adjusted as described in Section 2.04(f) below (all of which, for the avoidance of doubt, shall be determined assuming each Deferred Closing occurred at the Closing). If the Cash Amount is greater than the Estimated Cash Amount or less than the Estimated Cash Amount, the Purchase Price shall be adjusted as described in Section 2.04(f) below (all of which, for the avoidance of doubt, shall be determined assuming each Deferred Closing occurred at the Closing)."

(ix) Section 2.05(b) of the Purchase Agreement (Allocation of Purchase Price) is hereby amended and restated in its entirety as follows:

> "Within sixty (60) calendar days after the Closing Date, Buyer shall deliver a reasonable draft of the allocation of the Purchase Price and Assumed Liabilities among each of the Transferred Assets and Transferred Equity Interests (and among the assets held by any Transferred Company disregarded as separate from its owner for U.S. federal income Tax purposes) in a manner that incorporates, reflects and is consistent with the Allocation Method, the Initial Allocation, and Sections 1060 and 338 of the Code (the " Allocation ") to Seller (the " Proposed Allocation "). Except as provided in this subparagraph (b), subparagraph (c) and subparagraph (d) of this Section 2.05 , at the close of business on the thirtieth (30th) calendar day after delivery of the Proposed Allocation, the Proposed Allocation shall become binding upon Buyer and Seller, shall be set forth on Schedule 2.05(b) to the Disclosure Letter (the " Allocation Schedule "), and shall be the Allocation."

(x) Section 2.05(g) of the Purchase Agreement (Allocation of Purchase Price) is hereby amended and restated in its entirety as follows:

> "In the event that the Initial Allocation has not become final pursuant to this Section 2.05 by the Closing, the allocated purchase prices included in the Proposed Initial Allocation shall be used for the purpose of (A) including allocated purchase prices in the Country Transfer Agreements

for each applicable Country Unit and (B) determining the amount of any payments made on the Closing Date to the applicable Selling Affiliate with respect to such Country Unit. The inclusion of such allocated purchase prices shall not be deemed to waive, amend or otherwise alter any of the rights or obligations of the parties set forth in this Section 2.05 and shall not be used for any purpose in resolving, or result in any prejudice with respect to, any dispute with respect to the Proposed Initial Allocation or the Proposed Allocation."

(xi) Section 2.05(h) of the Purchase Agreement (Allocation of Purchase Price) is hereby amended and restated in its entirety as follows:

"In the event that the Allocation has not become final pursuant to this Section 2.05 by the Closing, to the extent that the amounts paid to any Selling Affiliate on the Closing Date are not equal to the portion of the Purchase Price allocated to such Selling Affiliate in the Allocation (with respect to any Selling Affiliate, the " Allocated Purchase Price "), the parties shall and shall cause their respective Affiliates to take all necessary actions to refund, repay and redistribute as promptly as reasonably practicable any amounts paid to any Selling Affiliate in excess of such Selling Affiliate's Allocated Purchase Price, such that, after giving effect to any such refunds, repayments and redistributions, the amounts received by each Selling Affiliate shall be equal to such Selling Affiliate's Allocated Purchase Price."

(xii) Section 2.05 of the Purchase Agreement (Allocation of Purchase Price) is hereby amended and supplemented by adding the following new Section 2.05(i) , which provides as follows:

"With respect to any Deferred Closing Country, if, in connection with the applicable Deferred Closing, an allocation of the relevant portion of the Purchase Price among the assets and liabilities transferred in such Deferred Closing is required by applicable Law, and the Allocation has not become final pursuant to this Section 2.05 at the time of such Deferred Closing, the parties shall agree on an allocation of the relevant portion of the Purchase Price and Assumed Liabilities among the applicable Deferred Assets and Deferred Liabilities of the applicable Deferred Business (each, a " Suballocation "). Any such Suballocation shall be consistent with the Initial Allocation. If Seller and Buyer are unable to mutually agree on any such Suballocation, such disagreement shall be referred to the Accounting Firm promptly for review and resolution (in accordance with the procedure set forth in Section 2.04)."

(xiii) The reference to "Delivery by Seller" in Section 2.08 of the Purchase Agreement is hereby replaced with a reference to "Closing Deliveries by Seller," and the lead-in to Section 2.08 is hereby amended by adding the phrase "or prior to" between "At" and "the Closing."

(xiv) Section 2.08(c) of the Purchase Agreement (Closing Deliveries by Seller) is hereby amended and restated in its entirety as follows:

"duly executed counterparts of the Ancillary Agreements contemplated by Section 7.09 ;"

(xv) Section 2.08(f) of the Purchase Agreement (Closing Deliveries by Seller) is hereby amended and restated in its entirety as follows:

"duly executed counterparts of any Country Transfer Agreement (except for those Country Units subject to Section 2.11);"

(xvi) Section 2.08 of the Purchase Agreement (Closing Deliveries by Seller) is hereby amended and supplemented by adding the following new Section 2.08(k) , which provides as follows:

"an irrevocable written authorization substantially in the form set forth as Exhibit Q hereto (" Merger Authorization ") and a counterpart signature page to the Agreement and Plan of Merger substantially in the form set forth as Exhibit R hereto (the " U.S. Merger Agreement "), executed by InnerDyne Holdings."

(xvii) The reference to "Delivery by Buyer" in Section 2.09 of the Purchase Agreement is hereby replaced with a reference to "Closing Deliveries by Buyer," and the lead-in to Section 2.09 is hereby amended by adding the phrase "or prior to" between "At" and "the Closing."

(xviii) Section 2.09(a) of the Purchase Agreement (Closing Deliveries by Buyer) is hereby amended and restated in its entirety as follows:

"a true and valid copy of the Escrow Instructions delivered to the Escrow Agent;"

(xix) Section 2.09(d) of the Purchase Agreement (Closing Deliveries by Buyer) is hereby amended and restated in its entirety as follows:

"duly executed counterparts of the Ancillary Agreements contemplated by Section 7.09 ;"

(xx) Section 2.09(e) of the Purchase Agreement (Closing Deliveries by Buyer) is hereby amended and restated in its entirety as follows:

> "duly executed counterparts of any Country Transfer Agreement (except for those Country Units subject to Section 2.11);"

(xxi) Section 2.09(h) of the Purchase Agreement (Closing Deliveries by Buyer) is hereby amended and restated in its entirety as follows:

> "a counterpart signature page to the U.S. Merger Agreement, executed by Cardinal Merger Sub."

(xxii) The following text is hereby inserted at the end of Section 2.09 of the Purchase Agreement (Closing Deliveries by Buyer):

> "In addition, at the Closing, consistent with Section 2.03(a) , Buyer will deliver or cause to be delivered to the Escrow Agent (with a copy to Seller and its counsel) irrevocable written instructions in form and substance as set forth in the Escrow Agreement (the " Escrow Instructions ")."

(xxiii) Article II is hereby amended and supplemented by adding the following new Section 2.10 titled "U.S. Merger.", which provides as follows:

> "(a) Notwithstanding anything to the contrary in this Agreement, conveyance, assignment, transfer and delivery by Seller or its Affiliates, and acceptance by Buyer, of InnerDyne Holdings, Inc., a Delaware corporation (" InnerDyne Holdings "), shall be effected by the merger of Cardinal Health 527, Inc., a Delaware corporation and a wholly owned subsidiary of Buyer (" Cardinal Merger Sub "), with and into InnerDyne Holdings. On the terms and subject to the conditions set forth in this Agreement and the U.S. Merger Agreement, and in accordance with the General Corporation Law of the State of Delaware (the " DGCL "), on the Closing Date, the parties shall cause Cardinal Merger Sub to be merged with and into InnerDyne Holdings (the " U.S. Merger "), as provided in this Section 2.10 . At the U.S. Merger Effective Time, the separate corporate existence of Cardinal Merger Sub shall cease, and InnerDyne Holdings shall continue as the surviving corporation in the U.S. Merger (the " U.S. Surviving Corporation ").
>
> (b) On the last business day before the Closing Date, Buyer and Seller shall, pursuant to Section 103(c)(4) of the DGCL, through Buyer's counsel, deliver to (but not file with) the Secretary of State of the State of Delaware (the " Delaware Secretary ") a certificate of merger in the form set forth as Exhibit S hereto (or otherwise as mutually agreed by Seller and Buyer), dated as of the Closing Date, relating to the U.S. Merger (the " U.S. Certificate of Merger ") with instructions that the Delaware Secretary

not file the U.S. Certificate of Merger until written instructions (which may be by email) are received from Buyer or its counsel to make such filing. Buyer hereby agrees that neither it nor any of its subsidiaries or representatives shall instruct or authorize the Delaware Secretary or any other Person to file or cause to be filed the U.S. Certificate of Merger unless and until the Merger Authorization is received from Seller at the Closing.

(c) After receipt of the Merger Authorization from Seller, as soon as practicable after the Closing and on the Closing Date, Buyer shall send or cause to be sent an email to the Delaware Secretary authorizing the Delaware Secretary to file (or shall cause to be filed) the U.S. Certificate of Merger with an effective time of the Closing (the time the U.S. Merger becomes effective, the " U.S. Merger Effective Time "). Seller shall not, and shall cause its subsidiaries and representatives not to, take any action that would prevent, impede or delay the Delaware Secretary from filing the U.S. Certificate of Merger pursuant to the preceding sentence.

(d) The U.S. Merger shall have the effects set forth in this Agreement and the applicable provisions of the DGCL.

(e) At the U.S. Merger Effective Time, by virtue of the U.S. Merger and without any action on the part of any holders of any shares of InnerDyne Common Stock or Cardinal Merger Sub Common Stock, (i) each share of InnerDyne Common Stock issued and outstanding immediately prior to the U.S. Merger Effective Time shall be cancelled for no consideration, shall cease to exist and shall no longer be outstanding and (ii) each share of Cardinal Merger Sub Common Stock issued and outstanding immediately prior to the U.S. Merger Effective Time shall be converted into one fully paid and nonassessable share of common stock, par value $0 per share, of the U.S. Surviving Corporation, and be owned by Buyer, and shall constitute the only outstanding shares of capital stock of the U.S. Surviving Corporation.

(f) The certificate of incorporation and bylaws of InnerDyne Holdings, as in effect immediately prior to the U.S. Merger Effective Time, shall be, as of the U.S. Merger Effective Time, amended to be identical to that set forth as Exhibit A and Exhibit B , respectively, to the U.S. Merger Agreement and shall be the certificate of incorporation and bylaws, respectively, of the U.S. Surviving Corporation until thereafter changed or amended as provided therein or by applicable Law.

(g) The directors of Cardinal Merger Sub immediately prior to the U.S. Merger Effective Time shall be, as of the U.S. Merger Effective Time, the directors of the U.S. Surviving Corporation until the earlier of their resignation or removal or until their respective successors are duly elected and qualified, as the case may be, in accordance with the certificate of

incorporation and bylaws of the U.S. Surviving Corporation. The officers of Cardinal Merger Sub immediately prior to the U.S. Merger Effective Time shall be, as of the U.S. Merger Effective Time, the officers of the U.S. Surviving Corporation until the earlier of their resignation or removal or until their respective successors are duly elected or appointed and qualified, as the case may be, in accordance with the certificate of incorporation and bylaws of the U.S. Surviving Corporation."

(xxiv) Article II is hereby amended and supplemented by adding the following new Section 2.11 titled "Deferred Closings.", which provides as follows:

"(a) Notwithstanding anything to the contrary contained in this Agreement (but subject to this Section 2.11(a)), (i) the conveyance, assignment, transfer and delivery by Seller or its Affiliates, and acceptance by Buyer or its Affiliates, of the Transferred Assets not owned by any Transferred Company located in the Country Units set forth on Annex B to the Disclosure Letter (the " Deferred Closing Countries ") and owned or held by a Deferred Title Holder (the " Deferred Assets "), (ii) the transfer to Buyer or its Affiliates of the Employees of the Business who are employed in such Deferred Closing Countries (other than any Non-Commercial Employees) (the " Deferred Employees "), and (iii) the assumption (and obligation to satisfy and discharge when due) by Buyer of the Assumed Liabilities to the extent arising from or relating to the Business conducted in the Deferred Closing Countries or the applicable Deferred Assets or Deferred Employees (the " Deferred Liabilities "), in each case, shall not occur on the Closing Date. For purposes of Article X , however, Buyer shall be deemed to have assumed the Deferred Liabilities on the Closing Date; provided , that (A) the Seller Indemnitees shall not be entitled to indemnification pursuant to Article X for any Damages incurred or suffered by any Seller Indemnitees to the extent resulting from the Deferred Liabilities or the Deferred Business during the Deferred Period to the extent resulting from the fraud, willful misconduct or intentional breach of this Agreement by Seller or its subsidiaries during the Deferred Period, and (B) the Seller Indemnitees shall not be entitled to indemnification pursuant to Article X for any Damages incurred or suffered by any Seller Indemnitees as a result of a third-party Claim to the extent resulting from the Deferred Liabilities or the Deferred Business during the Deferred Period to the extent resulting from the gross negligence of Seller or its subsidiaries during the Deferred Period. For purposes of clarity, the transfer of Non-Commercial Employees shall not be deferred pursuant to this Section 2.11(a) and the Non-Commercial Employees shall transfer as of the Closing Date (or, if applicable, such later date that such employee commences employment with Buyer or one of its Affiliates) pursuant to Section 8.01(c) (provided , that offer letters with respect to such Non-Commercial Employees shall not be required to be issued at least 10 days prior to the Closing Date).

(b) The conveyance, assignment, transfer, delivery and acceptance of the Deferred Assets, the transfer of Deferred Employees and the assumption of the Deferred Liabilities, with respect to a Deferred Closing Country (each such closing, a " Deferred Closing ") shall take place at 10:00 a.m., New York City time, at the offices of Wachtell, Lipton, Rosen & Katz, 51 West 52 Street, New York, New York 10019, or such other time and location specified in the applicable Country Transfer Agreement for such Deferred Closing Country, on the second business day after the date on which Seller (or its Affiliates) no longer has to provide the "finance / accounting" function for such Deferred Closing Country pursuant to the Transition Services Agreement to Buyer (or its Affiliates) (each date on which a Deferred Closing takes place, a " Deferred Closing Date "); provided that, if there is a Closing Legal Impediment in effect with respect to such Deferred Closing, then such Deferred Closing shall occur on the second business day after the date on which such Closing Legal Impediment is no longer in effect and provided , further , that the Deferred Closing for any Deferred Closing Country may occur on an earlier date if agreed in writing by Buyer and Seller. If any earlier Deferred Closing occurs pursuant to the preceding sentence, Buyer and Seller agree to cause their Affiliates to amend the Undisclosed Agency Agreement to include the Country Unit(s) for which such earlier Deferred Closing occurred on terms to be mutually agreed but substantially consistent with those set forth in the Undisclosed Agency Agreement.

(c) At each Deferred Closing, Seller and Buyer shall, or shall cause their respective Affiliates to, execute and deliver such documents and instruments, as may be reasonably necessary to transfer the Deferred Assets and Deferred Liabilities in such Deferred Closing Country to Buyer or its applicable Affiliate (designated in accordance with Section 2.02(f)), in each case consistent with the terms of this Agreement.

(d) It is the intention of the Parties that Buyer shall be entitled to the "net economic benefit" relating to the applicable Deferred Business arising during the applicable Deferred Period, and in connection therewith, each Deferred Title Holder shall retain such title as it has to the Deferred Assets of the applicable Deferred Business and hold such Deferred Assets for the benefit and expense of the applicable Deferred Beneficiary during the applicable Deferred Period. Solely to the extent related to the Deferred Business in a Deferred Closing Country, except as otherwise permitted by this Agreement or consented to by Buyer in writing (such consent not to be unreasonably withheld), (i) Seller agrees to (and to cause the applicable Deferred Title Holders to), (A) use commercially reasonable efforts to run the Deferred Business in the ordinary course consistent with past practice and in good faith and (B) comply with the covenants and agreements set forth in Section 6.01(b) (except Sections 6.01(b)(iv) , 6.01(b)(viii) , 6.01(b)(ix) , 6.01(b)(x) and 6.01(b)(xi) , and Section 6.01(b)(xiv) to the extent related to the

foregoing exclusions), in each case, until the Deferred Closing Date in such Deferred Closing Country, and (ii) Buyer agrees to grant Seller (and the Deferred Title Holders) a right to distribute the Products during the Deferred Period (the " Distribution Right ").

(e) Notwithstanding anything herein to the contrary, Seller's and its Affiliates' obligations to operate the Deferred Business is expressly conditioned on receipt of Products from applicable Affiliates of Buyer that applicable Affiliates of Seller need to operate the Deferred Business in compliance with this Agreement, and Seller and its Affiliates shall have no obligation to otherwise manufacture or procure any products. Applicable Affiliates of Buyer may invoice applicable Affiliates of Seller for such Products; provided that neither Seller or any Affiliate of Seller shall have any obligation to settle any such invoices and that the only payments to be made to Buyer or its applicable Affiliates with respect to such Products (or the Deferred Business) are the payments of any NEB Distribution Fee as provided in Section 2.11(f) .

(f) Following each fiscal month of Seller covering any portion of the Deferred Period, Buyer shall prepare an invoice (using trial balances provided by or on behalf of Seller to Buyer pursuant to the Transition Services Agreement) with respect to the NEB Distribution Fee for such fiscal month and deliver such invoice to Seller (if such NEB Distribution Fee is positive, it will be paid by Seller or its Affiliates for their respective Distribution Right, as provided herein). Seller or its applicable Affiliates shall settle such invoices with Buyer or its applicable Affiliates (in the applicable local currency in which the corresponding sales were made) in accordance with the country specific days sales outstanding (DSO) schedules of Seller set forth in Annex E to the Disclosure Letter (the " DSO Schedules ") in full satisfaction of any open invoices relating to such sales; provided that if any invoice provides for a negative NEB Distribution Fee, Buyer shall pay to Seller or as directed by Seller the absolute value of such negative NEB Distribution Fee within 30 days of such invoice. Any invoices prepared pursuant to this Section 2.11(f) shall comply with applicable VAT and Transfer Tax Laws. For the avoidance of doubt, neither Seller nor any Affiliate of Seller shall have any obligation to pay for any unpaid accounts receivable. Notwithstanding the foregoing, if the percentage of actual bad debt expense associated with the operation of the Deferred Business in any Deferred Closing Country in a particular fiscal month of Seller (calculated in a manner consistent with the Accounting Policies, including with respect to the allocation of any such debt as between the sales of Products of the Deferred Business and sales of products of Seller's other businesses) exceeds three (3) times the Bad Debt Rate applicable for such country, then Buyer agrees to pay or cause its applicable Affiliates to pay to Seller or its applicable Affiliates the amount by which such bad debt expense exceeds the product of (i) the Net Sales in such country in such fiscal

month *multiplied* by (ii) the Bad Debt Rate applicable for such country. Upon payment to Seller or its applicable Affiliates of any amount required to be paid by Buyer pursuant to the previous sentence, Seller or its applicable Affiliates shall convey, assign, and transfer to Buyer all bad debts to which such payment relates, including the rights to receive, collect or enforce such bad debts (provided that the parties shall cooperate in good faith with respect to such collection or enforcement).

(g) Subject to customary confidentiality undertakings comparable to those included in the Confidentiality Agreements, to the extent reasonably required to prepare or review any invoices required to be prepared or prepared pursuant to Section 2.11(f) or any calculation of the bad debt expense associated with the sales of Products of the Deferred Business to the extent Seller asserts such expense is payable, or to the extent such expense has been paid, pursuant to the second to last sentence of Section 2.11(f) , Seller will, during normal business hours (upon at least two (2) business days' written notice from Buyer), (i) make available its relevant personnel as shall be reasonably necessary in connection with the foregoing and (ii) permit Buyer and its duly authorized representatives access to all contracts, books, records and other data relating to the Deferred Businesses and/or the calculation of any NEB Distribution Fee (or any calculation of the bad debt expense associated with the sales of Products of the Deferred Business to the extent Seller asserts such expense is payable, or to the extent such expense has been paid, pursuant to the second to last sentence of Section 2.11(f)) as shall be reasonably necessary in connection with the foregoing, except where such access is prohibited by applicable Law or Contract.

(h) The parties acknowledge that the portion of the Purchase Price allocable to any Deferred Closing Country as set forth in the Initial Allocation (each, a " Deferred Closing Country Amount ") will be paid by Buyer to Seller on the Closing Date in U.S. dollars. On each Deferred Closing Date for each Deferred Closing Country in which a "local payment" is required by applicable Law to purchase the relevant Deferred Assets (as set forth on Schedule 2.11(h) to the Disclosure Letter), (i) Seller shall reimburse to Buyer, in U.S. dollars, the amount of such Deferred Closing Country Amount and (ii) the applicable Deferred Beneficiary shall (and Buyer shall cause such Deferred Beneficiary to) pay to the applicable Deferred Title Holder an amount, in local currency, equal to the local currency equivalent of such Deferred Closing Country Amount (as determined using the Exchange Rate) by wire transfer of immediately available funds to the bank account to be designated by the party that will be receiving such reimbursement or payment, as applicable. Schedule 2.11(h) to the Disclosure Letter sets forth Seller's good-faith estimate as of the date of this Agreement of the portion of the Purchase Price to be allocated to each Deferred Country Unit identified therein for payment in a Foreign Currency."

(xxv) Article II is hereby amended and supplemented by adding the following new Section 2.12 titled "Transferred Inventory.", which provides as follows:

"(a) Notwithstanding anything to the contrary contained in this Agreement (but subject to the last two sentences of this Section 2.12(a)), except (i) for Transferred Inventory that constitutes Finished Goods Inventory not in excess of $50,000 U.S. dollars in the aggregate as of Closing held by Covidien Deutschland GmbH, (ii) for Transferred Inventory that constitutes Finished Goods Inventory owned by Covidien AG on behalf of or for the benefit of Especialidades Medicas Kenmex SA de CV and (iii) for Transferred Inventory that constitutes Finished Goods Inventory for which title is held by any of the Transferred Companies, the conveyance, assignment, transfer and delivery by Seller or its Affiliates, and acceptance by Buyer or its Affiliates, of legal title to Transferred Inventory that constitutes Finished Goods Inventory shall not occur on the Closing Date (the " Deferred Inventory "). For the avoidance of doubt, Deferred Inventory will include Transferred Inventory held by Medtronic Australasia Pty. Limited. For purposes of Article X , however, Buyer shall be deemed to have assumed the Assumed Liabilities relating to or arising out of such Deferred Inventory on the Closing Date (without limiting clause (b) below). This Section 2.12 shall not be applicable to the determination of Closing Inventory, and Closing Inventory shall be determined assuming this Section 2.12 was not applicable.

(b) Seller and/or its Affiliates shall hold the Deferred Inventory for the benefit of, and at the expense and risk of loss to, Buyer and its Affiliates, and provide distribution services with respect to the Deferred Inventory on behalf of Buyer and/or its Affiliates pursuant to the terms of the Transition Services Agreement (such services, the " Distribution Services "). Subject to the express liability allocation provisions of the Transition Services Agreement with respect to Services to the extent relating to Deferred Inventory, Buyer and/or its Affiliates shall bear all risk of loss or damage to such Deferred Inventory, regardless of whether such Deferred Inventory is held by Seller or any of its Affiliates in the course of Seller and/or its Affiliates' provision of the Distribution Services; provided that neither Buyer nor any Affiliate thereof shall bear any risk of loss or similar liability for any loss or damage of any Deferred Inventory to the extent resulting from the fraud, willful misconduct or intentional breach of this Agreement by Seller or its Affiliates following the Closing.

(c) Upon the conclusion of all Distribution Services in a Country Unit, Seller will, and will cause the relevant Asset Selling Affiliates to, sell, convey, assign, and transfer to Buyer or its designee all Deferred Inventory in the applicable Country Unit, free and clear of all Liens other than Permitted Liens."

Section 1.04 Representations and Warranties of Seller . Article III of the Purchase Agreement (Representations and Warranties of Seller) is hereby amended as follows:

(i) The first paragraph of Article III of the Purchase Agreement is hereby amended and restated in its entirety as follows:

> "Buyer acknowledges and agrees that the Transferred Assets are sold "as is, where is" and Buyer agrees to accept the Transferred Assets on the Closing Date or the applicable Deferred Closing Date (as applicable) in the condition they are in at the place they are located on such Closing Date or the applicable Deferred Closing Date (as applicable) based on its own inspection, examination and determination with respect to all matters, and without reliance upon any express or implied representations or warranties of any nature made by, on behalf of or imputed to Seller, other than the representations and warranties of Seller expressly set forth in this Agreement. BUYER AGREES THAT THE REPRESENTATIONS AND WARRANTIES GIVEN HEREIN BY SELLER ARE IN LIEU OF, AND BUYER HEREBY EXPRESSLY WAIVES ALL RIGHTS TO, ANY IMPLIED WARRANTIES THAT MAY OTHERWISE BE APPLICABLE BECAUSE OF THE PROVISIONS OF THE UNIFORM COMMERCIAL CODE OR ANY OTHER STATUTE, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE."

Section 1.05 Certain Covenants . Article VI of the Purchase Agreement (Certain Covenants) is hereby amended as follows:

(i) Section 6.05(e) of the Purchase Agreement (Commercially Reasonable Efforts; Regulatory Approvals; Access) is hereby amended and restated in its entirety as follows:

> "Seller shall give Buyer and its accountants, legal counsel and other representatives reasonable access, during normal business hours and without undue interruption of the Business throughout the period prior to the Closing or, in the case of the Deferred Business, the applicable Deferred Closing (as applicable), to all of the properties, books and records (other than records relating to Income Taxes and attorney-client privileged communications and, for the avoidance of doubt, other than where access to such information is prohibited by applicable Law) relating to the Business, and will furnish, at Buyer's expense, Buyer, its accountants, legal counsel and other representatives during such period all such information (other than records relating to Income Taxes and attorney-client privileged communications and, for the avoidance of doubt, other than where access to such information is prohibited by applicable Law) concerning the affairs of the Business as Buyer may reasonably request; provided that this Section 6.05(e) shall not entitle Buyer or its accountants, legal counsel or other representatives to contact any third party doing business with Seller or access the properties, books or

records of any such third party, in each case without Seller's prior written consent (which consent shall not be unreasonably withheld). Buyer will hold in confidence all information so obtained in accordance with Section 7.12 . Nothing in this Agreement shall limit any of the parties' rights of discovery."

(ii) Section 6.07 of the Purchase Agreement (Transferred Companies Assets and Liabilities) is hereby amended and restated in its entirety as follows:

"Prior to the Closing, Seller shall take or cause to be taken, such action as is necessary or appropriate to transfer, assign or convey (i) any assets owned or held by the Transferred Companies other than those that would constitute Transferred Assets or (ii) any liabilities or obligations of the Transferred Companies other than those that would constitute Assumed Liabilities, in each case, to Seller or an Affiliate of Seller such that as of the Closing, (x) the assets owned or held by the Transferred Companies consist solely of assets that would otherwise constitute Transferred Assets pursuant to clauses (i)–(xvi) and (xviii) of Annex 2.02(a) and (y) the liabilities and obligations of the Transferred Companies consist solely of liabilities and obligations that would otherwise constitute Assumed Liabilities pursuant to clauses (i)–(x) of Annex 2.02(c) . Prior to or following the Closing, Buyer shall provide to Seller the necessary information and deliver such assignments, transfers, consents and other documents and instruments as may be reasonably required to permit Seller at its expense to effect and perfect the transfer of any registrations of Patents and Trademarks that constitute Excluded Assets but which are held by a Transferred Company. Notwithstanding anything in this Agreement to the contrary (but without limiting Seller's and Buyer's obligations after the Closing under Article VII and Article X in respect of Pre-Closing Accounts Receivable and Pre-Closing Accounts Payable), Seller and its Affiliates shall not be required to transfer, assign or convey any Pre-Closing Accounts Receivable that are owned or held by any of the Transferred Companies or any Pre-Closing Accounts Payable that are liabilities or obligations of any of the Transferred Companies at or prior to the Closing (it being understood that following the Closing any Pre-Closing Accounts Receivable (including any cash received in respect thereof) shall in any event be treated as Excluded Assets and any Pre-Closing Accounts Payable shall in any event be treated as Excluded Liabilities). Seller shall deliver or cause to be delivered to Buyer a schedule setting forth Pre-Closing Accounts Receivable and Pre-Closing Accounts Payable within thirty (30) days of the Closing Date. Notwithstanding anything in this Agreement to the contrary, certain equipment that would constitute Excluded Assets may continue to be owned following the Closing by Kendall-Gammatron Limited and Covidien Manufacturing Solutions, S.A., and such equipment shall be subject to the provisions of the Master Manufacturing and Supply Agreement, including with respect to the transfer thereof to Seller or its applicable Affiliate as provided therein."

(iii) The reference to "Innerdyne Holdings, Inc." in Section 6.09(c) of the Purchase Agreement (Closing Structure) is hereby replaced with a reference to "InnerDyne Holdings, Inc."

(iv) Section 6.11(a) of the Purchase Agreement (Certain Swiss Tax Matters) is hereby amended and restated in its entirety as follows:

> "Subject to Section 6.11(b) , Seller shall use its reasonable best efforts to minimize the Swiss Tax Rate. To the extent Seller receives, prior to the Closing, a Swiss Tax Ruling, the Purchase Price shall be reduced by an amount equal to the Swiss Sale Amount, less (i) the sum of (A) the Estimated Swiss Gain and (B) (x) the Estimated Swiss Gain multiplied by the Swiss Tax Rate, further multiplied by (y) the Swiss Gross-Up, less (ii) the Estimated Swiss Tax Basis."

Section 1.06 Post-Closing Covenants . Article VII of the Purchase Agreement (Post-Closing Covenants) is hereby amended as follows:

(i) Section 7.01 of the Purchase Agreement (Certain IP Matters) is hereby amended and supplemented by adding a new Section 7.01(d) , which provides as follows:

> "Buyer hereby grants, and shall cause its Affiliates to grant, to Seller and its subsidiaries a non-exclusive, royalty free, fully paid-up, irrevocable and worldwide license under all of Buyer's and its Affiliates' IP Rights to the Transferred IP to (A) make, have made, import, use, offer to sell, sell, distribute and otherwise commercialize any Products and services, and (B) use, copy, distribute, disclose, display, sublicense and otherwise exploit in any manner any technology, Products and services, in each case to the extent necessary to own and operate the applicable Deferred Business in the applicable Deferred Closing Countries for Buyer's or its Affiliates' benefit. If Buyer or any of its Affiliates incorporates any of Buyer or its Affiliates' other IP Rights into any of the Products or services being sold or provided by Seller or any of its Affiliates on Buyer's or any of its Affiliates' behalf in connection with the operation of the Deferred Business, Buyer grants (and shall cause its applicable Affiliates to grant) to Seller and its subsidiaries a non-exclusive, royalty free, fully paid-up, irrevocable, worldwide and non-sublicenseable (except to distributors of the Products) license under such other IP Rights to make, have made, import, use, offer to sell, sell, distribute and otherwise commercialize any such Products and services, and to own and operate the applicable Deferred Business, in each case to the extent necessary to provide services to Buyer or its Affiliates with respect to the applicable Deferred Business in the applicable Deferred Closing Countries for Buyer's or its Affiliates' benefit until the applicable Deferred Closing. Buyer and Seller shall in good faith cooperate with the objective that all products and all materials using the Buyer and its Affiliates' IP Rights as described in this paragraph in the operation of the Deferred Business meet at least the same

high standards of quality, appearance, service and other standards that are observed immediately prior to the Closing Date by Seller and its Affiliates (or Buyer and its Affiliates with respect to Buyer's and its Affiliates' other IP Rights). Seller's use of any Transferred IP or Buyer's and its Affiliates' other IP Rights and any goodwill generated thereby will inure to the benefit of Buyer and its Affiliates. Seller's rights hereunder shall terminate immediately, fully and completely, upon the final Deferred Closing."

(ii) Section 7.04 of the Purchase Agreement (Insurance) is hereby amended and restated in its entirety as follows:

"(a) Except (1) with respect to insurance proceeds that constitute Transferred Assets pursuant to clause (xiv) of Annex 2.02(a) , or (2) as provided in Section 7.04(b) or Section 7.04(c) , the coverage under all insurance policies related to the Business and arranged or maintained by Seller or its Affiliates is only for the benefit of Seller and its Affiliates, and not for the benefit of Buyer or the Business. Except as set forth in Section 7.04(b) or Section 7.04(c) , as of the Closing Date (or, solely with respect to the Deferred Business, the applicable Deferred Closing Date), Buyer agrees to arrange for its own insurance policies (including self-insurance or similar arrangements funded directly or indirectly by Buyer or any of its Affiliates) with respect to the Business covering all periods following the Closing (or, solely with respect to the Deferred Business, the applicable Deferred Closing Date) and, without prejudice to any right to indemnification pursuant to this Agreement or any other Transaction Document, agrees not to seek, through any means, to benefit from any of Seller's or its Affiliates' insurance policies which may provide coverage for claims relating in any way to the Business.

(b) Solely to the extent required for Buyer and its Affiliates to comply with applicable Law that requires Buyer and its Affiliates to maintain workers compensation insurance coverage for Transferred Employees for the period prior to the Closing (or with respect to the Deferred Employees, the applicable Deferred Closing), with respect to claims relating to acts, omissions, events or circumstances relating to Transferred Employees that occurred or existed prior to the Closing (or solely with respect to the Deferred Employees, the applicable Deferred Closing) (" Pre-Closing WC Claims ") that are covered by Seller's or its Affiliates' workers compensation insurance policies relating to Transferred Employees (or the Deferred Employees, as applicable) (" Workers Compensation Policies "), Seller hereby authorizes Buyer, to the extent permitted by such Workers Compensation Policies, to report Pre-Closing WC Claims directly to the provider of such Workers Compensation Policies and shall use commercially reasonable efforts (at Buyer's expense), to the extent permitted by such Workers Compensation Policies, to assist Buyer's efforts to obtain the benefit of such insurance coverage with respect to such Pre-Closing WC Claims; provided that Buyer shall keep Seller reasonably informed of

each claim and Buyer shall exclusively bear and shall promptly either directly pay (in lieu of Seller or its Affiliates having to first pay) or repay or reimburse Seller or its Affiliates for the amount of each claim and related costs or expenses (including increased premiums) and for the amount of any deductibles or self-insured retentions (including captive insurance amounts) associated with any such claims under the Workers Compensation Policies and Buyer and its Affiliates shall be liable for any and all uninsured, uncovered, unavailable or uncollectible amounts of such payments; and provided further that Buyer and its Affiliates shall use commercially reasonable efforts (including prior to the Closing) to obtain, as soon as reasonably practicable, replacement insurance policies (including self-insurance) such that Buyer and its Affiliates are no longer legally required to have access to the Workers Compensation Policies. For the avoidance of doubt, nothing in this Agreement shall require Seller or its Affiliates to extend or purchase any insurance policy.

(c) Solely to the extent required for Buyer and its Affiliates to comply with applicable Law that requires Buyer and its Affiliates to maintain automobile liability insurance coverage for the Business or the Transferred Employees for the period prior to the Closing (or solely with respect to the Deferred Business or Deferred Employees, the applicable Deferred Closing), with respect to claims relating to events or incidents relating to the Business or the Transferred Employees that occurred prior to the Closing (or solely with respect to the Deferred Business or Deferred Employees, the applicable Deferred Closing) (" Pre-Closing Auto Claims ") that are covered by Seller's or its Affiliates' automobile liability insurance policies relating to the Business or the Transferred Employees (" Auto Policies "), Seller hereby authorizes Buyer, to the extent permitted by such Auto Policies, to report Pre-Closing Auto Claims directly to the provider of such Auto Policies and shall use commercially reasonable efforts (at Buyer's expense), to the extent permitted by such Auto Policies, to assist Buyer's efforts to obtain the benefit of such insurance coverage with respect to such Pre-Closing Auto Claims; provided that Buyer shall keep Seller reasonably informed of each claim and Buyer shall exclusively bear and shall promptly either directly pay (in lieu of Seller or its Affiliates having to first pay) or repay or reimburse Seller or its Affiliates for the amount of each claim and related costs or expenses (including increased premiums) and for the amount of any deductibles or self-insured retentions (including captive insurance amounts) associated with any such claims under the Auto Policies and Buyer and its Affiliates shall be liable for any and all uninsured, uncovered, unavailable or uncollectible amounts of such payments; and provided further that Buyer and its Affiliates shall use commercially reasonable efforts (including prior to the Closing) to obtain, as soon as reasonably practicable, replacement insurance policies (including self-insurance) such that Buyer and its Affiliates are no longer legally required to have access to the Auto Policies. For the avoidance of doubt, nothing in this

Agreement shall require Seller or its Affiliates to extend or purchase any insurance policy.

(d) Buyer or its Affiliates may from time to time during the Deferred Period arrange for its own insurance with respect to Deferred Assets pursuant to this Agreement. Seller and its Affiliates shall use commercially reasonable efforts, at Buyer's sole cost and expense, to assist Buyer's or its Affiliates' efforts to obtain the benefits of any such insurance with respect to claims relating to any loss or damage of any such Deferred Assets."

(iii) Section 7.06 of the Purchase Agreement (Assurances) is hereby amended and restated in its entirety as follows:

"From and after the Closing Date or the applicable Deferred Closing Date, as applicable, if either Buyer or Seller becomes aware that any of the Transferred Assets has not been transferred to Buyer or that any of the Excluded Assets has been transferred to Buyer, it shall promptly notify the other and the parties hereto shall, as soon as reasonably practicable and, subject to Section 2.02(g) and Section 2.06 , ensure that such property is transferred, with any necessary prior third-party consent or approval, to:

(a) Buyer, in the case of any Transferred Asset which was not transferred at the Closing or the applicable Deferred Closing, as applicable; or

(b) Seller, in the case of any Excluded Asset which was transferred at the Closing or the applicable Deferred Closing, as applicable.

With respect to any Pre-Closing Accounts Receivable held by Buyer at Closing pursuant to Section 6.07 , (A) Buyer and Seller shall cooperate in good faith to establish reasonable payment mechanics for Buyer to comply with this Section 7.06 upon its or its Affiliates' (including the Transferred Companies') receipt of cash received in respect of Pre-Closing Account Receivable and (B) Buyer's obligations under this Section 7.06 with respect to any Pre-Closing Accounts Receivable shall terminate one (1) year after the Closing Date."

(iv) Section 7.07 of the Purchase Agreement (Further Assurances) is hereby amended and restated in its entirety as follows:

"Subject to the terms and conditions of this Agreement, from and after the Closing Date or the Deferred Closing Date, as applicable, each party will execute and deliver, or cause its Affiliates to execute and deliver, all such documents and instruments and will take, or cause its Affiliates to take, all such further actions, in each case as may be reasonably necessary to consummate the transactions contemplated by this Agreement."

(v) Section 7.08(a)(i) of the Purchase Agreement (Preparation and Filing of Tax Returns; Payment of Taxes) is hereby amended and restated in its entirety as follows:

> "Seller shall prepare and file all Tax Returns of the Transferred Companies or in respect of the Transferred Assets or the Business, in each case, that are due (including applicable extensions) before the Closing. Seller shall prepare (x) all income Tax Returns of the Transferred Companies for all taxable periods ending on or before the Closing Date that are due after the Closing (" Pre-Closing Entity Tax Returns "), (y) all income Tax Returns of the Seller or any of its subsidiaries and (z) all Tax Returns in respect of the Deferred Assets, the Deferred Liabilities, the Deferred Business, and the Deferred Inventory for all taxable periods (or portions thereof) beginning on or prior to (A) the applicable Deferred Closing Date (in the case of any Tax Return reflecting Deferred Business Taxes) or (B) the applicable Deferred Inventory Closing Date (in the case of any Tax Return reflecting Deferred Inventory Taxes) (" Deferred Period Tax Returns "). Seller shall prepare all Tax Returns (other than Tax Returns of the Transferred Companies) in respect of the Transferred Assets or the Business for all taxable periods ending on or before the Closing Date that are due after the Closing (" Pre-Closing Business Tax Returns " and, together with Pre-Closing Entity Tax Returns and Deferred Period Tax Returns, " Pre-Closing Tax Returns "). Seller shall also prepare and file all Tax Returns for Transferred Companies that are required to be included in (or filed with) a Tax Return of an affiliated, consolidated, combined, unitary or aggregate group of which Seller or any of its Affiliates (other than a Transferred Company) is parent for Pre-Closing Tax Periods. With respect to any Pre-Closing Tax Return required to be prepared by Seller pursuant to this Section 7.08(a)(i) , (1) such Pre-Closing Tax Returns shall be prepared on a basis consistent with the past practices of the Transferred Companies or with respect to the Transferred Assets or the Business, respectively, unless a different position is required by Law and the parties mutually agree on the resolution of such issue (and each party shall reasonably endeavor to reach such mutual agreement), (2) Seller shall deliver to Buyer for its review and comment, at least thirty (30) days prior to the due date for the filing of such Pre-Closing Tax Return in the case of a separate income Tax Return of the Transferred Companies, and at least ten (10) days prior to the due date for the filing of such Pre-Closing Tax Return in the case of a separate non-income Tax Return of the Transferred Companies or in respect of the Transferred Assets or the Business (in each case taking into account any applicable extensions), a copy of such Tax Return, together with any additional information that Buyer may reasonably request, and (3) Seller shall consider in good faith any reasonable comments submitted by Buyer at least fifteen (15) days prior to the due date of such Pre-Closing Tax Return in the case of a separate income Tax Return of the Transferred Companies, and at least five (5) days prior to the due date for the filing of such Pre-Closing Tax Return in the case of a separate non-income Tax Return of the Transferred Companies or

in respect of the Transferred Assets or the Business (in each case taking into account any applicable extensions). If applicable, Seller shall deliver a revised Pre-Closing Tax Return to Buyer before the due date for the filing of such Pre-Closing Tax Return (taking into account any applicable extensions), and Buyer shall timely file or cause to be timely filed any Pre-Closing Tax Returns."

(vi) Section 7.08(b)(i) of the Purchase Agreement (Refunds) is hereby amended and restated in its entirety as follows:

"Seller shall be entitled to retain, or receive prompt payment from Buyer or any of its subsidiaries or Affiliates (including the Transferred Companies) of, any refund (including any credit in lieu of a refund, which credit arises as a result of an overpayment and which otherwise would have been payable in cash by the relevant Taxing Authority at the election of the taxpayer) received or realized in cash with respect to (x) Taxes attributable to any Transferred Company, the Transferred Assets or the Business for any Pre-Closing Tax Period (other than Transfer Taxes, but including any VAT for which Seller is responsible pursuant to Section 2.06(e)) or (y) Excluded Deferred Taxes, including any such amounts arising by reason of amended Tax Returns filed after the Closing Date, but only to the extent that (A) such refund (or credit) is not the result of an event that occurred after the Closing Date (or after the applicable Deferred Closing Date, in the case of any such refund (or credit) in respect of Excluded Deferred Business Taxes, or after the applicable Deferred Inventory Closing Date, in the case of any such refund (or credit) in respect of Excluded Deferred Inventory Taxes), and (B) such refund (or credit) is not attributable to, and does not result from, a carry back or other use of any item of loss, deduction, credit or other similar item arising in a Post-Closing Tax Period (or in a taxable period beginning after the applicable Deferred Closing Date, in the case of any item arising with respect to Excluded Deferred Business Taxes, or in a taxable period beginning after the applicable Deferred Inventory Closing Date, in the case of any item arising with respect to Excluded Deferred Inventory Taxes) or, in the case of a refund (or credit) of Taxes for a Straddle Period, the use of any such item arising in a Post-Closing Tax Period (or in the case of a refund (or credit) of Excluded Deferred Business Taxes for a taxable period beginning on or prior to the applicable Deferred Closing Date and ending after the applicable Deferred Closing Date, the use of any such item arising in a taxable period beginning after the applicable Deferred Closing Date; or in the case of a refund (or credit) of Excluded Deferred Inventory Taxes for a taxable period beginning on or prior to the applicable Deferred Inventory Closing Date and ending after the applicable Deferred Inventory Closing Date, the use of any such item arising in a taxable period beginning after the applicable Deferred Inventory Closing Date). In connection with the foregoing, if Seller determines that any of the Transferred Companies is entitled to file or make a formal or informal claim

for a refund (to which Seller would be entitled under the first sentence of this Section 7.08(b)(i)) of (x) Taxes (including by filing an amended Tax Return) with respect to a Pre-Closing Tax Period (other than Transfer Taxes or VAT, but including any VAT for which Seller is responsible pursuant to Section 2.06(e)) or (y) Excluded Deferred Taxes, Seller shall be entitled, at Seller's expense, to file or make, or to request that Buyer cause the applicable Transferred Company to file or make, such formal or informal claim for refund, and Seller shall be entitled to control the prosecution of such claim for refund, provided that Seller shall not take any action in connection therewith that would bind Buyer or any of its Affiliates (including any Transferred Company) for a Post-Closing Tax Period (or a taxable period beginning after the applicable Deferred Closing Date, in the case of any refund (or credit) of Excluded Deferred Business Taxes, or a taxable period beginning after the applicable Deferred Inventory Closing Date, in the case of any refund (or credit) of Excluded Deferred Inventory Taxes) or otherwise adversely affect Buyer or any of its Affiliates (including any Transferred Company). Buyer will cooperate, and cause the Transferred Companies to cooperate, with respect to such claim for refund, and will pay, or cause the relevant Transferred Company to pay, to Seller the amount (including interest received from any Taxing Authority) of any related refund (including any credit in lieu of a refund, which credit arises as a result of an overpayment and which otherwise would have been payable in cash by the relevant Taxing Authority at the election of the taxpayer) (to which Seller would be entitled under the first sentence of this Section 7.08(b)(i)) received or realized in cash by Buyer or any Affiliate thereof (including any Transferred Company), net of any unreimbursed costs incurred by Buyer and its Affiliates in respect of such refund and reduced by the amount of any Taxes arising or that would arise as a result of the receipt of such refund or interest thereon, within five (5) days of receipt (or realization in cash) thereof. Buyer and the Transferred Companies shall be entitled to retain, or receive prompt payment from Seller with respect to, any other refund, credit, offset or other similar benefit received or realized with respect to Taxes attributable to any Transferred Company, the Transferred Assets or the Business (other than any such refund, credit, offset or other similar benefit received or realized with respect to Income Taxes of Seller or any of its subsidiaries, but only to the extent such Income Taxes were not Deferred Taxes borne by Buyer as part of the NEB Services Reimbursement Amount, under the Undisclosed Agency Agreement, or otherwise under this Agreement). Notwithstanding any other provision, (x) Seller shall be entitled to any refund, credit or reimbursement for any Transfer Taxes arising from, or relating to, the Internal Restructuring Steps, (y) Buyer shall be entitled to any refund, credit or reimbursement for any Transfer Taxes or VAT arising from, or relating to, any Transfer Taxes or VAT imposed on the transfer of the Transferred Equity Interests and the Transferred Assets to Buyer and assumption of the Assumed Liabilities by Buyer and (z) Buyer shall be entitled to any refund, credit or reimbursement for any Deferred Taxes borne

by Buyer."

(vii) Section 7.08(c)(ii) of the Purchase Agreement (Tax Indemnification) is hereby amended and restated in its entirety as follows:

"Buyer and its Affiliates (including the Transferred Companies) shall indemnify, defend and hold Seller and its Affiliates harmless from and against: (A) for any Post-Closing Tax Period (x) all Tax liabilities (which shall include any costs and expenses, including reasonable legal fees and expenses, attributable to such Tax liabilities) of the Transferred Companies and (y) all Tax liabilities (which shall include any costs and expenses, including reasonable legal fees and expenses, attributable to such Tax liabilities) with respect to the Transferred Assets or the Business (including, for the avoidance of doubt, any Deferred Taxes), in the case of each of clauses (x) and (y), other than any such Tax liabilities that are Excluded Taxes or Excluded Deferred Taxes, (B) all liability for Transfer Taxes for which Buyer is responsible pursuant to Section 2.06(a), (C) all Tax liabilities (which shall include any costs and expenses, including reasonable legal fees and expenses, attributable to such Tax liabilities) attributable to a Buyer Tax Act, unless such Buyer Tax Act is effected with the written consent of Seller, (D) Tax liabilities (which shall include any costs and expenses, including reasonable legal fees and expenses, attributable to such Tax liabilities) attributable to any breach by Buyer or its Affiliates (including, after the Closing, any Transferred Company) of any covenant or other agreement hereunder, or (E) any Taxes (which shall include any costs and expenses, including reasonable legal fees and expenses, attributable to such Taxes) imposed with respect to the excess of, if any, (x) any amount required to be included by Seller or any of its Affiliates in income under Section 951(a) of the Code with respect to a Transferred Company for the tax year of Seller or such Affiliate that includes the Closing Date, over (y) the amount that would have been required to be included by Seller or any of its Affiliates in income under Section 951(a) of the Code with respect to a Transferred Company for the tax year of Seller or such Affiliate that includes the Closing Date had the taxable year of such Transferred Company ended on the Closing Date;"

(viii) Section 7.08(d) of the Purchase Agreement (Tax Contests) is hereby amended and restated in its entirety as follows:

"(i) Buyer shall notify Seller within ten (10) business days of a Tax Proceeding for a Pre-Closing Tax Period with respect to a Transferred Company, provided that the failure to so notify Seller shall not affect Seller's indemnification obligation under Section 7.08(c) except to the extent of any material prejudice actually incurred by Seller.

(ii) With respect to any Tax Proceeding relating to (A) a Pre-Closing Tax Period with respect to a Transferred Company, the Transferred Assets or

the Business (other than a Straddle Period or a Tax Proceeding with respect to any Transfer Taxes or VAT, but including any Tax Proceeding with respect to any VAT for which Seller is responsible pursuant to Section 2.06(e)), (B) a consolidated Tax Return of which Seller or any of its subsidiaries (other than a Transferred Company) is the common parent, or (C) an Income Tax Return (other than a Deferred Period Tax Return) of Seller of any of its subsidiaries (other than a Transferred Company), Seller may choose in its sole discretion (at its expense) to control all Tax Proceedings and may make all decisions taken in connection with such Tax Proceeding (including selection of counsel), and, without limiting the foregoing, may, in its sole discretion, pursue or forego any and all administrative appeals, proceedings, hearings and conferences with any Taxing Authority with respect thereto, and may, in its sole discretion, either pay the applicable Tax liability and sue for a refund or contest the Tax at issue in such Tax Proceeding, provided that, to the extent such Tax Proceeding or the resolution or settlement thereof could have an impact on Buyer or any of its Affiliates (including the Transferred Companies) after the Closing Date, (x) Seller shall provide Buyer with a timely and reasonably detailed account of each phase of such Tax Proceeding and shall consult with Buyer before taking any significant action in connection with such Tax Proceeding and (y) Seller shall not settle, compromise or abandon any such Tax Proceeding without obtaining the prior written consent of Buyer, which consent shall not be unreasonably withheld.

(iii) With respect to any Tax Proceeding relating to a Straddle Period with respect to a Transferred Company, the Transferred Assets or the Business, Buyer may choose in its sole discretion (at its expense) to control all Tax Proceedings and may make all decisions taken in connection with such Tax Proceeding (including selection of counsel), and, without limiting the foregoing, may, in its sole discretion, pursue or forego any and all administrative appeals, proceedings, hearings and conferences with any Taxing Authority with respect thereto, and may, in its sole discretion, either pay the applicable Tax liability and sue for a refund or contest the Tax at issue in such Tax Proceeding, provided that, to the extent such Tax Proceeding or the resolution or settlement thereof could have an impact on Seller or any of its Affiliates with respect to the Pre-Closing Tax Period resulting in an increase of Seller's liability for Taxes pursuant to this Agreement, (x) Buyer shall provide Seller with a timely and reasonably detailed account of each phase of such Tax Proceeding and shall consult with Seller before taking any significant action in connection with such Tax Proceeding and (y) Buyer shall not settle, compromise or abandon any such Tax Proceeding without obtaining the prior written consent of Seller, which consent shall not be unreasonably withheld.

(iv) With respect to any Tax Proceeding relating to both (A) any Deferred Taxes and (B) any Excluded Taxes or Excluded Deferred Taxes (any such Tax Proceeding, a " Joint Tax Proceeding ") (it being understood that a Tax Proceeding relating to a Tax Return that reflects both Deferred Taxes, on the one hand, and Excluded Taxes or Excluded Deferred Taxes, on the other hand, is a Joint Tax Proceeding), Seller may choose in its sole discretion to control all Joint Tax Proceedings and may make all decisions taken in connection with any such Joint Tax Proceeding (including selection of counsel), and, without limiting the foregoing, may, in its sole discretion, pursue or forego any and all administrative appeals, proceedings, hearings and conferences with any Taxing Authority with respect thereto, and may, in its sole discretion, either pay the applicable Tax liability and sue for a refund or contest the Tax at issue in such Joint Tax Proceeding, provided that, to the extent such Joint Tax Proceeding relates to Deferred Taxes, (v) Seller shall provide Buyer with a timely and reasonably detailed account of each phase of such Joint Tax Proceeding and shall consult with Buyer before taking any significant action in connection with such Joint Tax Proceeding, (w) Seller shall consult with Buyer and offer Buyer an opportunity to comment before submitting any written materials prepared or furnished in connection with such Joint Tax Proceeding, (x) Seller shall defend such Joint Tax Proceeding diligently and in good faith as if it were the only party in interest in connection with such Joint Tax Proceeding, (y) Buyer shall be entitled to participate (at its expense) in such Joint Tax Proceeding and, to the extent permitted by the relevant Taxing Authority, attend any meetings or conferences with the relevant Taxing Authority, and (z) Seller shall not settle, compromise or abandon any such Joint Tax Proceeding without obtaining the prior written consent of Buyer, which consent shall not be unreasonably withheld. Buyer and Seller shall bear the expenses of conducting such Joint Tax Proceeding in proportion to the amount of Deferred Taxes, on the one hand, and Excluded Taxes and Excluded Deferred Taxes, on the other hand, at issue in such Joint Tax Proceeding.

(v) Except as otherwise provided in Section 7.08(d)(iv) , with respect to any Tax Proceeding relating to Deferred Taxes (such Tax Proceeding, a " Deferred Tax Proceeding "), Buyer may choose in its sole discretion (at its expense) to control all Deferred Tax Proceedings and may make all decisions taken in connection with any such Deferred Tax Proceeding (including selection of counsel), and, without limiting the foregoing, may, in its sole discretion, pursue or forego any and all administrative appeals, proceedings, hearings and conferences with any Taxing Authority with respect thereto, and may, in its sole discretion, either pay the applicable Tax liability and sue for a refund or contest the Tax at issue in such Deferred Tax Proceeding, provided that, to the extent any such Deferred Tax Proceeding relates to a taxable period (or portion thereof) beginning on or prior to (1) the applicable Deferred Closing Date (in the case of any Deferred Tax Proceeding with respect to

Deferred Business Taxes) or (2) the applicable Deferred Inventory Closing Date (in the case of any Deferred Tax Proceeding with respect to Deferred Inventory Taxes), (v) Buyer shall provide Seller with a timely and reasonably detailed account of each phase of such Deferred Tax Proceeding and shall consult with Seller before taking any significant action in connection with such Deferred Tax Proceeding, (w) Buyer shall consult with Seller and offer Seller an opportunity to comment before submitting any written materials prepared or furnished in connection with such Deferred Tax Proceeding, (x) Buyer shall defend such Deferred Tax Proceeding diligently and in good faith as if it were the only party in interest in connection with such Deferred Tax Proceeding, (y) Seller shall be entitled to participate (at its expense) in such Deferred Tax Proceeding and, to the extent permitted by the relevant Taxing Authority, attend any meetings or conferences with the relevant Taxing Authority, and (z) Buyer shall not settle, compromise or abandon any such Deferred Tax Proceeding without obtaining the prior written consent of Seller, which consent shall not be unreasonably withheld.

(vi) Except as otherwise provided in Section 7.08(d)(ii) , Section 7.08(d)(iii) , Section 7.08(d)(iv) and Section 7.08(d)(v) , Buyer shall exclusively control all Tax Proceedings with respect to the Transferred Companies or otherwise relating to the Transferred Assets or the Business. Notwithstanding anything in Section 7.08(d)(ii) and Section 7.08(d)(iv) to the contrary, Buyer shall have the exclusive right to control any Tax Proceeding described in Section 7.08(d)(i) if Seller fails to, or notifies Buyer in writing that Seller elects not to, defend such Tax Proceeding.

(vii) Buyer, the Transferred Companies and each of their respective Affiliates, on the one hand, and Seller and its respective Affiliates, on the other hand, shall cooperate in contesting any Tax Proceeding, which cooperation shall include the retention and, upon request, the provision to the requesting party of records and information which are reasonably relevant to such Tax Proceeding, and making employees available on a mutually convenient basis to provide additional information or explanation of any material provided hereunder or to testify at proceedings relating to such Tax Proceeding. Buyer and Seller shall execute and deliver such powers of attorney and other documents as are necessary to carry out the intent of this Section 7.08(d) ."

(ix) Section 7.09 of the Purchase Agreement (Ancillary Agreements) is hereby amended and restated in its entirety as follows:

"At the Closing, Buyer and Seller shall enter into, execute and deliver the Transition Services Agreement, substantially in the form attached as Exhibit G-1 (the " Transition Services Agreement "), the Master Manufacturing and Supply Agreement, substantially in the form attached as Exhibit H (the

" Master Manufacturing and Supply Agreement "), the Trademark License Agreement (Buyer as Licensee), substantially in the form attached as Exhibit I-1 (the " Trademark License Agreement 1 "), the Trademark License Agreement (Seller as Licensee), substantially in the form attached as Exhibit I-2 (the " Trademark License Agreement 2 "), the Sorting Service Agreement, substantially in the form attached as Exhibit N (the " Sorting Service Agreement "), the Escrow Agreement, substantially in the form attached as Exhibit O (the " Escrow Agreement ") and the Undisclosed Agency Agreement, substantially in the form attached as Exhibit P (the " Undisclosed Agency Agreement "). Trademark License Agreement 1 and Trademark License Agreement 2 are collectively referred to as the " Trademark License Agreements ". Between the date hereof and the Closing, the parties shall negotiate in good faith to agree on the fees for the services to be provided pursuant to the Transition Services Agreement based on the principles set forth in Exhibit G-2 ."

(x) Section 7.11(c)(iv) of the Purchase Agreement (Non-Solicitation of Employees; Non-Competition) is hereby amended and restated in its entirety as follows:

"exercising its rights or performing or complying with its obligations under or as contemplated by this Agreement or any of the Transaction Documents, including the provision of the Distribution Services and the ownership and/or operation of the Deferred Business in accordance with this Agreement or any Ancillary Agreement; or"

(xi) Section 7.12 of the Purchase Agreement (Confidentiality) is hereby amended and restated in its entirety as follows:

"(a) Each party acknowledges that the information being provided to it in connection with the Transaction and the other transactions contemplated hereby is subject to the terms of each of (1) that certain confidentiality agreement between Buyer and Seller, dated as of December 2, 2016 (the " Business Confidentiality Agreement "), and (2) that certain confidentiality agreement between Buyer and Seller, dated as of April 5, 2017 (together with the Business Confidentiality Agreement, the " Confidentiality Agreements "), the terms of which are incorporated herein by reference in their entirety and shall, subject to the following sentence, survive the Closing; provided that actions taken by the parties to the extent necessary in order to comply with their respective obligations under Section 6.05 hereunder shall not be deemed to be in violation of this Section 7.12 or of the Confidentiality Agreements; provided that the foregoing shall not affect Section 6.05(b) to the extent that Section 6.05(b) specifies that it is subject to this Section 7.12 or the Confidentiality Agreements. Effective upon, and only upon, the Closing, the Business Confidentiality Agreement shall terminate with respect to information relating solely to the Business, the Transferred Companies, the

Transferred Assets and the Assumed Liabilities (including, for avoidance of doubt, any Deferred Assets or Deferred Liabilities); provided , further , that Buyer acknowledges that its obligations of confidentiality and non-disclosure with respect to any and all other information provided to it by or on behalf of Seller, the Selling Affiliates, the Transferred Companies or any of their respective Affiliates or Representatives, concerning Seller or any of its Affiliates (other than solely with respect to the Business, the Transferred Companies, the Transferred Assets and the Assumed Liabilities, including, for avoidance of doubt, the Deferred Business, Deferred Assets and Deferred Liabilities) shall continue to remain subject to the terms and conditions of the Business Confidentiality Agreement (but subject to the term therein).

(b) For two (2) years after the Closing, unless Buyer has otherwise consented in writing, Seller agrees to, and shall cause its subsidiaries and shall instruct its Representatives to, retain in confidence, and not use, any and all confidential or proprietary information to the extent relating to the Business and the Transferred Assets (collectively, " Confidential Business Information "), and not disclose such Confidential Business Information to any other Person; provided that Confidential Business Information shall not include any information (i) which is or becomes generally available to the public other than as a result of disclosure in violation of this Section 7.12(b) , (ii) that Seller or any of its Affiliates receives after the Closing from a source that is not, to the knowledge of Seller, under any obligation of confidentiality with respect to such information, or (iii) that is independently developed by or on behalf of Seller or any of its Affiliates without reference to or use of such Confidential Business Information. In addition, the foregoing will not prohibit Seller or its Affiliates from disclosing Confidential Business Information which is required by applicable Law or order of a Governmental Entity or rule or policy of any securities exchange to be disclosed. The parties acknowledge and agree that (x) Seller and its Affiliates currently, and, subject to Section 7.11(c) , may continue following the Closing to, maintain and expand business and commercial relationships (whether as a customer, supplier or otherwise) with the same Persons, and engage in commercial relationships with such Persons and with Buyer and the other Transferred Companies, and, subject to Section 7.11(c) , may employ, or continue to employ, individuals who previously worked in or with the Business and possess knowledge and Know-How used in, relating to, or arising from the Business and (y) nothing in this Section 7.12(b) shall prohibit or restrict the maintenance or expansion of any such relationships or employment of any such individuals. In addition, the foregoing shall not prohibit the use or disclosure of such Confidential Business Information to the extent reasonably necessary to comply with the terms of, or perform under, any of the Transaction Documents or any Transferred Contract or Commingled Contract that has not been assigned or transferred to Buyer or its Affiliates, or to provide the Distribution Services or operate Deferred Business in accordance

with this Agreement or any Ancillary Agreement. Furthermore, the provisions of this Section 7.12(b) will not prohibit any use or disclosure in connection with the preparation and filing of financial statements with a Governmental Entity (including the U.S. Securities and Exchange Commission) or Tax Returns of Seller or its Affiliates or in connection with the enforcement of any right or remedy relating to this Agreement, the other Transaction Documents or the transactions contemplated hereby and thereby."

(xii) Section 7.13(b) of the Purchase Agreement (Replacement of Guarantees) is hereby amended and restated in its entirety as follows:

"Following the Closing (or a Deferred Closing, as applicable), Buyer and Seller will reasonably cooperate with one another so that Buyer will obtain, or cause an Affiliate of Buyer to provide or obtain, replacement Guarantees with respect to each Guarantee issued by Seller or an Affiliate of Seller for the benefit of any Transferred Company or with respect to any Transferred Asset or Assumed Liability that was not replaced on or prior to the Closing Date (or a Deferred Closing Date, as applicable) (each, an " Existing Guarantee "). Buyer and Seller shall reasonably cooperate to obtain any necessary release of Seller and its Affiliates from such Existing Guarantees in form and substance reasonably satisfactory to Buyer and Seller."

Section 1.07 Employees . Article VIII of the Purchase Agreement (Employees) is hereby amended as follows:

(i) Section 8.01(a) of the Purchase Agreement (Employee Benefits Matters) is hereby amended and restated in its entirety as follows:

"From and after the date of this Agreement until the Closing Date or the applicable Deferred Closing Date, as applicable, Buyer shall consult with Seller and obtain Seller's consent (which consent shall not be unreasonably withheld, conditioned or delayed) before distributing any communications to any Employee of the Business whether relating to employee benefits, post-Closing or post the applicable Deferred Closing, as applicable, terms of employment or otherwise; provided that this sentence shall not apply to any (i) offer letters or other individual communications regarding post-Closing or post the applicable Deferred Closing, as applicable, employment of Employees of the Business (including proposed terms of employment, compensation and employee benefits, or role and organizational structure) or (ii) individual conversations or communications regarding matters not covered by any of the Transaction Documents."

(ii) Section 8.01(b) of the Purchase Agreement (Employee Benefits Matters) is hereby amended and restated in its entirety as follows:

> "To the extent permitted by applicable Law and as soon as practicable, but in no event later than five (5) business days after the date of this Agreement, Seller shall provide Buyer with a list on Schedule 8.01(b)(i) to the Disclosure Letter containing an identification number (with the corresponding names tying to these identification numbers to be provided concurrently to one person Buyer specifies), date of hire, position, location, and base salary, wage rate and bonus opportunity (and, in no event later than thirty (30) calendar days after the date of this Agreement, for sales employees, sales incentive targets, as well as actual sales incentive paid during the prior fiscal year), employee benefit plan participation, outstanding equity awards (including vesting schedule and exercise price, as applicable), expatriate status and any additional information that is necessary for Buyer to establish payroll systems or employee benefit plans as of the Transfer Time, as applicable, of each individual identified by Seller as expected to be an Employee of the Business, and Seller shall update such information periodically prior to the Closing Date (or the applicable Deferred Closing Date, as applicable, to the extent such employment actions are permitted by this Agreement, including the next succeeding sentence), to reflect new hires, leaves of absence and employment terminations and any other material changes thereto and provide copies of such updated lists and information to Buyer. In addition, Seller shall periodically update Schedule 1.01(b) to the Disclosure Letter (including during the Deferred Period with respect to employees in a Deferred Closing Country) to reflect (i) any new hires and employment terminations permitted pursuant to Section 6.01(b)(iii) , and (ii) any other employee of Seller and its Affiliates proposed by Seller to be an "Employee of the Business"; provided that, in the case of clause (ii), if Buyer objects to any such addition proposed to be made to such schedule by Seller, such addition shall be reviewed and agreed by the Vice President of Human Resources, MITG of Seller and the Senior Vice President, HR Bus Partner Medical of Buyer and if the Vice President of Human Resources, MITG of Seller and the Senior Vice President, HR Bus Partner Medical of Buyer cannot agree, then such addition shall not be included. With respect to those Transferred Companies set forth on Schedule 8.01(b)(ii) to the Disclosure Letter, Buyer and Seller will use commercially reasonable efforts to establish or ensure continuation of (as applicable) for each such Transferred Company payroll, human resources and employee benefit administration Contracts and processes, effective as of or prior to the Closing. On the Closing Date and the applicable Deferred Closing Date, Seller shall provide Buyer with an updated Schedule 8.01(b)(i) to the Disclosure Letter reflecting the applicable information as of such date."

(iii) Section 8.01(c) of the Purchase Agreement (Employee Benefits Matters) is hereby amended and restated in its entirety as follows:

> "Prior to the Closing or the applicable Deferred Closing, as applicable, Seller shall, or shall cause its Affiliates to, take all actions necessary to transfer the employment of any individual who is employed by a Transferred Company and who is not an Employee of Business to Seller or any of its Affiliates (other than the Transferred Companies), as designated by Seller. In the event the employment of an Employee of the Business does not automatically transfer to Buyer or its Affiliates upon the occurrence of the Closing or the applicable Deferred Closing, as applicable, by operation of Law or pursuant to the transfer (directly or indirectly) of the Transferred Equity Interests to Buyer or its Affiliates, (i) Seller shall take, or cause its respective Affiliates to take, all actions required in accordance with applicable Law in respect of the transfer of employment of such Employees of the Business to Buyer or one of its Affiliates, and Seller shall encourage each Employee of the Business to accept any offers of employment pursuant to this Section 8.01(c) in its communications with such individuals; provided that, for the avoidance of doubt, nothing herein shall be interpreted as requiring Seller or any of its subsidiaries to provide any such Employee of the Business with any additional compensation or benefits or otherwise incur any material liability; and (ii) not less than ten (10) business days prior to the Closing or the applicable Deferred Closing, as applicable, Buyer or one of its Affiliates will offer employment, effective at 12:01 a.m., local time, on the Closing Date or the applicable Deferred Closing Date, as applicable (the " Transfer Time "), to such Employee of the Business in accordance with this Agreement. Offers pursuant to this Section 8.01(c) shall (A) be for a position commensurate with the skills and experience of such Employee of the Business and at a geographic work location within fifty (50) miles of the applicable Employee of the Business' primary work location immediately prior to the Closing Date or the applicable Deferred Closing Date, as applicable (or, to the extent applicable in jurisdictions other than the United States, within such lesser radius as is necessary to ensure severance is not due in connection with such relocation), and (B) otherwise comply in all respects with applicable Law (including with respect to compensation and benefits). With respect to any Employee of the Business to whom Buyer or one of its Affiliates is required to make an offer of employment pursuant to this Section 8.01(c) , and who, as of the Closing Date or the applicable Deferred Closing Date, as applicable, is on approved leave of absence from work with Seller or its Affiliates (each, an " Inactive Employee "), Buyer shall offer employment to such individual on the earliest practicable date following the return of such individual to work with Seller and its Affiliates and otherwise on terms and conditions consistent with this Section 8.01 ; provided that such employee returns to work within one hundred eighty (180) days following the Closing Date or the applicable Deferred Closing Date, as applicable, or such later time as required by applicable Law

or the terms of the applicable Collective Bargaining Agreement upon presenting themselves for duty to the Business. Seller shall promptly notify Buyer of the occurrence and end of any such leave of absence. In the case of any Inactive Employee who becomes a Transferred Employee following the Closing Date or the applicable Deferred Closing Date, as applicable, all references in this Agreement to (1) the Closing Date or the applicable Deferred Closing Date, as applicable, shall be deemed to be references to the date on which such individual becomes a Transferred Employee and (2) the Transfer Time shall be deemed to be references to 12:01 a.m., local time, on the date that such individual becomes a Transferred Employee. In any jurisdiction where the employment of an Employee of the Business can transfer automatically to Buyer and its Affiliates upon the occurrence of the Closing or Deferred Closing, as applicable, by operation of Law or pursuant to the transfer (directly or indirectly) of the Transferred Equity Interests to Buyer, Buyer and Seller agree to take, or cause their respective Affiliates to take, all actions required under applicable Law and all other actions as are necessary or appropriate such that the employment of such Employee of the Business will transfer to Buyer or its Affiliates automatically as of the Transfer Time. Seller shall provide a list to Buyer of each Inactive Employee no later than ten (10) business days prior to the Closing or Deferred Closing Date, as applicable, and shall update such list as of the Closing or Deferred Closing Date, as applicable. The Employee of the Business employed in France for whom the transfer of employment contemplated by this Section 8.01(c) is subject to the authorization of the *inspection du travail* shall transfer to Buyer or its Affiliates automatically on the day after such authorization is given. If such authorization is not granted within four (4) months following the Closing Date, such Employee of the Business shall not become a Transferred Employee. Seller shall use commercially reasonable efforts to obtain such authorization following the Closing and shall keep Buyer and its Affiliates informed of the status of such procedure."

(iv) Section 8.01(d) of the Purchase Agreement (Employee Benefits Matters) is hereby amended and restated in its entirety as follows:

"Buyer or its Affiliates shall bear all the liabilities, obligations and costs relating to, and shall indemnify and hold harmless Seller and the Selling Affiliates from and against, any claims made by any Employee of the Business for any statutory or common law severance or other separation benefits, any contractual or other severance or separation benefits and any other legally mandated payment obligations (including any compensation payable during a mandatory termination notice period and any payments pursuant to a Judgment of a court having jurisdiction over the parties) and for any other claim, cost, liability or obligation (whether related to compensation, benefits or otherwise), in each case, arising out of (i) Buyer's breach of its obligations under this Article VIII , including any failure of Buyer to provide

to U.S. Transferred Employees the benefits described in Section 8.01(e) , (ii) Buyer making an offer to an Employee of the Business that does not meet the requirements of (A) Section 8.01(e) with respect to an Employee of the Business in the United States or (B) Section 8.01(j)(i) with respect to an Employee of the Business outside of the United States (whether or not located in a Specified Non-U.S. Jurisdiction), or (iii) any claims for severance or other separation benefits in connection with the involuntary termination of employment by Buyer or its Affiliates of any Transferred Employee after the Transfer Time. Seller or its Affiliates shall bear all the liabilities, obligations and costs relating to, and shall indemnify and hold harmless Buyer and its Affiliates from and against, any claims made by any Employee of the Business for any statutory or common law severance or other separation benefits, any contractual or other severance or separation benefits and any other legally mandated payment obligations (including any compensation payable during a mandatory termination notice period and any payments pursuant to a Judgment of a court having jurisdiction over the parties) and for any other claim, cost, liability or obligation (whether related to compensation, benefits or otherwise), in each case, not arising out of Buyer's breach of its obligations under this Article VIII or under clause (ii) or (iii) above, including (A) any such claim arising out of the applicable Employee of the Business' refusal to accept an offer of employment made in compliance with this Article VIII from (or to commence employment with), or objection to the automatic transfer of employment to, Buyer or its Affiliates, and (B) any claims made by any Employee of the Business in China or other jurisdictions for any statutory severance or other separation benefits (including statutory economic compensation and statutory compensation payable in respect of accrued but not yet taken vacation days or other paid time off for the calendar year in which the Closing Date or the applicable Deferred Closing Date, as applicable, occurs) that arise as a result of any such employee who accepts an offer of employment from Buyer or any of its Affiliates making a request that such severance or other separation benefits be paid or provided by Seller or any of its subsidiaries. Buyer shall not encourage any Employee of the Business regarding a request described in the immediately preceding sentence, and in the event an Employee of the Business asks Buyer a question regarding such request, Buyer shall refer such Employee of the Business to an applicable representative of Seller with respect to such request."

(v) Section 8.01(i) of the Purchase Agreement (Employee Benefits Matters) is hereby amended and restated in its entirety as follows:

"Subject to Seller providing all reasonably necessary support and information in a timely manner, no later than the Closing Date or the applicable Deferred Closing Date, as applicable, Buyer shall establish or cause to be established (or utilize existing Buyer Plans), at its own expense, all necessary retirement, pension, employee welfare and employee benefit plans for Transferred

Employees, as applicable. Effective as of the Transfer Time, each Transferred Employee shall cease to be an employee of Seller or the applicable Affiliate and shall cease to participate in any Business Employee Benefit Plan (other than any Assumed Benefit Plan) as an active employee. Other than with respect to a government-sponsored benefit plan, (i) Seller shall be, or shall cause its Affiliates to be, responsible for all (A) medical, vision, dental and prescription drug claims for expenses incurred by any Transferred Employee or his or her dependents, (B) claims for short-term and long-term disability income benefits incurred by any Transferred Employee, (C) claims for group life, travel and accident, and accidental death and dismemberment insurance benefits incurred by any Transferred Employee and (D) claims relating to COBRA coverage attributable to "qualifying events" with respect to any Transferred Employee and his or her beneficiaries and dependents, in each case, prior to or as of the Transfer Time and (ii) Buyer shall be, or shall cause its Affiliates to be, responsible for all (A) medical, vision, dental and prescription drug claims for expenses incurred by any Transferred Employee or his or her dependents, (B) claims for short-term and long-term disability income benefits incurred by any Transferred Employee, (C) claims for group life, travel and accident, and accidental death and dismemberment insurance benefits incurred by any Transferred Employee and (D) claims relating to COBRA coverage attributable to 'qualifying events' with respect to any Transferred Employee and his or her beneficiaries and dependents, in each case, after the Transfer Time. Except in the event of any claim for workers compensation benefits, for purposes of this Agreement, the following claims and liabilities shall be deemed to be incurred as follows: (1) medical, vision, dental and/or prescription drug benefits (including hospital expenses), upon provision of the services, materials or supplies comprising any such benefits and (2) short and long-term disability, life, accidental death and dismemberment and business travel accident insurance benefits, upon the death, illness, injury or accident giving rise to such benefits. Seller and its Affiliates shall be responsible for all claims for workers compensation benefits that are incurred prior to the Transfer Time by any Transferred Employee. Buyer and its Affiliates shall be responsible for all claims for workers compensation benefits that are incurred on or after the Transfer Time by any Transferred Employee. A claim for workers compensation benefits shall be deemed to be incurred on the date the injury giving rise to the claim occurs."

(vi) Section 8.01(m) of the Purchase Agreement (Employee Benefits Matters) is hereby amended and restated in its entirety as follows:

"To the extent (i) permitted by applicable Law and (ii) that doing so would not require the consent of any other Person, as soon as reasonably practicable following the Closing or the applicable Deferred Closing Date, as applicable, Seller and its Affiliates shall use their commercially reasonable efforts to

assign to Buyer and its Affiliates any nondisclosure and confidentiality agreements, non-competition agreements or other restrictive covenant agreements applicable to any Transferred Employee to the extent that such agreements relate exclusively to the Business."

(vii) Section 8.01(q) of the Purchase Agreement (Employee Benefits Matters) is hereby amended and restated in its entirety as follows:

"No later than forty-five (45) business days following the Closing or the applicable Deferred Closing Date, as applicable, Seller or its applicable Affiliate shall pay (i) an annual bonus (prorated through the Closing Date or the applicable Deferred Closing Date, as applicable, and based on the lesser of (A) the amount accrued with respect to such bonus and (B) the target amount to each Transferred Employee who is or would be eligible as of immediately prior to the Closing or the applicable Deferred Closing, as applicable, to receive an annual bonus under any Business Employee Benefit Plan pursuant to the terms thereof); and (ii) sales incentives or commissions (prorated through the Closing Date or the applicable Deferred Closing Date, as applicable, and based on actual performance through the Closing Date or the applicable Deferred Closing Date, as applicable) to each Transferred Employee who participated in any Business Employee Benefit Plan that provides for sales incentives or commissions as of immediately prior to the Closing or the applicable Deferred Closing, as applicable, and who was eligible to earn sales incentives or commissions for the applicable performance period in which the Closing or the applicable Deferred Closing, as applicable, occurs."

(viii) Section 8.01(r) of the Purchase Agreement (Employee Benefits Matters) is hereby amended and restated in its entirety as follows:

"Prior to the Closing or the applicable Deferred Closing, as applicable, Seller shall take all actions as are necessary to provide as follows:

(i) Each outstanding option (each, a " Seller Option ") to purchase ordinary shares, par value $0.0001 (" Seller Ordinary Shares "), other than any Integration Incentive Stock Option, that is held by a Transferred Employee as of immediately prior to the Closing or the applicable Deferred Closing, as applicable, shall, effective as of the Closing or the applicable Deferred Closing, as applicable, become fully vested and exercisable and shall remain outstanding for the remainder of the term of such Seller Option.

(ii) Each outstanding Integration Incentive Stock Option held by a Transferred Employee as of immediately prior to the Closing or the applicable Deferred Closing, as applicable, shall remain outstanding and shall vest at the end of the performance period applicable to such Integration Incentive Stock Option to the extent the applicable performance criteria are satisfied.

(iii) Each outstanding restricted share unit award in respect of Seller Ordinary Shares (each, a " Seller RSU Award ") that is held by a Transferred Employee as of immediately prior to the Closing or the applicable Deferred Closing, as applicable, and vests solely based on continued service shall, as of the Closing or the applicable Deferred Closing, as applicable, become fully vested and shall be settled by Seller in accordance with its terms.

(iv) Each outstanding Seller RSU Award that is held by a Transferred Employee as of immediately prior to the Closing or the applicable Deferred Closing, as applicable, and subject to performance-based vesting conditions shall remain outstanding, shall vest at the end of the performance period applicable to such Seller RSU Award to the extent the applicable performance criteria are satisfied and shall be settled by Seller in accordance with its terms.

(v) As of the Closing or the applicable Deferred Closing, as applicable, each Employee of the Business who is eligible to receive a long-term cash retention bonus under Seller's Retention Bonus Plan shall become fully vested in his or her long-term cash retention bonus, which amount shall be paid by Seller or its applicable Affiliate in accordance with such plan.

(vi) No later than forty-five (45) business days following the Closing or the applicable Deferred Closing, as applicable, Seller or its applicable Affiliate shall pay a bonus under Seller's Long-Term Performance Plan (prorated through the Closing Date or the applicable Deferred Closing Date, as applicable, and based on actual performance through the Closing Date or the applicable Deferred Closing Date, as applicable, as determined by Seller) to each Transferred Employee who is or would be eligible to receive a bonus under such plan pursuant to the terms thereof."

(ix) Section 8.01 of the Purchase Agreement (Employee Benefits Matters) is hereby amended and supplemented by adding a new Section 8.01(v) , which provides:

"The parties agree to and covenant to perform the matters set forth in Schedule 8.01(v) of the Disclosure Letter."

(x) Section 8.02(a) of the Purchase Agreement (Pension Plan Adjustment) is hereby amended and restated in its entirety as follows:

"Within six (6) months following the Closing Date, Seller and Buyer shall determine the aggregate value of the underfunded pension liabilities as of the Closing Date under the Assumed Benefit Plans set forth on Schedule 8.02(a) to the Disclosure Letter (the absolute value of such underfunded liabilities, the " Aggregate Underfunded Amount "). The Aggregate Underfunded Amount shall be calculated on the same basis that was used to determine the estimate referred to in Section 3.13(b)(iii) and, if applicable, the conversion rate from the applicable Foreign Currency to U.S. dollars shall be the closing rate

provided by Bloomberg at 7:00 a.m. New York City time on the Closing Date."

Section 1.08 Indemnification . Section 10.03 of the Purchase Agreement (Indemnification by Buyer) is hereby amended and restated in its entirety as follows:

"Subject to the provisions of this Article X , from and after the Closing Date, in addition to the indemnification set forth in Section 6.06(a) , Section 7.08(c) and Section 8.01(d) , Buyer shall indemnify and hold harmless Seller against and from any and all Damages which Seller and any of its directors, officers, employees, Affiliates (other than the Transferred Companies), agents and representatives (collectively, the " Seller Indemnitees " and, together with the Buyer Indemnitees, the " Indemnitees ") may incur or suffer to the extent such Damages arise out of or result from (a) the breach of any representation or warranty made by Buyer in this Agreement as if made on the Closing Date, (b) any breach by Buyer or any of its Affiliates of its covenants or agreements contained herein or (c) without limiting the indemnification obligations of Seller pursuant to Section 10.02 , any of the Assumed Liabilities (including any Deferred Liabilities). Notwithstanding that a claim for Damages may fall into multiple categories of this Section 10.03 , a Seller Indemnitee may recover such Damages one time only."

Section 1.09 Miscellaneous . The first sentence of Section 11.04 of the Purchase Agreement (Waivers) is amended by inserting the words "or after" between "prior to" and "the Closing."

Section 1.10 Transferred Assets . Annex 2.02(a) of the Purchase Agreement (Transferred Assets) is hereby amended as follows:

(i) The lead-in to Annex 2.02(a) is hereby amended by inserting at the end of the lead-in section the words "or, solely with respect to the applicable Deferred Business, the applicable Deferred Closing:"

(ii) Annex 2.02(a)(ii) of the Purchase Agreement (Inventory) is hereby amended by inserting to the end of the section the words "or the applicable Deferred Closing, as applicable;"

(iii) Annex 2.02(a)(v) of the Purchase Agreement (Permits) is hereby amended by inserting to the end of the section the words "or the applicable Deferred Closing Date, as applicable;"

(iv) Annex 2.02(a)(xi) of the Purchase Agreement (Contracts) is hereby amended and restated in its entirety as follows:

" Contracts . All leases, licenses (other than Transferred Real Property Leases and Transferred IP Licenses which are identified separately on this Annex

2.02(a)), bids, tenders, purchase orders, consulting agreements, supply agreements, distribution contracts, manufacturing contracts, maintenance contracts, agreements, commitments and other contracts, whether or not reduced to writing (collectively, " Contracts ") exclusively relating to the Business or any of the Transferred Assets, and the Commingled Contracts set forth on Schedule 2.02(a)(xi) of the Disclosure Letter, but specifically excluding the Excluded Contracts (collectively, the " Transferred Contracts ");"

(v) Annex 2.02(a)(xiv) of the Purchase Agreement (Insurance Proceeds) is hereby amended and restated in its entirety as follows:

" Insurance Proceeds . All insurance proceeds actually received by Seller or any of its Affiliates prior to or after the Closing under any insurance policy written prior to the Closing (or, solely with respect to Deferred Assets, the applicable Deferred Closing) in connection with (i) the damage or destruction of any of the Transferred Assets from and after the date hereof and prior to the Closing (or, solely with respect to Deferred Assets, the applicable Deferred Closing) that is, or would have been but for such damage or destruction, included in the Transferred Assets or (ii) any Assumed Liability (other than, in the case of this clause (ii), where insurance proceeds are directly or indirectly funded by Seller or any of its Affiliates through self-insurance or other similar arrangement);"

(vi) Annex 2.02(a)(xv) of the Purchase Agreement (Cash Amount; Cash Proceeds of Sales and Dispositions) is hereby amended and restated in its entirety as follows:

" Cash Amount; Cash Proceeds of Sales and Dispositions . (1) Cash and cash equivalents of the Transferred Companies to the extent included in the Cash Amount and (2) all net cash proceeds actually received by Seller or any of its Affiliates prior to or after the Closing in connection with any sales or other dispositions from and after the date hereof through the Closing (or, solely with respect to Deferred Assets, the applicable Deferred Closing) of any asset that would have been included in the Transferred Assets but for such sale or disposition, other than with respect to sales of Inventory in the ordinary course of business consistent with past practice;"

(vii) Annex 2.02(a)(xvi) of the Purchase Agreement (Claims; Settlement Proceeds) is hereby amended and restated in its entirety as follows:

" Claims; Settlement Proceeds . Any and all claims, causes of action, defenses and rights of offset or counterclaim, or settlement agreements (in any manner arising or existing, whether choate or inchoate, known or unknown, contingent or non-contingent) arising out of the Transferred Contracts (other than any Pre-Closing Accounts Receivable) and all proceeds of any settlement from and after the date hereof through the Closing (or, solely with respect to

Deferred Assets, the applicable Deferred Closing) of any such claims, causes of action, defenses and rights of offset or counterclaim that would have been included in the Transferred Assets but for such settlement;"

Section 1.11 Excluded Assets . Annex 2.02(b) of the Purchase Agreement (Excluded Assets) is hereby amended as follows:

(i) Annex 2.02(b)(i) of the Purchase Agreement (Accounts Receivable/Other Current Assets) is hereby amended and restated in its entirety as follows:

" Accounts Receivable/Other Current Assets . (1) All accounts receivable, notes receivable and similar rights to receive payments of Seller or any of its Affiliates existing on the Closing Date or the applicable Deferred Closing Date, as applicable (" Pre-Closing Accounts Receivable "), (2) all other assets as of immediately prior to the Closing or the applicable Deferred Closing, as applicable, arising out of the operation or conduct of the Business before the Closing or the applicable Deferred Closing, as applicable, that would be classified as current assets under GAAP on a balance sheet of the Business as of immediately prior to the Closing or the applicable Deferred Closing, as applicable, calculated in a manner consistent with the Financial Information;"

(ii) Annex 2.02(b)(ii) of the Purchase Agreement (Cash and Cash Equivalents) is hereby amended and restated in its entirety as follows:

" Cash and Cash Equivalents . All cash and cash equivalents and marketable securities and other investment assets, other than cash and cash equivalents in respect of clauses (xiv), (xv) and (xvi) of Annex 2.02(a) , held by Seller or any of its Affiliates on the Closing Date or the applicable Deferred Closing Date, as applicable;"

(iii) Annex 2.02(b)(iii) of the Purchase Agreement (Hedging or Other Currency Exchange Agreements) is hereby amended and restated in its entirety as follows:

" Hedging or Other Currency Exchange Agreements . All rights to receive payments of Seller or any of its Affiliates pursuant to a hedging or other currency exchange agreement existing before, on or after the Closing Date;"

(iv) Annex 2.02(b)(v) of the Purchase Agreement (Certain Records) is hereby amended and restated in its entirety as follows:

" Certain Records . Any records and files not identified as Transferred Records, including (A) the personnel records maintained by Seller or any of its Affiliates, (B) Tax Returns (other than Tax Returns solely related to any Transferred Company), (C) records (including accounting records) relating to Taxes paid or payable by Seller or any of its Affiliates and all financial and Tax records relating to the Business that form part of Seller's or any of its

Affiliates' general ledger or otherwise constitute accounting records, (D) records prepared in connection with the Transactions, including bids received from other Persons and analyses relating to the Business and (E) file copies of the Transferred Records retained by Seller, in each case whether generated before, on or after the Closing Date;"

(v) Annex 2.02(b)(vi) of the Purchase Agreement (Certain Contracts and Contract Rights) is hereby amended and restated in its entirety as follows:

" Certain Contracts and Contract Rights . All rights of Seller and its Affiliates under (A) this Agreement and the Ancillary Agreements, (B) the Commingled Contracts (subject to Section 2.02(g)), except for those Commingled Contracts set forth on Schedule 2.02(a)(xi) of the Disclosure Letter, (C) those Contracts related to Shared Services, and (D) any contracts between Seller and any of its Affiliates or between Affiliates of Seller, whether arising before, on or after the Closing Date (collectively, the " Excluded Contracts ");"

(vi) Annex 2.02(b)(vii) of the Purchase Agreement (Insurance) is hereby amended and restated in its entirety as follows:

" Insurance . Other than insurance proceeds specified in clause (xiv) of Annex 2.02(a) , all current and prior insurance policies arranged or maintained by Seller or any of its Affiliates and all rights of any nature with respect thereto, including all rights to insurance recoveries thereunder and to assert claims with respect to any such insurance recoveries, whether arising before, on or after the Closing Date;"

Section 1.12 Assumed Liabilities . Annex 2.02(c) of the Purchase Agreement (Assumed Liabilities) is hereby amended as follows:

(i) The lead-in to Annex 2.02(c) is hereby amended by inserting the phrase "(including the Deferred Business and Deferred Assets but without duplication of any amounts included in the NEB Services Reimbursement Amount)" between "any Transferred Asset" and ", in each case other than the Excluded Liabilities".

(ii) Annex 2.02(c)(ii) of the Purchase Agreement (Transferred Contract Liabilities) is hereby amended and restated in its entirety as follows:

" Transferred Contract Liabilities . All liabilities and obligations under the Transferred Contracts, whether arising before, on or after the Closing Date, but excluding those in respect of the Pre-Closing Accounts Payable;"

(iii) Annex 2.02(c)(iv) of the Purchase Agreement (Product Claims) is hereby amended and restated in its entirety as follows:

" Product Claims . Liabilities and obligations to the extent arising from or

relating to lawsuits or other claims, regardless of when commenced or made and irrespective of the legal theory asserted, with respect to the design, manufacture, testing, advertising, marketing, distribution or sale of the Products, whether prior to or after the Closing, including all liabilities and obligations to the extent arising from or relating to (A) warranty obligations, (B) infringement, dilution, misappropriation or other violation of IP Rights, (C) alleged or actual hazard or defect in design, manufacture, materials or workmanship, including any failure to warn or alleged or actual breach of express or implied warranty or representation or (D) the return after the Closing of any Product sold prior to, on or after the Closing (collectively, " Product Claims "), in each case other than any Excluded Liability;"

(iv) Annex 2.02(c)(v) of the Purchase Agreement (Environmental Liabilities) is hereby amended and restated in its entirety as follows:

" Environmental Liabilities . All liabilities and obligations to the extent arising from or relating to the Transferred Real Property, the Business or any Transferred Asset (or, in each case, the ownership or operation thereof) and arising under any Environmental Law, or with respect to any Environmental Claim or Hazardous Materials, in each case, whether arising before, on or after the Closing Date;"

(v) Annex 2.02(c)(vi) of the Purchase Agreement (Business Claims) is hereby amended and restated in its entirety as follows:

" Business Claims. Except as otherwise set forth in this Agreement and except for the matters specifically identified as Excluded Liabilities, all obligations and liabilities in respect of any criminal, civil or administrative suit, action or proceeding, pending or threatened, and claims, whether or not presently asserted, to the extent arising from or relating to the Business before, on or after the Closing Date (collectively, " Business Claims ");"

Section 1.13 Excluded Liabilities . Annex 2.02(d) of the Purchase Agreement (Excluded Liabilities) is hereby amended as follows:

(i) Annex 2.02(d)(iii) of the Purchase Agreement (Excluded Asset Liabilities) is hereby amended and restated in its entirety as follows:

" Excluded Asset Liabilities . Each liability, obligation or commitment to the extent arising from or relating to any Excluded Asset or the distribution to, or ownership by, Seller or any of the Selling Affiliates of any Excluded Asset or associated with the realization of the benefits of any Excluded Asset, whether arising before, on or after the Closing Date;"

Section 1.14 Disclosure Letter. The Disclosure Letter is hereby amended as set forth on Exhibit A hereto.

Section 1.15 Exhibits. The Exhibits of the Purchase Agreement are hereby amended as follows:

(i) Exhibit 1 of the Purchase Agreement (Maximum Cash Amount of Transferred Companies) is hereby amended and restated in its entirety in the form set forth as Annex B attached hereto.

(ii) Exhibit L of the Purchase Agreement (Closing Structure) is hereby amended and restated in its entirety in the form set forth as Annex C attached hereto.

(iii) Exhibit M of the Purchase Agreement (Allocation Method) is hereby amended and restated in its entirety in the form set forth as Annex D attached hereto.

(iv) The Purchase Agreement is hereby amended and supplemented by inserting a new Exhibit O titled "Form of Escrow Agreement" in the form set forth as Annex E attached hereto.

(v) The Purchase Agreement is hereby amended and supplemented by inserting a new Exhibit P titled "Form of Undisclosed Agency Agreement" in the form set forth as Annex F attached hereto.

(vi) The Purchase Agreement is hereby amended and supplemented by inserting a new Exhibit Q titled "Form of Merger Authorization" in the form set forth as Annex G attached hereto.

(vii) The Purchase Agreement is hereby amended and supplemented by inserting a new Exhibit R titled "Form of U.S. Merger Agreement" in the form set forth as Annex H attached hereto.

(viii) The Purchase Agreement is hereby amended and supplemented by inserting a new Exhibit S titled "Form of U.S. Certificate of Merger" in the form set forth as Annex I attached hereto.

ARTICLE 2
General Provisions

Section 2.01 Effect of Amendment. This Amendment shall not constitute an amendment or waiver of any provision of the Purchase Agreement not expressly amended or waived herein and shall not be construed as an amendment, waiver or consent to any action that would require an amendment, waiver or consent except as expressly stated herein. The Purchase Agreement, as amended by this Amendment, is and shall continue to be in full force and effect.

Section 2.02 Counterparts. This Amendment may be executed in counterparts and such counterparts may be delivered in electronic format (including by fax or in portable

document format (.pdf)), each of which shall be deemed to be an original and all of which shall be deemed to constitute the same Amendment.

Section 2.03 Other Miscellaneous Terms . The provisions of Article XI (Miscellaneous) of the Purchase Agreement shall apply *mutatis mutandis* to this Amendment, and to the Purchase Agreement, taken together as a single agreement, reflecting the terms as modified hereby.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties have duly executed this Amendment as of the date first above written.

CARDINAL HEALTH, INC.

By: /s/ Donald M. Casey, Jr.
Name: Donald M. Casey, Jr.
Title: Chief Executive Officer - Medical Segment

MEDTRONIC PLC

By: /s/ Christopher Cleary
Name: Christopher Cleary
Title: Vice President - Corporate Development

Exhibit 10.2.2

FIRST AMENDMENT TO THE
AMENDED CARDINAL HEALTH, INC. 2011 LONG-TERM INCENTIVE PLAN

1. Effective June 29, 2017, Section 2(ii) of the Plan is hereby deleted in its entirety and in replacement thereof shall be the following:

   "" **Retirement** " means, unless the Administrator determines otherwise, Termination of Employment (other than by death or Disability and other than in the event of Termination for Cause) of an Awardee from the Company and its Affiliates after attaining either (i) age 55 and at least 10 years of continuous service with the Company and its Affiliates or (ii) solely with respect to Awards granted on or after July 1, 2017, age 60 and at least five years of continuous service with the Company and its Affiliates, in each case including service with an Affiliate of the Company prior to the time that such Affiliate became an Affiliate of the Company."

2. Effective August 8, 2017, Section 4(b)(x) of the Plan is hereby deleted in its entirety and in replacement thereof shall be the following:

   (x) "to modify or amend each Award, including, but not limited to, providing for the continuation or acceleration of vesting and/or exercisability; provided, however, that any such modification or amendment is subject to (A) the minimum vesting provisions set forth in Sections 8(e), 11(a) and 12(a) of the Plan, and (B) the Plan amendment provisions set forth in Section 17 of the Plan;"

3. Effective August 8, 2017, the first three sentences of Section 8(e) of the Plan are hereby deleted in their entirety and in replacement thereof shall be the following:

   (e) "Options granted under the Plan will vest and/or be exercisable at such time and in such installments during the period prior to the expiration of the Option's term as determined by the Administrator, except that no Option may first become exercisable within one year from its Grant Date, other than (i) upon a Change of Control as specified in Section 16(b) of the Plan, (ii) upon the death or Disability of the Awardee, in each case as specified in the Option Agreement, or (iii) for up to a number of Shares subject to Options that, when added to the number of Shares subject to Stock Awards and Other Stock-Based Awards granted under the Plan that on or after August 8, 2017 vest within less than one year, does not in the aggregate exceed 5% of the total number of Shares provided in Section 3(a) of the Plan . The Administrator has the right to make the timing of the ability to exercise any Option granted under the Plan subject to continued active employment, the passage of time, and/or such performance requirements as deemed appropriate by the Administrator. At any time after the grant of an Option, the Administrator may reduce or eliminate any restrictions surrounding any Participant's right to exercise all or part of the Option, subject to the restrictions set forth above."

4. Effective August 8, 2017, the following sentence is hereby inserted at the end of Section 11(a) of the Plan:

   "No condition that is based upon performance criteria and level of achievement versus such criteria shall be based on performance over a period of less than one year and no condition that is based solely upon continued employment or the passage of time shall provide for vesting in full of a Stock Award in less than one year from its Grant Date,

other than (i) upon a Change of Control as specified in Section 16(b) of the Plan, (ii) upon the death or Disability of the Awardee, in each case as specified in the Stock Award Agreement, or (iii) for up to a number of Shares subject to Stock Awards that, when added to the number of Shares subject to Options and Other Stock-Based Awards granted under the Plan that on or after August 8, 2017 vest within less than one year, does not in the aggregate exceed 5% of the total number of Shares provided in Section 3(a) of the Plan ."

5. Effective August 8, 2017, the following sentence is hereby inserted at the end of Section 12(a) of the Plan:

"No condition that is based upon performance criteria and level of achievement versus such criteria shall be based on performance over a period of less than one year and no condition that is based solely upon continued employment or the passage of time shall provide for vesting in full of an Other Stock-Based Award in less than one year from its Grant Date, other than (i) upon a Change of Control as specified in Section 16(b) of the Plan, (ii) upon the death or Disability of the Awardee, in each case as specified in the Other Stock-Based Award Agreement, or (iii) for up to a number of Shares subject to Other Stock-Based Awards that, when added to the number of Shares subject to Options and Stock Awards granted under the Plan that on or after August 8, 2017 vest within less than one year, does not in the aggregate exceed 5% of the total number of Shares provided in Section 3(a) of the Plan ."

6. Effective June 29, 2017, Section 13(d) of the Plan is hereby deleted in its entirety and in replacement thereof shall be the following:

" (d) *Termination of Employment* . The following provisions shall apply to Cash Awards upon Termination of Employment unless the Administrator determines otherwise.

(i) *Termination of Employment Due to Disability, Retirement or Death* . In the event that a Participant's Termination of Employment occurs by reason of Disability, Retirement or death before the date the Cash Award is paid for the applicable performance period, the Cash Award determined by the Administrator to be paid will be prorated based upon the length of time that the Participant was employed by the Company during the applicable performance period. In the case of a Participant's Disability, Termination of Employment will be deemed to occur as of the date that the Administrator determines was the date on which the definition of Disability was satisfied. The Cash Award will be paid at the same time payments are made to Participants who did not terminate employment during the applicable performance period and will be based on the level of financial, business or operational performance actually achieved, to the extent applicable to such Award. The right of the Participant to receive any payment under this Plan will pass to the Participant's estate in the event of the Participant's death.

(ii) *Certain Involuntary Terminations of Employment (Not Disability or Retirement Eligible)* . In the event that (A) a Participant's Termination

of Employment by the Company (other than as a Termination for Cause) occurs on or after the first day of the last one-fourth of the applicable performance period and before the date the Cash Award is paid for the applicable performance period, or (B) solely with respect to Cash Award opportunities granted on or after July 1, 2017, (1) Sections 13(d)(i) and 13(d)(ii)(A) of the Plan are not applicable, but the Participant has attained either (a) age 53 and at least eight years of continuous service with the Company and its Affiliates or (b) age 59 and at least four years of continuous service with the Company and its Affiliates, in each case including service with an Affiliate of the Company prior to the time that such Affiliate became an Affiliate of the Company, and (2) a Participant's Termination of Employment by the Company (other than as a Termination for Cause) occurs and no later than 45 days after the Termination of Employment, the Participant enters into a written separation agreement and general release of claims with the Company and its Affiliates (in such form as may reasonably be presented by the Company) (a "Separation Agreement") and the Participant does not timely revoke such Separation Agreement, in each case the Cash Award determined by the Administrator to be paid will be prorated based upon the length of time that the Participant was employed by the Company during the applicable performance period. The Cash Award will be paid at the same time payments are made to Participants who did not terminate employment during or after completion of the applicable performance period and will be based on the level of financial, business or operational performance actually achieved, to the extent applicable to such Award.

(iii) *Other Terminations of Employment* . Except as set forth in Sections 13(d)(i) and (ii) above, in the event that a Participant's Termination of Employment occurs before the date the Cash Award is paid for the applicable performance period, all of the Participant's rights to any Cash Award for that performance period will be forfeited."

7. Effective August 8, 2017, the following sentence is hereby inserted before the last sentence of Section 20 of the Plan:

"Further, the Administrator may, in its discretion, require that all or any portion of any Cash Award paid or payable after June 30, 2018 to a Participant who is or was an "executive officer" (as that term is defined under Rule 3b-7 under the Exchange Act) be repaid or forfeited to the Company upon a determination by the Administrator that the Participant engaged in a material violation of law or of the Company's Standards of Business Conduct during the performance or vesting period of the Cash Award and that this conduct caused material financial harm to the Company."

Exhibit 10.2.3

CARDINAL HEALTH, INC.
NONQUALIFIED STOCK OPTION AGREEMENT

This Nonqualified Stock Option Agreement (this "Agreement") is entered into in Franklin County, Ohio. On [date of grant] (the "Grant Date"), Cardinal Health, Inc., an Ohio corporation (the "Company"), has awarded to [employee name] ("Awardee"), a Nonqualified Stock Option (the "Option") to purchase [# of shares] common shares, without par value, of the Company (the "Shares") for an exercise price of [$X.XX] per share. The Option has been granted under the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan (the "Plan"), and will include and be subject to all provisions of the Plan, which are incorporated in this Agreement by reference, and will be subject to the provisions of this Agreement. Capitalized terms used in this Agreement which are not specifically defined will have the meanings ascribed to such terms in the Plan. [CLIFF ALTERNATIVE: This Option vests and becomes exercisable on the [ ] anniversary of the Grant Date (the "Vesting Date"), subject to the provisions of this Agreement, including those relating to Awardee's continued employment with the Company and its Affiliates (collectively, the "Cardinal Group").] [INSTALLMENT ALTERNATIVE: This Option vests and becomes exercisable in [ ] installments, which will be as nearly equal as possible, on the [ ] anniversaries of the Grant Date (each a "Vesting Date" with respect to the portion of the Option scheduled to vest on such date), subject in each case to the provisions of this Agreement, including those relating to Awardee's continued employment with the Company and its Affiliates (collectively, the "Cardinal Group").] This Option will expire on [date of expiration] (the "Grant Expiration Date").

1. Method of Exercise and Payment of Price .

(a) Method of Exercise . At any time when all or a portion of the Option is exercisable under the Plan and this Agreement, some or all of the exercisable portion of the Option may be exercised from time to time by written notice to the Company, or such other method of exercise as may be specified by the Company, including without limitation, exercise by electronic means on the web site of the Company's third-party equity plan administrator, which will:

(i) state the number of whole Shares with respect to which the Option is being exercised; and

(ii) if the Option is being exercised by anyone other than Awardee, if not already provided, be accompanied by proof satisfactory to counsel for the Company of the right of such person or persons to exercise the Option under the Plan and all applicable laws and regulations.

(b) Payment of Price . The full exercise price for the portion of the Option being exercised shall be paid to the Company as provided below:

(i) in cash;

(ii) by check acceptable to the Company or wire transfer (denominated in U.S. Dollars);

(iii) subject to any conditions or limitations established by the Administrator, other Shares owned by Awardee that have a Fair Market Value on the date of surrender equal to or greater than the aggregate exercise price of the Shares as to which said Option is exercised (it being agreed that the excess of the Fair Market Value over the aggregate exercise price will be refunded to Awardee, with any fractional Share being repaid in cash);

(iv) if permitted by the Administrator, consideration received by the Company under a broker-assisted sale and remittance program acceptable to the Administrator;

(v) if permitted by the Administrator, and subject to any conditions or limitations established by the Administrator, the Company's withholding Shares otherwise issuable upon exercise of the Option pursuant to a "net exercise" arrangement; or

(vi) any combination of the foregoing methods of payment.

2. Transferability . The Option is transferable (a) at Awardee's death, by Awardee by will or pursuant to the laws of descent and distribution, and (b) by Awardee during Awardee's lifetime, without payment of consideration, to (i) the spouse, former spouse, parents, stepparents, grandparents, parents-in-law, siblings, siblings-in-law, children, stepchildren, children-in-law, grandchildren, nieces or nephews of Awardee, or any other persons sharing Awardee's household (other than tenants or employees) (collectively, "Family Members") or (ii) a trust, partnership or other entity controlled by Awardee or Awardee's Family Members and in which Awardee or Awardee's Family Members have 100% of the pecuniary interest; provided, however, that subsequent transfers of the transferred Option are prohibited, except (X) if the transferee is an individual, at the transferee's death by the transferee by will or pursuant to the laws of descent and distribution, and (Y) without payment of consideration to the individuals or entities listed in Paragraphs (b)(i) or (ii) above, with respect to the original Awardee. The Administrator may, in its discretion, permit transfers to other persons and entities as permitted by the Plan. Neither a transfer under a domestic relations order in settlement of marital property rights nor a transfer to an entity in which more than 50% of the voting interests are owned by Awardee or Family Members in exchange for an interest in that entity will be considered to be a transfer for consideration. Within 10 days of any transfer, Awardee shall notify the Company in writing of the transfer. Following transfer, the Option continues to be subject to the same terms and conditions as were applicable immediately prior to transfer and, except as otherwise provided in the Plan or this Agreement, references to the original Awardee are deemed to refer to the transferee. The events of a Termination of Employment of Awardee provided in Paragraph 3 continue to be applied with respect to the original Awardee, following which the Option is exercisable by the transferee only to the extent, and for the periods, specified in Paragraph 3. The Company has no obligation to notify any transferee of Awardee's Termination of Employment with the Cardinal Group for any reason. The conduct prohibited of Awardee in Paragraph 5 continues to be prohibited of Awardee following transfer to the same extent as immediately prior to transfer and the Option (or its economic value, as applicable) is subject to forfeiture by the transferee and recoupment from Awardee to the same extent as would have been the case of Awardee had the Option not been transferred. Awardee remains subject to the recoupment provisions of Paragraphs 5 and 15 of this Agreement and tax withholding provisions of Section 31 of the Plan following transfer of the Option.

3. Termination of Employment .

(a) Termination of Employment by Reason of Death or Disability . If a Termination of Employment by reason of death or Disability occurs at least six months after the Grant Date, then any outstanding unvested portion of the Option vests upon and becomes exercisable in full from and after such Termination of Employment. The Option may thereafter be exercised by Awardee, any transferee of Awardee, if applicable, or by the legal representative of the estate or by the legatee of Awardee under the will of Awardee from the date of such Termination of Employment until the Grant Expiration Date.

(b) Termination of Employment by Reason of Retirement . If a Termination of Employment by reason of Retirement occurs at least six months after the Grant Date, then a Ratable Portion of each

unvested installment of the outstanding Option immediately vests and becomes exercisable. Such "Ratable Portion," with respect to the applicable installment, is an amount equal to such installment of the Option scheduled to vest on a future Vesting Date multiplied by a fraction, the numerator of which is the number of days from the Grant Date through the date of the Termination of Employment, and the denominator of which is the number of days from the Grant Date through such Vesting Date. The Option, to the extent vested, may be exercised by Awardee (or any transferee, if applicable) until the Grant Expiration Date. If Awardee dies after Retirement, but before the Grant Expiration Date, the Option, to the extent vested, may be exercised by any transferee of the Option, if applicable, or by the legal representative of the estate or by the legatee of Awardee under the will of Awardee from and after such death until the Grant Expiration Date.[1]

(c) Involuntary Termination of Employment with Severance . If (i) Paragraph 3(b) is not applicable, but Awardee has attained either (A) age 53 and at least eight years of continuous service with the Cardinal Group, or (B) age 59 and at least four years of continuous service with the Cardinal Group, in each case including service with an Affiliate of the Company prior to the time that such Affiliate became an Affiliate of the Company, (ii) a Termination of Employment by the Cardinal Group (other than a Termination for Cause) occurs at least six months after the Grant Date, and (iii) no later than 45 days after the Termination of Employment, Awardee enters into a written separation agreement and general release of claims with the Cardinal Group (in such form as may reasonably be presented by the Cardinal Group) (a "Separation Agreement"), and Awardee does not timely revoke such Separation Agreement, then a Ratable Portion of each unvested installment of the outstanding Option immediately vests and becomes exercisable. The Option, to the extent vested, may be exercised by Awardee (or any transferee, if applicable) until the Grant Expiration Date. If Awardee dies after such Termination of Employment, but before the Grant Expiration Date, the Option, to the extent vested, may be exercised by any transferee of the Option, if applicable, or by the legal representative of the estate or by the legatee of Awardee under the will of Awardee from and after such death until the Grant Expiration Date.

(d) Change of Control . In the event of a Change of Control prior to the Participant's Termination of Employment, any outstanding unvested portion of the Option vests in full, except to the extent a Replacement Award is provided to the Participant in accordance with Section 16(b) of the Plan.

(e) Other Termination of Employment . Except as set forth in Paragraphs 3(a), (b), (c) and (d), if a Termination of Employment occurs, any unexercised portion of the Option that has not vested on such date of Termination of Employment is automatically forfeited. Unless a longer period is applicable as specified in Section 16(b)(iv) of the Plan or Paragraphs 3(a) through (c), Awardee (or any transferee, if applicable) has 90 days from the date of Termination of Employment or until the Grant Expiration Date, whichever period is shorter, to exercise any portion of the Option that is vested and exercisable on the date of Termination of Employment; provided, however, that if the Termination of Employment was a Termination for Cause, as determined by the Administrator, the Option may be immediately canceled by the Administrator (whether then held by Awardee or any transferee).

4. Restrictions on Exercise . The Option is subject to all restrictions in this Agreement and in the Plan. As a condition of any exercise of the Option, the Company may require Awardee or his or her transferee or successor to make any representation and warranty to comply with any applicable law or regulation or to confirm any factual matters (including Awardee's compliance with the terms of Paragraph

[1] This provision is an alternative that may not be included in every award agreement.

5 or any employment or severance agreement between the Cardinal Group and Awardee) reasonably requested by the Company. The Option is not exercisable if such exercise would involve a violation of any Applicable Law.

5. Special Forfeiture and Repayment Rules . This Agreement contains special forfeiture and repayment rules intended to encourage conduct that protects the Cardinal Group's legitimate business assets and discourage conduct that threatens or harms those assets. The Company does not intend to have the benefits of this Agreement reward or subsidize conduct detrimental to the Company, and therefore will require the forfeiture of the benefits offered under this Agreement and the repayment of gains obtained from this Agreement, according to the rules specified below. Activities that trigger the forfeiture and repayment rules are divided into two categories: Misconduct and Competitor Conduct.

(a) Misconduct . During employment with the Cardinal Group and for three years after the Termination of Employment for any reason, Awardee agrees not to engage in Misconduct. If Awardee engages in Misconduct during employment or within three years after the Termination of Employment for any reason, then

(i) Awardee immediately forfeits the Option (or any part of the Option that has not been exercised) which automatically terminates, and

(ii) Awardee shall, within 30 days following written notice from the Company, pay to the Company in cash an amount equal to (A) the gross gain to Awardee or any transferee from each and every exercise of the Option at any time within three years prior to the date the Misconduct first occurred less (B) $1.00. The gross gain is calculated by subtracting the exercise price paid for the Shares from the Fair Market Value of the Shares on the exercise date.

As used in this Agreement, " **Misconduct** " means

(A) disclosing or using any of the Cardinal Group's confidential information (as defined by the applicable Cardinal Group policies and agreements) without proper authorization from the Cardinal Group or in any capacity other than as necessary for the performance of Awardee's assigned duties for the Cardinal Group;

(B) violation of the Standards of Business Conduct or any successor code of conduct or other applicable Cardinal Group policies, including but not limited to conduct which would constitute a breach of any representation or certificate of compliance signed by Awardee;

(C) fraud, gross negligence or willful misconduct by Awardee, including but not limited to fraud, gross negligence or willful misconduct causing or contributing to a material error resulting in a restatement of the financial statements of any member of the Cardinal Group;

(D) directly or indirectly soliciting or recruiting for employment or contract work on behalf of a person or entity other than a member of the Cardinal Group, any person who is an employee, representative, officer or director in the Cardinal Group or who held one or more of those positions at any time within the 12 months prior to Awardee's Termination of Employment;

(E) directly or indirectly inducing, encouraging or causing an employee of the Cardinal Group to terminate his/her employment or a contract worker to terminate his/her contract with a member of the Cardinal Group;

(F) any action by Awardee and/or his or her representatives that either does or could reasonably be expected to undermine, diminish or otherwise damage the relationship between the Cardinal Group and any of its customers, prospective customers, vendors, suppliers or employees known to Awardee; or

(G) breaching any provision of any employment or severance agreement with a member of the Cardinal Group.

Nothing in this Agreement will prevent Awardee from testifying truthfully as required by law, prohibit or prevent Awardee from filing a charge with or participating, testifying or assisting in any investigation, hearing, whistleblower proceeding or other proceeding before any federal, state or local government agency (e.g., Equal Employment Opportunity Commission, National Labor Relations Board, Securities and Exchange Commission, etc.), or prevent Awardee from disclosing Cardinal Group's confidential information in confidence to a federal, state or local government official for the purpose of reporting or investigating a suspected violation of law.

(b) Competitor Conduct . If Awardee engages in Competitor Conduct during employment or within one year after the Termination of Employment for any reason, then

(i) Awardee immediately forfeits the Option (or any part of the Option that has not been exercised) which automatically terminates, and

(ii) Awardee shall, within 30 days following written notice from the Company, pay to the Company in cash an amount equal to (A) the gross gain to Awardee or any transferee from each and every exercise of the Option at any time since the earlier of one year prior to the date the Competitor Conduct first occurred and one year prior to the Termination of Employment, if applicable, less (B) $1.00. The gross gain is calculated by subtracting the exercise price paid for the Shares from the Fair Market Value of the Shares on the exercise date.

As used in this Agreement, " **Competitor Conduct** " means accepting employment with, or directly or indirectly providing services to, a Competitor in the United States. If Awardee has a Termination of Employment and Awardee's responsibilities to the Cardinal Group were limited to a specific territory or territories within or outside the United States during the 24 months prior to the Termination of Employment, then Competitor Conduct will be limited to that specific territory or territories. A "Competitor" means any person or business that competes with the products or services provided by a member of the Cardinal Group for which Awardee had business responsibilities within 24 months prior to Termination of Employment or about which Awardee obtained confidential information (as defined by the applicable Cardinal Group policies or agreements).

(c) General .

(i) Nothing in this Paragraph 5 constitutes or is to be construed as a "noncompete" covenant or other restraint on employment or trade. The provisions of this Paragraph 5 do not prevent, nor are they intended to prevent, Awardee from seeking or accepting employment or other work outside the Cardinal Group. The execution of this Agreement is voluntary. Awardee is free to choose to comply with the terms of this Agreement and receive the benefits offered or else reject this Agreement with no adverse consequences to Awardee's employment with the Cardinal Group.

(ii) Awardee agrees to provide the Company with at least 10 days' written notice prior to accepting employment with or providing services to a Competitor prior to one year after Termination of Employment.

(iii) Awardee acknowledges receiving sufficient consideration for the requirements of this Paragraph 5, including Awardee's receipt of the Option. Awardee further acknowledges that the Company would not provide the Option to Awardee without Awardee's promise to abide by the terms of this Paragraph 5. The parties also acknowledge that the provisions contained in this Paragraph 5 are ancillary to, or part of, an otherwise enforceable agreement at the time this Agreement is made.

(iv) Awardee may be released from the obligations of this Paragraph 5 if and only if the Administrator determines, in writing and in the Administrator's sole discretion, that a release is in the best interests of the Company.

6. Right of Set-Off . By accepting the Option, Awardee consents to a deduction from, and set-off against, any amounts owed to Awardee that are not treated as "non-qualified deferred compensation" under Section 409A of the Code by any member of the Cardinal Group from time to time (including, but not limited to, amounts owed to Awardee as wages, severance payments or other fringe benefits) to the extent of the amounts owed to the Cardinal Group by Awardee under this Agreement.

7. Withholding Tax .

(a) Generally . Awardee is liable and responsible for all taxes owed in connection with the exercise of the Option, regardless of any action the Company takes with respect to any tax withholding obligations that arise in connection with the Option. The Company does not make any representation or undertaking regarding the tax treatment or the treatment of any tax withholding in connection with the exercise of the Option. The Company does not commit and is under no obligation to structure the Option or the exercise of the Option to reduce or eliminate Awardee's tax liability.

(b) Payment of Withholding Taxes . Concurrently with the payment of the exercise price pursuant to Paragraph 1, Awardee is required to arrange for the satisfaction of the minimum amount of any domestic or foreign tax withholding obligation, whether national, federal, state or local, including any employment tax obligation (the "Tax Withholding Obligation") in a manner acceptable to the Company. Any manner provided for in Paragraph 1(b) is an acceptable manner to satisfy the Tax Withholding Obligation unless otherwise determined by the Administrator.

8. Governing Law/Venue for Dispute Resolution/Costs and Legal Fees . This Agreement is governed by the laws of the State of Ohio, without regard to principles of conflicts of law, except to the extent superseded by the laws of the United States of America. **The parties agree and acknowledge that the laws of the State of Ohio bear a substantial relationship to the parties and/or this Agreement and that the Option and benefits granted in this Agreement would not be granted without the governance of this Agreement by the laws of the State of Ohio. In addition, all legal actions or proceedings relating to this Agreement must be brought exclusively in state or federal courts located in Franklin County, Ohio and the parties executing this Agreement hereby consent to the personal jurisdiction of such courts.** Awardee acknowledges that the covenants contained in Paragraph 5 are reasonable in nature, are fundamental for the protection of the Company's legitimate business and proprietary interests, and do not adversely affect Awardee's ability to earn a living. In the event that it becomes necessary for the Company to institute legal proceedings under this Agreement, Awardee is responsible to the Company for all costs and reasonable legal fees incurred by the Company in

connection with the proceedings. Any provision of this Agreement which is determined by a court of competent jurisdiction to be invalid or unenforceable or to disqualify the Award under any Applicable Law should be construed or limited in a manner that is valid and enforceable and that comes closest to the business objectives intended by the provision, without invalidating or rendering unenforceable the remaining provisions of this Agreement.

9. Defend Trade Secrets Act Notice . Under the U.S. Defend Trade Secrets Act of 2016, Awardee will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that: (a) is made (i) in confidence to a federal, state or local government official, either directly or indirectly, or to an attorney, and (ii) solely for the purpose of reporting or investigating a suspected violation of law; (b) is made to Awardee's attorney in relation to a lawsuit for retaliation against Awardee for reporting a suspected violation of law; or (c) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

10. Action by the Administrator . The parties agree that the interpretation of this Agreement rests exclusively and completely within the sole discretion of the Administrator. The parties agree to be bound by the decisions of the Administrator with regard to the interpretation of this Agreement and with regard to any and all matters set forth in this Agreement. In fulfilling its responsibilities, the Administrator may rely upon documents, written statements of the parties, financial reports or other material as the Administrator deems appropriate. The parties agree that there is no right to be heard or to appear before the Administrator and that any decision of the Administrator relating to this Agreement, including without limitation whether particular conduct constitutes Misconduct or Competitor Conduct, is final and binding. The Administrator may delegate its functions under this Agreement to an officer of the Cardinal Group designated by the Administrator, to the extent permitted under the Plan.

11. Prompt Acceptance of Agreement . The Option grant evidenced by this Agreement will, at the discretion of the Administrator, be forfeited if this Agreement is not manually executed and returned to the Company, or electronically executed by Awardee by indicating Awardee's acceptance of this Agreement in accordance with the acceptance procedures set forth on the Company's third-party equity plan administrator's web site, within 90 days of the Grant Date.

12. Electronic Delivery and Consent to Electronic Participation . The Company may, in its sole discretion, decide to deliver any documents related to the Option grant under and participation in the Plan or future options that may be granted under the Plan by electronic means or to request Awardee's consent to participate in the Plan by electronic means. Awardee hereby consents to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company, including the acceptance of option grants and the execution of option agreements through electronic signature.

13. Notices . All notices, requests, consents and other communications required or provided under this Agreement to be delivered by Awardee to the Company will be in writing and will be deemed sufficient if delivered by hand, nationally recognized overnight courier, or certified or registered mail, return receipt requested, postage prepaid, and will be effective upon delivery to the Company at the address set forth below:

Cardinal Health, Inc.
7000 Cardinal Place
Dublin, Ohio 43017
Attention: Deputy General Counsel

All notices, requests, consents and other communications required or provided under this Agreement to be delivered by the Company to Awardee may be delivered by e-mail or in writing and will be deemed sufficient if delivered by e-mail, hand, facsimile, nationally recognized overnight courier, or certified or registered mail, return receipt requested, postage prepaid, and will be effective upon delivery to Awardee.

14. Employment Agreement, Offer Letter or Other Arrangement . To the extent a written employment agreement, offer letter or other arrangement ("Employment Arrangement") that was approved by the Human Resources and Compensation Committee or the Board of Directors or that was approved in writing by an officer of the Company pursuant to delegated authority of the Human Resources and Compensation Committee provides for greater benefits to Awardee with respect to (a) vesting of the Option on Termination of Employment by reason of specified events or (b) exercisability of the Option following Termination of Employment, than provided in this Agreement or in the Plan, then the terms of such Employment Arrangement with respect to vesting of the Option on Termination of Employment by reason of such specified events or exercisability of the Option following Termination of Employment supersede the terms of this Agreement to the extent permitted by the terms of the Plan.

15. Recoupment . This Agreement will be administered in compliance with Section 10D of the Exchange Act and any applicable rules or regulations promulgated by the Securities and Exchange Commission or any national securities exchange or national securities association on which the Shares may be traded. In its discretion, moreover, the Administrator may require repayment to the Company of all or any portion of this Award if the amount of the Award was calculated based upon the achievement of financial results that were subsequently the subject of a restatement of the Company's financial statements, Awardee engaged in misconduct that caused or contributed to the need for the restatement of the financial statements, and the amount payable to Awardee would have been lower than the amount actually paid to Awardee had the financial results been properly reported. This Paragraph 15 is not the Company's exclusive remedy with respect to such matters. Except as otherwise required by Applicable Law, this Paragraph 15 will not apply after a Change of Control.

16. Amendments. Any amendment to the Plan will be deemed to be an amendment to this Agreement to the extent that the amendment is applicable hereto; provided, however, that no amendment will impair the rights of Awardee with respect to an outstanding Award unless agreed to by Awardee and the Company, which agreement must be in writing and signed by Awardee and the Company. Other than following a Change of Control, no such agreement is required if the Administrator determines in its sole discretion that such amendment either (a) is required or advisable in order for the Company, the Plan or the Option to satisfy any Applicable Law or to meet the requirements of any accounting standard or (b) is not reasonably likely to significantly diminish the benefits provided under the Option, or that any such diminishment has been adequately compensated, including pursuant to Section 16(c) of the Plan.

17. Adjustments . The number of Shares issuable subject to the Option and the other terms and conditions of the grant evidenced by this Agreement are subject to adjustment as provided in Section 16 of the Plan.

18. No Right to Future Awards or Employment . The grant of the Option under this Agreement to Awardee is a voluntary, discretionary award being made on a one-time basis and it does not

constitute a commitment to make any future awards. The grant of the Option and any related payments made to Awardee will not be considered salary or other compensation for purposes of any severance pay or similar allowance, except as otherwise required by law. Nothing contained in this Agreement confers upon Awardee any right with respect to continuance of employment or other service with the Company or any Affiliate, nor interferes in any way with any right the Company or any Affiliate would otherwise have to terminate Awardee's employment or other service at any time.

19. Successors and Assigns . Without limiting Paragraph 2, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, administrators, heirs, legal representatives and assigns of Awardee, and the successors and assigns of the Company.

CARDINAL HEALTH, INC.

By: _____

Its: _____

ACCEPTANCE OF AGREEMENT

Awardee hereby: (a) acknowledges that he or she has received a copy of the Plan, a copy of the Company's most recent annual report to shareholders and other communications routinely distributed to the Company's shareholders, and a copy of the Plan Description pertaining to the Plan; (b) accepts this Agreement and the Option granted to him or her under this Agreement subject to all provisions of the Plan and this Agreement, including the provisions in the Agreement regarding "Special Forfeiture and Repayment Rules" set forth in Paragraph 5 and "Recoupment" set forth in Paragraph 15; (c) represents that he or she understands that the acceptance of this Agreement through an on-line or electronic system, if applicable, carries the same legal significance as if he or she manually signed the Agreement; and (d) agrees that no transfer of the Shares delivered in respect of the Option may be made unless the Shares have been duly registered under all applicable Federal and state securities laws pursuant to a then-effective registration which contemplates the proposed transfer or unless the Company has received a written opinion of, or satisfactory to, its legal counsel that the proposed transfer is exempt from such registration.

[

Awardee's Signature

Date]

Exhibit 10.2.4

CARDINAL HEALTH, INC.
RESTRICTED SHARE UNITS AGREEMENT

This Restricted Share Units Agreement (this "Agreement") is entered into in Franklin County, Ohio. On [grant date] (the "Grant Date"), Cardinal Health, Inc., an Ohio corporation (the "Company"), has awarded to [employee name] ("Awardee") [# of shares] Stock Units (the "Restricted Share Units" or "Award"), representing an unfunded unsecured promise of the Company to deliver common shares, without par value, of the Company (the "Shares") to Awardee as set forth in this Agreement. The Restricted Share Units have been granted pursuant to the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan (the "Plan"), and are subject to all provisions of the Plan, which are incorporated in this Agreement by reference, and are subject to the provisions of this Agreement. Capitalized terms used in this Agreement which are not specifically defined have the meanings ascribed to such terms in the Plan.

1. Vesting of Restricted Share Units .

(a) General . [CLIFF ALTERNATIVE: The Restricted Share Units vest on the [ ] anniversary of the Grant Date (the "Vesting Date"), subject to the provisions of this Agreement, including those relating to Awardee's continued employment with the Company and its Affiliates (collectively, the "Cardinal Group").] [INSTALLMENT ALTERNATIVE: The Restricted Share Units vest in [ ] installments, which will be as nearly equal as possible, on the [ ] anniversaries of the Grant Date (each a "Vesting Date" with respect to the portion of the Restricted Share Units scheduled to vest on such date), subject in each case to the provisions of this Agreement, including those relating to Awardee's continued employment with the Company and its Affiliates (collectively, the "Cardinal Group").]

(b) Change of Control . In the event of a Change of Control prior to a Termination of Employment, the Restricted Share Units (to the extent not previously vested or forfeited) vest in full, except to the extent that a Replacement Award is provided to Awardee in accordance with Section 16(b) of the Plan. Any Replacement Award must vest in full upon (i) a Termination for Good Reason by Awardee, (ii) a Termination of Employment by the Company or its successor in the Change of Control other than a Termination for Cause, or (iii) Awardee's death or Disability, in each case, occurring at or during the period of two years after the Change of Control. In addition, if a Replacement Award is provided, any Restricted Share Units that would vest in accordance with Paragraphs 3(b) or (c) in connection with Awardee's Retirement or Disability if Awardee's Termination of Employment occurred on the date of the Change of Control will for purposes of this Agreement vest at the time of the Change of Control.

2. Transferability . The Restricted Share Units are not transferable.

3. Termination of Employment .

(a) General . Except as set forth in Paragraphs 1(b) and 3(b), (c) and (d), if a Termination of Employment occurs, then any unvested Restricted Share Units are forfeited by Awardee immediately after such Termination of Employment.

(b) Death or Disability . If a Termination of Employment by reason of Awardee's death or Disability occurs at least 6 months after the Grant Date, then any outstanding unvested Restricted Share Units immediately vest in full and are not forfeited.

(c) Retirement . If a Termination of Employment by reason of Awardee's Retirement occurs at least 6 months after the Grant Date, then a Ratable Portion of each unvested installment of the

outstanding Restricted Share Units immediately vests and is not forfeited. Such "Ratable Portion," with respect to the applicable installment, is an amount equal to such installment of the Restricted Share Units scheduled to vest on a future Vesting Date multiplied by a fraction, the numerator of which is the number of days from the Grant Date through the date of the Termination of Employment, and the denominator of which is the number of days from the Grant Date through such Vesting Date. [1]

(d) Involuntary Termination with Severance . If (i) Paragraph 3(c) is not applicable, but Awardee has attained either (A) age 53 and at least eight years of continuous service with the Cardinal Group or (B) age 59 and at least four years of continuous service with the Cardinal Group, in each case including service with an Affiliate of the Company prior to the time that such Affiliate became an Affiliate of the Company, (ii) a Termination of Employment by the Cardinal Group (other than a Termination for Cause) occurs at least 6 months after the Grant Date, and (iii) no later than 45 days after the Termination of Employment, Awardee enters into a written separation agreement and general release of claims with the Cardinal Group (in such form as may reasonably be presented by the Company) (a "Separation Agreement"), and Awardee does not timely revoke such Separation Agreement, then a Ratable Portion of each unvested installment of the outstanding Restricted Share Units immediately vests and is not forfeited.

4. Special Forfeiture and Repayment Rules . This Agreement contains special forfeiture and repayment rules intended to encourage conduct that protects the Cardinal Group's legitimate business assets and discourage conduct that threatens or harms those assets. The Company does not intend to have the benefits of this Agreement reward or subsidize conduct detrimental to the Company, and therefore will require the forfeiture of the benefits offered under this Agreement and the repayment of gains obtained from this Agreement, according to the rules specified below. Activities that trigger the forfeiture and repayment rules are divided into two categories: Misconduct and Competitor Conduct.

(a) Misconduct . During employment with the Cardinal Group and for three years after the Termination of Employment for any reason, Awardee agrees not to engage in Misconduct. If Awardee engages in Misconduct during employment or within three years after the Termination of Employment for any reason, then

(i) Awardee immediately forfeits the Restricted Share Units that have not yet vested or that vested at any time within three years prior to the date the Misconduct first occurred and have not yet been paid pursuant to Paragraph 5, and those forfeited Restricted Share Units automatically terminate, and

(ii) Awardee shall, within 30 days following written notice from the Company, pay to the Company in cash an amount equal to (A) the gross gain to Awardee resulting from the payment of Restricted Share Units pursuant to Paragraph 5 that had vested at any time within three years prior to the date the Misconduct first occurred less (B) $1.00. The gross gain is the Fair Market Value of the Shares represented by the Restricted Share Units on the date of receipt.

As used in this Agreement, " **Misconduct** " means

(A) disclosing or using any of the Cardinal Group's confidential information (as defined by the applicable Cardinal Group policies and agreements) without proper authorization

[1] This provision is an alternative that may not be included in every award agreement.

from the Cardinal Group or in any capacity other than as necessary for the performance of Awardee's assigned duties for the Cardinal Group;

(B) violation of the Standards of Business Conduct or any successor code of conduct or other applicable Cardinal Group policies, including but not limited to conduct which would constitute a breach of any representation or certificate of compliance signed by Awardee;

(C) fraud, gross negligence or willful misconduct by Awardee, including but not limited to fraud, gross negligence or willful misconduct causing or contributing to a material error resulting in a restatement of the financial statements of any member of the Cardinal Group;

(D) directly or indirectly soliciting or recruiting for employment or contract work on behalf of a person or entity other than a member of the Cardinal Group, any person who is an employee, representative, officer or director in the Cardinal Group or who held one or more of those positions at any time within the 12 months prior to Awardee's Termination of Employment;

(E) directly or indirectly inducing, encouraging or causing an employee of the Cardinal Group to terminate his/her employment or a contract worker to terminate his/her contract with a member of the Cardinal Group;

(F) any action by Awardee and/or his or her representatives that either does or could reasonably be expected to undermine, diminish or otherwise damage the relationship between the Cardinal Group and any of its customers, prospective customers, vendors, suppliers or employees known to Awardee; or

(G) breaching any provision of any employment or severance agreement with a member of the Cardinal Group.

Nothing in this Agreement will prevent Awardee from testifying truthfully as required by law, prohibit or prevent Awardee from filing a charge with or participating, testifying or assisting in any investigation, hearing, whistleblower proceeding or other proceeding before any federal, state or local government agency (e.g., Equal Employment Opportunity Commission, National Labor Relations Board, Securities and Exchange Commission, etc.), or prevent Awardee from disclosing Cardinal Group's confidential information in confidence to a federal, state or local government official for the purpose of reporting or investigating a suspected violation of law.

(b) Competitor Conduct . If Awardee engages in Competitor Conduct during employment or within one year after the Termination of Employment for any reason, then

(i) Awardee immediately forfeits the Restricted Share Units that have not yet vested or that vested at any time within one year prior to the date the Competitor Conduct first occurred and have not yet been paid pursuant to Paragraph 5, and those forfeited Restricted Share Units automatically terminate, and

(ii) Awardee shall, within 30 days following written notice from the Company, pay to the Company in cash an amount equal to (A) the gross gain to Awardee resulting from the payment of Restricted Share Units pursuant to Paragraph 5 that had vested at any time since the

earlier of one year prior to the date the Competitor Conduct first occurred or one year prior to the Termination of Employment, if applicable, less (B) $1.00. The gross gain is the Fair Market Value of the Shares represented by the Restricted Share Units on the date of receipt.

As used in this Agreement, " **Competitor Conduct** " means accepting employment with, or directly or indirectly providing services to, a Competitor in the United States. If Awardee has a Termination of Employment and Awardee's responsibilities to the Cardinal Group were limited to a specific territory or territories within or outside the United States during the 24 months prior to the Termination of Employment, then Competitor Conduct will be limited to that specific territory or territories. A "Competitor" means any person or business that competes with the products or services provided by a member of the Cardinal Group for which Awardee had business responsibilities within 24 months prior to Termination of Employment or about which Awardee obtained confidential information (as defined by the applicable Cardinal Group policies or agreements).

(c) General .

(i) Nothing in this Paragraph 4 constitutes or is to be construed as a "noncompete" covenant or other restraint on employment or trade. The provisions of this Paragraph 4 do not prevent, nor are they intended to prevent, Awardee from seeking or accepting employment or other work outside the Cardinal Group. The execution of this Agreement is voluntary. Awardee is free to choose to comply with the terms of this Agreement and receive the benefits offered or else reject this Agreement with no adverse consequences to Awardee's employment with the Cardinal Group.

(ii) Awardee agrees to provide the Company with at least 10 days' written notice prior to accepting employment with or providing services to a Competitor within one year after Termination of Employment.

(iii) Awardee acknowledges receiving sufficient consideration for the requirements of this Paragraph 4, including Awardee's receipt of the Restricted Share Units. Awardee further acknowledges that the Company would not provide the Restricted Share Units to Awardee without Awardee's promise to abide by the terms of this Paragraph 4. The parties also acknowledge that the provisions contained in this Paragraph 4 are ancillary to, or part of, an otherwise enforceable agreement at the time this Agreement is made.

(iv) Awardee may be released from the obligations of this Paragraph 4 if and only if the Administrator determines, in writing and in the Administrator's sole discretion, that a release is in the best interests of the Company.

5. Payment .

(1) General . Subject to the provisions of Paragraph 4 and Paragraphs 5(b), (c), (d) and (e), Awardee is entitled to receive from the Company (without any payment by or on behalf of Awardee other than as described in Paragraph 9) the Shares represented by the vested Restricted Share Units on the Vesting Date.

(a) Death . To the extent that Restricted Share Units are vested on the date of Awardee's Termination of Employment due to death, Awardee is entitled to receive the corresponding Shares from the Company on the date of death.

(b) Disability, Retirement and Other Separations from Service . To the extent that Restricted Share Units are vested as the result of Disability, Retirement or otherwise on the date of Awardee's "separation from service" (determined in accordance with Section 409A of the Code), Awardee is entitled to receive the corresponding Shares from the Company on the date that is 60 days after Awardee's "separation from service"; provided, however, that if Awardee on the date of separation from service is a "specified employee" (certain employees of the Cardinal Group within the meaning of Section 409A of the Code determined using the identification methodology selected by the Company from time to time), to the extent necessary to avoid the imposition of tax under Section 409A of the Code, Awardee is entitled to receive the corresponding Shares from the Company on the first day of the seventh month after the date of Awardee's separation from service or, if earlier, the date of Awardee's death.

(c) Change of Control . To the extent that Restricted Share Units are vested on the date of a Change of Control, Awardee is entitled to receive the corresponding Shares from the Company on the date of the Change of Control; provided, however, that if such Change of Control would not qualify as a permissible date of distribution under Section 409A(a)(2)(A)(v) of the Code and the regulations thereunder, and where Section 409A of the Code applies to such distribution as a deferral of compensation, Awardee is entitled to receive the corresponding Shares from the Company on the date that would have otherwise applied pursuant to Paragraphs 5(a), (b) or (c).

(d) Elections to Defer Receipt . Elections to defer receipt of the Shares beyond the date of payment provided in this Agreement may be permitted in the discretion of the Administrator pursuant to procedures established by the Administrator in compliance with the requirements of Section 409A of the Code.

6. Dividend Equivalents . Awardee is not entitled to receive cash dividends on the Restricted Share Units, but will receive a dividend equivalent payment from the Company in an amount equal to the dividends that would have been paid on each Share underlying the Restricted Share Units if it had been outstanding between the Grant Date and the payment date of any such Share (i.e., based on the record date for cash dividends). Subject to an election to defer receipt as permitted under Paragraph 5(e), the Company shall pay dividend equivalent payments in cash as soon as reasonably practicable after the payment date of the Restricted Share Units to which such dividend equivalents relate.

7. Right of Set-Off . By accepting the Restricted Share Units, Awardee consents to a deduction from, and set-off against, any amounts owed to Awardee that are not treated as "non-qualified deferred compensation" under Section 409A of the Code by any member of the Cardinal Group from time to time (including, but not limited to, amounts owed to Awardee as wages, severance payments or other fringe benefits) to the extent of the amounts owed to the Cardinal Group by Awardee under this Agreement.

8. No Shareholder Rights . Awardee has no rights of a shareholder with respect to the Restricted Share Units, including no right to vote the Shares represented by the Restricted Share Units, until such Shares vest and are paid to Awardee.

9. Withholding Tax .

(a) Generally . Awardee is liable and responsible for all taxes owed in connection with the Restricted Share Units (including taxes owed with respect to the cash payments described in Paragraph 6), regardless of any action the Company takes with respect to any tax withholding obligations that arise in connection with the Restricted Share Units. The Company does not make any representation or undertaking regarding the tax treatment or the treatment of any tax withholding in connection with the

grant, vesting or payment of the Restricted Share Units or the subsequent sale of Shares issuable pursuant to the Restricted Share Units. The Company does not commit and is under no obligation to structure the Restricted Share Units to reduce or eliminate Awardee's tax liability.

(b) Payment of Withholding Taxes . Prior to any event in connection with the Restricted Share Units (e.g., vesting or payment) that the Company determines may result in any domestic or foreign tax withholding amounts being paid by the Company, whether national, federal, state or local, including any employment tax obligation (the "Tax Withholding Obligation"), Awardee is required to arrange for the satisfaction of the minimum amount of such Tax Withholding Obligation in a manner acceptable to the Company. Awardee's acceptance of this Agreement constitutes Awardee's instruction and authorization to the Company to withhold on Awardee's behalf the number of Shares from those Shares issuable to Awardee under this Award as the Company determines to be sufficient to satisfy the Tax Withholding Obligation. In the case of any amounts withheld for taxes pursuant to this provision in the form of Shares, the amount withheld may not exceed the amount legally required, and withholding above the minimum withholding requirements shall be available only if and to the extent that the Administrator has authorized such. The Company has the right to deduct from all cash payments paid pursuant to Paragraph 6 the amount of any taxes which the Company is required to withhold with respect to such payments.

10. Governing Law/Venue for Dispute Resolution/Costs and Legal Fees . This Agreement is governed by the laws of the State of Ohio, without regard to principles of conflicts of law, except to the extent superseded by the laws of the United States of America. **The parties agree and acknowledge that the laws of the State of Ohio bear a substantial relationship to the parties and/or this Agreement and that the Restricted Share Units and benefits granted in this Agreement would not be granted without the governance of this Agreement by the laws of the State of Ohio. In addition, all legal actions or proceedings relating to this Agreement must be brought exclusively in state or federal courts located in Franklin County, Ohio and the parties executing this Agreement hereby consent to the personal jurisdiction of such courts.** Awardee acknowledges that the covenants contained in Paragraph 4 are reasonable in nature, are fundamental for the protection of the Company's legitimate business and proprietary interests, and do not adversely affect Awardee's ability to earn a living. In the event that it becomes necessary for the Company to institute legal proceedings under this Agreement, Awardee is responsible to the Company for all costs and reasonable legal fees incurred by the Company in connection with the proceedings. Any provision of this Agreement which is determined by a court of competent jurisdiction to be invalid or unenforceable or to disqualify the Award under any Applicable Law should be construed or limited in a manner that is valid and enforceable and that comes closest to the business objectives intended by the provision, without invalidating or rendering unenforceable the remaining provisions of this Agreement.

11. Defend Trade Secrets Act Notice . Under the U.S. Defend Trade Secrets Act of 2016, Awardee will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that: (a) is made (i) in confidence to a federal, state or local government official, either directly or indirectly, or to an attorney, and (ii) solely for the purpose of reporting or investigating a suspected violation of law; (b) is made to Awardee's attorney in relation to a lawsuit for retaliation against Awardee for reporting a suspected violation of law; or (c) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

12. Action by the Administrator . The parties agree that the interpretation of this Agreement rests exclusively and completely within the sole discretion of the Administrator. The parties agree to be bound by the decisions of the Administrator with regard to the interpretation of this Agreement and with

regard to any and all matters set forth in this Agreement. In fulfilling its responsibilities under this Agreement, the Administrator may rely upon documents, written statements of the parties, financial reports or other material as the Administrator deems appropriate. The parties agree that there is no right to be heard or to appear before the Administrator and that any decision of the Administrator relating to this Agreement, including whether particular conduct constitutes Misconduct or Competitor Conduct, is final and binding. The Administrator may delegate its functions under this Agreement to an officer of the Cardinal Group designated by the Administrator, to the extent permitted under the Plan.

13. Prompt Acceptance of Agreement . The Restricted Share Unit grant evidenced by this Agreement will, at the discretion of the Administrator, be forfeited if this Agreement is not manually executed and returned to the Company, or electronically executed by Awardee by indicating Awardee's acceptance of this Agreement in accordance with the acceptance procedures set forth on the Company's third-party equity plan administrator's web site, within 90 days of the Grant Date.

14. Electronic Delivery and Consent to Electronic Participation . The Company may, in its sole discretion, decide to deliver any documents related to the Restricted Share Unit grant under and participation in the Plan or future Restricted Share Units that may be granted under the Plan by electronic means or to request Awardee's consent to participate in the Plan by electronic means. Awardee hereby consents to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company, including the acceptance of restricted share unit grants and the execution of restricted share unit agreements through electronic signature.

15. Notices . All notices, requests, consents and other communications required or provided under this Agreement to be delivered by Awardee to the Company will be in writing and will be deemed sufficient if delivered by hand, nationally recognized overnight courier, or certified or registered mail, return receipt requested, postage prepaid, and will be effective upon delivery to the Company at the address set forth below:

Cardinal Health, Inc.
7000 Cardinal Place
Dublin, Ohio 43017
Attention: Deputy General Counsel

All notices, requests, consents and other communications required or provided under this Agreement to be delivered by the Company to Awardee may be delivered by e-mail or in writing and will be deemed sufficient if delivered by e-mail, hand, facsimile, nationally recognized overnight courier, or certified or registered mail, return receipt requested, postage prepaid, and will be effective upon delivery to Awardee.

16. Employment Agreement, Offer Letter or Other Arrangement . To the extent a written employment agreement, offer letter or other arrangement ("Employment Arrangement") that was approved by the Human Resources and Compensation Committee or the Board of Directors or that was approved in writing by an officer of the Company pursuant to delegated authority of the Human Resources and Compensation Committee provides for greater benefits to Awardee with respect to vesting of the Award on Termination of Employment by reason of specified events than provided in this Agreement or in the Plan, then the terms of such Employment Arrangement with respect to vesting of the Award on Termination of Employment by reason of such specified events supersede the terms of this Agreement to the extent permitted by the terms of the Plan.

17. Recoupment . This Agreement will be administered in compliance with Section 10D of the Exchange Act and any applicable rules or regulations promulgated by the Securities and Exchange Commission or any national securities exchange or national securities association on which the Shares may be traded. In its discretion, moreover, the Administrator may require repayment to the Company of all or any portion of this Award if the amount of the Award was calculated based upon the achievement of financial results that were subsequently the subject of a restatement of the Company's financial statements, Awardee engaged in misconduct that caused or contributed to the need for the restatement of the financial statements, and the amount payable to Awardee would have been lower than the amount actually paid to Awardee had the financial results been properly reported. This Paragraph 17 is not the Company's exclusive remedy with respect to such matters. Except as otherwise required by Applicable Law, this Paragraph 17 will not apply after a Change of Control.

18. Amendment . Any amendment to the Plan is deemed to be an amendment to this Agreement to the extent that the amendment is applicable hereto; provided, however, that no amendment may impair the rights of Awardee with respect to an outstanding Restricted Share Unit unless agreed to by Awardee and the Company, which agreement must be in writing and signed by Awardee and the Company. Other than following a Change of Control, no such agreement is required if the Administrator determines in its sole discretion that such amendment either (a) is required or advisable in order for the Company, the Plan or the Restricted Share Units to satisfy any Applicable Law or to meet the requirements of any accounting standard or (b) is not reasonably likely to significantly diminish the benefits provided under the Restricted Share Units, or that any such diminishment has been adequately compensated, including pursuant to Section 16(c) of the Plan.

19. Adjustments . The number of Shares issuable for each Restricted Share Unit and the other terms and conditions of the Award evidenced by this Agreement are subject to adjustment as provided in Section 16 of the Plan.

20. Compliance with Section 409A of the Code . To the extent applicable, it is intended that this Agreement comply with the provisions of Section 409A of the Code. This Agreement shall be administered in a manner consistent with this intent, and any provision that would cause this Agreement or the Plan to fail to satisfy Section 409A of the Code shall have no force or effect until amended to comply with Section 409A of the Code (which amendment may be retroactive to the extent permitted by Section 409A of the Code and may be made by the Company without the consent of Awardee).

21. No Right to Future Awards or Employment . The grant of the Restricted Share Units under this Agreement to Awardee is a voluntary, discretionary award being made on a one-time basis and it does not constitute a commitment to make any future awards. The grant of the Restricted Share Units and any payments made under this Agreement will not be considered salary or other compensation for purposes of any severance pay or similar allowance, except as otherwise required by law. Nothing contained in this Agreement confers upon Awardee any right to be employed or remain employed by the Company or any of its Affiliates, nor limits or affects in any manner the right of the Company or any of its Affiliates to terminate the employment or adjust the compensation of Awardee.

22. Successors and Assigns . Without limiting Paragraph 2, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, administrators, heirs, legal representatives and assigns of Awardee, and the successors and assigns of the Company.

CARDINAL HEALTH, INC.

By: _____

Its: _____

ACCEPTANCE OF AGREEMENT

Awardee hereby: (a) acknowledges that he or she has received a copy of the Plan, a copy of the Company's most recent annual report to shareholders and other communications routinely distributed to the Company's shareholders, and a copy of the Plan Description pertaining to the Plan; (b) accepts this Agreement and the Restricted Share Units granted to him or her under this Agreement subject to all provisions of the Plan and this Agreement, including the provisions in the Agreement regarding "Special Forfeiture and Repayment Rules" set forth in Paragraph 4 and "Recoupment" set forth in Paragraph 17; (c) represents that he or she understands that the acceptance of this Agreement through an on-line or electronic system, if applicable, carries the same legal significance as if he or she manually signed the Agreement; and (d) agrees that no transfer of the Shares delivered in respect of the Restricted Share Units may be made unless the Shares have been duly registered under all applicable Federal and state securities laws pursuant to a then-effective registration which contemplates the proposed transfer or unless the Company has received a written opinion of, or satisfactory to, its legal counsel that the proposed transfer is exempt from such registration.

[_____
Awardee's Signature

_____
Date]

Exhibit 10.2.5

CARDINAL HEALTH, INC.
PERFORMANCE SHARE UNITS AGREEMENT

This Performance Share Units Agreement (this "Agreement") is entered into in Franklin County, Ohio. On [grant date] (the "Grant Date"), Cardinal Health, Inc., an Ohio corporation (the "Company"), has awarded to [employee name] ("Awardee") [target # of units] performance-based Stock Units (the "Performance Share Units" or "Award"). The Performance Share Units have been granted pursuant to the Amended Cardinal Health, Inc. 2011 Long-Term Incentive Plan (the "Plan"), and are subject to all provisions of the Plan, which are incorporated in this Agreement by reference, and are subject to the provisions of this Agreement. Capitalized terms used in this Agreement which are not specifically defined have the meanings ascribed to them in the Plan.

1. Vesting of Performance Share Units . Subject to the provisions of this Agreement, zero to [maximum percentage] of the Performance Share Units vest when the Administrator certifies the payout level ("Payout Level") as a result of achievement of: (a) specific performance criteria (the "Performance Goals") for a performance period ("Performance Period") set forth in Exhibit A attached hereto; and (b) Qualifying Performance Criteria set by the Administrator for a Performance Period, if the Award is intended to satisfy the requirements for "performance-based compensation" under Section 162(m) of the Code.

2. Transferability . The Performance Share Units are not transferable.

3. Termination of Employment .

(a) General . Except to the extent that vesting occurs pursuant to Paragraphs 3(b), (c), (d) or (e) or Paragraph 5, if a Termination of Employment occurs prior to the applicable payment date in Paragraph 6(a) (the "Payment Date") associated with a Performance Period, any Performance Share Units allocated to that Performance Period, whether vested or unvested, are forfeited by Awardee.

(b) Death or Disability . If a Termination of Employment by reason of Awardee's death or Disability occurs at least 6 months after the Grant Date, then the outstanding unvested Performance Share Units for a Performance Period will vest as if Awardee had remained employed through the Payment Date.

(c) Retirement . If a Termination of Employment by reason of Awardee's Retirement occurs at least 6 months after the Grant Date, then the outstanding unvested Performance Share Units for a Performance Period will vest in an amount equal to the number of Performance Share Units that would have vested if Awardee had remained employed through the Payment Date multiplied by a fraction, the numerator of which is the number of days in the Performance Period up to the date of such Termination of Employment, and the denominator of which is the total number of days in such Performance Period. [1]

(d) Involuntary Termination with Severance . If (i) neither Paragraph 3(c) nor Paragraph 3(e) is applicable, but Awardee has attained either (A) age 53 and at least eight years of continuous service with the Company and its Affiliates (collectively, the "Cardinal Group"), or (B) age 59 and at least four years of continuous service with the Cardinal Group, in each case including service with an Affiliate of the Company prior to the time that such Affiliate became an Affiliate of the Company, (ii) a Termination of Employment by the Cardinal Group (other than a Termination for Cause) occurs at least 6 months after

[1] This provision is an alternative that may not be included in every award agreement.

the Grant Date, and (iii) no later than 45 days after the Termination of Employment, Awardee enters into awritten separation agreement and general release with the Cardinal Group (in such form as may reasonably be presented by the Company) (a "Separation Agreement"), and Awardee does not timely revoke such Separation Agreement, then the outstanding unvested Performance Share Units for a Performance Period will vest in an amount equal to the number of Performance Share Units that would have vested if Awardee had remained employed through the Payment Date multiplied by a fraction, the numerator of which is the number of days in the Performance Period up to the date of such Termination of Employment, and the denominator of which is the total number of days in such Performance Period.

(e) Involuntary Termination After Completion of a Performance Period . If a Termination of Employment by the Cardinal Group (other than a Termination for Cause) occurs after the completion of a Performance Period but prior to the Payment Date, then the Performance Share Units for the applicable Performance Period will vest as if Awardee had remained employed through the Payment Date.

4. Special Forfeiture and Repayment Rules . This Agreement contains special forfeiture and repayment rules intended to encourage conduct that protects the Cardinal Group's legitimate business assets and discourage conduct that threatens or harms those assets. The Company does not intend to have the benefits of this Agreement reward or subsidize conduct detrimental to the Company, and therefore will require the forfeiture of the benefits offered under this Agreement and the repayment of gains obtained from this Agreement, according to the rules specified below. Activities that trigger the forfeiture and repayment rules are divided into two categories: Misconduct and Competitor Conduct.

(a) Misconduct . During employment with the Cardinal Group and for three years after the Termination of Employment for any reason, Awardee agrees not to engage in Misconduct. If Awardee engages in Misconduct during employment or within three years after the Termination of Employment for any reason, then

(i) Awardee immediately forfeits the Performance Share Units that have not yet vested or that vested at any time within three years prior to the date the Misconduct first occurred and have not yet been paid pursuant to Paragraph 6, and those forfeited Performance Share Units automatically terminate, and

(ii) Awardee shall, within 30 days following written notice from the Company, pay to the Company in cash an amount equal to: (A) the gross gain to Awardee resulting from the payment of the Performance Share Units pursuant to Paragraph 6 that had vested at any time within three years prior to the date the Misconduct first occurred less (B) $1.00. The gross gain is the Fair Market Value of the Shares represented by the Performance Share Units on the Payment Date.

As used in this Agreement, " **Misconduct** " means

(A) disclosing or using any of the Cardinal Group's confidential information (as defined by the applicable Cardinal Group policies and agreements) without proper authorization from the Cardinal Group or in any capacity other than as necessary for the performance of Awardee's assigned duties for the Cardinal Group;

(B) violation of the Standards of Business Conduct or any successor code of conduct or other applicable Cardinal Group policies, including but not limited to conduct which would constitute a breach of any representation or certificate of compliance signed by Awardee;

(C) fraud, gross negligence or willful misconduct by Awardee, including but not limited to fraud, gross negligence or willful misconduct causing or contributing to a material error resulting in a restatement of the financial statements of any member of the Cardinal Group;

(D) directly or indirectly soliciting or recruiting for employment or contract work on behalf of a person or entity other than a member of the Cardinal Group, any person who is an employee, representative, officer or director in the Cardinal Group or who held one or more of those positions at any time within the 12 months prior to Awardee's Termination of Employment;

(E) directly or indirectly inducing, encouraging or causing an employee of the Cardinal Group to terminate his/her employment or a contract worker to terminate his/her contract with a member of the Cardinal Group;

(F) any action by Awardee and/or his or her representatives that either does or could reasonably be expected to undermine, diminish or otherwise damage the relationship between the Cardinal Group and any of its customers, prospective customers, vendors, suppliers or employees known to Awardee; or

(G) breaching any provision of any employment or severance agreement with a member of the Cardinal Group.

Nothing in this Agreement will prevent Awardee from testifying truthfully as required by law, prohibit or prevent Awardee from filing a charge with or participating, testifying or assisting in any investigation, hearing, whistleblower proceeding or other proceeding before any federal, state or local government agency (e.g., Equal Employment Opportunity Commission, National Labor Relations Board, Securities and Exchange Commission, etc.), or prevent Awardee from disclosing Cardinal Group's confidential information in confidence to a federal, state or local government official for the purpose of reporting or investigating a suspected violation of law.

(b) Competitor Conduct . If Awardee engages in Competitor Conduct during employment or within one year after the Termination of Employment for any reason, then

(i) Awardee immediately forfeits the Performance Share Units that have not yet vested or that vested at any time within one year prior to the date the Competitor Conduct first occurred and have not yet been paid pursuant to Paragraph 6, and those forfeited Performance Share Units automatically terminate, and

(ii) Awardee shall, within 30 days following written notice from the Company, pay the Company an amount equal to: (A) the gross gain to Awardee resulting from the payment of Performance Share Units pursuant to Paragraph 6 that had vested at any time since the earlier of one year prior to the date the Competitor Conduct first occurred or one year prior to the Termination of Employment, if applicable, less (B) $1.00. The gross gain is the Fair Market Value of the Shares represented by the Performance Share Units on the Payment Date.

As used in this Agreement, " **Competitor Conduct** " means accepting employment with, or directly or indirectly providing services to, a Competitor in the United States. If Awardee has a Termination of

Employment and Awardee's responsibilities to the Cardinal Group were limited to a specific territory or territories within or outside the United States during the 24 months prior to the Termination of Employment, then Competitor Conduct is limited to that specific territory or territories. A "Competitor" means any person or business that competes with the products or services provided by a member of the Cardinal Group for which Awardee had business responsibilities within 24 months prior to Termination of Employment or about which Awardee obtained confidential information (as defined by the applicable Cardinal Group policies or agreements).

(c) General .

(i) Nothing in this Paragraph 4 constitutes or is to be construed as a "noncompete" covenant or other restraint on employment or trade. The provisions of this Paragraph 4 do not prevent, nor are they intended to prevent, Awardee from seeking or accepting employment or other work outside the Cardinal Group. The execution of this Agreement is voluntary. Awardee is free to choose to comply with the terms of this Agreement and receive the benefits offered or else reject this Agreement with no adverse consequences to Awardee's employment with the Cardinal Group.

(ii) Awardee agrees to provide the Company with at least 10 days written notice prior to accepting employment with or providing services to a Competitor within one year after Termination of Employment.

(iii) Awardee acknowledges receiving sufficient consideration for the requirements of this Paragraph 4, including Awardee's receipt of the Performance Share Units. Awardee further acknowledges that the Company would not provide the Performance Share Units to Awardee without Awardee's promise to abide by the terms of this Paragraph 4. The parties also acknowledge that the provisions contained in this Paragraph 4 are ancillary to, or part of, an otherwise enforceable agreement at the time this Agreement is made.

(iv) Awardee may be released from the obligations of this Paragraph 4 if and only if the Administrator determines, in writing and in the Administrator's sole discretion, that a release is in the best interests of the Company.

5. Change of Control .

(a) Valuation . In the event of a Change of Control prior to a Payment Date, the Administrator, as constituted immediately before such Change of Control, shall determine and certify the Payout Level (the "Change of Control Payout Level") based on (i) actual performance through the most recent date prior to the Change of Control for which achievement of the Performance Goals can reasonably be determined; and (ii) the expected performance for the remainder of the Performance Period based on information reasonably available.

(b) Vesting and Substitute Awards .

(i) In the event of a Change of Control prior to a Payment Date, the percentage of the Performance Share Units determined in accordance with Exhibit A at the Change of Control Payout Level vests unless an award meeting the requirements of Paragraph 5(b)(ii) (a "Substitute Award") is provided to Awardee to replace or adjust the Award. If a Substitute Award is provided, any Performance Share Units that (A) except to the extent that clause (B) applies, would vest in accordance with Paragraphs 3(b) or (c) in connection with Awardee's Retirement or Disability if

Awardee's Termination of Employment occurred on the date of the Change of Control or (B) are eligible to vest in accordance with Paragraph 3(d) as a result of Awardee's Termination of Employment that actually occurs prior to the Change of Control, vest at the time of the Change of Control. No Substitute Award will be provided in the event of Awardee's Termination of Employment by reason of death, Disability, Retirement or the circumstances described in Paragraph 3(d) prior to a Change of Control.

(ii) An award meets the conditions of this Paragraph 5(b)(ii) (and hence qualifies as a Substitute Award) if, as determined by the Administrator as constituted immediately before the Change of Control, (A) it has a value at the time of grant or adjustment at least equal to the value of the Performance Share Units that would vest under Paragraph 5(b)(i) if there were no Substitute Award; (B) it is paid in publicly traded equity securities of the Company or its successor in the Change of Control or another entity that is affiliated with the Company or its successor following the Change of Control; (C) it is a restricted stock unit award with vesting and payment not conditioned on the achievement of any performance criteria or conditions; (D) it vests in full upon (1) a Termination for Good Reason by Awardee, (2) a Termination of Employment by the Company or its successor in the Change of Control other than a Termination for Cause, or (3) Awardee's death or Disability, in each case, occurring at or during the period of two years after the Change of Control; (E) if Awardee is subject to U.S. federal income tax under the Code, the tax consequences to Awardee under the Code of the Substitute Award are not less favorable to Awardee than the tax consequences of the Award; and (F) its other terms and conditions are not less favorable to Awardee than the terms and conditions of the Award (including the provisions that would apply in the event of a subsequent Change of Control). Without limiting the generality of the foregoing, the Substitute Award may take the form of a continuation of the Award if the modifications required by the preceding sentence are satisfied.

6. Payment .

(a) General . The Company shall pay Performance Share Units in Shares. Subject to the provisions of Paragraph 4 and Paragraphs 6(b) and (c), Awardee is entitled to receive from the Company (without any payment on behalf of Awardee other than as described in Paragraph 10) one Share for each vested Performance Share Unit not later than the 60th day after the end of a Performance Period, except that if Awardee's Termination of Employment occurs due to death after the end of the Performance Period, Awardee is entitled to receive the corresponding Shares from the Company on the date of death.

(b) Change of Control . Notwithstanding Paragraph 6(a), to the extent that the performance and service vesting requirements have been satisfied for the Performance Share Units on the dates set forth below, payment with respect to the Performance Share Units will be made as follows:

(i) On the date of a Change of Control, Awardee is entitled to receive one Share for each vested Performance Share Unit, subject to any adjustments made pursuant to Section 16(a) of the Plan, from the Company; provided, however, that if such Change of Control would not qualify as a permissible date of distribution under Section 409A(a)(2)(A)(v) of the Code and the regulations thereunder, and where Section 409A of the Code applies to such distribution as a deferral of compensation, Awardee is entitled to receive the corresponding Shares from the Company on the date that would have otherwise applied pursuant to Paragraphs 6(a), 6(b)(ii) or 6(b)(iii).

(ii) If Awardee's separation from service occurs during the period of two years following a Change of Control (and such Change of Control constitutes a change of control event as defined in accordance with Section 409A(a)(2)(A)(v) of the Code and the regulations thereunder), Awardee is entitled to receive one Share for each vested Performance Share Unit from the Company on the date of Awardee's separation from service; provided, in such event that if Awardee on the date of separation from service is a "specified employee" (certain employees of the Cardinal Group within the meaning of Section 409A of the Code determined using the identification methodology selected by the Company from time to time), Awardee is entitled to receive the corresponding Shares from the Company on the first day of the seventh month after the date of Awardee's separation from service or, if earlier, the date of Awardee's death.

(iii) On the date of Awardee's Termination of Employment due to death following a Change of Control, Awardee is entitled to receive one Share for each vested Performance Share Unit from the Company on the date of death.

(c) Elections to Defer Receipt. Elections to defer receipt of the Shares beyond the Payment Date may be permitted in the discretion of the Administrator pursuant to procedures established by the Administrator in compliance with the requirements of Section 409A of the Code.

7. Dividend Equivalents. Awardee is not entitled to receive cash dividends on the Performance Share Units, but will receive a dividend equivalent payment from the Company in an amount equal to the dividends that would have been paid on each Share underlying the Performance Share Units if it had been outstanding between the Grant Date and the payment date of any such Share (i.e., based on the record date for cash dividends). Subject to an election to defer receipt as permitted under Paragraph 6(c), the Company shall pay dividend equivalent payments in cash as soon as reasonably practicable after the payment date of (and to the same extent as) the Performance Share Units to which such dividend equivalents relate.

8. Right of Set-Off. By accepting the Performance Share Units, Awardee consents to a deduction from, and set-off against, any amounts owed to Awardee that are not treated as "non-qualified deferred compensation" under Section 409A of the Code by any member of the Cardinal Group from time to time (including, but not limited to, amounts owed to Awardee as wages, severance payments or other fringe benefits) to the extent of the amounts owed to the Cardinal Group by Awardee under this Agreement.

9. No Shareholder Rights. Awardee has no rights of a shareholder with respect to the Performance Share Units, including no right to vote any Shares represented by the Performance Share Units, until such Shares are paid to Awardee.

10. Withholding Tax.

(a) Generally. Awardee is liable and responsible for all taxes owed in connection with the Performance Share Units (including taxes owed with respect to the cash payments described in Paragraph 7), regardless of any action the Company takes with respect to any tax withholding obligations that arise in connection with the Performance Share Units. The Company does not make any representation or undertaking regarding the tax treatment or the treatment of any tax withholding in connection with the grant, vesting or payment of the Performance Share Units or the subsequent sale of Shares issuable pursuant to vested Performance Share Units. The Company does not commit and is under no obligation to structure the Performance Share Units to reduce or eliminate Awardee's tax liability.

(b) Payment of Withholding Taxes. Prior to any event in connection with the Performance Share Units (e.g., vesting or payment) that the Company determines may result in any domestic or foreign tax withholding amounts being paid by the Company, whether national, federal, state or local, including any employment tax obligation (the "Tax Withholding Obligation"), Awardee is required to arrange for the satisfaction of the minimum amount of such Tax Withholding Obligation in a manner acceptable to the Company. Awardee's acceptance of this Agreement constitutes Awardee's instruction and authorization to the Company to withhold on Awardee's behalf the number of Shares from those Shares issuable to Awardee under this Award as the Company determines to be sufficient to satisfy the Tax Withholding Obligation. In the case of any amounts withheld for taxes pursuant to this provision in the form of Shares, the amount withheld may not exceed the amount legally required, and withholding above the minimum withholding requirements shall be available only if and to the extent that the Administrator has authorized such. The Company has the right to deduct from all cash payments paid pursuant to Paragraph 7 the amount of any taxes which the Company is required to withhold with respect to such payments.

11. Governing Law/Venue for Dispute Resolution/Costs and Legal Fees. This Agreement is governed by the laws of the State of Ohio, without regard to principles of conflicts of law, except to the extent superseded by the laws of the United States of America. **The parties agree and acknowledge that the laws of the State of Ohio bear a substantial relationship to the parties and/or this Agreement and that the Performance Share Units and benefits granted in this Agreement would not be granted without the governance of this Agreement by the laws of the State of Ohio. In addition, all legal actions or proceedings relating to this Agreement must be brought exclusively in state or federal courts located in Franklin County, Ohio and the parties executing this Agreement hereby consent to the personal jurisdiction of such courts.** Awardee acknowledges that the covenants contained in Paragraph 4 are reasonable in nature, are fundamental for the protection of the Company's legitimate business and proprietary interests, and do not adversely affect Awardee's ability to earn a living. In the event that it becomes necessary for the Company to institute legal proceedings under this Agreement, Awardee is responsible to the Company for all costs and reasonable legal fees incurred by the Company in connection with the proceedings. Any provision of this Agreement which is determined by a court of competent jurisdiction to be invalid or unenforceable or to disqualify the Award under any Applicable Law should be construed or limited in a manner that is valid and enforceable and that comes closest to the business objectives intended by the provision, without invalidating or rendering unenforceable the remaining provisions of this Agreement.

12. Defend Trade Secrets Act Notice. Under the U.S. Defend Trade Secrets Act of 2016, Awardee will not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that: (a) is made (i) in confidence to a federal, state or local government official, either directly or indirectly, or to an attorney, and (ii) solely for the purpose of reporting or investigating a suspected violation of law; (b) is made to Awardee's attorney in relation to a lawsuit for retaliation against Awardee for reporting a suspected violation of law; or (c) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

13. Action by the Administrator. The parties agree that the interpretation of this Agreement rests exclusively and completely within the sole discretion of the Administrator. The parties agree to be bound by the decisions of the Administrator with regard to the interpretation of this Agreement and with regard to any and all matters set forth in this Agreement. In fulfilling its responsibilities under this Agreement, the Administrator may rely upon documents, written statements of the parties, financial reports or other material as the Administrator deems appropriate. The parties agree that there is no right to be heard or to appear before the Administrator and that any decision of the Administrator relating to

this Agreement, including whether particular conduct constitutes Misconduct or Competitor Conduct, is final and binding. The Administrator may delegate its functions under this Agreement to an officer of the Cardinal Group designated by the Administrator, to the extent permitted under the Plan.

14. Prompt Acceptance of Agreement . The Performance Share Units grant evidenced by this Agreement will, at the discretion of the Administrator, be forfeited if this Agreement is not manually executed and returned to the Company, or electronically executed by Awardee by indicating Awardee's acceptance of this Agreement in accordance with the acceptance procedures set forth on the Company's third-party equity plan administrator's web site, within 90 days of the Grant Date.

15. Electronic Delivery and Consent to Electronic Participation . The Company may, in its sole discretion, decide to deliver any documents related to the Performance Share Unit grant under and participation in the Plan or future Performance Share Units that may be granted under the Plan by electronic means or to request Awardee's consent to participate in the Plan by electronic means. Awardee hereby consents to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company, including the acceptance of performance share unit grants and the execution of performance share unit agreements through electronic signature.

16. Notices . All notices, requests, consents and other communications required or provided under this Agreement to be delivered by Awardee to the Company will be in writing and will be deemed sufficient if delivered by hand, nationally recognized overnight courier, or certified or registered mail, return receipt requested, postage prepaid, and will be effective upon delivery to the Company at the address set forth below:

Cardinal Health, Inc.
7000 Cardinal Place
Dublin, Ohio 43017
Attention: Deputy General Counsel

All notices, requests, consents and other communications required or provided under this Agreement to be delivered by the Company to Awardee may be delivered by e-mail or in writing and will be deemed sufficient if delivered by e-mail, hand, facsimile, nationally recognized overnight courier, or certified or registered mail, return receipt requested, postage prepaid, and will be effective upon delivery to Awardee.

17. Employment Agreement, Offer Letter or Other Arrangement . To the extent a written employment agreement, offer letter or other arrangement ("Employment Arrangement") that was approved by the Human Resources and Compensation Committee or the Board of Directors or that was approved in writing by an officer of the Company pursuant to delegated authority of the Human Resources and Compensation Committee provides for greater benefits to Awardee with respect to vesting of the Award on Termination of Employment by reason of specified events than provided in this Agreement or in the Plan, then the terms of such Employment Arrangement with respect to vesting of the Award on Termination of Employment by reason of such specified events supersede the terms of this Agreement to the extent permitted by the terms of the Plan.

18. Recoupment . This Agreement will be administered in compliance with Section 10D of the Exchange Act and any applicable rules or regulations promulgated by the Securities and Exchange Commission or any national securities exchange or national securities association on which the Shares may be traded. In its discretion, moreover, the Administrator may require repayment to the Company of all or any portion of this Award if the amount of the Award was calculated based upon the achievement of

financial results that were subsequently the subject of a restatement of the Company's financial statements, Awardee engaged in misconduct that caused or contributed to the need for the restatement of the financial statements, and the amount payable to Awardee would have been lower than the amount actually paid to Awardee had the financial results been properly reported. This Paragraph 18 is not the Company's exclusive remedy with respect to such matters. Except as otherwise required by Applicable Law, this Paragraph 18 will not apply after a Change of Control.

19. Amendment . Any amendment to the Plan is deemed to be an amendment to this Agreement to the extent that the amendment is applicable hereto; provided, however, that no amendment may impair the rights of Awardee with respect to an outstanding Performance Share Unit unless agreed to by Awardee and the Company, which agreement must be in writing and signed by Awardee and the Company. Other than following a Change of Control, no such agreement is required if the Administrator determines in its sole discretion that such amendment either (a) is required or advisable in order for the Company, the Plan or the Performance Share Units to satisfy any Applicable Law or to meet the requirements of any accounting standard or (b) is not reasonably likely to significantly diminish the benefits provided under the Performance Share Units, or that any such diminishment has been adequately compensated, including pursuant to Section 16(c) of the Plan.

20. Adjustments . The number of Shares issuable for each Performance Share Unit and the other terms and conditions of the Award evidenced by this Agreement are subject to adjustment as provided in Section 16 of the Plan.

21. Compliance with Section 409A of the Code . To the extent applicable, it is intended that this Agreement comply with the provisions of Section 409A of the Code. This Agreement shall be administered in a manner consistent with this intent, and any provision that would cause this Agreement or the Plan to fail to satisfy Section 409A of the Code shall have no force or effect until amended to comply with Section 409A of the Code (which amendment may be retroactive to the extent permitted by Section 409A of the Code and may be made by the Company without the consent of Awardee).

22. No Right to Future Awards or Employment . The grant of the Performance Share Units under this Agreement to Awardee is a voluntary, discretionary award being made on a one-time basis and it does not constitute a commitment to make any future awards. The grant of the Performance Share Units and any payments made under this Agreement will not be considered salary or other compensation for purposes of any severance pay or similar allowance, except as otherwise required by law. Nothing contained in this Agreement confers upon Awardee any right to be employed or remain employed by the Company or any of its Affiliates, nor limits or affects in any manner the right of the Company or any of its Affiliates to terminate the employment or adjust the compensation of Awardee.

23. Successors and Assigns . Without limiting Paragraph 2, the provisions of this Agreement shall inure to the benefit of, and be binding upon, the successors, administrators, heirs, legal representatives and assigns of Awardee, and the successors and assigns of the Company.

CARDINAL HEALTH, INC.

By: _____

Its: _____

ACCEPTANCE OF AGREEMENT

Awardee hereby: (a) acknowledges that he or she has received a copy of the Plan, a copy of the Company's most recent annual report to shareholders and other communications routinely distributed to the Company's shareholders, and a copy of the Plan Description pertaining to the Plan; (b) accepts this Agreement and the Performance Share Units granted to him or her under this Agreement subject to all provisions of the Plan and this Agreement, including the provisions in this Agreement regarding "Special Forfeiture and Repayment Rules" set forth in Paragraph 4 and "Recoupment" set forth in Paragraph 18; (c) represents that he or she understands that the acceptance of this Agreement through an on-line or electronic system, if applicable, carries the same legal significance as if he or she manually signed the Agreement; and (d) agrees that no transfer of the Shares delivered in respect of the Performance Share Units may be made unless the Shares have been duly registered under all applicable Federal and state securities laws pursuant to a then-effective registration which contemplates the proposed transfer or unless the Company has received a written opinion of, or satisfactory to, its legal counsel that the proposed transfer is exempt from such registration.

[_____
Awardee's Signature

_____
Date]

Exhibit A

CARDINAL HEALTH, INC.

Statement of Performance Goals

A-1

Exhibit 12.1

Computation of Ratio of Earnings to Fixed Charges

(in millions, except ratios)	2013	2014	2015	2016	**2017**
Earnings from continuing operations before income taxes	$ 888	$ 1,798	$ 1,967	$ 2,276	**$ 1,924**
Plus fixed charges:					
Interest expense	119	129	137	178	**187**
Capitalized interest	2	1	2	6	**9**
Amortization of debt offering costs	4	4	8	6	**6**
Interest portion of rent expense	8	10	10	12	**14**
Fixed charges (1)	133	144	156	201	**217**
Plus: amortization of capitalized interest	3	3	2	3	**4**
Less: capitalized interest	(2)	(1)	(2)	(6)	**(9)**
Earnings (1)	$ 1,023	$ 1,944	$ 2,124	$ 2,473	**$ 2,135**
Ratio of earnings to fixed charges (1) (2)	8	14	14	12	**10**

(1) The sum of the components may not equal the total due to rounding.
(2) The ratio of earnings to fixed charges is computed by dividing fixed charges into earnings from continuing operations before income taxes plus fixed charges and capitalized interest. Fixed charges include interest expense, amortization of debt offering costs and the portion of rent expense that is deemed to be representative of the interest factor. Interest expense recorded on tax exposures has been recorded in income tax expense and has therefore been excluded from the calculation.

Exhibit 21.1

Subsidiaries of the Registrant

Listed below are majority-owned subsidiaries of Cardinal Health, Inc. as of June 30, 2017 . Subsidiaries excluded from the list below would not, considered in the aggregate as a single subsidiary, constitute a "significant subsidiary" of Cardinal Health, Inc. as that term is defined in Rule 1-02(w) of SEC Regulation S-X.

Subsidiary Name	State/Jurisdiction of Incorporation
Access Closure, Inc.	California
Allegiance Corporation	Delaware
AssuraMed, Inc.	Delaware
Cardinal Health 2, LLC	Nevada
Cardinal Health 3, LLC	Delaware
Cardinal Health 5, LLC	Delaware
Cardinal Health 6, Inc.	Nevada
Cardinal Health 7, LLC	Delaware
Cardinal Health 100, Inc.	Indiana
Cardinal Health 104 LP	Ohio
Cardinal Health 105, Inc.	Ohio
Cardinal Health 107, LLC	Ohio
Cardinal Health 108, LLC	Delaware
Cardinal Health 110, LLC	Delaware
Cardinal Health 112, LLC	Delaware
Cardinal Health 114, Inc.	Delaware
Cardinal Health 115, LLC	Ohio
Cardinal Health 116, LLC	Delaware
Cardinal Health 118, LLC	Delaware
Cardinal Health 119, LLC	Delaware
Cardinal Health 121, LLC	Delaware
Cardinal Health 122, LLC	Delaware
Cardinal Health 123, LLC	Delaware
Cardinal Health 124, LLC	Delaware
Cardinal Health 126, LLC	Delaware
Cardinal Health 127, Inc.	Kansas
Cardinal Health 200, LLC	Delaware
Cardinal Health 201, Inc.	Delaware
Cardinal Health 222 (Thailand) Ltd.	Thailand
Cardinal Health 247, Inc.	Colorado
Cardinal Health 249, LLC	Delaware
Cardinal Health 414, LLC	Delaware
Cardinal Health Australia 503 Pty. Ltd.	Australia
Cardinal Health Austria 504 GmbH	Austria
Cardinal Health Belgium 505 BVBA	Belgium
Cardinal Health Canada Inc.	Canada
Cardinal Health Colombia S.A.S.	Colombia
Cardinal Health D.R. 203 II Ltd.	Bermuda
Cardinal Health Denmark ApS	Denmark
Cardinal Health Finland Oy	Finland
Cardinal Health Foundation	Ohio
Cardinal Health France 506 SAS	France
Cardinal Health Funding, LLC	Nevada
Cardinal Health Germany 507 GmbH	Germany
Cardinal Health (H.K.) Co. Ltd.	Hong Kong
Cardinal Health International Philippines, Inc.	Philippines
Cardinal Health IPS, LLC	Delaware
Cardinal Health Ireland 419 Designated Activity Company	Ireland
Cardinal Health Ireland 508 Limited	Ireland
Cardinal Health Italy 509 Srl	Italy
Cardinal Health Japan G.K.	Japan
Cardinal Health Korea Limited	Korea
Cardinal Health (L) Co., Ltd.	Malaysia
Cardinal Health Luxembourg 522 S.a.r.l.	Luxembourg
Cardinal Health Malaysia 211 Sdn. Bhd.	Malaysia
Cardinal Health Malta 212 Limited	Malta
Cardinal Health Managed Care Services, LLC	Delaware
Cardinal Health Medical Products India Private Limited	India
Cardinal Health Mexico 244 S. de R.L. de C.V.	Mexico
Cardinal Health Mexico 514 S. de R.L. de C.V.	Mexico
Cardinal Health Netherlands 502 B.V.	Netherlands
Cardinal Health Norway AS	Norway
Cardinal Health Pharmaceutical Contracting, LLC	Delaware
Cardinal Health Pharmacy Services, LLC	Delaware
Cardinal Health Poland Spółlka z ograniczonąa odpowiedzialnośściąa	Poland
Cardinal Health Portugal 513 Unipessoal Lda.	Portugal
Cardinal Health P.R. 120, Inc.	Puerto Rico
Cardinal Health P.R. 218, Inc.	Puerto Rico
Cardinal Health P.R. 220, LLC	Puerto Rico
Cardinal Health Singapore 225 Pte. Ltd.	Singapore
Cardinal Health Spain 511 S.L.	Spain
Cardinal Health Specialty Pharmacy, LLC	Delaware
Cardinal Health Sweden 512 A.B.	Sweden
Cardinal Health Switzerland 515 GmbH	Switzerland
Cardinal Health Systems, Inc.	Ohio
Cardinal Health Technologies, LLC	Nevada
Cardinal Health Technologies Switzerland GmbH	Switzerland
Cardinal Health U.K. 432 Limited	United Kingdom
Cirpro de Delicias S.A. de C.V.	Mexico
Convertors de Mexico S.A. de C.V.	Mexico
Cordis Cashel Company Unlimited	Ireland
Cordis Corporation	Florida
Cordis (Shanghai) Medical Devices Co., Ltd.	China
Cornerstone Partners G.P.O., L.P.	Tennessee
Curaspan Health Group, Inc.	Delaware

Subsidiary Name	State/Jurisdiction of Incorporation
Dutch American Manufacturers II (D.A.M. II) B.V.	Netherlands
EPIC Insurance Company	Vermont
Griffin Capital, LLC	Nevada
Innovative Therapies, Inc.	Delaware
Instant Diagnostic Systems, Inc.	Alabama
Leader Drugstores, Inc.	Delaware
Marin Apothecaries	California
Medicine Shoppe International, Inc.	Delaware
NaviHealth, Inc.	Delaware
One Cloverleaf, LLC	Delaware
Pinnacle Intellectual Property Services, Inc.	Nevada
Pinnacle Intellectual Property Services-International, Inc.	Nevada
Post-Acute Care Center for Research, LLC	Delaware
Quiroproductos de Cuauhtemoc S. de R.L. de C.V.	Mexico
R Cubed, Inc.	Tennessee
RainTree GPO, LLC	Delaware
RGH Enterprises, Inc.	Ohio
RightCare Solutions, Inc.	Delaware
Rxealtime, Inc.	Nevada
Sonexus Health, LLC	Texas
The Harvard Drug Group, L.L.C.	Michigan
Tradex International, Inc.	Ohio
WaveMark, Inc.	Delaware

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement on Form S-3 No. 333-215935 of Cardinal Health, Inc.,

(2) Registration Statements on Form S-4 No. 333-62938 and No. 333-74761 of Cardinal Health, Inc., and

(3) Registration Statements on Form S-8 No. 33-42357, No. 33-64337, No. 333-72727, No. 333-90423, No. 333-91849, No. 333-38192, No. 333-38198, No. 333-56010, No. 333-129725, No. 333-149107, No. 333-155156, No. 333-163128, No. 333-164736, No. 333-177728, No. 333-183471, No. 333-206339, No. 333-206340, and No. 333-214412 of Cardinal Health, Inc.;

of our reports dated August 10, 2017 , with respect to the consolidated financial statements and schedule of Cardinal Health, Inc. and subsidiaries and the effectiveness of internal control over financial reporting of Cardinal Health, Inc. and subsidiaries, included in this Annual Report (Form 10-K) of Cardinal Health, Inc. and subsidiaries for the year ended June 30, 2017 .

/s/ Ernst & Young LLP

Columbus, Ohio
August 10, 2017

Exhibit 31.1

I, George S. Barrett, certify that:

1. I have reviewed this Form 10-K of Cardinal Health, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 10, 2017

/s/ GEORGE S. BARRETT

George S. Barrett

Chairman and Chief Executive Officer

Exhibit 31.2

I, Michael C. Kaufmann, certify that:

1. I have reviewed this Form 10-K of Cardinal Health, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 10, 2017

/s/ MICHAEL C. KAUFMANN

Michael C. Kaufmann

Chief Financial Officer

Exhibit 32.1

Certification of the Chief Executive Officer and the Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Each of George S. Barrett, Chairman and Chief Executive Officer of Cardinal Health, Inc. (the "Company"), and Michael C. Kaufmann, Chief Financial Officer of the Company, certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) the Annual Report on Form 10-K for the fiscal year ended June 30, 2017 containing the financial statements of the Company (the "Periodic Report"), which this statement accompanies, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(2) the information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 10, 2017

/s/ GEORGE S. BARRETT

George S. Barrett
Chairman and Chief Executive Officer

/s/ MICHAEL C. KAUFMANN

Michael C. Kaufmann
Chief Financial Officer

Exhibit 99.1

Statement Regarding Forward-Looking Information

As used in this exhibit, "we," "our," "us" and similar pronouns refer to Cardinal Health, Inc. and its subsidiaries, unless the context requires otherwise. Our filings with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the fiscal year ended June 30, 2017 (the "2017 Form 10-K"), our quarterly reports on Form 10-Q and our current reports on Form 8-K (along with any exhibits and amendments to such reports), as well as our news releases or any other written or oral statements made by or on behalf of us, may include, directly or by incorporation by reference, forward-looking statements that reflect our current view (as of the date the forward-looking statement is first made) about future events, prospects, projections or financial performance. The matters discussed in these forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those projected, anticipated or implied in or by such statements. These risks and uncertainties include:

- competitive pressures in the markets in which we operate, including pricing pressures;
- uncertainties relating to the pricing of generic pharmaceuticals;
- uncertainties relating to the timing, frequency and profitability of generic pharmaceutical launches;
- our ability to maintain the benefits of our generic pharmaceutical sourcing venture with CVS Health Corporation;
- with respect to our distribution services agreements with branded pharmaceutical manufacturers, changes in the amount of service fees we receive or, in cases where part of our compensation under these agreements is based on branded pharmaceutical price appreciation, changes in the frequency or magnitude of such price appreciation;
- changes in the timing or frequency of the introduction of branded pharmaceuticals;
- actions of regulatory bodies and other governmental authorities, including the U.S. Drug Enforcement Administration, certain agencies within the U.S. Department of Health and Human Services (including the U.S. Food and Drug Administration, Centers for Medicare and Medicaid Services, the Office of Inspector General and the Office for Civil Rights), the U.S. Nuclear Regulatory Commission, the U.S. Federal Trade Commission, the U.S. Customs and Border Protection, various state boards of pharmacy, state controlled substance authorities, state health departments, state insurance departments, state Medicaid departments or comparable regulatory bodies or governmental authorities or foreign equivalents that, in each case, could delay, limit or suspend product development, manufacturing, distribution, importation or sales or result in warning letters, recalls, seizures, injunctions or monetary sanctions;
- difficulties or delays in the development, production, manufacturing, sourcing and marketing of new or existing products and services, including difficulties or delays associated with obtaining requisite regulatory consents or approvals associated with those activities;
- risks arising from possible violations of healthcare fraud and abuse laws;
- costs or claims resulting from potential errors or defects in our manufacturing of medical devices or other products or in our compounding, repackaging, information systems or pharmacy management services that may injure persons or damage property or operations, including costs from remediation efforts or recalls and related product liability claims and lawsuits, including class action lawsuits;
- risks arising from possible violations of the U.S. Foreign Corrupt Practices Act, Chinese anti-corruption laws and other similar anti-corruption laws in other jurisdictions and U.S. and foreign export control, trade embargo and customs laws;
- risks arising from our collecting, handling and maintaining patient-identifiable health information and other sensitive personal and financial information, which are subject to federal, state and foreign laws that regulate the use and disclosure of such information;
- risks arising from certain of our businesses being Medicare-certified suppliers or participating in other federal and state healthcare programs, such as state Medicaid programs and the federal 340B drug pricing program, which businesses are subject to accreditation and quality standards and other rules and regulations, including applicable reporting, billing, payment and record-keeping requirements;
- risks arising from certain of our businesses manufacturing pharmaceutical and medical products or repackaging pharmaceuticals that are purchased or reimbursed through, or are otherwise governed by, federal or state healthcare programs, which businesses are subject to federal and state laws that establish eligibility for reimbursement by such programs and other applicable standards and regulations;
- changes in laws or changes in the interpretation or application of laws or regulations, as well as possible failures to comply with applicable laws or regulations, including as a result of possible misinterpretations or misapplications;
- material reductions in purchases, non-renewal or early termination of contracts, or delinquencies or defaults by key customers;
- unfavorable changes to the terms of key customer or supplier relationships, or changes in customer mix;
- adverse changes in U.S. or foreign tax laws, including proposals relating to new taxes or import tariffs, unfavorable challenges to our tax positions and payments to settle these challenges, or failure to permanently repeal the U.S. medical device tax;
- uncertainties due to government healthcare reform, including possible repeal or replacement of major parts of the Patient Protection and Affordable Care Act;
- reductions or limitations on governmental funding at the state or federal level or efforts by healthcare insurance companies to limit payments for products and services;
- changes in manufacturers' pricing, selling, inventory, distribution or supply policies or practices;
- changes in legislation or regulations governing prescription drug pricing, healthcare services or mandated benefits;
- changes in hospital buying groups or hospital buying practices;

- changes in distribution or sourcing models for pharmaceutical and medical and surgical products, including an increase in direct and limited distribution;
- the risks of counterfeit products in the supply chain;
- changes to the prescription drug reimbursement formula and related reporting requirements for generic pharmaceuticals under Medicaid;
- increasing consolidation in the healthcare industry, which could give the resulting enterprises greater bargaining power and may increase pressure on prices for our products and services or result in the loss of customers;
- disruption, damage or lack of access to, or failure of, our or our third-party service providers' information systems, our critical facilities, including our national logistics center, or our distribution networks;
- manufacturing disruptions, whether due to regulatory action, production quality deviations, safety issues or raw material shortages or defects, or because a key product is manufactured at a single manufacturing facility with limited alternate facilities;
- risks to our business and information and controls systems in the event that the Pharmaceutical segment's multi-year systems replacement project or other business process improvements, infrastructure modernizations or initiatives to use third-party service providers for key systems and processes are not effectively implemented;
- any compromise of our information systems or of those of a third-party service provider, including unauthorized access to or use or disclosure of sensitive information;
- the results, costs, effects or timing of any commercial disputes, government contract compliance matters, product liability claims or lawsuits, patent infringement claims, *qui tam* actions or other legal proceedings;
- possible losses relating to product liability claims regarding products for which we cannot obtain product liability insurance or for which such insurance is not adequate to cover our losses;
- our ability to maintain adequate intellectual property protections;
- risks and uncertainties relating to the acquisition of the Patient Care, Deep Vein Thrombosis and Nutritional Insufficiency businesses from Medtronic plc (the "Patient Recovery Business"), including the following: we may fail to realize the synergies and other benefits we expect from the acquisition; we may fail to retain key personnel of the acquired businesses; future developments may impair the value of our purchased goodwill or intangible assets; we may face difficulties or delays establishing, integrating or combining operations and systems; we may face challenges retaining the customers of the acquired businesses; we may encounter unforeseen internal control, regulatory or compliance issues; and we may face other additional risks relating to regulatory matters, legal proceedings, tax laws or positions, supply interruptions, commodity price volatility and global operations, including the effects of local economic environments and currency volatility;
- risks relating to the use of a significant amount of cash, including borrowings under our existing credit arrangements, to fund the acquisition of the Patient Recovery Business, which is expected to result in increased short-term borrowings in the course of our operations during fiscal 2018;
- risks and uncertainties relating to the acquisition of Cordis, including the ability to achieve the expected synergies and positive impact to operating results and the additional risks the Cordis acquisition subjects us to relating to regulatory matters, legal proceedings, tax laws or positions and global operations, including the effects of local economic environments and currency volatility;
- the costs, difficulties and uncertainties related to the integration of acquired businesses, including liabilities relating to the operations or activities of such businesses prior to their acquisition, and uncertainties relating to our ability to achieve the anticipated results from acquisitions;
- increased costs for commodities used in the Medical segment including various components, compounds, raw materials or energy such as oil-based resins, pulp, cotton, latex and other commodities;
- shortages in commodities, components, compounds, raw materials or energy used by our businesses, including supply disruptions of radioisotopes;
- the loss of, or default by, one or more key suppliers for which alternative suppliers may not be readily available;
- bankruptcy, insolvency or other credit failure of a customer or supplier that owes us a substantial amount;
- risks associated with global operations, including the effect of local economic environments, inflation, recession, currency volatility and global competition, in addition to risks associated with compliance with U.S. and international laws relating to global operations;
- risks associated with our use of and reliance on the global capital and credit markets, including our ability to access credit and our cost of credit, which may adversely affect our ability to efficiently fund our operations or undertake certain expenditures;
- our ability to introduce and market new products and our ability to keep pace with advances in technology;
- the costs, effects, timing or success of restructuring programs or plans;
- significant charges to earnings if goodwill or intangible assets become impaired;
- uncertainties relating to general political, business, industry, regulatory and market conditions; and
- other factors described in the “Risk Factors” section of the 2017 Form 10-K.

The words “expect,” “anticipate,” “intend,” “plan,” “believe,” “will,” “should,” “could,” “would,” “project,” “continue,” “likely,” and similar expressions generally identify “forward-looking statements,” which speak only as of the date the statements were made, and also include statements reflecting future results or guidance, statements of outlook and expense accruals. We undertake no obligation to update or revise any forward-looking statements, except to the extent required by applicable law.

Table of Contents

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended June 30, 2016

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File Number: 1-11373

Cardinal Health, Inc.

(Exact name of registrant as specified in its charter)

Ohio	**31-0958666**
(State or other jurisdiction of incorporation or organization)	*(IRS Employer Identification No.)*
7000 Cardinal Place, Dublin, Ohio	**43017**
(Address of principal executive offices)	*(Zip Code)*

(614) 757-5000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of class	*Name of each exchange on which registered*
Common shares (without par value)	**New York Stock Exchange**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☑ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☑

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☑ No ☐

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☑	Accelerated filer ☐
Non-accelerated filer ☐ (Do not check if a smaller reporting company)	Smaller reporting company ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

The aggregate market value of voting stock held by non-affiliates or registrant on December 31, 2015 , was the following: $29,344,021,222 .

The number of the registrant's common shares, without par value, outstanding as of July 29, 2016 , was the following: 318,588,961 .

Documents Incorporated by Reference:

Portions of the registrant's Definitive Proxy Statement to be filed for its 2016 Annual Meeting of Shareholders are incorporated by reference into the sections of this Form 10-K addressing the requirements of Part III of Form 10-K.

Cardinal Health

Fiscal 2016 Form 10-K

Table of Contents

Introduction

This "Key Highlights" section provides a brief overview of Cardinal Health, Inc. and does not contain all of the information you should consider. Please read the entire Form 10-K carefully before voting or making an investment decision. As used in this report, “we,” “our,” “us” and similar pronouns refer to Cardinal Health, Inc. and its subsidiaries, unless the context requires otherwise.

References to Fiscal Years

Our fiscal year ends on June 30. References to fiscal 2016, 2015, 2014, 2013 and 2012 and to FY16, FY15, FY14, FY13 and FY12 are to the fiscal years ended June 30, 2016, 2015, 2014, 2013 and 2012, respectively. Except as otherwise specified, information in this Form 10-K is provided as of June 30, 2016.

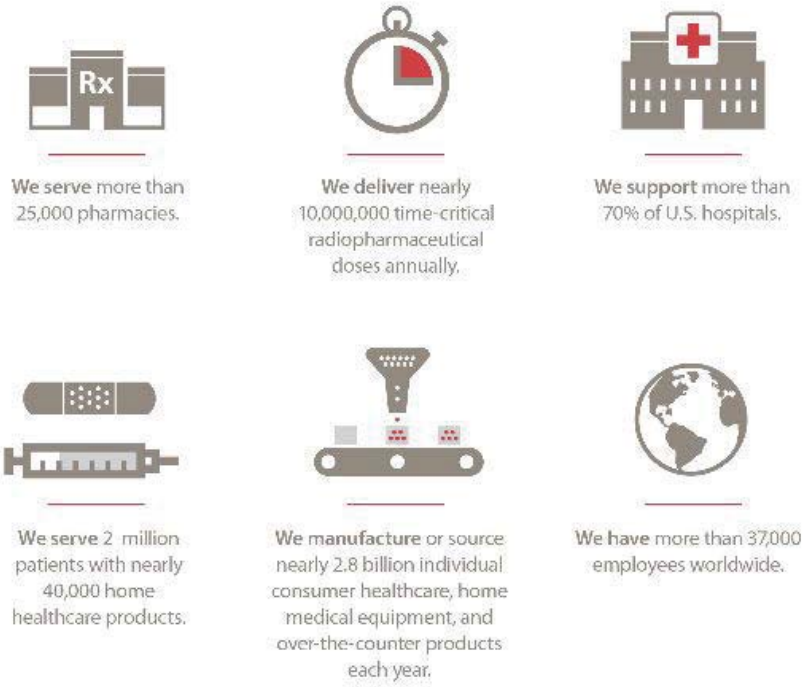
Non-GAAP Financial Measures

In this "Key Highlights" section and the "Fiscal 2016 Overview" section of Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A"), we use financial measures that are derived from consolidated financial data but are not presented in our financial statements that are prepared in accordance with U.S. generally accepted accounting principles (“GAAP”). These measures are considered “non-GAAP financial measures” under the Securities and Exchange Commission (“SEC”) rules. The reasons we use these non-GAAP financial measures and the reconciliations to their most directly comparable GAAP financial measures are included in the “Explanation and Reconciliation of Non-GAAP Financial Measures” section following MD&A in this Form 10-K.

Important Information Regarding Forward-Looking Statements

This Form 10-K (including information incorporated by reference) includes forward-looking statements addressing expectations, prospects, estimates and other matters that are dependent upon future events or developments. Many forward-looking statements appear in MD&A, but there are others throughout this document, which may be identified by words such as “expect,” “anticipate,” “intend,” “plan,” “believe,” “will,” “should,” “could,” “would,” “project,” “continue,” “likely,” and similar expressions, and include statements reflecting future results or guidance, statements of outlook and expense accruals. These matters are subject to risks and uncertainties that could cause actual results to differ materially from those projected, anticipated or implied. The most significant of these risks and uncertainties are described in “Risk Factors” and in Exhibit 99.1 to this Form 10-K. Forward-looking statements in this document speak only as of the date of this document. Except to the extent required by applicable law, we undertake no obligation to update or revise any forward-looking statement.

Key Highlights



Key Highlights

For those tasked with navigating the complexities of healthcare, Cardinal Health brings scaled solutions that help our customers thrive in a changing world.

We apply our nearly 100 years of experience and expertise to reduce the total cost of healthcare and to improve the lives of patients. Our scale and experience lead to solutions across the entire care continuum — from hospital to home and everywhere in between — through **logistics, business, product and patient solutions**.

Key Highlights

Financial summary

	GAAP Basis ($M)					Non-GAAP[1] Basis ($M)				
	FY16	FY15	FY14	FY13	FY12	**FY16**	FY15	FY14	FY13	FY12
Revenue	**$121,546**	$102,531	$91,084	$101,093	$107,552					
% change	19%	13%	(10)%	(6)%	5%					
Operating earnings	**$2,459**	$2,161	$1,885	$996	$1,792	**$2,895**	$2,472	$2,133	$2,046	$1,866
% change	14%	15%	89%	(44)%	18%	17%	16%	4%	10%	13%
Ratio to revenue (operating margin)	2.02%	2.11%	2.07%	0.99%	1.67%	2.38%	2.41%	2.34%	2.02%	1.73%
Net earnings from continuing operations[2]	**$1,427**	$1,212	$1,163	$335	$1,070	**$1,732**	$1,469	$1,324	$1,284	$1,119
% change	18%	4%	247%	(69)%	11%	18%	11%	3%	15%	13%
Diluted EPS[3]	**$4.32**	$3.61	$3.37	$0.97	$3.06	**$5.24**	$4.38	$3.84	$3.73	$3.21
% change	20%	7%	247%	(68)%	12%	20%	14%	3%	16%	15%

Sustained strong financial performance over five years

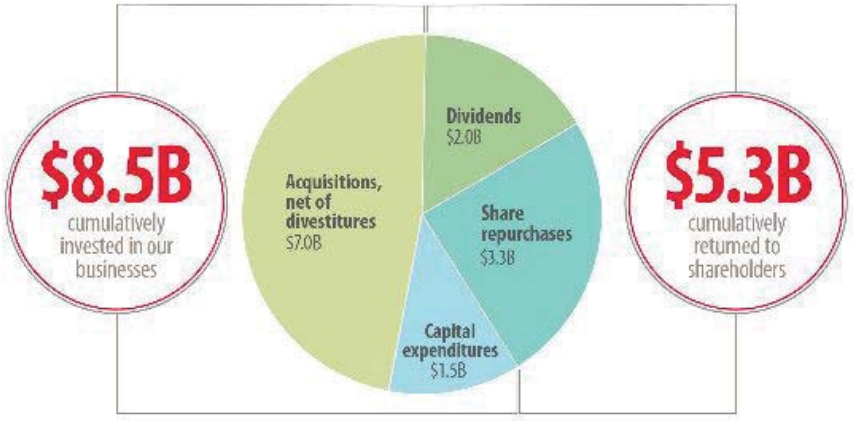
The growth presented below reflects fiscal 2011 compared to fiscal 2016.

[1] Non-GAAP financial measures. See "Explanation and Reconciliation of Non-GAAP Financial Measures" section following MD&A for definitions and reconciling information.
[2] Attributable to Cardinal Health, Inc.
[3] Diluted earnings per share from continuing operations attributable to Cardinal Health, Inc.
[4] Total shareholder return is the total return of our shares expressed as a percentage (calculated based on changes in stock price over the measurement period and assuming reinvestment of dividends).

Key Highlights

Capital deployment for five years

Fiscal 2012 through fiscal 2016



Corporate citizenship

We challenge ourselves to best utilize our assets, expertise and influence to make our communities stronger and our world more sustainable, while governing our activities as a good corporate citizen and with a belief that doing "the right thing" serves everyone.

$92M corporate and Cardinal Health Foundation charitable and product donations worldwide from fiscal 2012 through fiscal 2016

10 years included on the Dow Jones Sustainability Index

Over ⅓ of our Board of Directors is gender or ethnically diverse.

Board of directors

David J. Anderson (A)
Retired Senior Vice President and
Chief Financial Officer, Honeywell International Inc.

Colleen F. Arnold (N)
Retired Senior Vice President, Sales and Distribution,
International Business Machines Corp.

George S. Barrett (E)
Chairman and Chief Executive Officer,
Cardinal Health, Inc.

Carrie S. Cox (H)
Chairman and Chief Executive Officer,
Humacyte, Inc.
Former Executive Vice President and President,
Global Pharmaceuticals, Schering-Plough Corp.

Calvin Darden (H)
Retired Senior Vice President, U.S. Operations,
United Parcel Service, Inc.

Bruce L. Downey (A)
Partner, New Spring Health Capital II, LP
Retired Chairman and Chief Executive Officer,
Barr Pharmaceuticals, Inc.

Patricia A. Hemingway Hall (A,N)
Retired President and Chief Executive Officer,
Health Care Service Corp.

Clayton M. Jones (E,A)
Retired Chairman, President and Chief Executive Officer,
Rockwell Collins, Inc.

Gregory B. Kenny (E,I,N)
Retired President and Chief Executive Officer,
General Cable Corp.

Nancy Killefer (H)
Retired Senior Partner,
Public Sector Practice, McKinsey & Company, Inc.

David P. King (E,H)
Chairman, President and Chief Executive Officer,
Laboratory Corp. of America Holdings

A: Audit Committee member
E: Executive Committee member
H: Human Resources and Compensation Committee member
N: Nominating and Governance Committee member
I: Independent Lead Director

Executive team

George S. Barrett
Chairman and Chief Executive Officer

Donald M. Casey Jr.
Chief Executive Officer, Medical Segment

Jon L. Giacomin
Chief Executive Officer, Pharmaceutical Segment

Michael C. Kaufmann
Chief Financial Officer

Pamela O. Kimmet
Chief Human Resources Officer

Craig S. Morford
Chief Legal and Compliance Officer

Patricia B. Morrison
Executive Vice President,
Customer Support Services
and Chief Information Officer

Management's Discussion and Analysis of Financial Condition and Results of Operations (MD&A)

About Cardinal Health

Cardinal Health, Inc. is an Ohio corporation formed in 1979 and is a global integrated healthcare services and products company providing customized solutions for hospital systems, pharmacies, ambulatory surgery centers, clinical laboratories and physician offices worldwide. We provide clinically proven medical products and pharmaceuticals and cost-effective solutions that enhance supply chain efficiency from hospital to home. We connect patients, providers, payers, pharmacists, and manufacturers for integrated care coordination and better patient management.

We manage our business and report our financial results in two segments: Pharmaceutical and Medical.

Pharmaceutical Segment

Our Pharmaceutical segment distributes branded and generic pharmaceutical, specialty pharmaceutical, over-the-counter healthcare and consumer products in the United States. This segment also operates nuclear pharmacies and cyclotron facilities, provides pharmacy management services to hospitals as well as medication therapy management and patient outcomes services to hospitals, other healthcare providers and payers, provides services to healthcare companies supporting the development, marketing, and distribution of specialty pharmaceutical products, and repackages generic pharmaceuticals and over-the-counter healthcare products. This segment also imports and distributes pharmaceuticals, over-the-counter healthcare and consumer products as well as provides specialty pharmacy and other services in China.

Medical Segment

Our Medical segment distributes a broad range of medical, surgical and laboratory products and provides services to hospitals, ambulatory surgery centers, clinical laboratories and other healthcare providers in the United States, Canada and China. This segment distributes medical products to patients in the home in the United States. This segment also manufactures, sources and develops our own Cardinal Health brand medical and surgical products, which are sold in the United States, Canada, Europe and other regions internationally. This segment also provides post-acute care management and transition services and software to hospitals, other healthcare providers and payers.

Non-GAAP Financial Measures

We use "non-GAAP financial measures" as well as GAAP financial measures in the "Fiscal 2016 Overview" section. We include the reasons we use these non-GAAP financial measures and the reconciliations to their most directly comparable GAAP financial measures in the “Explanation and Reconciliation of Non-GAAP Financial Measures” section following MD&A. The remaining sections of MD&A refer to GAAP measures only.

Consolidated Results

Fiscal 2016 Overview

Revenue

Revenue for fiscal 2016 was $121.5 billion , a 19 percent increase from the prior year, due primarily to sales growth from existing and new pharmaceutical distribution customers and from acquisitions.

GAAP and Non-GAAP Operating Earnings

(in millions)	2016	2015	Change
GAAP	**$ 2,459**	**$ 2,161**	**14%**
Restructuring and employee severance	**25**	**44**	
Amortization and other acquisition-related costs	**459**	**281**	
Impairments and (gain)/loss on disposal of assets	**21**	**(19)**	
Litigation (recoveries)/charges, net	**(69)**	**5**	
Non-GAAP	**$ 2,895**	**$ 2,472**	**17%**

The sum of the components may not equal the total due to rounding.

During fiscal 2016 , GAAP operating earnings increased 14 percent to $2.5 billion and non-GAAP operating earnings increased 17 percent to $2.9 billion . The increases in both GAAP and non-GAAP operating earnings were due to sales growth from existing and new pharmaceutical distribution customers, performance under our Pharmaceutical segment generics program, and acquisitions, partially offset by the adverse impact of customer pricing changes. GAAP operating earnings were negatively impacted by increased acquisition-related amortization, partially offset by litigation recoveries.

GAAP and Non-GAAP Diluted EPS

($ per share)	2016	2015	Change
GAAP	**$ 4.32**	**$ 3.61**	**20%**
Restructuring and employee severance	**0.05**	**0.09**	
Amortization and other acquisition-related costs	**0.96**	**0.54**	
Impairments and (gain)/loss on disposal of assets	**0.04**	**(0.03)**	
Litigation (recoveries)/charges, net	**(0.13)**	**0.06**	
Loss on extinguishment of debt	**—**	**0.11**	
Non-GAAP	**$ 5.24**	**$ 4.38**	**20%**

The sum of the components may not equal the total due to rounding.

During fiscal 2016 , GAAP diluted earnings per share attributable to Cardinal Health, Inc. ("diluted EPS") increased 20 percent to $4.32 and non-GAAP diluted EPS increased 20 percent to $5.24 . GAAP and non-GAAP diluted EPS increased primarily due to the same factors impacting GAAP and non-GAAP operating earnings described above. The increase in fiscal 2016 GAAP diluted EPS also reflects the prior-year loss on extinguishment of debt.

Cash and Equivalents

Our cash and equivalents balance was $2.4 billion at June 30, 2016 compared to $4.6 billion at June 30, 2015 . The decrease in cash and equivalents during the fiscal 2016 was driven by $3.6 billion deployed for acquisitions, $512 million paid in dividends, $651 million paid for share repurchases, and $465 million in capital expenditures, partially offset by $3.0 billion in cash provided by operating activities.

Significant Developments in Fiscal 2016 and Trends

Acquisitions

Cordis
On October 2, 2015, we completed the acquisition of the Cordis business ("Cordis") from Ethicon, Inc., a wholly-owned subsidiary of Johnson & Johnson, for $1.9 billion using cash on hand and proceeds from our debt offering in June 2015. The acquisition of Cordis, a global manufacturer and distributor of interventional cardiology devices and endovascular solutions with operations in more than 50 countries, expands our Medical segment's portfolio of self-manufactured products and its geographic scope.

naviHealth
On August 26, 2015, we acquired a 71 percent ownership interest in naviHealth Holdings, LLC ("naviHealth") for $238 million, net of cash acquired of $53 million. We funded the acquisition with cash on hand. The acquisition of naviHealth, a leader in post-acute care management solutions, expands our ability to help hospitals, other healthcare providers, and payers manage the complex processes of patient discharge. We consolidate the results of naviHealth in our consolidated financial statements and report its results in our Medical segment. The portion of naviHealth net earnings attributable to third-party interest holders is reported as a reduction to net earnings in the consolidated statements of earnings. At June 30, 2016 , our ownership interest in naviHealth was 82 percent due to an additional capital contribution in connection with an acquisition by naviHealth. Refer to Note 12 for further information on this acquisition.

Harvard Drug
On July 2, 2015 , we completed the acquisition of The Harvard Drug Group ("Harvard Drug") for $1.1 billion using cash on hand and proceeds from our debt offering in June 2015. The acquisition of Harvard Drug, a distributor of generic pharmaceuticals, over-the-counter healthcare and related products to retail, institutional, and alternate care customers, enhances our Pharmaceutical segment's generic pharmaceutical distribution and related services businesses. Harvard Drug also repackages generic pharmaceuticals and over-the-counter healthcare products.

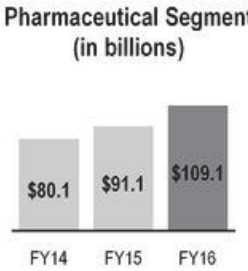
Refer to Note 2 of the "Notes to Consolidated Financial Statements" for additional information on acquisitions.

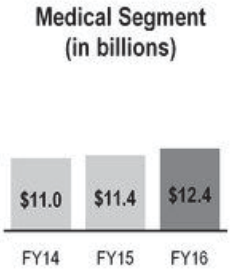
Trends

Within our Pharmaceutical segment, we expect segment profit for fiscal 2017 to be essentially flat compared to fiscal 2016. The factors contributing to our expectation include less profit growth from the segment’s generics program and the loss of a large pharmaceutical distribution customer beginning April 1, 2016, combined with the adverse impact of customer pricing changes similar to those in fiscal 2016. While we expect that the segment’s generics program will be positively impacted by benefits from both Red Oak Sourcing and new generic pharmaceutical launches, we expect that both of these items will have significantly less of a year-over-year positive segment profit impact in fiscal 2017 than fiscal 2016. The impact of these factors will be more pronounced in the first quarter of fiscal 2017, when we expect Pharmaceutical segment profit to be significantly less than in the prior-year period and consolidated operating earnings to be less than in the prior-year period. However, as is generally the case, the frequency, magnitude and profit impact of future generic pharmaceutical product launches (as well as other factors impacting our generics program) are uncertain, and their impact on fiscal 2017 Pharmaceutical segment profit and consolidated operating earnings could be more or less than we expect.

Results of Operations

Revenue





	Revenue			Change	
(in millions)	**2016**	2015	2014	**2016**	2015
Pharmaceutical	**$ 109,131**	$ 91,116	$ 80,110	**20%**	14%
Medical	**12,430**	11,395	10,962	**9%**	4%
Total segment revenue	**121,561**	102,511	91,072	**19%**	13%
Corporate	**(15)**	20	12	**N.M.**	N.M.
Total revenue	**$ 121,546**	$ 102,531	$ 91,084	**19%**	13%

Fiscal 2016 Compared to Fiscal 2015

Pharmaceutical Segment
Fiscal 2016 Pharmaceutical segment revenue grew primarily due to sales growth from existing and new pharmaceutical distribution customers, including continued branded pharmaceutical price appreciation, all of which increased revenue by $16.9 billion. Acquisitions also contributed $2.1 billion to revenue growth.

Medical Segment
Fiscal 2016 Medical segment revenue grew primarily due to acquisitions, net of divestitures, which contributed $645 million, and sales growth from existing businesses.

Fiscal 2015 Compared to Fiscal 2014

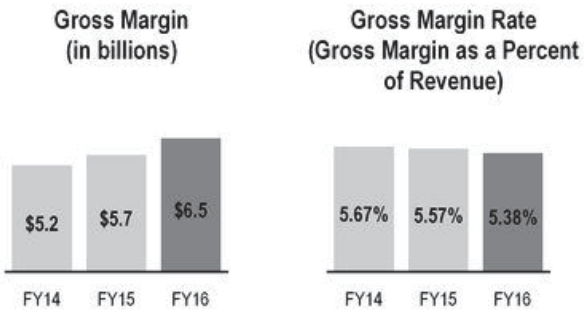
Pharmaceutical Segment
Fiscal 2015 Pharmaceutical segment revenue grew primarily due to sales growth from existing and new pharmaceutical distribution customers, which increased revenue by $13.7 billion. The growth was primarily driven by increased sales to existing customers, including continued branded pharmaceutical price appreciation and newly launched hepatitis C pharmaceutical products. The increase was partially offset by $3.3 billion due to the Walgreens contract expiration in the prior-year period.

Medical Segment
Fiscal 2015 Medical segment revenue grew primarily due to acquisitions which contributed $344 million.

Cost of Products Sold

As a result of the same factors affecting the change in revenue, consolidated cost of products sold increased $18.2 billion (19 percent) and $10.9 billion (13 percent) during fiscal 2016 and 2015 , respectively. See the gross margin discussion for additional drivers impacting cost of products sold.

Gross Margin



	Consolidated Gross Margin			Change	
(in millions)	**2016**	2015	2014	**2016**	2015
Gross margin	**$ 6,543**	$ 5,712	$ 5,161	**15%**	11%

Fiscal 2016 Compared to Fiscal 2015

Fiscal 2016 consolidated gross margin increased $831 million (15 percent), and was favorably impacted by sales growth from existing and new pharmaceutical distribution customers ($510 million) and acquisitions, net of divestitures ($576 million).

Gross margin rate contracted during fiscal 2016 , primarily due to changes in product mix driven by the on-boarding of a new mail order customer starting in October 2015, and also due to the adverse impact of customer pricing changes. Our gross margin rate was favorably impacted by performance under our Pharmaceutical segment generics program. Our generics program had strong year-over-year performance from Red Oak Sourcing.

Fiscal 2015 Compared to Fiscal 2014

Fiscal 2015 consolidated gross margin increased $551 million (11 percent), and was favorably impacted by sales growth from existing and new pharmaceutical distribution customers, offset in part by the Walgreens contract expiration in the prior year. The net impact of these factors increased consolidated gross margin by $516 million. In addition, acquisitions favorably impacted gross margin by $101 million.

Gross margin rate contracted slightly during fiscal 2015 , reflecting the adverse impact of customer pricing changes, the lower margin rate impact of newly launched hepatitis C pharmaceutical products, and new customer mix, largely offset by strong performance from our Pharmaceutical segment generics program, including benefits from Red Oak Sourcing.

Distribution, Selling, General, and Administrative ("SG&A") Expenses

	SG&A Expenses			Change	
(in millions)	**2016**	2015	2014	**2016**	2015
SG&A expenses	**$ 3,648**	$ 3,240	$ 3,028	**13%**	7%

Fiscal 2016 Compared to Fiscal 2015

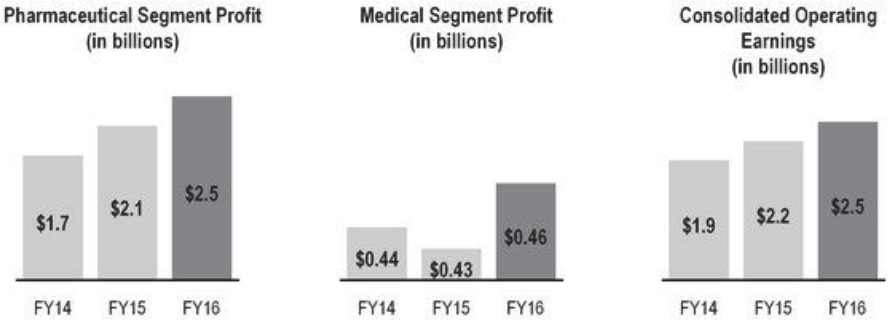
Fiscal 2016 SG&A expenses increased primarily due to acquisitions, net of divestitures ($370 million).

Fiscal 2015 Compared to Fiscal 2014

Fiscal 2015 SG&A expenses increased primarily due to acquisitions ($97 million) and an overall increase in volume of sales to existing and new customers.

Segment Profit

We evaluate segment performance based on segment profit, among other measures. See Note 15 of the "Notes to Consolidated Financial Statements" for additional information on segment profit.



	Segment Profit and Operating Earnings			Change	
(in millions)	**2016**	2015	2014	**2016**	2015
Pharmaceutical	**$ 2,488**	$ 2,094	$ 1,745	**19%**	20 %
Medical	**457**	433	444	**6%**	(3)%
Total segment profit	**2,945**	2,527	2,189	**17%**	15 %
Corporate	**(486)**	(366)	(304)	**33%**	20 %
Total consolidated operating earnings	**$ 2,459**	$ 2,161	$ 1,885	**14%**	15 %

Fiscal 2016 Compared to Fiscal 2015

Pharmaceutical Segment Profit
Fiscal 2016 Pharmaceutical segment profit increased due to sales growth from existing and new pharmaceutical distribution customers and performance under our generics program, partially offset by the adverse impact of customer pricing changes. Acquisitions also contributed to Pharmaceutical segment profit growth. Our generics program benefited from strong year-over-year performance from Red Oak Sourcing.

Medical Segment Profit
Fiscal 2016 Medical segment profit increased due to the contribution from Cardinal Health Brand products. Acquisitions, net of divestitures, which included the unfavorable impact on cost of products sold from the fair value step up of inventory acquired with Cordis, also contributed to segment profit growth. Fiscal 2016 Medical segment profit growth was partially offset by a decline in the results from our Canada business.

Corporate
As discussed further in sections that follow, the principal driver for the change in Corporate during fiscal 2016 were increased amortization and other acquisition-related costs primarily related to the acquisitions of Cordis and Harvard Drug, partially offset by litigation recoveries.

Fiscal 2015 Compared to Fiscal 2014

Pharmaceutical Segment Profit
Fiscal 2015 Pharmaceutical segment profit increased due to sales growth from existing and new pharmaceutical distribution customers and strong performance from our generics program, including benefits from Red Oak Sourcing, partially offset by the adverse impact of customer pricing changes and the Walgreens contract expiration in the prior-year period.

Medical Segment Profit
Fiscal 2015 Medical segment profit decreased primarily due to a decline in contribution from distribution of national brand products. This was partially offset by contributions from the strategic expansion of our portfolio of Cardinal Health Brand products and services, driven by acquisitions and targeted cost reductions.

Corporate
As discussed further in sections that follow, the principal driver for the change in Corporate in fiscal 2015 were increased amortization and other acquisition-related costs primarily due to costs incurred in connection with the acquisition of Cordis.

Other Components of Consolidated Operating Earnings

In addition to revenue, gross margin, and SG&A expenses discussed previously, consolidated operating earnings were impacted by the following:

(in millions)	2016	2015	2014
Restructuring and employee severance	**$ 25**	$ 44	$ 31
Amortization and other acquisition-related costs	**459**	281	223
Impairments and (gain)/loss on disposal of assets, net	**21**	$ (19)	$ 15
Litigation (recoveries)/charges, net	**(69)**	5	(21)

Amortization and Other Acquisition-Related Costs
Amortization of acquisition-related intangible assets was $355 million, $189 million and $187 million for fiscal 2016 , 2015 and 2014 , respectively. The increase in amortization of acquisition-related intangible assets during fiscal 2016 was largely due to the Cordis and Harvard Drug acquisitions. Transaction and integration costs associated with the Cordis acquisition were $78 million and $44 million during fiscal 2016 and 2015 , respectively.

Litigation (Recoveries)/Charges, Net
During fiscal 2016 and 2015 , we received and recognized income of $80 million and $71 million , respectively, from settlements of class action antitrust lawsuits in which we were a class member.

During fiscal 2015 , we incurred litigation charges of $68 million related to government investigations.

Earnings From Continuing Operations Before Income Taxes

In addition to the items discussed above, earnings from continuing operations before income taxes was impacted by the following:

	Earnings from Continuing Operations Before Income Taxes			Change	
(in millions)	2016	2015	2014	2016	2015
Other (income)/expense, net	**$ 5**	$ (7)	$ (46)	**N.M.**	N.M.
Interest expense, net	**178**	141	133	**26%**	6%
Loss on extinguishment of debt	**—**	60	—	**N.M.**	N.M.

Other Income, Net
Other income, net for fiscal 2014 included a $32 million pre-tax gain related to the sale of our minority interest in two investments.

Interest Expense, Net
Fiscal 2016 interest expense increased primarily as a result of the additional $1.5 billion of debt issued in June 2015 to fund the Harvard Drug and Cordis acquisitions.

Loss on Extinguishment of Debt
In December 2014, we redeemed certain debt resulting in a loss on the extinguishment of debt of $60 million ($37 million, net of tax).

Provision for Income Taxes

The provision for income taxes increased $90 million in fiscal 2016 due to an increase in earnings from continuing operations before income taxes. Our effective tax rate decreased 1.3 percentage points during fiscal 2016 .

Generally, fluctuations in the effective tax rate are due to changes in the distribution of income among non-U.S. taxing jurisdictions with lower income tax rates and discrete items. A reconciliation of the provision based on the federal statutory income tax rate to our effective income tax rate from continuing operations is as follows (see Note 7 of the "Notes to Consolidated Financial Statements" for additional information):

	2016	2015	2014
Provision at Federal statutory rate	**35.0 %**	35.0 %	35.0 %
State and local income taxes, net of federal benefit	**1.5**	4.1	2.2
Foreign tax rate differential	**(0.6)**	(2.4)	(1.2)
Nondeductible/nontaxable items	**1.0**	0.7	(0.2)
Other	**0.2**	1.0	(0.5)
Effective income tax rate	**37.1 %**	38.4 %	35.3 %

Fiscal 2016

The fiscal 2016 effective income tax rate was favorably impacted by the state and local income tax rate, which decreased 2.6 percentage points due to resolutions with state taxing authorities and a shift in the distribution of income among jurisdictions. The foreign tax rate differential decreased 1.8 percentage points primarily due to the deferred tax benefits recognized in fiscal 2015.

Ongoing Audits

The IRS is currently conducting audits of fiscal years 2006 through 2014.

Fiscal 2015 and Fiscal 2014

The fiscal 2015 effective income tax rate was unfavorably impacted by the state and local income tax rate, which increased 1.9 percentage points due to the de-recognition of certain state tax benefits. The foreign tax rate differential also increased 1.2 percentage points primarily due to recognition of deferred tax benefits resulting from new tax legislation. In addition, the change in measurement of uncertain tax positions increased 1.3 percentage points primarily as a result of proposed assessment of additional tax.

The fiscal 2014 effective tax rate was impacted by net favorable discrete items of $37 million, which reduced the rate by 2.1 percentage points. The discrete items include the favorable impact of the settlement of federal and state tax controversies ($80 million) and release of valuation allowances ($12 million) and the unfavorable impact of remeasurement of unrecognized tax benefits ($65 million), primarily as a result of proposed assessments of additional tax.

Liquidity and Capital Resources

We currently believe that, based on available capital resources (cash on hand and committed credit facilities) and projected operating cash flow, we have adequate capital resources to fund working capital needs; currently anticipated capital expenditures; currently anticipated business growth and expansion; contractual obligations; tax payments; and current and projected debt service requirements, dividends, and share repurchases. If we decide to engage in one or more additional acquisitions, depending on the size and timing of such transactions, we may need to access capital markets for additional financing.

Cash and Equivalents

Our cash and equivalents balance was $2.4 billion at June 30, 2016 compared to $4.6 billion at June 30, 2015 . The decrease in cash and equivalents during fiscal 2016 was driven by $3.6 billion deployed for acquisitions, $512 million paid in dividends, $651 million paid for share repurchases, and $465 million in capital expenditures, partially offset by $3.0 billion in cash provided by operating activities. Net cash provided by operating activities was positively impacted by increased net earnings and working capital improvements. At June 30, 2016 , our cash and equivalents were held in cash depository accounts with major banks or invested in high quality, short-term liquid investments.

The cash and equivalents balance at June 30, 2016 included $475 million of cash held by subsidiaries outside of the United States. Although the vast majority of cash is available for repatriation, bringing the cash into the United States could trigger U.S federal, state and local income tax obligations. Because the earnings are considered permanently reinvested, no U.S. tax provision has been accrued related to the repatriation of these earnings. It is not practicable to evaluate the amount of U.S. tax that might be payable on the eventual remittance of such earnings.

During fiscal 2015 , net cash provided by operating activities of $2.5 billion was positively impacted by working capital improvements. These funds were deployed for $1.0 billion of share repurchases, $503 million of acquisitions and $460 million of cash dividends. In addition, during the second quarter of fiscal 2015 , we refinanced $1.2 billion of long-term debt at lower interest rates and longer maturities and during the fourth quarter of fiscal 2015 we received proceeds from the issuance of additional long-term debt of $1.5 billion to fund the Harvard Drug and Cordis acquisitions.

During fiscal 2014 we deployed $673 million of cash on share repurchases, $519 million on acquisitions and $415 million on dividends. Net cash provided by operating activities of $2.5 billion benefited from a net working capital decrease in excess of $500 million as a result of the Walgreens contract expiration.

Changes in working capital, which impact operating cash flow, can vary significantly depending on factors such as the timing of customer payments, inventory purchases and payments to vendors in the regular course of business, as well as fluctuating working capital needs driven by customer and product mix.

Other Financing Arrangements and Financial Instruments

Credit Facilities and Commercial Paper

In addition to cash and equivalents and operating cash flow, other sources of liquidity at June 30, 2016 include a $1.75 billion revolving credit facility and a $700 million committed receivables sales facility program. In June 2016, we increased our revolving credit facility from $1.5 billion to $1.75 billion and decreased our committed receivables facility program from $950 million to $700 million . We also have a commercial paper program of up to $1.5 billion , backed by the revolving credit facility. At June 30, 2016 , we had no amounts outstanding under the revolving credit facility. Availability on the revolving credit facility was reduced by outstanding letters of credit of $14 million at June 30, 2016. We also had standby letters of credit of $40 million issued under the committed receivables sales facility program at June 30, 2016 .

Our revolving credit facility and committed receivables sales facility program require us to maintain a consolidated leverage ratio of no more than 3.25-to-1 and our committed receivables sales facility also requires us to maintain a consolidated interest coverage ratio, as of the end of any calendar quarter, of at least 4-to-1. As of June 30, 2016 , we were in compliance with these financial covenants.

Available-for-Sale Securities

At June 30, 2016 and 2015 , we held $200 million and $193 million , respectively, of marketable securities, which are classified as available-for-sale.

Long-Term Obligations

At June 30, 2016 , we had total long-term obligations of $5.0 billion .

Risk Management

We use interest rate swaps, foreign currency contracts and commodity contracts to manage our exposure to cash flow variability. We also use interest rate swaps to protect the value of our debt and use foreign currency forward contracts to protect the value of our existing and forecasted foreign currency assets and liabilities. See the "Quantitative and Qualitative Disclosures About Market Risk" section as well as Notes 1 and 11 of the “Notes to Consolidated Financial Statements” for information regarding the use of financial instruments and derivatives as well as foreign currency, interest rate and commodity exposures.

Capital Deployment

Capital Expenditures

Capital expenditures during fiscal 2016 , 2015 and 2014 were $465 million , $300 million and $249 million , respectively.

We expect capital expenditures in fiscal 2017 to be between $400 million and $450 million primarily for information technology projects, growth projects in our core business and integration of the Cordis acquisition.

Dividends

During fiscal 2016 , we paid quarterly dividends totaling $1.55 per share, an increase of 13 percent from fiscal 2015 .

On May 4, 2016, our Board of Directors approved a quarterly dividend of $0.4489 per share, or $1.80 per share on an annualized basis, payable on July 15, 2016 to shareholders of record on July 1, 2016.

Share Repurchases

Our Board of Directors has approved a $2.0 billion share repurchase program, which was completed in July 2016. On May 4, 2016, our Board of Directors also approved an additional $1.0 billion share repurchase program that expires on December 31, 2019. During fiscal 2016 , we repurchased $651 million of our common shares and from July 1, 2016 through August 5, 2016, we repurchased an additional $250 million of our common shares. We funded the repurchases with available cash. At August 5, 2016, we had $793 million remaining under the new repurchase authorization.

Acquisitions

On July 2, 2015, August 26, 2015 and October 2, 2015, we acquired Harvard Drug, naviHealth and Cordis for $1.1 billion (net of cash acquired of $44 million), $238 million (net of cash acquired of $53 million) and $1.9 billion, respectively.

Contractual Obligations

At June 30, 2016 , our contractual obligations, including estimated payments due by period, are as follows:

(in millions)	2017	2018 to 2019	2020 to 2021	There-after	Total
Long-term debt and short-term borrowings (1)	$ 585	$ 959	$ 989	$ 2,973	**$ 5,506**
Interest on long-term debt	164	308	278	1,465	**2,215**
Capital lease obligations (2)	2	26	3	2	**33**
Other liabilities (3)	3	—	—	—	**3**
Operating leases (4)	119	181	117	127	**544**
Purchase obligations and other payments (5)	386	329	254	313	**1,282**
Total contractual obligations	**$ 1,259**	**$ 1,803**	**$ 1,641**	**$ 4,880**	**$ 9,583**

(1) Represents maturities of our long-term debt obligations and other short-term borrowings excluding capital lease obligations described below. See Note 6 of the "Notes to Consolidated Financial Statements" for further information.

(2) Represents maturities of our capital lease obligations included within long-term obligations in our consolidated balance sheets.

(3) Represents cash outflows by period for certain of our liabilities in which cash outflows could be reasonably estimated. Long-term liabilities, such as unrecognized tax benefits and deferred taxes, have been excluded from the table above because of the inherent uncertainty of the underlying tax positions or because of the inability to reasonably estimate the timing of any cash outflows. See Note 7 of the "Notes to Consolidated Financial Statements" for further discussion of income taxes. Additionally, the carrying value of redeemable noncontrolling interests are excluded from the table, as the ultimate amount and timing of any future cash payments related to the redemption amount are uncertain. See Note 1 and Note 12 of the "Notes to Consolidated Financial Statements" for for additional information regarding redeemable noncontrolling interests.

(4) Represents minimum rental payments for operating leases having initial or remaining non-cancelable lease terms as described in Note 8 of the "Notes to Consolidated Financial Statements."

(5) A purchase obligation is defined as an agreement to purchase goods or services that is legally enforceable and specifies all significant terms, including fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and approximate timing of the transaction. The purchase obligation amounts disclosed above represent estimates of the minimum for which we are obligated and the time period in which cash outflows will occur. Purchase orders and authorizations to purchase that involve no firm commitment from either party are excluded from the above table. In addition, contracts that can be unilaterally canceled with no termination fee or with proper notice are excluded from our total purchase obligations except for the amount of the termination fee or the minimum amount of goods that must be purchased during the requisite notice period. Purchase obligations and other payments also includes quarterly payments of $25.6 million that we are required to pay CVS Health Corporation ("CVS Health"), which commenced in October 2014 in connection with the establishment of Red Oak Sourcing and will be in place for the remaining eight years of the agreement. Purchase obligations and other payments does not include contingent payments under the sourcing venture that were not yet determined as of June 30, 2016, including the quarterly $10 million increase that began in fiscal 2016 and the additional $10 million beginning in the first quarter of fiscal 2017. See Note 8 of the "Notes to Consolidated Financial Statements" for additional information.

Off-Balance Sheet Arrangements

We had no significant "off-balance sheet arrangements" at June 30, 2016 , as that term is defined in the SEC rules.

Recent Financial Accounting Standards

See Note 1 of the "Notes to Consolidated Financial Statements" for a discussion of recent financial accounting standards.

Critical Accounting Policies and Sensitive Accounting Estimates

Critical accounting policies are those accounting policies that (i) can have a significant impact on our financial condition and results of operations and (ii) require the use of complex and subjective estimates based upon past experience and management's judgment. Other people applying reasonable judgment to the same facts and circumstances could develop different estimates. Because estimates are inherently uncertain, actual results may differ. In this section, we describe the significant policies applied in preparing our consolidated financial statements that management believes are the most dependent on estimates and assumptions. For further discussion of accounting policies for items within this section and of additional accounting policies, see Note 1 of the "Notes to Consolidated Financial Statements."

Allowance for Doubtful Accounts

Trade receivables are presented net of an allowance for doubtful accounts of $135 million at both June 30, 2016 and 2015 . We must use judgment when deciding whether to extend credit to customers and when estimating the required allowance for doubtful accounts.

The allowance for doubtful accounts includes general and specific reserves. We determine the appropriate allowance by reviewing accounts receivable aging, industry trends, customer financial strength and credit standing, historical write-off trends and payment history. We also regularly evaluate how changes in economic conditions may affect credit risks.

Our methodology for estimating the general reserve is assessed annually based on historical losses and economic, business and market trends. In addition, the allowance is reviewed quarterly and updated if appropriate. We may adjust the allowance for doubtful accounts if changes in customers' financial condition or general economic conditions make defaults more frequent or severe.

The following table gives information regarding the allowance for doubtful accounts over the past three fiscal years:

(in millions, except percentages)	2016	2015	2014
Allowance for doubtful accounts	$ **135**	$ 135	$ 137
Reduction to allowance for customer deductions and write-offs	**74**	66	50
Charged to costs and expenses	**74**	64	53
Allowance as a percentage of customer receivables	**1.8%**	2.0%	2.5%
Allowance as a percentage of revenue	**0.11%**	0.13%	0.15%

A hypothetical 0.1 percent increase or decrease in the reserve as a percentage of trade receivables at June 30, 2016 , would result in an increase or decrease in bad debt expense of $8 million .

We believe the reserve maintained and expenses recorded in fiscal 2016 are appropriate. At this time, we are not aware of any analytical findings or customer issues that are likely to lead to a significant future increase in the allowance for doubtful accounts as a percentage of revenue.

Inventories

A substantial portion of our inventories (58 percent at both June 30, 2016 and 2015) are valued at the lower of cost, using the last-in, first-out ("LIFO") method, or market. These are primarily merchandise inventories at the core pharmaceutical distribution facilities within our Pharmaceutical segment. The LIFO impact on the consolidated statements of earnings in a given year depends on pharmaceutical price appreciation and the level of inventory. Prices for branded pharmaceuticals generally tend to rise, which results in an increase in cost of products sold, whereas prices for generic pharmaceuticals generally tend to decline, which results in a decrease in cost of products sold.

The LIFO method presumes that the most recent inventory purchases are the first items sold, so LIFO helps us better match current costs and revenue. Using LIFO, if there is a decrease in inventory levels that have experienced pharmaceutical price appreciation, the result generally will be a decrease in future cost of products sold as our older inventory is held at a lower cost. Conversely, if there is a decrease in inventory levels that have experienced a pharmaceutical price decline, the result generally will be an increase in future cost of products sold as our older inventory is held at a higher cost. We believe that the average cost method of inventory valuation reasonably approximates the current cost of replacing inventory within the core pharmaceutical distribution facilities. Accordingly, the LIFO reserve is the difference between (a) inventory at the lower of LIFO cost or market and (b) inventory at replacement cost determined using the average cost method of inventory valuation.

If we had used the average cost method of inventory valuation for all inventory within the core pharmaceutical distribution facilities, the value of our inventories would not have changed in fiscal 2016 or 2015 because inventories valued at LIFO were $9 million and $114 million higher than the average cost value at June 30, 2016 and June 30, 2015 , respectively. We do not record inventories in excess of replacement cost. As such, the LIFO reserve was zero at both June 30, 2016 and 2015 . Our remaining inventory is stated at the lower of cost, using the first-in, first-out method, or market.

Inventories presented in the consolidated balance sheets are net of reserves for excess and obsolete inventory which were $79 million and $57 million at June 30, 2016 and 2015 , respectively. The increase primarily reflects inventory reserves pertaining to Cordis.

We reserve for inventory obsolescence using estimates based on historical experience, historical and projected sales trends, specific categories of inventory and age of on-hand inventory. If actual conditions are less favorable than our assumptions, additional inventory reserves may be required.

Business Combinations

The assets acquired and liabilities assumed in a business combination, including identifiable intangible assets, are recorded at their estimated fair values as of the acquisition date. The excess of the purchase price over the estimated fair value of the identifiable net assets acquired is recorded as goodwill. We base the fair values of identifiable intangible assets on detailed valuations that require management to make significant judgments, estimates and assumptions. Critical estimates and assumptions include: expected future cash flows for customer relationships, trademarks, trade names, patents, developed technology, in-process research and development and other identifiable intangible assets; discount rates that reflect the risk factors associated with future cash flows; and estimates of useful lives. See Note 2 of the “Notes to Consolidated Financial Statements” for additional information regarding our acquisitions.

Goodwill and Other Intangible Assets

Purchased goodwill and intangible assets with indefinite lives are tested for impairment annually or when indicators of impairment exist.

Goodwill impairment testing involves judgment, including the identification of reporting units, the estimation of the fair value of each reporting unit and, if necessary, the estimation of the implied fair value of goodwill.

Our determination of estimated fair value of our reporting units is based on a combination of the income-based and market-based approaches. Under the income-based approach, we use a discounted cash flow model in which cash flows anticipated over several future periods, plus a terminal value at the end of that time horizon, are discounted to their present value using an appropriate risk-adjusted rate of return. We use our internal forecasts to estimate future cash flows, which we believe are consistent with those of a market participant, and include an estimate of long-term growth rates based on our most recent views of the long-term outlook for each reporting unit. Actual results may differ materially from those used in our forecasts. We use discount rates that are commensurate with the risks and uncertainty inherent in the respective reporting units and in our internally-developed forecasts. Discount rates used in our reporting unit valuations ranged from 8.5 percent to 12.5 percent . Under the market-based approach, we determine fair value by comparing our reporting units to similar businesses or guideline companies whose securities are actively traded in public markets. Estimating the fair value of reporting units requires the use of estimates and significant judgments that are based on a number of factors including actual operating results. The use of alternate estimates and assumptions or changes in the industry or peer groups could materially affect the determination of fair value for each reporting unit and potentially result in goodwill impairment.

We performed annual impairment testing in fiscal 2016, 2015 and 2014 and concluded that there were no impairments of goodwill as the estimated fair value of each reporting unit exceeded its carrying value. If we were to alter our impairment testing by increasing the discount rate in the discounted cash flow analysis by 1 percent, there still would not be any impairment indicated for any of our reporting units for fiscal 2016, 2015 or 2014.

The impairment test for indefinite-lived intangibles other than goodwill (primarily in-process research and development ("IPR&D")) requires comparing the fair value of the indefinite-lived intangible asset to the carrying value of the asset as of the impairment testing date. We estimate the fair value of our indefinite-lived intangibles under the income approach using a discounted cash flow model. We use our internal forecasts to estimate future cash flows, which we believe are consistent with those of a market participant, and include an estimate of long-term growth rates based on our most recent views of the long-term outlook for the indefinite-lived intangible including, among other factors, assumptions on regulatory approval for IPR&D.

Intangible assets with finite lives, primarily customer relationships; trademarks, trade names and patents; and developed technology, are amortized using a combination of straight-line and accelerated methods based on the expected cash flows from the asset over their estimated useful lives. We review intangible assets with finite lives for impairment whenever events or changes in circumstances indicate that the related carrying amounts may not be recoverable. Determining whether an impairment loss occurred requires estimating future undiscounted cash flows expected to be generated by the asset group. Actual results may differ materially from those used in our forecasts.

Vendor Reserves

In the ordinary course of business, our vendors may dispute deductions taken against payments otherwise due to them or assert other disputes. These disputed transactions are researched and resolved based upon findings of the research performed. At any given time, there are outstanding items in various stages of research and resolution. In determining appropriate reserves for areas of exposure with our vendors, we assess historical experience and current outstanding claims. We have established various levels of reserves based on the type of claim and status of review. Though the transaction types are relatively consistent, we periodically refine our methodology by updating the reserve estimate percentages to reflect actual historical experience. Changes to the estimate percentages affect the cost of products sold in the period in which the change was made.

Vendor reserves were $62 million and $88 million at June 30, 2016 and 2015 , respectively. Approximately 66 percent of the vendor reserve at the end of fiscal 2016 pertained to the Pharmaceutical segment compared to 75 percent at the end of fiscal 2015 . The reserve balance will fluctuate due to variations in outstanding claims from period-to-period, timing of settlements and specific vendor issues.

The ultimate outcome of specific claims may be different than our original estimate and may require adjustment. We believe, however, that reserves recorded for such disputes are reasonable based upon current facts and circumstances.

Loss Contingencies

We accrue for contingencies related to disputes, litigation and regulatory matters if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Because these matters are inherently unpredictable and unfavorable developments or resolutions can occur, assessing contingencies is highly subjective and requires judgments about future events.

We regularly review contingencies to determine whether our accruals and related disclosures are adequate. The amount of ultimate loss may differ from these estimates. See Note 8 of the “Notes to Consolidated Financial Statements” for additional information regarding loss contingencies.

Provision for Income Taxes

Our income tax expense, deferred income tax assets and liabilities, and unrecognized tax benefits reflect management’s assessment of estimated future taxes to be paid on items in the consolidated financial statements.

The following table presents information about our tax position at June 30:

(in millions)	2016	2015
Total deferred income tax assets (1)	**$ 567**	$ 585
Valuation allowance for deferred income tax assets (2)	**(93)**	(87)
Net deferred income tax assets	**474**	498
Total deferred income tax liabilities	**(2,130)**	(1,853)
Net deferred income tax liability	**$ (1,656)**	$ (1,355)

(1) Total deferred income tax assets included $193 million and $197 million of loss and tax credit forwards at June 30, 2016 and 2015 , respectively.

(2) This valuation allowance primarily relates to federal, state and international loss carryforwards for which the ultimate realization of future benefits is uncertain.

Expiring loss and credit carryforwards and the required valuation allowances are adjusted quarterly. After applying the valuation allowances, we do not anticipate any limitations on our use of any of the other net deferred income tax assets described above.

We believe that our estimates for the valuation allowances against deferred tax assets and unrecognized tax benefits are appropriate based on current facts and circumstances. However, others applying reasonable judgment to the same facts and circumstances could develop different estimates. The amount we ultimately pay when matters are resolved may differ from the amounts accrued.

Tax benefits from uncertain tax positions are recognized when it is more likely than not that the position will be sustained upon examination of the technical merits of the position, including resolutions of any related appeals or litigation processes. The amount recognized is measured as the largest amount of tax benefit that is greater than 50 percent likely of being realized upon settlement. See Note 7 of the “Notes to Consolidated Financial Statements” for additional information regarding unrecognized tax benefits.

If any of our assumptions or estimates were to change, an increase or decrease in our effective income tax rate by 1 percent would have caused income tax expense to increase or decrease $23 million for fiscal 2016 .

Share-Based Compensation

Share-based compensation provided to employees is recognized in the consolidated statements of earnings based on the grant date fair value of the awards. The fair value of restricted share units and performance share units is determined by the grant date market price of our common shares. The compensation expense associated with nonvested performance share units is dependent on our periodic assessment of the probability of the targets being achieved and our estimate, which may vary over time, of the number of shares that ultimately will be issued. The fair value of stock options is determined using a lattice valuation model. We believe the lattice model provides reasonable estimates because it has the ability to take into account employee exercise patterns based on changes in our stock price and other variables and it provides for a range of input assumptions.

We analyze historical data to estimate option exercise behaviors and post-vesting forfeitures to be used within the lattice model. The expected life of the options granted is calculated from the option valuation model and represents the length of time in years that the options granted are expected to be outstanding. Expected volatilities are based on implied volatility from traded options on our common shares and historical volatility over a period of time commensurate with the contractual term of the option grant (up to ten years). As required, the forfeiture estimates are adjusted to reflect actual forfeitures when an award vests. The actual forfeitures in future reporting periods could be higher or lower than our current estimates. See Note 16 of the "Notes to Consolidated Financial Statements" for additional information regarding share-based compensation.

Explanation and Reconciliation of Non-GAAP Financial Measures

The "Key Highlights" section and "Fiscal 2016 Overview" section within MD&A in this Form 10-K contains financial measures that are not calculated in accordance with GAAP.

In addition to analyzing our business based on financial information prepared in accordance with GAAP, we use these non-GAAP financial measures internally to evaluate our performance, evaluate the balance sheet, engage in financial and operational planning, and determine incentive compensation because we believe that these measures provide additional perspective on and, in some circumstances are more closely correlated to, the performance of our underlying, ongoing business. We provide these non-GAAP financial measures to investors as supplemental metrics to assist readers in assessing the effects of items and events on our financial and operating results on a year-over-year basis and in comparing our performance to that of our competitors. However, the non-GAAP financial measures that we use may be calculated differently from, and therefore may not be comparable to, similarly titled measures used by other companies. The non-GAAP financial measures disclosed by us should not be considered a substitute for, or superior to, financial measures calculated in accordance with GAAP, and the financial results calculated in accordance with GAAP and reconciliations to those financial statements set forth below should be carefully evaluated.

Exclusions from Non-GAAP Financial Measures

The differences between the non-GAAP measures presented in this Form 10-K and the most directly comparable GAAP measure are represented by the following items, which management believes are useful to exclude for its own and for investors' assessment of the business for the reasons identified below:

- restructuring and employee severance costs , which include charges for programs in which we fundamentally change our operations and are excluded because they are not part of the ongoing operations of our underlying business, which includes normal levels of reinvestment in the business;
- amortization and other acquisition-related costs. We began excluding amortization costs in fiscal 2013 primarily for consistency with the presentation of the financial results of our peer group companies. Additionally, these non-cash amounts are variable in amount and frequency and are significantly impacted by the timing and size of acquisitions, so their exclusion allows for better comparison of forecasted, current and historical financial results. Other acquisition-related costs are excluded because they are directly related to an acquisition but do not meet the criteria to be recognized on the acquired entity's initial balance sheet as part of the purchase price allocation. They are also significantly impacted by the timing and size of acquisitions;
- impairments and gains or loss on disposal of assets , which are excluded because they do not occur in or reflect the ordinary course of our ongoing business operations and their exclusion results in a metric that more meaningfully reflects the sustainability of our operating performance;
- litigation recoveries or charges, net , which often relate to events that may have occurred in prior or multiple periods, do not occur in or reflect the ordinary course of our business and are inherently unpredictable in timing and amount;
- LIFO charges and credits , which we began excluding in fiscal 2015 because the factors that drive LIFO charges or credits such as pharmaceutical manufacturer price appreciation/deflation and year-end inventory levels (which can be meaningfully influenced by customer buying behavior immediately preceding our fiscal year-end), are largely out of our control and cannot be accurately predicted. We also believe that exclusion of LIFO charges from non-GAAP metrics allows for better comparison of our financial results to our historical operations and to our peer group companies;
- loss on extinguishment of debt , which does not typically occur in the normal course of business and may obscure analysis of trends and financial performance. Additionally, the amount and frequency of these notable one-time charges is not consistent and is significantly impacted by the timing and size of debt financing transactions.
- other spin-off costs , incurred in connection with our spin-off of CareFusion, which are included in distribution, selling, general and administrative expenses and are excluded because they do not relate to or reflect our ongoing business operations.

The tax effect for each of the non-GAAP items described above is determined using the tax rate and other tax attributes applicable to the item and the jurisdiction(s) in which the item is recorded. The gross, tax and net impact of each item are presented with our GAAP to non-GAAP reconciliations.

Definitions

Growth rate calculation : Except for compound annual growth rates ("CAGR"), growth rates in this Form 10-K are determined by dividing the difference between current period results and prior period results by prior period results. CAGR is determined by subtracting one from ((the ending value divided by the beginning value) raised to the power of (one divided by the number of years)).

Non-GAAP operating earnings : operating earnings excluding (1) LIFO charges/(credits), (2) restructuring and employee severance, (3) amortization and other acquisition-related costs, (4) impairments and (gain)/loss on disposal of assets, (5) litigation (recoveries)/charges, net, and (6) other CareFusion spin-off costs.

Non-GAAP Earnings from continuing operations before income taxes : earnings from continuing operations before income taxes excluding (1) LIFO charges/(credits), (2) restructuring and employee severance, (3) amortization and other acquisition-related costs, (4) impairments and (gain)/loss on disposal of assets, (5) litigation (recoveries)/charges, net, and (6) loss on extinguishment of debt.

Non-GAAP net earnings from continuing operations attributable to Cardinal Health, Inc. : net earnings attributable to Cardinal Health, Inc. excluding (1) earnings from discontinued operations (2) LIFO charges/(credits), (3) restructuring and employee severance, (4) amortization and other acquisition-related costs, (5) impairments and (gain)/loss on disposal of assets, (6) litigation (recoveries)/charges, net, (7) loss on extinguishment of debt, and (8) other CareFusion spin-off costs, each net of tax.

Non-GAAP diluted EPS from continuing operations attributable to Cardinal Health, Inc. or "Non-GAAP diluted EPS" : non-GAAP net earnings from continuing operations attributable to Cardinal Health, Inc. divided by diluted weighted-average shares outstanding.

Explanation and Reconciliation of Non-GAAP Financial Measures

GAAP to Non-GAAP Reconciliations

(in millions, except per common share amounts)	Operating Earnings	Operating Earnings Growth Rate	Earnings [1] Before Income Taxes	Provision for Income Taxes	Net Earnings from Continuing Operations [2]	Net Earnings from Continuing Operations [2] Growth Rate	Diluted EPS [1,2]	Diluted EPS [1,2] Growth Rate
				Fiscal Year 2016				
GAAP	**$ 2,459**	**14 %**	**$ 2,276**	**$ 845**	**$ 1,427**	**18 %**	**$ 4.32**	**20 %**
Restructuring and employee severance	25		25	9	16		0.05	
Amortization and other acquisition-related costs	459		459	143	316		0.96	
Impairments and loss on disposal of assets	21		21	6	15		0.04	
Litigation (recoveries)/charges, net	(69)		(69)	(27)	(42)		(0.13)	
Non-GAAP	**$ 2,895**	**17 %**	**$ 2,711**	**$ 976**	**$ 1,732**	**18 %**	**$ 5.24**	**20 %**
				Fiscal Year 2015				
GAAP	$ 2,161	15 %	$ 1,967	$ 755	$ 1,212	4 %	$ 3.61	7 %
Restructuring and employee severance	44		44	15	29		0.09	
Amortization and other acquisition-related costs	281		281	100	181		0.54	
Impairments and (gain)/loss on disposal of assets	(19)		(19)	(10)	(9)		(0.03)	
Litigation (recoveries)/charges, net	5		5	(14)	19		0.06	
Loss on extinguishment of debt	—		60	23	37		0.11	
Non-GAAP	$ 2,472	16 %	$ 2,339	$ 870	$ 1,469	11 %	$ 4.38	14 %
				Fiscal Year 2014				
GAAP	1,885	89 %	$ 1,798	$ 635	1,163	247 %	3.37	247 %
Restructuring and employee severance	31		$ 31	$ 11	20		0.06	
Amortization and other acquisition-related costs	223		$ 223	$ 79	144		0.42	
Impairments and (gain)/loss on disposal of assets	15		$ 15	$ 5	10		0.03	
Litigation (recoveries)/charges, net	(21)		$ (21)	$ (8)	(13)		(0.04)	
Non-GAAP	$ 2,133	4 %	$ 2,047	$ 722	$ 1,324	3 %	$ 3.84	3 %
				Fiscal Year 2013				
GAAP	$ 996	(44)%	$ 888	$ 553	$ 335	(69)%	$ 0.97	(68)%
Restructuring and employee severance	71		71	$ 27	44		0.13	
Amortization and other acquisition-related costs	158		158	$ 52	106		0.31	
Impairments and (gain)/loss on disposal of assets	859		859	$ 37	822		2.39	
Litigation (recoveries)/charges, net	(38)		(38)	$ (15)	(23)		(0.07)	
Non-GAAP	$ 2,046	10 %	$ 1,938	$ 654	$ 1,284	15 %	$ 3.73	16 %
				Fiscal Year 2012				
GAAP	$ 1,792	18 %	$ 1,698	$ 628	$ 1,070	11 %	$ 3.06	12 %
Restructuring and employee severance	21		21	8	13		0.04	
Amortization and other acquisition-related costs	33		33	9	24		0.07	
Impairments and (gain)/loss on disposal of assets	21		21	8	13		0.04	
Litigation (recoveries)/charges, net	(3)		(3)	(1)	(2)		(0.01)	
Other spin-off costs	2		2	1	1		—	
Non-GAAP	$ 1,866	13 %	$ 1,772	$ 653	$ 1,119	13 %	$ 3.21	15 %

[1] from continuing operations
[2] attributable to Cardinal Health, Inc.

The sum of the components may not equal the total due to rounding.
We apply varying tax rates depending on the item's nature and tax jurisdiction where it is incurred.

Selected Financial Data

The consolidated financial data below includes all business combinations as of the date of acquisition that occurred during these periods. The following selected consolidated financial data should be read in conjunction with the consolidated financial statements and related notes and MD&A.

(in millions, except per common share amounts)	2016	2015	2014	2013 (1)	2012
Earnings Data:					
Revenue	**$ 121,546**	$ 102,531	$ 91,084	$ 101,093	$ 107,552
Operating earnings	**$ 2,459**	$ 2,161	$ 1,885	$ 996	$ 1,792
Earnings from continuing operations	**$ 1,431**	$ 1,212	$ 1,163	$ 335	$ 1,070
Earnings/(loss) from discontinued operations, net of tax	**—**	3	3	(1)	(1)
Net earnings	**1,431**	1,215	1,166	334	1,069
Less: Net earnings attributable to noncontrolling interests	**(4)**	—	—	—	—
Net earnings attributable to Cardinal Health, Inc.	**$ 1,427**	$ 1,215	$ 1,166	$ 334	$ 1,069
Basic earnings per common share attributable to Cardinal Health, Inc.:					
Continuing operations	**$ 4.36**	$ 3.65	$ 3.41	$ 0.98	$ 3.10
Discontinued operations	**—**	0.01	0.01	—	—
Net basic earnings per common share attributable to Cardinal Health, Inc.	**$ 4.36**	$ 3.66	$ 3.42	$ 0.98	$ 3.10
Diluted earnings per common share attributable to Cardinal Health, Inc.:					
Continuing operations	**$ 4.32**	$ 3.61	$ 3.37	$ 0.97	$ 3.06
Discontinued operations	**—**	0.01	0.01	—	—
Net diluted earnings per common share attributable to Cardinal Health, Inc.	**$ 4.32**	$ 3.62	$ 3.38	$ 0.97	$ 3.06
Cash dividends declared per common share	**$ 1.6099**	$ 1.4145	$ 1.2500	$ 1.0900	$ 0.8825
Balance Sheet Data:					
Total assets	**$ 34,122**	$ 30,142	$ 26,033	$ 25,819	$ 24,260
Long-term obligations, less current portion	**4,952**	5,211	3,171	3,686	2,418
Total Cardinal Health, Inc. shareholders' equity	**6,554**	6,256	6,401	5,975	6,244

(1) During fiscal 2013, we recognized a non-cash goodwill impairment charge of $829 million ($799 million, net of tax) related to our Nuclear Pharmacy Services division.

Quantitative and Qualitative Disclosures About Market Risk

We are exposed to cash flow and earnings fluctuations as a result of certain market risks. These market risks primarily relate to foreign exchange, interest rate, and commodity price-related changes. We maintain a hedging program to manage volatility related to these market exposures which employs operational, economic, and derivative financial instruments in order to mitigate risk. See Note 1 and Note 11 of the "Notes to Consolidated Financial Statements" for further discussion regarding our use of derivative instruments.

Foreign Exchange Rate Sensitivity

By nature of our global operations, we are exposed to cash flow and earnings fluctuations resulting from foreign exchange rate variation. These exposures are transactional and translational in nature. Principal drivers of this foreign exchange exposure include the Canadian dollar, euro, Thai baht, Chinese renminbi, Japanese yen, Mexican peso, British pound, Singapore dollar, Australian dollar, Malaysian ringgit.

Transactional Exposure

Transactional exposure arises from the purchase and sale of goods and services in currencies other than our functional currency or the functional currency of our subsidiaries. As part of our risk management program, at the end of each fiscal year we perform a sensitivity analysis on our forecasted transactional exposure for the upcoming fiscal year. These analyses include the estimated impact of our hedging program, which is designed to mitigate transactional exposure. Our forecasted transactional exposure at June 30, 2016 increased from the prior year primarily as a result of changes in the volume of transactions in foreign currencies due to the acquisition of Cordis. At June 30, 2016 and 2015 , we had hedged approximately 29 and 37 percent of transactional exposures, respectively.

The following table summarizes the analysis as it relates to transactional exposure and the impact of a hypothetical 10 percent fluctuation in foreign currencies, assuming rates collectively shift in the same direction and we are unable to change customer pricing in response to those shifts, for the upcoming fiscal year:

	June 30	
(in millions)	**2016**	2015
Net hypothetical transactional exposure	**$ 621**	$ 392
Sensitivity gain/loss	**$ 62**	$ 39
Estimated offsetting impact of hedges	**(18)**	(15)
Hypothetical net gain/loss	**$ 44**	$ 24

Translational Exposure

We have exposure related to the translation of financial statements of our foreign operations into U.S. dollars, our functional currency. We perform a similar analysis to that previously described related to this translational exposure. Our forecasted translational exposure at June 30, 2016 increased from the prior year primarily as a result of changes in the number of financial statements translated from foreign currencies due to the acquisition of Cordis. We do not typically hedge any of our translational exposure and no hedging impact was included in our analysis at June 30, 2016 and 2015 .

The following table summarizes translational exposure and the impact of a hypothetical 10 percent strengthening or weakening in the U.S. dollar, assuming rates collectively shift in the same direction, for the upcoming fiscal year:

	June 30	
(in millions)	**2016**	2015
Net hypothetical translational exposure	**$ 201**	$ 55
Sensitivity gain/loss	**20**	6

Interest Rate Sensitivity

We are exposed to changes in interest rates primarily as a result of our borrowing and investing activities to maintain liquidity and fund operations. The nature and amount of our long-term and short-term debt can be expected to fluctuate as a result of business requirements, market conditions and other factors. Our policy is to manage exposures to interest rates using a mix of fixed and floating rate debt as deemed appropriate by management. We utilize interest rate swap instruments to mitigate our exposure to interest rate movements.

As part of our risk management program, we perform an annual sensitivity analysis on our forecasted exposure to interest rates for the upcoming fiscal year. This analysis assumes a hypothetical 10 percent change in interest rates. At June 30, 2016 and 2015 , the potential increase or decrease in annual interest expense under this analysis as a result of this hypothetical change was $3 million for both periods.

During fiscal 2016 and 2015 , we held marketable securities, which are classified as available-for-sale and are carried at fair value in the consolidated balance sheets. The fair value is subject to change primarily as a result of changes in market interest rates and investment risk related to the issuers' credit worthiness. At both June 30, 2016 and 2015 , a hypothetical increase or decrease of one percentage point in interest rates would cause a potential increase or decrease of up to $2 million in the estimated fair value.

Commodity Price Sensitivity

We are directly exposed to market price changes for certain commodities, including oil-based resins, nitrile, cotton, diesel fuel and latex. We typically purchase raw materials at either market prices or prices tied to a commodity index and some finished goods at prices based in part on a commodity price index. We also are indirectly exposed to fluctuations in certain commodity prices through the purchase of finished goods and various energy-related commodities, including natural gas and electricity, through our normal course of business where our contracts are not directly tied to a commodity index. As part of our risk management program, we perform sensitivity analysis on our forecasted commodity exposure for the upcoming fiscal year. Our forecasted commodity exposure at June 30, 2016 increased from the prior year primarily as a result of changes in purchasing volumes and commodity pricing. At June 30, 2016 and 2015 , we had hedged a portion of these direct commodity exposures (see Note 11 of the “Notes to Consolidated Financial Statements” for further discussion).

The table below summarizes our analysis of these forecasted direct and indirect commodity exposures and the potential gain/loss given a hypothetical 10 percent fluctuation in commodity prices, assuming pricing collectively shifts in the same direction and we are unable to change customer pricing in response to those shifts, for the upcoming fiscal year:

	June 30	
(in millions)	**2016**	2015
Hypothetical commodity exposure	**$ 417**	$ 405
Sensitivity gain/loss	**$ 42**	$ 41
Hypothetical offsetting impact of hedges	**(1)**	(1)
Hypothetical net gain/loss	**$ 41**	$ 40

We believe our total gross range of direct and indirect exposure to commodities is $400 million to $525 million for fiscal 2017.

Business

General

Cardinal Health, Inc. is a global integrated healthcare services and products company providing customized solutions for hospital systems, pharmacies, ambulatory surgery centers, clinical laboratories and physician offices worldwide. We provide clinically proven medical products and pharmaceuticals and cost-effective solutions that enhance supply chain efficiency from hospital to home. We connect patients, providers, payers, pharmacists and manufacturers for integrated care coordination and better patient management.

Pharmaceutical Segment

In the United States, our Pharmaceutical segment:

- distributes branded and generic pharmaceutical, over-the-counter healthcare and consumer products through its Pharmaceutical Distribution division to retailers (including chain and independent drug stores and pharmacy departments of supermarkets and mass merchandisers), hospitals and other healthcare providers. This division:
  - maintains prime vendor relationships that streamline the purchasing process resulting in greater efficiency and lower costs for our customers;
  - provides services to pharmaceutical manufacturers including distribution, inventory management, data reporting, new product launch support and contract pricing and chargeback administration;
  - provides pharmacy management services to hospitals as well as medication therapy management and patient outcomes services to hospitals, other healthcare providers and payers; and
  - repackages generic pharmaceuticals and over-the-counter healthcare products;
- operates nuclear pharmacies and cyclotron facilities through its Nuclear Pharmacy Services division that manufacture, prepare and deliver radiopharmaceuticals for use in nuclear imaging and other procedures in hospitals and physician offices; and
- distributes specialty pharmaceutical products to hospitals and other healthcare providers; provides consulting, patient support and other services for specialty pharmaceutical products to pharmaceutical manufacturers and healthcare providers; and provides specialty pharmacy services through its Specialty Solutions division.

The Pharmaceutical segment is also constructing a sterile facility to contract manufacture a radiopharmaceutical for prostate cancer treatment.

In China, the Pharmaceutical segment distributes branded, generic and specialty pharmaceutical, over-the-counter healthcare and consumer products, provides logistics, marketing and other services and operates direct-to-patient specialty pharmacies through Cardinal Health China.

See Note 15 of the “Notes to Consolidated Financial Statements” for Pharmaceutical segment revenue, profit and assets for fiscal 2016 , 2015 and 2014 .

Pharmaceutical Distribution

Our Pharmaceutical Distribution division’s gross margin includes margin from our generic pharmaceutical program, margin from pharmaceutical distribution agreements with branded manufacturers and margin from over-the-counter healthcare and consumer products. It also includes cash discounts. Margin from our generic pharmaceutical program includes price discounts and rebates from manufacturers and may include price appreciation on some products. Our earnings on generic pharmaceuticals are generally highest during the period immediately following the initial launch of a generic product because generic pharmaceutical selling prices are generally highest during that period and tend to decline over time. Overall, our generic pharmaceutical program's performance is driven by several factors, including increased utilization of generic pharmaceuticals, our ability to sell generic pharmaceuticals to new customers, our ability to sell more generic pharmaceuticals to existing customers, generic pharmaceutical price appreciation, our data and analytic capabilities to predict market trends, enhanced sourcing of generic pharmaceuticals through Red Oak Sourcing (which is discussed below) and new generic product launches. Margin from pharmaceutical distribution agreements with branded manufacturers refers primarily to fees we receive for providing a range of distribution and related services to manufacturers and also includes benefits from pharmaceutical price appreciation on branded pharmaceutical products.

Sourcing Venture With CVS Health

In July 2014, we established Red Oak Sourcing, a U.S.-based generic pharmaceutical sourcing venture with CVS Health with an initial term of 10 years. Red Oak Sourcing negotiates generic pharmaceutical supply contracts on behalf of both companies.

Specialty Pharmaceutical Products and Services

We refer to products and services offered by our Specialty Solutions division as “specialty pharmaceutical products and services.” The Specialty Solutions division distributes oncology, rheumatology, urology, nephrology and other pharmaceutical products ("specialty pharmaceutical products") and human-derived plasma products to hospitals, dialysis clinics, physician offices and other healthcare

providers; provides consulting, patient support, logistics, group purchasing and other services to pharmaceutical manufacturers and healthcare providers primarily supporting the development, marketing and distribution of specialty pharmaceutical products; and provides specialty pharmacy services. Our use of the terminology "specialty pharmaceutical products and services" may not be comparable to the terminology used by other industry participants.

Medical Segment

Our Medical segment distributes a broad range of national and Cardinal Health Brand medical, surgical and laboratory products and provides services to hospitals, ambulatory surgery centers, clinical laboratories and other healthcare providers in the United States, Canada and China. It also distributes medical products to patients in the home in the United States through our Cardinal Health at Home division.

This segment also manufactures, sources and develops higher-margin, Cardinal Health Brand medical and surgical products. Manufactured products include: single-use surgical drapes, gowns and apparel; exam and surgical gloves; fluid suction and collection systems; cardiovascular and endovascular products; wound care products; and orthopedic products. In fiscal 2016, we completed the acquisition of Cordis, a global manufacturer and distributor of interventional cardiology devices and endovascular solutions with operations in more than 50 countries . We expect to continue to expand our lines of manufactured products through acquisitions, strategic partnerships and internal development. Our manufactured products are sold directly or through third-party distributors in the United States, Canada, Europe, Asia, Latin America and other regions internationally. We are expanding our direct distribution network through Cordis.

Through naviHealth and other companies acquired within naviHealth during fiscal 2016, the Medical segment provides services and software to hospitals, other healthcare providers and payers that help manage the complex processes of patient discharge from an acute-care facility (“post-acute care”).

This segment also assembles and offers sterile and non-sterile procedure kits. In addition, the segment provides supply chain services, including spend management, distribution management and inventory management services, to healthcare providers.

See Note 15 of the “Notes to Consolidated Financial Statements” for Medical segment revenue, profit and assets for fiscal 2016 , 2015 and 2014 .

Acquisitions

We have acquired a number of businesses over the last several years that have enhanced our core strategic areas of generics, health systems and hospital solutions (including manufactured medical products), specialty pharmaceutical products and services, international and post-acute care. We expect to continue to pursue additional acquisitions in the future.

Since July 1, 2011, we have completed the following three large acquisitions:

Date	Company	Location	Line of Business	Acquisition Price (in millions)
10/15	Cordis business of Johnson & Johnson	Fremont, CA	Cardiovascular and endovascular products	$1,944
07/15	The Harvard Drug Group	Livonia, MI	Pharmaceutical product distribution	$1,115
03/13	AssuraMed, Inc.	Twinsburg, OH	Medical product distribution	$2,070

In addition, we completed several smaller acquisitions during the last five fiscal years, including: in fiscal 2016, the acquisition of a 71 percent ownership interest in naviHealth, a provider of post-acute care management services, and CuraSpan Health Group, Inc., a provider of discharge planning and care transition software; in fiscal 2015, Tradex International, Inc., a supplier of disposable gloves, and Metro Medical Supply, Inc., a distributor of specialty pharmaceuticals and medical and surgical products; in fiscal 2014, Access Closure, Inc., a manufacturer and distributor of extravascular closure devices; and in fiscal 2012, Futuremed Healthcare Products Corporation, a Canadian medical product distributor.

Customers

Our largest customer, CVS Health, accounted for 25 percent of our fiscal 2016 revenue. In the aggregate, our five largest customers, including CVS Health, accounted for 40 percent of our fiscal 2016 revenue. Our pharmaceutical distribution agreements with CVS Health extend through June 2019.

In addition, we have agreements with group purchasing organizations ("GPOs") that act as agents to negotiate vendor contracts on behalf of their members. Our two largest GPO relationships in terms of member revenue are with Vizient (formerly Novation, LLC) and Premier, Inc. Sales to members of these two GPOs, under numerous contracts across all of our businesses, collectively accounted for 17 percent of our revenue in fiscal 2016 .

Suppliers

We rely on many different suppliers. Products obtained from our five largest suppliers accounted for an aggregate of 27 percent of our revenue during fiscal 2016 , but no single supplier's products accounted for more than 8 percent of revenue.

Competition

We operate in a highly competitive environment in the distribution of pharmaceuticals and related healthcare services. We also operate in a highly competitive environment in the development, manufacturing and distribution of medical and surgical products. We compete on many levels, including price, service offerings, support services and breadth of product lines.

In the Pharmaceutical segment, we compete with wholesale distributors with national reach (including McKesson Corporation and AmerisourceBergen Corporation), regional wholesale distributors, self-warehousing chains, specialty distributors, third-party logistics companies, companies that provide specialty pharmaceutical services and nuclear pharmacies, among others. In addition, the Pharmaceutical segment has experienced competition from a number of organizations offering generic pharmaceuticals, including telemarketers. We also compete with manufacturers that sell their products directly.

In the Medical segment, we compete with many different national medical product distributors, including Owens & Minor, Inc., Medline Industries, Inc. and McKesson Corporation. We also compete with regional medical product distributors and companies that distribute medical products to patients in the home as well as third-party logistics companies. In addition, we compete with manufacturers that sell their products directly. Competitors of the Medical segment's manufacturing and procedural kit businesses include diversified healthcare companies as well as companies that are more focused on specific product categories.

Employees

At June 30, 2016 , we had approximately 26,500 employees in the United States and approximately 10,800 employees outside of the United States. Overall, we consider our employee relations to be good.

Intellectual Property

We rely on a combination of trade secret, patent, copyright and trademark laws, nondisclosure and other contractual provisions, and technical measures to protect our products, services and intangible assets. We hold patents relating to medical and surgical products and to distribution of our nuclear pharmacy products and service offerings. We also operate under licenses for certain proprietary technologies, and in certain instances we license our technologies to third parties.

We believe that we have taken all necessary steps to protect our proprietary rights, but no assurance can be given that we will be able to successfully enforce or protect our rights in the event that they are infringed upon by a third party. While all of these proprietary rights are important to our operations, we do not consider any particular patent, trademark, license, franchise or concession to be material to our overall business.

Regulatory Matters

Our business is highly regulated in the United States, at both the federal and state level, and in foreign countries. Depending upon their specific business, our subsidiaries may be subject to regulation by government entities including:

- the U.S. Drug Enforcement Administration (the “DEA”);
- certain agencies within the U.S. Department of Health and Human Services, including the U.S. Food and Drug Administration (the “FDA”), the Centers for Medicare and Medicaid Services, the Office of Inspector General and the Office for Civil Rights;
- the U.S. Nuclear Regulatory Commission (the “NRC”);
- the U.S. Federal Trade Commission (the "FTC");
- U.S. Customs and Border Protection;
- state boards of pharmacy;
- state controlled substance agencies;
- state health departments, insurance departments, Medicaid departments or other comparable state agencies; and
- agencies comparable to those listed above in various regions, such as Europe, Asia and Latin America.

These regulatory agencies have a variety of civil, administrative and criminal sanctions at their disposal for failure to comply with applicable legal or regulatory requirements. They can suspend our ability to manufacture and distribute products, initiate product recalls, seize products or impose criminal, civil and administrative sanctions.

Distribution

The FDA, DEA and various state authorities regulate the marketing, purchase, storage and distribution of pharmaceutical and medical products under various federal and state statutes including the federal Prescription Drug Marketing Act of 1987, Drug Quality and Security Act of 2013 (the “DQSA”), and Controlled Substances Act (the "CSA"). The CSA governs the sale, packaging, storage and distribution of controlled substances. Wholesale distributors of controlled substances must hold valid DEA registrations and state-level licenses, meet various security and operating standards, and comply with the CSA.

Manufacturing and Marketing

The FDA and other domestic and foreign governmental agencies administer requirements that cover the design, testing, safety, effectiveness, manufacturing (including good manufacturing practices), quality systems, labeling, promotion and advertising (including restrictions on promoting or advertising a product other than for the uses set forth in the approved product label), distribution, importation and post-market surveillance of most of our manufactured products. In addition, we need specific approval or clearance from regulatory authorities and may have to register products with regulatory authorities before we can market and sell some of these products in the United States and certain other countries.

In the United States, authorization to commercially distribute a new medical device is generally received in one of two ways. The first, known as pre-market notification or the 510(k) process, requires us to demonstrate that our new medical device is substantially equivalent to a legally marketed medical device. The second, more rigorous process, known as pre-market approval (“PMA”), requires us to independently demonstrate that the new medical device is safe and effective, and is much more detailed than the 510(k) process. Many of our Medical segment products are cleared through the 510(k) process and certain Cordis products must be approved through the PMA process. It can be costly and time-consuming to obtain regulatory approvals, clearances and registrations of medical devices, and such approvals, clearances and registrations might not be granted on a timely basis, if at all. Even after we obtain approval or clearance to market a product or obtain product registrations, the product and our manufacturing processes are subject to continued regulatory oversight.

From time to time, we may determine that products we manufacture or market do not meet our specifications, regulatory requirements, or published standards. When we or a regulatory agency identify a quality or regulatory issue, we investigate and take appropriate corrective action, which may include recalling the product, correcting the product at the customer location, revising product labeling and notifying customers.

Nuclear Pharmacies and Related Businesses

Our nuclear pharmacies and radiopharmaceutical manufacturing facilities require licenses or permits and must abide by regulations issued by the NRC, applicable state boards of pharmacy and the radiologic health agency or department of health of each state in which we operate. In addition, our radiopharmaceutical manufacturing facilities must comply with the FDA's good manufacturing practices. Once completed, our sterile radiopharmaceutical manufacturing facility also will be subject to NRC and FDA regulation. Changes to pharmacy sterile compounding standards and practices are being considered by the FDA, state boards of pharmacy and standards setting organizations that may affect our Nuclear Pharmacy Services division and could require additional infrastructure requirements and modifications to our current practices and impose additional costs.

Product Tracing and Supply Chain Integrity

Title II of the DQSA, known as the Drug Supply Chain Security Act, establishes a phased-in national system for tracing pharmaceutical products through the pharmaceutical distribution supply chain to prevent the introduction of counterfeit, adulterated or mislabeled drugs. The first phase of implementation began on January 1, 2015, and upon full implementation in 2023, we and other supply chain stakeholders will participate in an electronic, interoperable, prescription drug tracing system. In addition, the FDA also has issued regulations requiring most medical device labeling to bear a unique device identifier. These regulations are being phased in through 2020.

Government Healthcare Programs

We are subject to U.S. federal healthcare fraud and abuse laws. These laws generally prohibit persons from soliciting, offering, receiving or paying any compensation in order to induce someone to order or purchase items or services that are in any way paid for by Medicare, Medicaid or other federally-funded healthcare programs. They also prohibit submitting or causing to be submitted any fraudulent claim for payment by the federal government. There are similar state healthcare fraud and abuse laws that apply to Medicaid and other state-funded healthcare programs. Violations of these laws may result in criminal or civil penalties, as well as breach of contract claims and *qui tam* actions (false claims cases initiated by private parties purporting to act on behalf of federal or state governments).

Our Cardinal Health at Home business and a few of our other businesses are Medicare-certified suppliers or participate in state Medicaid programs. These businesses are subject to accreditation and quality standards and other rules and regulations, including applicable billing, payment and record-keeping requirements. In addition, we manufacture pharmaceutical and medical products and repackage pharmaceuticals that are purchased through federal or state healthcare programs and are subject to laws that establish eligibility for reimbursement by federal and state healthcare programs. Failure to comply with applicable standards and regulations could result in civil or criminal sanctions, including the loss of our ability to participate in Medicare, Medicaid and other federal and state healthcare programs.

In addition, our U.S. federal and state government contracts are subject to specific procurement regulations. Failure to comply with applicable rules or regulations or with contractual or other requirements may result in monetary damages and criminal or civil penalties as well as termination of our government contracts or our suspension or debarment from government contract work.

Health and Personal Information Practices

We collect, handle and maintain patient-identifiable health information. The Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as augmented by the Health Information Technology for Economic and Clinical Health Act, as well as some state and foreign laws, regulate the use and disclosure of patient-identifiable health information, including requiring specified privacy and security measures.

We also collect, handle and maintain other sensitive personal and financial information that is subject to federal and state laws protecting such information. Security and disclosure of personal information is also highly regulated in many other countries in which we operate.

In Europe, we are subject to the European Union (“EU”) data protection regulations, including the EU Directive on Data Protection, which requires member states to impose minimum restrictions on the collection, use and transfer of personal data that, in some respects, are more stringent, and impose more significant burdens on subject businesses, than current privacy standards in the United States. A new EU General Data Protection Regulation that will apply uniformly across the EU will become effective in 2018 and includes, among other things, a requirement for prompt notice of data breaches to data subjects and supervisory authorities in certain circumstances and significant fines for non-compliance.

Antitrust Laws

The U.S. federal government, most U.S. states and many foreign countries have antitrust laws that prohibit certain types of conduct deemed to be anti-competitive. Violations of antitrust laws can result in various sanctions, including criminal and civil penalties. Private plaintiffs also could bring civil lawsuits against us in the United States for alleged antitrust law violations, including claims for treble damages. As previously disclosed, in April 2015, we settled allegations by the FTC resulting from an investigation into supplier arrangements involving our Nuclear Pharmacy Services division primarily focused on the period between 2003 and 2008.

Environmental, Health and Safety Laws

In the United States and other countries, we are subject to various federal, state and local environmental laws, as well as laws relating to safe working conditions and laboratory practices.

Laws Relating to Foreign Trade and Operations

U.S. and foreign laws require us to abide by standards relating to the import and export of finished goods, raw materials and supplies and the handling of information. We also must comply with various export control and trade embargo laws, which may require licenses or other authorizations for transactions within some countries or with some counterparties.

Similarly, we are subject to U.S. and foreign laws concerning the conduct of our foreign operations, including the U.S. Foreign Corrupt Practices Act, Chinese anti-corruption laws, the U.K. Bribery Act and other foreign anti-bribery laws. Among other things, these laws generally prohibit companies and their intermediaries from offering, promising or making payments to officials of foreign governments for the purpose of obtaining or retaining business.

Other Information

Although our agreements with manufacturers sometimes require us to maintain inventory levels within specified ranges, our distribution businesses are generally not required by our customers to maintain particular inventory levels other than as needed to meet service level requirements. Certain supply contracts with U.S. government entities require us to maintain sufficient inventory to meet emergency demands, but we do not believe those requirements materially affect inventory levels.

Our customer return policies generally require that the product be physically returned, subject to restocking fees. We only allow customers to return products that can be added back to inventory and resold at full value, or that can be returned to vendors for credit.

We offer market payment terms to our customers.

Revenue and Long-Lived Assets by Geographic Area

See Note 15 of the "Notes to Consolidated Financial Statements" for revenue and long-lived assets by geographic area.

Available Information

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to those reports are available free of charge on our website (www.cardinalhealth.com), under the "Investors — Financial Reporting — SEC Filings" caption, as soon as reasonably practicable after we electronically file them with, or furnish them to, the SEC.

You may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website (www.sec.gov) where you can search for annual, quarterly and current reports, proxy and information statements, and other information regarding us and other public companies.

Risk Factors

The risks described below could materially and adversely affect our results of operations, financial condition, liquidity and cash flows. These are not the only risks we face. Our businesses also could be affected by risks that we are not presently aware of or that we currently consider immaterial to our operations.

We could suffer the adverse effects of competitive pressures.
As described in greater detail in the "Business" section, we operate in markets that are highly competitive. Because of competition, our businesses face continued pricing pressure from our customers and suppliers. If we are unable to offset margin reductions caused by these pricing pressures through steps such as sourcing or cost control measures, additional service offerings and sales of higher margin products, our results of operations and financial condition could be adversely affected.

Our Pharmaceutical segment's generic pharmaceutical program could be adversely affected by price declines and fewer generic product launches.
Prices for generic pharmaceuticals generally decline over time. Although some generic products may experience price appreciation which can positively affect our margins, we may not be able to predict whether (and if so, for how long and at what magnitude) such price appreciation will be sustained. The number of generic products experiencing price declines or appreciation and the magnitude of price changes is uncertain in future fiscal years, and could have a negative impact on our year-over-year margins.

The number of new generic pharmaceutical launches also varies from year to year, and the margin impact of these launches varies from product to product. Fewer generic product launches or launches that are less profitable than prior launches will have an adverse effect on our year-over-year margin growth.

Our generic pharmaceutical program has benefited from sourcing generic pharmaceuticals through our Red Oak Sourcing venture with CVS Health, which sources for both us and CVS Health. If the venture does not continue to be successful, our margins could be adversely affected.

Our Pharmaceutical segment's margins under our distribution agreements with branded pharmaceutical manufacturers are affected by service fees we receive from the manufacturers and prices established by the manufacturers.
Our distribution agreements with branded pharmaceutical manufacturers generally provide that we receive fees from the manufacturers to compensate us for the services we provide them. Under some agreements, branded pharmaceutical price appreciation also serves as part of our compensation. If our service fees are reduced or, in cases where part of our compensation is branded price appreciation, if manufacturers determine not to increase prices or to implement only modest increases, our margins may be adversely affected.

Our business is subject to rigorous regulatory and licensing requirements.
As described in greater detail in the "Business" section, our business is highly regulated in the United States, at both the federal and state level, and in foreign countries. If we fail to comply with regulatory requirements, or if allegations are made that we fail to comply, our results of operations and financial condition could be adversely affected.

To lawfully operate our businesses, we are required to obtain and hold permits, product registrations, licenses and other regulatory approvals from, and to comply with operating and security standards of, numerous governmental bodies. Failure to maintain or renew necessary permits, product registrations, licenses or approvals, or to comply with required standards, could have an adverse effect on our results of operations and financial condition.

Products that we manufacture, source, distribute or market must comply with regulatory requirements. Noncompliance or concerns over noncompliance may result in suspension of our ability to distribute, import or manufacture products, product bans, recalls or seizures or criminal or civil sanctions, which, in turn, could result in product liability claims and lawsuits, including class actions. In addition, it can be costly and time-consuming to obtain regulatory approvals or product registrations to market a medical device, and such approvals or registrations might not be granted on a timely basis, if at all.

We are required to comply with laws relating to healthcare fraud and abuse. The requirements of these laws are complex and subject to varying interpretations, and it is possible that regulatory authorities could challenge our policies and practices. If we fail to comply with these laws, we could be subject to federal or state government investigations or *qui tam* actions (false claims cases initiated by private parties purporting to act on behalf of federal or state governments), which could result in civil or criminal sanctions, including the loss of licenses or the ability to participate in Medicare, Medicaid and other federal and state healthcare programs. Such sanctions and damages could adversely affect our results of operations and financial condition.

Our Cardinal Health at Home business and a few of our other businesses are Medicare-certified suppliers or participate in state Medicaid programs. In addition, we manufacture pharmaceutical and medical products and repackage pharmaceuticals that are purchased through federal or state healthcare programs. Failure to comply with applicable standards and regulations could result in civil or criminal sanctions, including the loss of our ability to participate in Medicare, Medicaid and other federal and state healthcare programs.

Our government contracts are subject to specific procurement regulations. Failure to comply with applicable rules or regulations or with contractual or other requirements may result in monetary damages and criminal or civil penalties as well as termination of our government contracts or our suspension or debarment from government contract work.

We collect, handle and maintain patient-identifiable health information and other sensitive personal and financial information, which are subject to federal, state and foreign laws that regulate the use and disclosure of such information. Regulations currently in place continue to evolve, and new laws in this area could further restrict our ability to collect, handle and maintain personal or patient information, or could require us to incur additional compliance costs, either of which could have an adverse impact on our results of operations. Violations of federal, state or foreign laws concerning privacy and data protection could subject us to civil or criminal penalties, breach of contract claims, costs for remediation and harm to our reputation.

The U.S. federal government, most U.S. states and many foreign countries have antitrust laws that prohibit certain types of conduct deemed to be anti-competitive. Violations of antitrust laws can result in various sanctions, including criminal and civil penalties. Private plaintiffs also could bring civil lawsuits against us in the United States for alleged antitrust law violations, including claims for treble damages.

Our global operations are required to comply with the U.S. Foreign Corrupt Practices Act, Chinese anti-corruption laws, the U.K. Bribery Act and similar anti-bribery laws in other jurisdictions and U.S. and foreign export control, trade embargo and customs laws. If we fail to comply with any of these laws, we could suffer civil or criminal sanctions.

Our China operations are subject to national, regional and local regulations. The regulatory environment in China is evolving, and officials in the Chinese government exercise broad discretion in deciding how to interpret and apply regulations. It is possible that the Chinese government's current or future interpretation and application of existing or new regulations will negatively impact our China operations, result in regulatory investigations or lead to fines or penalties.

The acquisition of Cordis significantly expanded the number of countries in which we sell products directly. We are required to comply with the regulatory requirements of each of these countries, including requirements related to product registrations and licensing of medical devices. Additionally, as a result of the Cordis acquisition, we now manufacture and distribute a greater number of products that are implanted in the human body, subjecting us to more complex regulations within the United States and in the foreign countries in which Cordis operates. If we fail to comply with any of these laws, we could suffer civil or criminal sanctions.

CVS Health is a large customer that generates a significant amount of our revenue.

Our sales and credit concentration is significant. CVS Health accounted for 25 percent of our fiscal 2016 revenue and 22 percent of our gross trade receivable balance at June 30, 2016 . If CVS Health were to terminate our agreements with them due to an alleged default by us, default in payment or significantly reduce its purchases of our products and services, our results of operations and financial condition could be adversely affected.

We could be subject to adverse changes in the tax laws or challenges to our tax positions.

We are a large multinational corporation with operations in the United States and many foreign countries. As a result, we are subject to the tax laws of many jurisdictions.

From time to time, legislative initiatives are proposed in the United States and other jurisdictions in which we operate that could adversely affect our tax positions, effective tax rate, tax payments or financial condition. Examples of such initiatives include the repeal of the LIFO (last-in, first-out) method of inventory accounting for income tax purposes, a change in the current U.S. taxation treatment of income from foreign operations, the establishment or increase in taxation at the U.S. state level on the basis of gross revenues, recommendations of the base erosion and profit shifting project undertaken by the Organization for Economic Cooperation and Development and the European Commission’s investigation into illegal state aid.

Tax laws are complex and subject to varying interpretations. Tax authorities have challenged some of our tax positions and it is possible that they will challenge others. These challenges may adversely affect our effective tax rate, tax payments or financial condition.

The U.S. healthcare environment is changing in many ways, some of which may not be favorable to us.

The U.S. healthcare industry continues to undergo significant changes designed to increase access to medical care, improve safety and patient outcomes, contain costs and increase efficiencies. Medicare and Medicaid reimbursement levels have generally declined and the basis for payments is changing, shifting away from the traditional fee-for-service model towards value-based payments and risk-sharing models. The U.S. Department of Health and Human Services has set a goal of tying 50 percent of Medicare reimbursements to alternative payment models by the end of 2018. The use of managed care has increased. Distributors, manufacturers, healthcare providers, insurers and pharmacy chains have consolidated and have formed strategic alliances. Large purchasing groups are also prevalent. The industry is experiencing a shift away from traditional healthcare venues like hospitals and into clinics and physician offices, and, in some cases, patients’ homes. We could be adversely affected directly or indirectly (if our customers or suppliers are adversely affected) by these and other changes in the delivery, pricing or utilization of, or reimbursement for, pharmaceuticals, medical products or healthcare services.

Consolidation in the healthcare industry may negatively impact our results of operations.

In recent years, the healthcare industry has continued to consolidate. Manufacturers are combining, which may leave us less able to negotiate our service fees with them. Some of our customers also are consolidating, creating larger enterprises with greater negotiating power. Customer consolidations also could result in the possible loss of a customer where the combined enterprise selects one distributor from two incumbents. We expect this consolidation trend among manufacturers and customers to continue, which could adversely affect our results of operations.

Our business and operations depend on the proper functioning of information systems, critical facilities and distribution networks. Our business could be adversely affected if we experience a cyber-attack or other systems breach.

We rely on our information systems to obtain, rapidly process, analyze and manage data to:

- facilitate the purchase and distribution of inventory items from numerous distribution centers;
- receive, process and ship orders on a timely basis;
- manage the accurate billing and collections for thousands of customers;
- process payments to suppliers;
- facilitate the manufacturing and assembly of medical products; and
- generate financial information.

Our business also depends on the proper functioning of our critical facilities, including our national logistics center, and our distribution networks. Our results of operations could be adversely affected if:

- our information systems, critical facilities or distribution networks, or our customers' access to these systems, facilities or networks, are disrupted;
- our information systems, critical facilities or distribution networks are damaged; or
- our information systems, critical facilities or distribution networks fail,

whether due to physical disruptions, such as fire, natural disaster, pandemic or power outage, or due to cyber security incidents or other actions of third parties, including terrorism or labor strikes.

The Pharmaceutical segment is in a multi-year project to replace certain of its finance and operating information systems. If these new systems are not effectively implemented or they fail to operate as intended, it could adversely affect the Pharmaceutical segment's supply chain operations and our internal control over financial reporting. In addition, from time to time, other businesses perform business process improvements or infrastructure modernizations or may use third-party service providers for key systems and processes, such as order to cash, customer service and accounts payable. If any of these initiatives are not successfully or efficiently implemented or maintained, they could adversely affect our business and our internal control over financial reporting.

Our business relies on the secure transmission, storage and hosting of patient-identifiable health information, financial information and other sensitive information relating to our customers, company and workforce. We have programs in place to detect, contain and respond to information security incidents. However, because the techniques used to obtain unauthorized access, disable or degrade service or sabotage systems change frequently and may be difficult to detect for long periods of time, we may be unable to anticipate these techniques or to implement adequate preventative measures. In addition, hardware, software or applications we develop or procure from third parties may contain defects in design or manufacture or other problems that could unexpectedly compromise information security. Unauthorized parties may also attempt to gain access to our systems or facilities, or to those of third parties with whom we do business, through fraud, trickery or other forms of deceiving our employees, contractors or vendors. Any compromise of our information systems or of the information systems of a third-party with whom we do business, including unauthorized access to or use or disclosure of sensitive information, could adversely impact our operations, results of operations or our ability to satisfy legal requirements, including those legal requirements related to patient-identifiable health information.

Because of the nature of our business, we may become involved in legal proceedings that could adversely impact our cash flows or results of operations.

Due to the nature of our businesses, which includes the manufacture and distribution of healthcare products, we may from time to time become involved in disputes or legal proceedings. These include commercial disputes, government contract compliance matters, product liability claims or lawsuits, patent infringement claims, *qui tam* actions or other legal proceedings.

Some of the products that we manufacture or distribute, including the cardiovascular and endovascular products manufactured and distributed by Cordis, have been and may in the future be alleged to cause personal injury, subjecting us to product liability claims. Although we maintain product liability insurance for many products that we manufacture, there are substantial self-insured retentions, conditions or exclusions. There are no guarantees that we can obtain product liability insurance for a particular product we manufacture or if we do obtain insurance, the amount maintained would be adequate to cover any or all current or future claims settlements or judgments. Where we self-insure, we establish reserves based on actuarial methodologies and historical loss trends. However, any settlement or judgment in excess of our insurance limits or that is not otherwise covered could adversely affect our results of operations and financial condition.

Our manufacturing businesses operate in an industry characterized by extensive intellectual property litigation. Patent litigation can result in significant damage awards and injunctions that could prevent the manufacture and sale of affected products or force us to make royalty payments in order to continue selling the affected products.

Litigation is inherently unpredictable, and the unfavorable resolution of one or more of these legal proceedings could adversely affect our cash flows or results of operations.

Acquisitions can have unanticipated results.

An important element of our growth strategy has been to acquire other businesses that expand or complement our existing businesses. In fiscal 2016 , we spent $3.6 billion to acquire other businesses, including $1.1 billion to acquire Harvard Drug and $1.9 billion to acquire Cordis. Acquisitions involve risks: we may overpay for a business or fail to realize the synergies and other benefits we expect from the acquisition; our management's attention may be diverted to integration efforts; we may fail to retain key personnel of the acquired business; future developments may impair the value of our purchased goodwill or intangible assets; we may face difficulties establishing or combining operations and systems; we may assume

liabilities related to litigation or other legal proceedings involving the acquired business; we may face challenges retaining the customers of the acquired business; or we may encounter unforeseen internal control, regulatory or compliance issues.

We depend on certain suppliers to make their raw materials and products available to us and are subject to fluctuations in costs of raw materials and products.
We depend on the availability of various components, compounds, raw materials (including radioisotopes) and energy supplied by others for our operations. Any of our supplier relationships could be interrupted due to events beyond our control, including natural disasters, or could be terminated. A sustained supply interruption could have an adverse effect on our business.

Our manufacturing businesses use oil-based resins, cotton, latex and other commodities as raw materials in many products. Prices of oil and gas also affect our distribution and transportation costs. Prices of these commodities are volatile and can fluctuate significantly, causing our costs to produce and distribute our products to fluctuate. Due to competitive dynamics and contractual limitations, we may be unable to pass along cost increases through higher prices. If we cannot fully offset cost increases through other cost reductions, or recover these costs through price increases or surcharges, our results of operations could be adversely affected.

Our results of operations may suffer upon the bankruptcy, insolvency, or other credit failure of a customer that has a substantial amount owed to us.
Most of our customers buy products and services from us on credit, which is made available to customers based on our assessment of creditworthiness. The bankruptcy, insolvency or other credit failure of any customer that has a substantial amount owed to us could adversely affect our results of operations.

Our Cordis acquisition increased the extent of our exposure to the economic, political and currency risks of international operations.
We conduct our operations in various regions of the world outside of the United States, including North America, South America, Europe and Asia. The scope and complexity of our international operations expanded with the acquisition of Cordis and we may continue to expand our operations outside the United States. Global developments can affect our business in many ways. Our global operations are affected by local economic environments, including inflation, recession and competition. In addition, we conduct our business in U.S. dollars and various functional currencies of our foreign subsidiaries. Changes in foreign currency exchange rates could adversely affect our financial results, which are reported in U.S. dollars. We may not be able to hedge to protect us against these exposures, and any hedges may not successfully mitigate these exposures. Political changes also can disrupt our global operations, as well as our customers and suppliers, in a particular location. Divergent or unfamiliar regulatory systems and labor markets also can increase the risks and burdens of operating in numerous countries.

Economic conditions may adversely affect demand for our products and services .
Deterioration in general economic conditions in the United States and other countries in which we do business could adversely affect the amount of prescriptions filled and the number of medical procedures undertaken and, therefore, reduce purchases of our products and services, which could adversely affect our results of operations. In addition, deteriorating economic conditions may increase bankruptcies, insolvencies or other credit failures of customers or suppliers, which, if they have a substantial amount owed to us, also could adversely affect our results of operations.

Properties

In the United States, at June 30, 2016 , the Pharmaceutical segment operated 24 primary pharmaceutical distribution facilities and one national logistics center; six specialty distribution facilities; and more than 140 nuclear pharmacy and cyclotron facilities. The Medical segment operated more than 70 medical-surgical distribution, assembly, manufacturing and other operating facilities. Our U.S. operating facilities are located in 45 states and in Puerto Rico.

Outside the United States, at June 30, 2016 , our Medical segment operated more than 20 facilities in Canada, the Dominican Republic, Malaysia, Malta, Mexico and Thailand that engage in manufacturing, distribution or research. In addition, our Pharmaceutical and Medical segments utilized various distribution and pharmacy facilities in China.

At June 30, 2016 , we owned more than 70 operating facilities and leased more than 240 operating facilities around the world. Our principal executive offices are headquartered in an owned building located at 7000 Cardinal Place in Dublin, Ohio.

We consider our operating properties to be in satisfactory condition and adequate to meet our present needs. However, we regularly evaluate operating properties and may make further additions and improvements or consolidate locations as we seek opportunities to expand or enhance the efficiency of our business.

Legal Proceedings

The legal proceedings described in Note 8 of the "Notes to Consolidated Financial Statements" are incorporated in this "Legal Proceedings" section by reference.

Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common shares are listed on the New York Stock Exchange under the symbol "CAH." The following table reflects the range of the reported high and low closing prices of our common shares as reported on the New York Stock Exchange Composite Tape and the per share dividends declared for the fiscal years ended June 30, 2016 and 2015 and paid quarterly. It also reflects the range of the reported high and low closing prices of our common shares from July 1, 2016 through the period ended on July 29, 2016 and the per share dividends declared from July 1, 2016 through the period ended on August 5, 2016:

	High	Low	Dividends Declared
Fiscal 2015			
Quarter Ended:			
September 30, 2014	$ 77.66	$ 69.59	$ 0.3425
December 31, 2014	83.04	72.13	0.3425
March 31, 2015	91.25	79.19	0.3425
June 30, 2015	91.50	83.65	0.3870
Fiscal 2016			
Quarter Ended:			
September 30, 2015	$ 87.02	$ 76.72	$ 0.3870
December 31, 2015	90.85	77.12	0.3870
March 31, 2016	89.68	76.16	0.3870
June 30, 2016	87.20	73.69	0.4489
Fiscal 2017	$ 83.64	$ 78.23	$ 0.4489

At July 29, 2016 there were approximately 9,184 shareholders of record of our common shares.

We anticipate that we will continue to pay quarterly cash dividends in the future. The payment and amount of future dividends remain, however, within the discretion of our Board of Directors and will depend upon our future earnings, financial condition, capital requirements and other factors.

Issuer Purchases of Equity Securities

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs (2)	Approximate Dollar Value of Shares That May Yet be Purchased Under the Programs (2) (in millions)
April 2016	191	$ 84.50	—	$ 393
May 2016	2,802,649	77.36	2,802,453	1,176
June 2016	1,711,419	77.67	1,711,249	1,043
Total	**4,514,259**	**$ 77.48**	**4,513,702**	**$ 1,043**

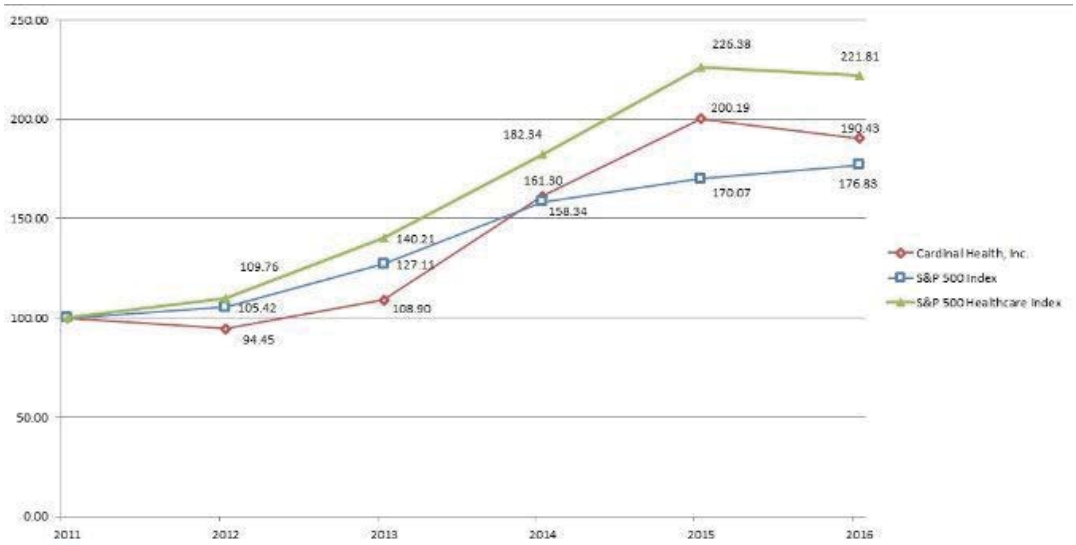
(1) Reflects 191 , 196 and 170 common shares purchased in April, May and June 2016, respectively, through a rabbi trust as investments of participants in our Deferred Compensation Plan.

(2) On October 29, 2013, our Board of Directors approved a $1.0 billion share repurchase program and on August 6, 2014, the Board of Directors authorized an additional $1.0 billion under the program, for a total of $2.0 billion. This program was completed in July 2016. On May 4, 2016, our Board of Directors also approved a $1.0 billion share repurchase program that expires on December 31, 2019. During the three months ended June 30, 2016 , we repurchased 4.5 million common shares under these programs. We repurchased an additional 3 million common shares from July 1, 2016 through August 5, 2016. After these repurchases, we have $793 million available under our new repurchase program.

Market for Registrant's Common Equity

Five Year Performance Graph

The following line graph compares the cumulative total return of our common shares with the cumulative total return of the Standard & Poor's Composite—500 Stock Index (the "S&P 500 Index") and the Standard & Poor's Composite—500 Healthcare Index (the "S&P 500 Healthcare Index"). The line graph assumes, in each case, an initial investment of $100 on June 30, 2011, based on the market prices at the end of each fiscal year through and including June 30, 2016 , and reinvestment of dividends. The S&P 500 Index and S&P 500 Healthcare Index investments are weighted on the basis of market capitalization at the beginning of each period.



	June 30					
	2011	2012	2013	2014	2015	**2016**
Cardinal Health, Inc.	$ 100.00	$ 94.45	$ 108.90	$ 161.30	$ 200.19	**$ 190.43**
S&P 500 Index	100.00	105.42	127.11	158.34	170.07	**176.83**
S&P 500 Healthcare Index	100.00	109.76	140.21	182.34	226.38	**221.81**

Management Reports

Evaluation of Disclosure Controls and Procedures

We evaluated, with the participation of our principal executive officer and principal financial officer, the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934 (the "Exchange Act")) as of June 30, 2016 . Based on this evaluation, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures were effective as of June 30, 2016 to provide reasonable assurance that information required to be disclosed in our reports under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms and that such information is accumulated and communicated to management as appropriate to allow timely decisions regarding required disclosure.

Management's Report on Internal Control Over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act. Our internal control system is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, controls deemed effective now may become inadequate in the future because of changes in conditions, or because compliance with policies or procedures has deteriorated or been circumvented.

Management assessed the effectiveness of our internal control over financial reporting as of June 30, 2016 . In making this assessment, management used the criteria established in the Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the "COSO criteria"). Based on management's assessment and the COSO criteria, management believes that our internal control over financial reporting was effective as of June 30, 2016 .

Our independent registered public accounting firm, Ernst & Young LLP, has issued a report on our internal control over financial reporting. Ernst & Young LLP's report appears following this "Management Reports" section and expresses an unqualified opinion on the effectiveness of our internal control over financial reporting.

On October 2, 2015 , we completed the acquisition of Cordis. As permitted by guidelines established by the SEC, management excluded Cordis from the scope of its assessment of the effectiveness of internal control over financial reporting as of June 30, 2016 . Cordis constituted 7 percent and 29 percent of our total and net assets, respectively, as of June 30, 2016 and less than 1 percent of both our revenue and operating earnings for the fiscal year then ended.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended June 30, 2016 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Implementation of New Software Systems

The Pharmaceutical segment is in a multi-year project implementing a replacement of certain finance and operating information systems, which is expected to affect internal control over financial reporting. This project did not impact internal control over financial reporting during fiscal 2016. If these new systems are not effectively implemented or fail to operate as intended, it could adversely affect our internal control over financial reporting.

Reports

Report of Independent Registered Public Accounting Firm on Internal Control Over Financial Reporting

The Board of Directors and Shareholders of Cardinal Health, Inc.

We have audited Cardinal Health, Inc. and subsidiaries' internal control over financial reporting as of June 30, 2016 , based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Cardinal Health, Inc. and subsidiaries' management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying “Management's Report on Internal Control Over Financial Reporting.” Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

As indicated in the accompanying “Management’s Report on Internal Control Over Financial Reporting”, management’s assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Cordis, which is included in the 2016 consolidated financial statements of Cardinal Health, Inc. and subsidiaries and constituted 7 percent and 29 percent of total and net assets, respectively, as of June 30, 2016 and less than 1 percent of both revenues and operating earnings for the year then ended. Our audit of internal control over financial reporting of Cardinal Health, Inc. and subsidiaries also did not include an evaluation of the internal control over financial reporting of Cordis.

In our opinion, Cardinal Health, Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of June 30, 2016 , based on the COSO criteria .

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Cardinal Health, Inc. and subsidiaries as of June 30, 2016 and 2015 and the related consolidated statements of earnings, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended June 30, 2016 of Cardinal Health, Inc. and subsidiaries and our report dated August 12, 2016 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Columbus, Ohio

August 12, 2016

Reports

Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of Cardinal Health, Inc.

We have audited the accompanying consolidated balance sheets of Cardinal Health, Inc. and subsidiaries as of June 30, 2016 and 2015 , and the related consolidated statements of earnings, comprehensive income, shareholders' equity, and cash flows for each of the three years in the period ended June 30, 2016 . Our audits also included the financial statement schedule listed in the Index at Item 15(a)(2). These financial statements and schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements and schedule based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Cardinal Health, Inc. and subsidiaries at June 30, 2016 and 2015 , and the consolidated results of their operations and their cash flows for each of the three years in the period ended June 30, 2016 , in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Cardinal Health, Inc. and subsidiaries' internal control over financial reporting as of June 30, 2016 , based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated August 12, 2016 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

Columbus, Ohio
August 12, 2016

Financial Statements and Supplementary Data

Financial Statements

Consolidated Statements of Earnings

(in millions, except per common share amounts)	2016	2015	2014
Revenue	$ 121,546	$ 102,531	$ 91,084
Cost of products sold	115,003	96,819	85,923
Gross margin	6,543	5,712	5,161
Operating expenses:			
Distribution, selling, general, and administrative expenses	3,648	3,240	3,028
Restructuring and employee severance	25	44	31
Amortization and other acquisition-related costs	459	281	223
Impairments and (gain)/loss on disposal of assets, net	21	(19)	15
Litigation (recoveries)/charges, net	(69)	5	(21)
Operating earnings	2,459	2,161	1,885
Other (income)/expense, net	5	(7)	(46)
Interest expense, net	178	141	133
Loss on extinguishment of debt	—	60	—
Earnings from continuing operations before income taxes	2,276	1,967	1,798
Provision for income taxes	845	755	635
Earnings from continuing operations	1,431	1,212	1,163
Earnings from discontinued operations, net of tax	—	3	3
Net earnings	1,431	1,215	1,166
Less: Net earnings attributable to noncontrolling interests	(4)	—	—
Net earnings attributable to Cardinal Health, Inc.	$ 1,427	$ 1,215	$ 1,166
Basic earnings per common share attributable to Cardinal Health, Inc.:			
Continuing operations	$ 4.36	$ 3.65	$ 3.41
Discontinued operations	—	0.01	0.01
Net basic earnings per common share attributable to Cardinal Health, Inc.	$ 4.36	$ 3.66	$ 3.42
Diluted earnings per common share attributable to Cardinal Health, Inc.:			
Continuing operations	$ 4.32	$ 3.61	$ 3.37
Discontinued operations	—	0.01	0.01
Net diluted earnings per common share attributable to Cardinal Health, Inc.	$ 4.32	$ 3.62	$ 3.38
Weighted-average number of common shares outstanding:			
Basic	327	332	341
Diluted	330	335	345

The accompanying notes are an integral part of these consolidated statements.

Consolidated Statements of Comprehensive Income

(in millions)	2016	2015	2014
Net earnings	**$ 1,431**	$ 1,215	$ 1,166
Other comprehensive income/(loss):			
Foreign currency translation adjustments and other	**(82)**	(104)	9
Net unrealized gain/(loss) on derivative instruments, net of tax	**(11)**	11	(7)
Total other comprehensive income/(loss), net of tax	**(93)**	(93)	2
Total comprehensive income	**$ 1,338**	$ 1,122	$ 1,168
Less: comprehensive income attributable to noncontrolling interests	**(4)**	—	—
Total comprehensive income attributable to Cardinal Health, Inc.	**$ 1,334**	**$ 1,122**	**$ 1,168**

The accompanying notes are an integral part of these consolidated statements.

Financial Statements

Consolidated Balance Sheets

(in millions)	June 30 2016	2015
Assets		
Current assets:		
Cash and equivalents	$ **2,356**	$ 4,616
Trade receivables, net	**7,405**	6,523
Inventories, net	**10,615**	9,211
Prepaid expenses and other	**1,580**	1,402
Total current assets	**21,956**	21,752
Property and equipment, net	**1,796**	1,506
Goodwill and other intangibles, net	**9,426**	6,018
Other assets	**944**	866
Total assets	$ **34,122**	$ 30,142
Liabilities, Redeemable Noncontrolling Interests, and Shareholders' Equity		
Current liabilities:		
Accounts payable	$ **17,306**	$ 14,368
Current portion of long-term obligations and other short-term borrowings	**587**	281
Other accrued liabilities	**1,808**	2,594
Total current liabilities	**19,701**	17,243
Long-term obligations, less current portion	**4,952**	5,211
Deferred income taxes and other liabilities	**2,781**	1,432
Redeemable noncontrolling interests	**117**	—
Shareholders' equity:		
Preferred shares, without par value:		
Authorized— **500 thousand** shares, Issued— **none**	—	—
Common shares, without par value:		
Authorized— **755 million** shares, Issued— **364 million** shares at **June 30, 2016** and 2015	**3,010**	3,003
Retained earnings	**6,419**	5,521
Common Shares in treasury, at cost: **42 million** shares and 36 million shares at **June 30, 2016** and 2015, respectively	**(2,759)**	(2,245)
Accumulated other comprehensive loss	**(116)**	(23)
Total Cardinal Health, Inc. shareholders' equity	**6,554**	6,256
Noncontrolling interests	**17**	—
Total shareholders' equity	**6,571**	6,256
Total liabilities, redeemable noncontrolling interests, and shareholders' equity	$ **34,122**	$ 30,142

The accompanying notes are an integral part of these consolidated statements.

Consolidated Statements of Shareholders' Equity

(in millions)	Common Shares Shares Issued	Common Shares Amount	Retained Earnings	Treasury Shares Shares	Treasury Shares Amount	Accumulated Other Comprehensive Income/(Loss)	Noncontrolling Interests	Total Shareholders' Equity
Balance at June 30, 2013	364	$ 2,953	$ 4,038	(25)	$ (1,084)	$ 68	$ —	$ 5,975
Net earnings			1,166					1,166
Other comprehensive income, net of tax						2		2
Employee stock plans activity, including tax impact of $39 million	—	27		8	334			361
Treasury shares acquired				(10)	(673)			(673)
Dividends declared			(430)					(430)
Balance at June 30, 2014	364	2,980	4,774	(27)	(1,423)	70	—	6,401
Net earnings			1,215					1,215
Other comprehensive loss, net of tax						(93)		(93)
Employee stock plans activity, including tax impact of $52 million	—	23		4	214			237
Treasury shares acquired				(13)	(1,036)			(1,036)
Dividends declared			(471)					(471)
Other			3					3
Balance at June 30, 2015	364	3,003	5,521	(36)	(2,245)	(23)	—	6,256
Net earnings			1,427				3	1,430
Other comprehensive loss, net of tax						(93)		(93)
Purchase of noncontrolling interests							(7)	(7)
Employee stock plans activity, including tax impact of $33 million	—	7		2	137			144
Treasury shares acquired				(8)	(651)			(651)
Dividends declared			(529)					(529)
Other			—				21	21
Balance at June 30, 2016	**364**	**$ 3,010**	**$ 6,419**	**(42)**	**$ (2,759)**	**$ (116)**	**$ 17**	**$ 6,571**

The accompanying notes are an integral part of these consolidated statements.

Financial Statements

Consolidated Statements of Cash Flows

(in millions)	2016	2015	2014
Cash flows from operating activities:			
Net earnings	**$ 1,431**	$ 1,215	$ 1,166
Earnings from discontinued operations, net of tax	**—**	(3)	(3)
Earnings from continuing operations	**1,431**	1,212	1,163
Adjustments to reconcile earnings from continuing operations to net cash provided by operating activities:			
Depreciation and amortization	**641**	451	459
Loss on extinguishment of debt	**—**	60	—
Gain on sale of other investments	**—**	(5)	(32)
Impairments and (gain)/loss on disposal of assets, net	**21**	(19)	15
Share-based compensation	**111**	110	96
Provision for deferred income taxes	**87**	219	26
Provision for bad debts	**73**	52	42
Change in fair value of contingent consideration obligation	**(16)**	8	—
Change in operating assets and liabilities, net of effects from acquisitions:			
Decrease/(increase) in trade receivables	**(866)**	(870)	925
Decrease/(increase) in inventories	**(1,179)**	(779)	142
Increase/(decrease) in accounts payable	**2,815**	1,948	(196)
Other accrued liabilities and operating items, net	**(147)**	153	(116)
Net cash provided by operating activities	**2,971**	2,540	2,524
Cash flows from investing activities:			
Acquisition of subsidiaries, net of cash acquired	**(3,614)**	(503)	(519)
Additions to property and equipment	**(465)**	(300)	(249)
Purchase of available for sale securities and other investments	**(200)**	(342)	(129)
Proceeds from sale of available-for-sale securities and other investments	**136**	206	47
Proceeds from maturities of available-for-sale securities	**50**	37	—
Proceeds from divestitures and disposal of property and equipment and held for sale assets	**13**	53	—
Net cash used in investing activities	**(4,080)**	(849)	(850)
Cash flows from financing activities:			
Payment of contingent consideration obligation	**(25)**	(7)	—
Net change in short-term borrowings	**26**	(12)	114
Net purchase of noncontrolling interests	**(10)**	—	—
Reduction of long-term obligations	**(6)**	(1,221)	(2)
Proceeds from long-term obligations, net of issuance costs	**—**	2,672	—
Net proceeds from share-based compensation	**6**	72	227
Excess tax benefits from share-based compensation	**33**	52	39
Dividends on common shares	**(512)**	(460)	(415)
Purchase of treasury shares	**(651)**	(1,036)	(673)
Net cash provided by/(used in) financing activities	**(1,139)**	60	(710)
Effect of exchange rates changes on cash and equivalents	**(12)**	—	—
Net increase/(decrease) in cash and equivalents	**(2,260)**	1,751	964
Cash and equivalents at beginning of period	**4,616**	2,865	1,901
Cash and equivalents at end of period	**$ 2,356**	$ 4,616	$ 2,865
Supplemental Information:			
Cash payments for interest	**$ 174**	$ 150	$ 152
Cash payments for income taxes	**635**	529	632

The accompanying notes are an integral part of these consolidated statements.

Notes to Consolidated Financial Statements

1. Basis of Presentation and Summary of Significant Accounting Policies

Cardinal Health, Inc. is a global integrated healthcare services and products company providing customized solutions for hospital systems, pharmacies, ambulatory surgery centers, clinical laboratories and physician offices worldwide. The company provides clinically proven, medical products and pharmaceuticals and cost-effective solutions that enhance supply chain efficiency from hospital to home. Cardinal Health, Inc. connects patients, providers, payers, pharmacists, and manufacturers for integrated care coordination and better patient management. References to “we”, “our” and similar pronouns in these consolidated financial statements are to Cardinal Health, Inc. and its majority-owned or controlled subsidiaries unless the context otherwise requires.

Our fiscal year ends on June 30. References to fiscal 2016 , 2015 and 2014 in these consolidated financial statements are to the fiscal years ended June 30, 2016 , 2015 and 2014 , respectively.

Basis of Presentation

Our consolidated financial statements include the accounts of all majority-owned or controlled subsidiaries, and all significant intercompany transactions and amounts have been eliminated. The results of businesses acquired or disposed of are included in the consolidated financial statements from the date of the acquisition or up to the date of disposal, respectively.

Use of Estimates

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (“GAAP”). The preparation of financial statements in accordance with GAAP requires us to make estimates, judgments and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Estimates, judgments and assumptions are used in the accounting and disclosure related to, among other items, allowance for doubtful accounts, inventory valuation, business combinations, goodwill and other intangible asset impairment, vendor reserves, loss contingencies, income taxes and share-based compensation. Actual amounts could ultimately differ from these estimated amounts.

Cash Equivalents

We consider liquid investments purchased with an initial maturity of three months or less to be cash equivalents. The carrying value of cash equivalents approximates fair value.

Receivables

Trade receivables are presented net of an allowance for doubtful accounts of $135 million at both June 30, 2016 and 2015 . An account is considered past due on the first day after its due date. In accordance with contract terms, we generally have the ability to charge customers service fees or higher prices if an account is considered past due. We regularly monitor past due accounts and establish appropriate reserves to cover potential losses, which are based primarily on historical collection rates and the credit worthiness of the customer. We write off any amounts deemed uncollectible against the established allowance for doubtful accounts.

We provide financing to various customers. Such financing arrangements range from 270 days to 5 years at interest rates that are generally subject to fluctuation. Interest income on these arrangements is recognized as it is earned. The financings may be collateralized, guaranteed by third parties or unsecured. Finance notes and related accrued interest were $145 million (current portion $31 million) and $161 million (current portion $53 million) at June 30, 2016 and 2015 , respectively, and are included in other assets (current portion is included in prepaid expenses and other) in the consolidated balance sheets. Finance notes receivable are reported net of an allowance for doubtful accounts of $19 million and $14 million at June 30, 2016 and 2015 , respectively. We estimate an allowance for these financing receivables based on historical collection rates and the credit worthiness of the customer. We write off any amounts deemed uncollectible against the established allowance for doubtful accounts.

Concentrations of Credit Risk

We maintain cash depository accounts with major banks, and we invest in high quality, short-term liquid instruments, and in marketable securities. Our short-term liquid instruments mature within three months and we have not historically incurred any related losses. Investments in marketable securities consist of a portfolio of high-grade instruments. Such investments are made only in instruments issued by highly-rated institutions, whose financial condition we monitor.

Our trade receivables and finance notes and related accrued interest are exposed to a concentration of credit risk with customers in the retail and healthcare sectors. Credit risk can be affected by changes in reimbursement and other economic pressures impacting the healthcare industry. Such credit risk is limited due to supporting collateral and the diversity of the customer base, including its wide geographic dispersion. We perform regular credit evaluations of our customers’ financial conditions and maintain reserves for credit losses. Historically, such losses have been within our expectations. Refer to the "Receivables" section within this Note 1 for additional information on the accounting treatment of reserves for credit losses.

Major Customers

CVS Health Corporation ("CVS Health"), which is primarily serviced through our Pharmaceutical segment, is our only customer that individually accounts for at least 10 percent of revenue and gross trade receivables. The table below summarizes historical percent of revenue and gross trade receivables from CVS Health.

	Percent of Revenue			Percent of Gross Trade Receivables at June 30	
	2016	2015	2014	**2016**	2015
CVS Health	**25%**	27%	28%	**22%**	20%

We have entered into agreements with group purchasing organizations (“GPOs”) which act as purchasing agents that negotiate vendor contracts on behalf of their members. Vizient (formerly Novation, LLC) and Premier, Inc. are our two largest GPO member relationships in terms of revenue. Sales to members of these two GPOs collectively accounted for 17 percent , 18 percent and 17 percent of revenue for fiscal 2016 , 2015 and 2014 , respectively. Our trade receivable balances are with individual members of the GPO, and therefore no significant concentration of credit risk exists with these types of arrangements.

Inventories

A substantial portion of our inventories (58 percent at both June 30, 2016 and 2015) are valued at the lower of cost, using the last-in, first-out ("LIFO") method, or market. These inventories are included within the core pharmaceutical distribution facilities of our Pharmaceutical segment (“distribution facilities”) and are primarily merchandise inventories. The LIFO method presumes that the most recent inventory purchases are the first items sold, so LIFO helps us better match current costs and revenue. We believe that the average cost method of inventory valuation provides a reasonable approximation of the current cost of replacing inventory within these distribution facilities. As such, the LIFO reserve is the difference between (a) inventory at the lower of LIFO cost or market and (b) inventory at replacement cost determined using the average cost method of inventory valuation.

Our remaining inventory is stated at the lower of cost, using the first-in, first-out method, or market. If we had used the average cost method of inventory valuation for all inventory within the core pharmaceutical distribution facilities, the value of our inventories would not have changed in fiscal 2016 or 2015 because inventories valued at LIFO were $9 million and $114 million higher than the average cost value at June 30, 2016 and June 30, 2015 , respectively. We do not record inventories in excess of replacement cost. As such, we did not record any changes in our LIFO reserve in fiscal 2016 and 2015 .

Inventories presented in the consolidated balance sheets are net of reserves for excess and obsolete inventory which were $79 million and $57 million at June 30, 2016 and 2015 , respectively. We reserve for inventory obsolescence using estimates based on historical experience, historical and projected sales trends, specific categories of inventory and age of on-hand inventory.

Cash Discounts

Manufacturer cash discounts are recorded as a component of inventory cost and recognized as a reduction of cost of products sold when the related inventory is sold.

Property and Equipment

Property and equipment are carried at cost less accumulated depreciation. Property and equipment held for sale are recorded at the lower of cost or fair value less cost to sell. When certain events or changes in operating conditions occur, an impairment assessment may be performed on the recoverability of the carrying amounts.

Depreciation expense is computed using the straight-line method over the estimated useful lives of the assets, including capital lease assets which are depreciated over the terms of their respective leases. We generally use the following range of useful lives for our property and equipment categories: buildings and improvements— 3 to 39 years ; machinery and equipment— 3 to 20 years ; and furniture and fixtures— 3 to 7 years . We recorded depreciation expense of $277 million , $254 million and $265 million for fiscal 2016 , 2015 and 2014 , respectively.

The following table presents the components of property and equipment, net at June 30:

(in millions)	2016	2015
Land, building and improvements	$ 1,735	$ 1,465
Machinery and equipment	2,608	2,440
Furniture and fixtures	133	129
Total property and equipment, at cost	4,476	4,034
Accumulated depreciation and amortization	(2,680)	(2,528)
Property and equipment, net	**$ 1,796**	$ 1,506

Repairs and maintenance expenditures are expensed as incurred. Interest on long-term projects is capitalized using a rate that approximates the weighted-average interest rate on long-term obligations, which was 3.38 percent at June 30, 2016 . The amount of capitalized interest was immaterial for all periods presented.

Business Combinations

The assets acquired and liabilities assumed in a business combination, including identifiable intangible assets, are recorded at their estimated fair values as of the acquisition date. The excess of the purchase price over the estimated fair value of the identifiable net assets acquired is recorded as goodwill. We base the fair values of identifiable intangible assets on detailed valuations that require management to make significant judgments, estimates and assumptions. Critical estimates and assumptions include: expected future cash flows for customer relationships, trade names and other identifiable intangible assets; discount rates that reflect the risk factors associated with future cash flows; and estimates of useful lives. When an acquisition involves contingent consideration, we recognize a liability equal to the fair value of the contingent consideration obligation at the acquisition date. The estimate of fair value of a contingent consideration obligation requires subjective assumptions to be made regarding future business results, discount rates, discount periods and probabilities assigned to various potential business result scenarios. See Note 2 for additional information regarding our acquisitions.

Goodwill and Other Intangible Assets

Purchased goodwill and intangible assets with indefinite lives are not amortized, but instead are tested for impairment annually or when indicators of impairment exist.

Goodwill impairment testing involves a comparison of the estimated fair value of reporting units to the respective carrying amount, which may be performed utilizing either a qualitative or quantitative assessment. A reporting unit is defined as an operating segment or one level below an operating segment (also known as a component). Goodwill impairment testing involves judgment, including the identification of reporting units, the estimation of the fair value of each

reporting unit and, if necessary, the estimation of the implied fair value of goodwill.

We have two operating segments, which are the same as our reportable segments: Pharmaceutical and Medical. These operating segments are comprised of divisions (components), for which discrete financial information is available. Components are aggregated into reporting units for purposes of goodwill impairment testing to the extent that they share similar economic characteristics. Our reporting units are: Pharmaceutical operating segment (excluding our Nuclear Pharmacy Services division and Cardinal Health China - Pharmaceutical division); Nuclear Pharmacy Services division; Cardinal Health China - Pharmaceutical division; Medical operating segment (excluding our Cardinal Health at Home division and naviHealth division); Cardinal Health at Home division; and naviHealth division.

Fair value can be determined using market, income or cost-based approaches. Our determination of estimated fair value of the reporting units is based on a combination of the income-based and market-based approaches. Under the income-based approach, we use a discounted cash flow model in which cash flows anticipated over several future periods, plus a terminal value at the end of that time horizon, are discounted to their present value using an appropriate risk-adjusted rate of return. We use our internal forecasts to estimate future cash flows, which we believe are consistent with those of a market participant, and include an estimate of long-term growth rates based on our most recent views of the long-term outlook for each reporting unit. Actual results may differ materially from those used in our forecasts. We use discount rates that are commensurate with the risks and uncertainty inherent in the respective reporting units and in our internally-developed forecasts. Discount rates used in our reporting unit valuations ranged from 8.5 percent to 12.5 percent . Under the market-based approach, we determine fair value by comparing our reporting units to similar businesses or guideline companies whose securities are actively traded in public markets. To further confirm fair value, we compare the aggregate fair value of our reporting units to our total market capitalization. Estimating the fair value of reporting units requires the use of estimates and significant judgments that are based on a number of factors including forecasted operating results. The use of alternate estimates and assumptions or changes in the industry or peer groups could materially affect the determination of fair value for each reporting unit and potentially result in goodwill impairment.

We performed annual impairment testing in fiscal 2016 , 2015 and 2014 and concluded that there were no impairments of goodwill as the estimated fair value of each reporting unit exceeded its carrying value.

The impairment test for indefinite-lived intangibles other than goodwill (primarily in-process research and development ("IPR&D")) consists of a comparison of the fair value of the indefinite-lived intangible asset to the carrying value of the asset as of the impairment testing date. If the carrying amount of the indefinite-lived intangible exceeds its fair value, an impairment loss must be recognized in an amount equal to that excess. We estimate the fair value of our indefinite-lived intangibles under the income approach using a discounted cash flow model. We use our internal forecasts, which we believe are consistent with those of a market participant, to estimate future cash flows and include an estimate of long-term growth rates based on our most recent views of the long-term outlook for the indefinite-lived intangible including, among other factors, assumptions on regulatory approval for IPR&D.

Intangible assets with finite lives, primarily customer relationships; trademarks, trade names and patents; and developed technology, are amortized using a combination of straight-line and accelerated methods based on the expected cash flows from the asset over their estimated useful lives. We review intangible assets with finite lives for impairment whenever events or changes in circumstances indicate that the related carrying amounts may not be recoverable. Determining whether an impairment loss occurred requires a comparison of the carrying amount to the sum of the future forecasted undiscounted cash flows expected to be generated by the asset group. Actual results may differ materially from those used in our forecasts.

Investments

Investments in non-marketable equity securities are accounted for under either the cost or equity method of accounting and are included in other assets in the consolidated balance sheets. For investments in which we can exercise significant influence, we use the equity method of accounting. Our share of the earnings and losses was immaterial, both individually and in the aggregate, for all periods presented and is recorded in other income, net in the consolidated statements of the earnings. We monitor investments for other-than-temporary impairment by considering factors such as the operating performance of the investment and current economic and market conditions.

During fiscal 2014 , we sold our minority equity interests in two investments for proceeds of $47 million , which resulted in a pre-tax gain of $32 million ($20 million , net of tax) included in other income, net in the consolidated statements of earnings.

Marketable securities are classified as available-for-sale and are carried at fair value in the consolidated balance sheets. Unrealized gains and losses on available-for-sale securities, net of applicable taxes, are included within shareholders' equity in accumulated other comprehensive income ("AOCI"). We monitor these securities for other-than-temporary impairment by considering factors such as the duration that, and the extent to which, the fair value is below cost, the operating performance and credit worthiness of the issuer of the securities and current economic and market conditions. See Note 5 for additional information regarding available-for-sale securities.

Vendor Reserves

In the ordinary course of business, our vendors may dispute deductions taken against payments otherwise due to them or assert other disputes. These disputes are researched and resolved based upon the findings of the research performed. At any given time, there are outstanding items in various stages of research and resolution. In determining appropriate reserves for areas of exposure with our vendors, we assess historical experience and current outstanding claims. We have established various levels of reserves based on the

type of claim and status of review. Though the claim types are relatively consistent, we periodically refine our methodology by updating the reserve estimate percentages to reflect actual historical experience. The ultimate outcome of certain claims may be different than our original estimate and may require an adjustment. All adjustments to vendor reserves are included in cost of products sold. In addition, the reserve balance will fluctuate due to variations of outstanding claims from period-to-period, timing of settlements and specific vendor issues, such as bankruptcies. Vendor reserves were $62 million and $88 million at June 30, 2016 and 2015 , respectively, excluding third-party returns. See separate section in Note 1 for a description of third-party returns.

Distribution Service Agreement and Other Vendor Fees

Our Pharmaceutical segment recognizes fees received from its distribution service agreements and other fees received from vendors related to the purchase or distribution of the vendors' inventory when those fees have been earned and we are entitled to payment. Since the benefit provided to a vendor is related to the purchase and distribution of the vendor's inventory, we recognize the fees as a reduction in the carrying value of the inventory that generated the fees, and as such, a reduction of cost of products sold in our consolidated statements of earnings when the inventory is sold.

Loss Contingencies

We accrue for contingencies related to disputes, litigation and regulatory matters if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Because these matters are inherently unpredictable and unfavorable developments or resolutions can occur, assessing contingencies is highly subjective and requires judgments about future events. We regularly review contingencies to determine whether our accruals and related disclosures are adequate. The amount of ultimate loss may differ from these estimates. See Note 8 for additional information regarding loss contingencies.

Income Taxes

We account for income taxes using the asset and liability method. Deferred tax assets and liabilities are measured using enacted tax rates in the respective jurisdictions in which we operate. Deferred taxes are not provided on the unremitted earnings of subsidiaries outside of the United States when it is expected that these earnings are permanently reinvested.

Tax benefits from uncertain tax positions are recognized when it is more likely than not that the position will be sustained upon examination of the technical merits of the position, including resolutions of any related appeals or litigation processes. The amount recognized is measured as the largest amount of tax benefit that is greater than 50 percent likely of being realized upon settlement. See Note 7 for additional information regarding income taxes.

Other Accrued Liabilities

Other accrued liabilities represent various current obligations, including certain accrued operating expenses and taxes payable.

Noncontrolling Interests and Redeemable Noncontrolling Interests

Noncontrolling interests represent the portion of net earnings, comprehensive income and net assets that is not attributable to Cardinal Health, Inc.

The redeemable noncontrolling interests relate to our ownership interest in naviHealth Holdings, LLC. ("naviHealth"), which we acquired during fiscal 2016 . The redeemable noncontrolling interests are redeemable at the option of the third-party noncontrolling interest holders at any time after the two-year anniversary of the closing, or earlier if a trigger event occurs. As such, the noncontrolling interests have been presented as redeemable noncontrolling interests in our consolidated balance sheets. The noncontrolling interests will be adjusted each period for net earnings and dividends attributable to the noncontrolling interests and changes in the noncontrolling ownership interests, if any. An additional adjustment to the carrying value of the noncontrolling interests may be required if the redemption value under the terms of the agreement exceeds the carrying value. Changes in the carrying value of the noncontrolling interests related to a change in the redemption value will be recorded through retained earnings and will not affect net earnings attributable to Cardinal Health, Inc. See Note 2 and Note 12 for additional information regarding redeemable noncontrolling interests.

Share-Based Compensation

Share-based compensation provided to employees is recognized in the consolidated statements of earnings based on the grant date fair value of the awards. The fair value of stock options is determined on the grant date using a lattice valuation model. The fair value of restricted share units and performance share units is determined by the grant date market price of our common shares. The compensation expense associated with nonvested performance share units is dependent on our periodic assessment of the probability of the targets being achieved and our estimate, which may vary over time, of the number of shares that ultimately will be issued. The compensation expense recognized for share-based awards is net of estimated forfeitures and is recognized ratably over the service period of the awards. We classify share-based compensation expense in distribution, selling, general and administrative ("SG&A") expenses to correspond with the same line item as the majority of the cash compensation paid to employees. If awards are modified in connection with a restructuring activity, the incremental share-based compensation expense is classified in restructuring and employee severance. See Note 16 for additional information regarding share-based compensation.

Dividends

We paid cash dividends per common share of $1.55 , $1.37 and $1.21 in fiscal 2016 , 2015 and 2014 , respectively.

Revenue Recognition

We recognize revenue when persuasive evidence of an arrangement exists, product delivery has occurred or the services have been rendered, the price is fixed or determinable, and collectability is reasonably assured.

Pharmaceutical Segment
The Pharmaceutical segment recognizes distribution revenue when title transfers to its customers and we have no further obligation to provide services related to such merchandise.

Revenue for deliveries that are directly shipped to customers from the manufacturer when we act as an intermediary in the ordering and delivery of products is recorded gross. This is in accordance with accounting standards addressing reporting revenue on a gross basis as a principal versus on a net basis as an agent. This revenue is recorded on a gross basis since we incur credit risk from the customer, bear the risk of loss for incomplete shipments and do not receive a separate fee or commission for the transaction and, as such, are the primary obligor. Revenue from these sales is recognized when title transfers to the customer and we have no further obligation to provide services related to such merchandise.

Radiopharmaceutical revenue is recognized upon delivery of the product to the customer and we have no further obligation to provide services related to such merchandise.

Medical Segment
The Medical segment recognizes revenue when title transfers to its customers and we have no further obligation to provide services related to such products.

Sales Returns and Allowances

Revenue is recorded net of sales returns and allowances. Our customer return policies generally require that the product be physically returned, subject to restocking fees, in a condition suitable to be added back to inventory and resold at full value, or returned to vendors for credit ("merchantable product"). Product returns are generally consistent throughout the year and typically are not specific to any particular product or customer.

We accrue for estimated sales returns and allowances at the time of sale based upon historical customer return trends, margin rates and processing costs. Our accrual for sales returns is reflected as a reduction of revenue and cost of products sold for the sales price and cost, respectively. At June 30, 2016 and 2015 , the accrual for estimated sales returns and allowances was $386 million and $305 million , respectively, the impact of which is reflected in trade receivables, net and inventories, net in the consolidated balance sheets. Sales returns and allowances were $2.2 billion , $2.0 billion and $1.7 billion , for fiscal 2016 , 2015 and 2014 , respectively.

Third-Party Returns

Since we generally do not accept non-merchantable product returns from our customers, many of our customers return non-merchantable pharmaceutical products to the manufacturer through third parties. Since our customers generally do not have a direct relationship with manufacturers, our vendors pass the value of such returns to us (usually in the form of an accounts payable deduction) for distribution to customers. We, in turn, pass the value received, less an administrative fee, to our customer. In certain instances, we pass the estimated value of the return to our customer prior to our receipt of the value from the vendor. Although we believe we have satisfactory protections, we could be subject to claims from customers or vendors if our administration of this overall process was deficient in some respect or our contractual terms with vendors are in conflict with our contractual terms with our customers. We have maintained reserves for some of these situations based on their nature and our historical experience with their resolution.

Shipping and Handling

Shipping and handling costs are primarily included in SG&A expenses in our consolidated statements of earnings. Shipping and handling costs include all delivery expenses as well as all costs to prepare the product for shipment to the end customer. Shipping and handling costs were $504 million , $454 million and $430 million , for fiscal 2016 , 2015 and 2014 , respectively. Revenue received for shipping and handling was immaterial for all periods presented.

Restructuring and Employee Severance

We consider restructuring activities to be programs by which we fundamentally change our operations, such as closing and consolidating facilities, moving manufacturing of a product to another location, production or business process sourcing, employee severance (including rationalizing headcount or other significant changes in personnel) and realigning operations (including realignment of the management structure of a business unit in response to changing market conditions). See Note 3 for additional information regarding our restructuring activities.

Amortization and Other Acquisition-Related Costs

We classify certain costs incurred in connection with acquisitions as amortization and other acquisition-related costs in our consolidated statements of earnings. These costs consist of amortization of acquisition-related intangible assets, transaction costs, integration costs and changes in the fair value of contingent consideration obligations. Transaction costs are incurred during the initial evaluation of a potential acquisition and primarily relate to costs to analyze, negotiate and consummate the transaction as well as due diligence activities. Integration costs relate to activities required to combine the operations of an acquired enterprise into our operations and, in the case of the Cordis business, to stand-up the systems and processes needed to support its global footprint. We record changes in the fair value of contingent consideration obligations relating to acquisitions as income or expense in amortization and other acquisition-related costs. See Note 4 for additional information regarding amortization of acquisition-related intangible assets and Note 10 for additional information regarding contingent consideration.

Translation of Foreign Currencies

Financial statements of our subsidiaries outside the United States are generally measured using the local currency as the functional currency. Adjustments to translate the assets and liabilities of these foreign subsidiaries into U.S. dollars are accumulated in shareholders' equity through AOCI utilizing period-end exchange rates. Revenues and expenses of these foreign subsidiaries are translated using average exchange rates during the year.

The foreign currency translation gains/(losses) included in AOCI at June 30, 2016 and 2015 are presented in Note 13 . Foreign currency transaction gains and losses for the period are included in the

consolidated statements of earnings in their respective financial statement line item.

Interest Rate, Currency and Commodity Risk

All derivative instruments are recognized at fair value on the consolidated balance sheets and all changes in fair value are recognized in net earnings or shareholders' equity through AOCI, net of tax.

For contracts that qualify for hedge accounting treatment, the hedge contracts must be effective at reducing the risk associated with the exposure being hedged and must be designated as a hedge at the inception of the contract. Hedge effectiveness is assessed periodically. Any contract not designated as a hedge, or so designated but ineffective, is adjusted to fair value and recognized immediately in net earnings. If a fair value or cash flow hedge ceases to qualify for hedge accounting treatment, the contract continues to be carried on the balance sheet at fair value until settled and future adjustments to the contract's fair value are recognized immediately in net earnings. If a forecasted transaction is probable not to occur, amounts previously deferred in AOCI are recognized immediately in net earnings. See Note 11 for additional information regarding our derivative instruments, including the accounting treatment for instruments designated as fair value, cash flow and economic hedges.

Fair Value Measurements

Fair value is defined as the price that would be received upon selling an asset or the price paid to transfer a liability on the measurement date. It focuses on the exit price in the principal or most advantageous market for the asset or liability in an orderly transaction between willing market participants. A three-tier fair value hierarchy is established as a basis for considering such assumptions and for inputs used in the valuation methodologies in measuring fair value. This hierarchy requires entities to maximize the use of observable inputs and minimize the use of unobservable inputs. The three levels of inputs used to measure fair values are:

Level 1 - Observable prices in active markets for identical assets and liabilities.

Level 2 - Observable inputs other than quoted prices in active markets for identical assets and liabilities.

Level 3 - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities.

See Note 10 for additional information regarding fair value measurements.

Recent Financial Accounting Standards

In June 2016, the Financial Accounting Standards Board ("FASB") issued amended accounting guidance that will require entities to measure credit losses on trade and other receivables, held-to-maturity debt securities, loans and other instruments using an "expected credit loss" model that considers historical experience, current conditions and reasonable supportable forecasts. This guidance also requires that credit losses on available-for-sale debt securities with unrealized losses be recognized as allowances rather than as deductions in the amortized cost of the securities. This guidance will be effective for us in the first quarter of fiscal 2021. We are currently evaluating the impact of adoption on our consolidated financial statements.

In March 2016, the FASB issued amended accounting guidance that will change the accounting for certain aspects of share-based compensation to employees. The guidance requires all income tax effects of share-based awards to be recognized in the statement of earnings as awards vest or are settled. Additionally, the guidance increases the amount employers can withhold in shares to cover employee income taxes without requiring liability classification and allows a policy election for accounting for forfeitures. This guidance will be effective for us in the first quarter of fiscal 2018, with early adoption permitted. We are currently evaluating the impact of the adoption on our consolidated financial statements and the timing of adoption.

In February 2016, the FASB issued amended accounting guidance that requires lessees to recognize most leases on the balance sheet as a lease liability and corresponding right-of-use asset. This guidance will be effective for us in the first quarter of fiscal 2020, with early adoption permitted. We are currently evaluating the impact of the adoption on our consolidated financial statements.

In January 2016, the FASB issued amended accounting guidance intended to improve the recognition and measurement of financial instruments. The amended guidance primarily changes the accounting for equity investments, financial liabilities under the fair value option, the method for assessing the realizability of deferred tax assets related to available-for-sale securities, and the presentation and disclosure requirements for financial instruments. This classification and measurement guidance will be effective for us in the first quarter of fiscal 2019, with early adoption permitted. We are currently evaluating the impact of the adoption on our consolidated financial statements.

In November 2015, the FASB issued amended accounting guidance that simplifies the accounting for income taxes. Under this amended guidance, deferred tax assets and liabilities must be classified as noncurrent on the balance sheet instead of separating deferred tax items into current and noncurrent amounts. We adopted this guidance on a prospective basis in the second quarter of fiscal 2016. In accordance with the adoption of this guidance, balances were not retrospectively adjusted. Upon adoption of this guidance, current deferred tax assets of $20 million and current deferred tax liabilities of $1.1 billion in our December 31, 2015 condensed consolidated balance sheet were reclassified as noncurrent. The adoption of this guidance had no impact on our consolidated statements of earnings, comprehensive income or cash flows.

In September 2015, the FASB issued amended accounting guidance that eliminates the requirement that an acquirer in a business combination account for measurement-period adjustments on a retrospective basis. Under this amended guidance, the acquirer will recognize a measurement-period adjustment during the period in which it determines the amount of the adjustment. We adopted this guidance in the second quarter of fiscal 2016. The adoption of this guidance did not materially impact our consolidated financial statements.

In July 2015, the FASB issued amended accounting guidance that simplifies the current guidance surrounding the measurement of inventory. Under this amended guidance, inventory is measured at the lower of cost and net realizable value, which eliminates the need to determine replacement cost and evaluate whether the inventory is above or below net realizable value. Net realizable value is defined as the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. The amended guidance does not apply to inventory measured under the LIFO method. This amendment will be effective for us in the first quarter of fiscal 2018. We are currently evaluating the impact of adoption on our financial position and results of operations.

In April 2015, the FASB issued amended accounting guidance that clarifies the circumstances under which a cloud computing customer would account for the arrangement as a license of internal-use software. If it is determined that a software license does not exist in the arrangement, the customer would account for this arrangement as a service contract. This amendment will be effective for us in the first quarter of fiscal 2017. We do not expect the adoption to have a material impact on our financial position or results of operations.

Also in April 2015, the FASB issued amended accounting guidance related to the presentation of debt issuance costs in the financial statements. This guidance requires an entity to present such costs in the balance sheet as a direct deduction from the related debt rather than as an asset. This amendment will be effective for us in the first quarter of fiscal 2017. Adoption of the guidance would reclassify debt issuance costs from other assets to long-term obligations, less current portion within the consolidated balance sheet. We do not expect the adoption to have a material impact on our financial position or results of operations.

In August 2014, the FASB issued amended accounting guidance related to uncertainties about an entity's ability to continue as a going concern. This guidance requires management to evaluate whether there is substantial doubt about a company's ability to continue as a going concern. This amendment will be effective for us in the fourth quarter of fiscal 2017, with early adoption permitted. We do not expect the adoption of this guidance to impact our financial statement disclosures.

In May 2014, the FASB issued amended accounting guidance related to revenue recognition. This guidance is based on the principle that revenue is recognized in an amount that reflects the consideration to which an entity expects to be entitled in exchange for the transfer of goods or services to customers. The guidance also requires additional disclosure about the nature, amount, timing, and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. In July 2015, the FASB deferred the effective date for one year beyond the originally specified effective date. This amendment will be effective for us in the first quarter of fiscal 2019. We are in the process of assessing any differences between the amended and existing guidance that could impact our consolidated financial statements and continuing to evaluate the options for adoption.

In April 2014, the FASB issued amended accounting guidance related to the reporting of discontinued operations and disclosures of disposals of components of an entity. The amended guidance changes the thresholds for disposals to qualify as discontinued operations and requires additional disclosures. We adopted this guidance in the first quarter of fiscal 2016. The adoption of this guidance did not impact our consolidated financial statements.

2. Acquisitions

During fiscal 2016 , we completed several acquisitions, the most significant of which are described in more detail below. The pro forma results of operations and the results of operations for acquired businesses since the acquisition dates have not been separately disclosed because the effects were not significant compared to the consolidated financial statements, individually or in the aggregate.

Cordis

On October 2, 2015 , we acquired Cordis from Ethicon, Inc., a wholly-owned subsidiary of Johnson & Johnson, for $1.9 billion using cash on hand and proceeds from our debt offering in June 2015 . The acquisition of Cordis, a global manufacturer and distributor of interventional cardiology devices and endovascular solutions with operations in more than 50 countries, expands our Medical segment's portfolio of self-manufactured products and its geographic scope. We closed the Cordis acquisition in 20 principal countries on October 2, 2015 , and acquired control of, as described in GAAP, and the rights to, the net economic benefit from the entire Cordis business in the remaining countries at that time. We are in the process of transitioning legal ownership in the remaining non-principal countries, which we expect to complete by the end of calendar 2017. The results for the entire Cordis business in all countries are included in the consolidated financial statements beginning October 2, 2015 .

Transaction and integration costs associated with the acquisition of Cordis were $78 million and $44 million during fiscal 2016 and 2015 , respectively, and are included in amortization and other acquisition-related costs in the consolidated statements of earnings.

naviHealth

On August 26, 2015 , we acquired a 71 percent ownership interest in naviHealth for $238 million , net of cash acquired of $53 million . We funded the acquisition with cash on hand. The acquisition of naviHealth, a leader in post-acute care management solutions, expands our ability to serve hospitals, other healthcare providers, and payers. We consolidate the results of naviHealth in our consolidated financial statements and report its consolidated results in our Medical segment. The terms of the agreement provide us with the option to acquire any remaining noncontrolling interests at any time after the two-year anniversary of the closing. The third-party noncontrolling interest holders also hold an option, which allows them to sell their noncontrolling interests to us at any time after the two-year anniversary of the closing, or earlier if a trigger event occurs. Refer to Note 12 for further information on the redeemable noncontrolling interests. We also completed acquisitions within naviHealth during fiscal 2016 for $242 million , which were paid in cash.

Harvard Drug

On July 2, 2015 , we completed the acquisition of The Harvard Drug Group ("Harvard Drug") for $1.1 billion using cash on hand and proceeds from our debt offering in June 2015 . The acquisition of Harvard Drug, a distributor of generic pharmaceuticals, over-the-counter healthcare and related products to retail, institutional, and alternate care customers, enhances our Pharmaceutical segment's generic pharmaceutical distribution and related services businesses. Harvard Drug also repackages generic pharmaceuticals and over-the-counter healthcare products.

Fair Value of Assets Acquired and Liabilities Assumed

The allocation of the purchase price for the acquisitions of Cordis, naviHealth and Harvard Drug are not yet finalized and are subject to adjustment as we complete the valuation analysis for these acquisitions. The purchase prices were subject to adjustment based on working capital requirements as set forth in the acquisition agreements.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed as of the acquisition dates for Cordis, naviHealth and Harvard Drug:

(in millions)	Cordis	naviHealth	Harvard Drug
Identifiable intangible assets:			
Customer relationships (1)	$ 225	$ 38	$ 470
Trade names (2)	125	16	130
Developed technology (3)	395	61	—
In-process research and development (4)	55	—	—
Total identifiable intangible assets acquired	800	115	600
Cash and equivalents	—	53	44
Trade receivables	—	38	67
Inventories	207	—	49
Prepaid expenses and other	4	14	11
Property and equipment	97	5	16
Other assets	20	1	—
Accounts payable	(93)	(2)	(47)
Other accrued liabilities	(16)	(95)	(37)
Deferred income taxes and other liabilities	(7)	(48)	(188)
Redeemable noncontrolling interests	—	(119)	—
Total identifiable net assets/(liabilities) acquired	1,012	(38)	515
Goodwill	861	329	634
Total net assets acquired	**$ 1,873**	**$ 291**	**$ 1,149**

(1) The weighted-average useful lives of customer relationships range from 4 to 13 years.

(2) The weighted-average useful lives of trade names range from 10 to 17 years.

(3) The weighted-average useful life of developed technology is 10 years.

(4) Acquired in-process research and development intangible assets have an indefinite life.

3. Restructuring and Employee Severance

The following tables summarize restructuring and employee severance costs:

(in millions)	2016	2015	2014
Employee-related costs (1)	**$ 15**	$ 34	$ 13
Facility exit and other costs (2)	**10**	10	18
Total restructuring and employee severance	**$ 25**	$ 44	$ 31

(1) Employee-related costs primarily consist of termination benefits provided to employees who have been involuntarily terminated and duplicate payroll costs during transition periods.

(2) Facility exit and other costs primarily consist of lease termination costs, accelerated depreciation, equipment relocation costs, project consulting fees and costs associated with restructuring our delivery of information technology infrastructure services.

The following table summarizes activity related to liabilities associated with restructuring and employee severance:

(in millions)	Employee-Related Costs	Facility Exit and Other Costs	Total
Balance at June 30, 2013	$ 55	$ 2	**$ 57**
Additions	23	1	**24**
Payments and other adjustments	(54)	(3)	**(57)**
Balance at June 30, 2014	$ 24	$ —	**$ 24**
Additions	34	1	**35**
Payments and other adjustments	(36)	(1)	**(37)**
Balance at June 30, 2015	$ 22	$ —	**$ 22**
Additions	17	2	**19**
Payments and other adjustments	(24)	(1)	**(25)**
Balance at June 30, 2016	**$ 15**	**$ 1**	**$ 16**

4. Goodwill and Other Intangible Assets

Goodwill

The following table summarizes the changes in the carrying amount of goodwill by segment and in total:

(in millions)	Pharmaceutical (1)	Medical	Total
Balance at June 30, 2014	$ 2,158	$ 2,720	**$ 4,878**
Goodwill acquired, net of purchase price adjustments	41	179	**220**
Foreign currency translation adjustments and other	—	(28)	**(28)**
Balance at June 30, 2015	$ 2,199	$ 2,871	**$ 5,070**
Goodwill acquired, net of purchase price adjustments	738	1,382	**2,120**
Foreign currency translation adjustments and other	(18)	(5)	**(23)**
Balance at June 30, 2016	**$ 2,919**	**$ 4,248**	**$ 7,167**

(1) At June 30, 2016 the accumulated goodwill impairment loss was $829 million .

The increase in the Pharmaceutical segment goodwill during fiscal 2016 is primarily due to the Harvard Drug acquisition. Goodwill recognized in connection with this acquisition primarily represents the expected benefits from synergies of integrating this business, the

existing workforce of the acquired entity and the expected growth from new customers. The goodwill acquired in connection with the Harvard Drug acquisition is not deductible for tax purposes.

The increase in the Medical segment goodwill during fiscal 2016 is primarily due to the Cordis and naviHealth acquisitions. Goodwill recognized in connection with the Cordis acquisition primarily represents the expected benefits from synergies of integrating the business, the existing workforce of the acquired entity, the expected growth from new customers and the expected growth from improvements to existing technology. The majority of the goodwill acquired in connection with the acquisition of Cordis is deductible for tax purposes. Goodwill recognized in connection with the naviHealth acquisition primarily represents the existing workforce of the acquired entity, expected growth from new customers, new service offerings and the expected growth from improvements to existing technology. The goodwill acquired in connection with the naviHealth acquisition is not deductible for tax purposes.

See Note 2 for further discussion of these acquisitions.

Other Intangible Assets

The following tables summarize other intangible assets by class at June 30:

	2016			
(in millions)	Gross Intangible	Accumulated Amortization	Net Intangible	Weighted-Average Remaining Amortization Period (Years)
Indefinite-life intangibles:				
IPR&D, trademarks and other	$ 72	$ —	$ 72	N/A
Total indefinite-life intangibles	72	—	72	N/A
Definite-life intangibles:				
Customer relationships	1,946	737	1,209	9
Trademarks, trade names, and patents	508	140	368	13
Developed technology and other	808	198	610	8
Total definite-life intangibles	3,262	1,075	2,187	10
Total other intangible assets	$ 3,334	$ 1,075	$ 2,259	N/A

	2015		
(in millions)	Gross Intangible	Accumulated Amortization	Net Intangible
Indefinite-life intangibles:			
Trademarks and other	$ 14	$ —	$ 14
Total indefinite-life intangibles	14	—	14
Definite-life intangibles:			
Customer relationships	1,103	501	602
Trademarks, trade names, and patents	237	91	146
Developed technology and other	320	134	186
Total definite-life intangibles	1,660	726	934
Total other intangible assets	$ 1,674	$ 726	$ 948

Total amortization of intangible assets was $355 million , $191 million and $188 million for fiscal 2016 , 2015 and 2014 , respectively. Estimated annual amortization of intangible assets for fiscal 2017 through 2021 is as follows: $376 million , $345 million , $276 million , $250 million and $203 million .

5. Available-for-Sale Securities

We invest in marketable securities, which are classified as available-for-sale and are carried at fair value in the consolidated balance sheets. We held the following investments in marketable securities at fair value at June 30:

(in millions)	2016	2015
Current available-for-sale securities:		
Commercial paper	$ —	$ 4
Treasury bills	3	12
International bonds	2	2
Corporate bonds	58	34
U.S. agency bonds	6	5
Asset-backed securities	28	8
International equity securities	2	—
U.S. agency mortgage-backed securities	14	26
Total current available-for-sale securities	113	91
Long-term available-for-sale securities:		
Treasury bills	10	—
International bonds	1	—
Corporate bonds	36	33
U.S. agency bonds	9	18
Asset-backed securities	17	41
U.S. agency mortgage-backed securities	14	10
Total long-term available-for-sale securities	87	102
Total available-for-sale securities	$ 200	$ 193

Gross unrealized gains and losses were immaterial at both June 30, 2016 and 2015 . During fiscal 2016 , 2015 and 2014 gross realized gains and losses were immaterial and we did not recognize any other-than-temporary impairments. At June 30, 2016 , the weighted-average effective maturity of our current and long-term investments was approximately 6 months and 15 months , respectively.

6. Long-Term Obligations and Other Short-Term Borrowings

The following table summarizes long-term obligations and other short-term borrowings at June 30:

(in millions)	2016	2015
1.7% Notes due 2018	$ 405	$ 404
1.9% Notes due 2017	251	251
1.95% Notes due 2018	554	550
2.4% Notes due 2019	461	450
3.2% Notes due 2022	253	249
3.2% Notes due 2023	549	549
3.5% Notes due 2024	398	398
3.75% Notes due 2025	505	500
4.5% Notes due 2044	345	345
4.6% Notes due 2043	349	349
4.625% Notes due 2020	528	524
4.9% Notes due 2045	450	450
7.0% Debentures due 2026	124	124
7.8% Debentures due 2016	37	37
Other obligations	330	312
Total	$ 5,539	$ 5,492
Less: current portion of long-term obligations and other short-term borrowings	587	281
Long-term obligations, less current portion	$ 4,952	$ 5,211

Maturities of existing long-term obligations and other short-term borrowings for fiscal 2017 through 2021 and thereafter are as follows: $587 million , $982 million , $3 million , $463 million , $529 million and $2,975 million .

Long-Term Debt

The 1.7% , 1.9% , 1.95% , 2.4% , 3.2% , 3.2% , 3.5% , 3.75% , 4.5% , 4.6% , 4.625% and 4.9% Notes represent unsecured obligations of Cardinal Health, Inc. and rank equally in right of payment with all of our existing and future unsecured and unsubordinated indebtedness. The 7.0% and 7.8% Debentures represent unsecured obligations of Allegiance Corporation (a wholly-owned subsidiary), which Cardinal Health, Inc. has guaranteed. None of these obligations are subject to a sinking fund and the Allegiance obligations are not redeemable prior to maturity. Interest is paid pursuant to the terms of the obligations. These notes are effectively subordinated to the liabilities of our subsidiaries, including trade payables of $17 billion .

In June 2015, we sold $550 million aggregate principal amount of 1.95% Notes that mature on June 15, 2018, $500 million aggregate principal amount of 3.75% Notes that mature on September 15, 2025, and $450 million aggregate principal amount of 4.9% Notes that mature on September 15, 2045. We used the net proceeds from the offering to pay part of the purchase price to acquire Harvard Drug on July 2, 2015 and Cordis on October 2, 2015 , as discussed further in Note 2 .

In November 2014, we sold $450 million aggregate principal amount of 2.4% Notes that mature on November 15, 2019, $400 million aggregate principal amount of 3.5% Notes that mature on November 15, 2024 and $350 million aggregate principal amount of 4.5% Notes that mature on November 15, 2044.

In December 2014, we used the net proceeds from the November 2014 offering, together with cash on hand, to redeem all of the outstanding 4.0% Notes due 2015, 5.8% Notes due 2016, 5.85% Notes due 2017 and 6.0% Notes due 2017 at a redemption price equal to 100% of the principal amount and any accrued but unpaid interest, plus the applicable make-whole premium. As a result of the redemption, we incurred a loss on the extinguishment of debt of $60 million ($37 million , net of tax), which included a make-whole premium of $80 million , write-off of $2 million of unamortized debt issuance costs, and an offsetting $22 million fair value adjustment to the respective debt related to previously terminated interest rate swaps.

The 1.7% Notes due 2018, 1.9% Notes due 2017, 1.95% Notes due 2018, 2.4% Notes due 2019, 3.2% Notes due 2022, 3.2% Notes due 2023, 3.5% Notes due 2024, 3.75% Notes due 2025, 4.5% Notes due 2044, 4.6% Notes due 2043, 4.625% Notes due 2020 and 4.9% Notes due 2045 require us to offer to purchase the notes at 101% of the principal amount plus accrued and unpaid interest if we undergo a change of control, as defined in the notes, and if the notes receive specified ratings below investment grade by each of Standard & Poors Ratings Services, Moodys Investors Service, Inc. and Fitch Ratings.

Other Financing Arrangements

In addition to cash and cash equivalents, our sources of liquidity include a revolving credit facility, which we increased from $1.5 billion at June 30, 2015 to $1.75 billion at June 30, 2016 and a commercial paper program of up to $1.5 billion , backed by the revolving credit facility. The revolving credit facility exists largely to support issuances of commercial paper as well as other short-term borrowings for general corporate purposes. We had no outstanding balance under the revolving credit facility at June 30, 2016 and 2015 , respectively. Availability on the revolving credit facility was reduced by outstanding letters of credit of $14 million and zero at June 30, 2016 and 2015 , respectively. We had no outstanding borrowings from the commercial paper program at June 30, 2016 and 2015 , respectively.

On November 3, 2014, we renewed our committed receivables sales facility program through Cardinal Health Funding, LLC ("CHF") until November 3, 2017 and increased the size of the facility from $700 million to $950 million . During fiscal 2016 , we reduced the size of the committed receivables sales facility program from $950 million to $700 million in connection with the increase of credit under the revolving credit facility as noted above. CHF was organized for the sole purpose of buying receivables and selling undivided interests in those receivables to third-party purchasers. Although consolidated with Cardinal Health, Inc. in accordance with GAAP, CHF is a separate legal entity from Cardinal Health, Inc. and from our subsidiary that sells receivables to CHF. CHF is designed to be a special purpose, bankruptcy-remote entity whose assets are available solely to satisfy the claims of its creditors. We had no outstanding balance under the committed receivable sales facility program at June 30, 2016 and 2015 . Availability on the committed

receivable sales facility program was reduced by outstanding letters of credit of $40 million and $41 million on June 30, 2016 and 2015 , respectively.

Our revolving credit facility and committed receivables sales facility program require us to maintain a consolidated leverage ratio of no more than 3.25 -to-1 and our committed receivables sales facility also requires us to maintain a consolidated interest coverage ratio, as of the end of any calendar quarter, of at least 4 -to-1. As of June 30, 2016 , we were in compliance with these financial covenants.

We also maintain other short-term credit facilities and an unsecured line of credit that allowed for borrowings up to $699 million and $439 million at June 30, 2016 and 2015 , respectively. The $330 million and $312 million balance of other obligations at June 30, 2016 and 2015, respectively, consisted of short-term borrowings and capital leases.

7. Income Taxes

The following table summarizes earnings from continuing operations before income taxes:

(in millions)	2016	2015	2014
U.S. Operations	$ 2,050	$ 1,733	$ 1,665
Non-U.S. Operations	226	234	133
Earnings from continuing operations before income taxes	$ 2,276	$ 1,967	$ 1,798

The following table summarizes the components of provision for income taxes from continuing operations:

(in millions)	2016	2015	2014
Current:			
Federal	$ 611	$ 424	$ 521
State and local	74	83	51
Non-U.S.	73	29	37
Total current	$ 758	$ 536	$ 609
Deferred:			
Federal	$ 96	$ 196	$ 24
State and local	12	24	3
Non-U.S.	(21)	(1)	(1)
Total deferred	87	219	26
Provision for income taxes	$ 845	$ 755	$ 635

The following table presents a reconciliation of the provision based on the federal statutory income tax rate to our effective income tax rate from continuing operations:

	2016	2015	2014
Provision at Federal statutory rate	35.0 %	35.0 %	35.0 %
State and local income taxes, net of federal benefit	1.5	4.1	2.2
Foreign tax rate differential	(0.6)	(2.4)	(1.2)
Nondeductible/nontaxable items	1.0	0.7	(0.2)
Other	0.2	1.0	(0.5)
Effective income tax rate	37.1 %	38.4 %	35.3 %

The fiscal 2016 effective tax rate was impacted by net favorable discrete items of $29 million , which decreased the rate by 1.3 percentage points. There were no individually significant discrete items.

The fiscal 2015 effective tax rate was impacted by net unfavorable discrete items of $15 million , which increased the rate by 0.8 percentage points. There were no individually significant discrete items.

The fiscal 2014 effective tax rate was impacted by net favorable discrete items of $37 million , which reduced the rate by 2.1 percentage points. The discrete items include the favorable impact of the settlement of federal and state tax controversies ($80 million) and release of valuation allowances ($12 million) and the unfavorable impact of remeasurement of unrecognized tax benefits ($65 million), primarily as a result of proposed assessments of additional tax.

At June 30, 2016 , we had $2.1 billion of undistributed earnings from non-U.S. subsidiaries that are intended to be permanently reinvested in non-U.S. operations. Because these earnings are considered permanently reinvested, no U.S. tax provision has been accrued related to the repatriation of these earnings. It is not practicable to estimate the amount of U.S. tax that might be payable on the eventual remittance of such earnings.

Deferred income taxes arise from temporary differences between financial reporting and tax reporting bases of assets and liabilities and operating loss and tax credit carryforwards for tax purposes. The following table presents the components of the deferred income tax assets and liabilities at June 30:

(in millions)	2016	2015
Deferred income tax assets:		
Receivable basis difference	$ 44	$ 47
Accrued liabilities	133	138
Share-based compensation	56	53
Loss and tax credit carryforwards	193	197
Deferred tax assets related to uncertain tax positions	95	100
Other	46	50
Total deferred income tax assets	567	585
Valuation allowance for deferred income tax assets	(93)	(87)
Net deferred income tax assets	$ 474	$ 498
Deferred income tax liabilities:		
Inventory basis differences	$ (1,351)	$ (1,344)
Property-related	(172)	(155)
Goodwill and other intangibles	(607)	(352)
Other	—	(2)
Total deferred income tax liabilities	$ (2,130)	$ (1,853)
Net deferred income tax liability	$ (1,656)	$ (1,355)

Deferred income tax assets and liabilities in the preceding table, after netting by taxing jurisdiction, are in the following captions in the consolidated balance sheets at June 30:

(in millions)	2016 (5)	2015
Current deferred income tax asset (1)	$ —	$ 22
Noncurrent deferred income tax asset (2)	42	17
Current deferred income tax liability (3)	—	(1,066)
Noncurrent deferred income tax liability (4)	(1,698)	(328)
Net deferred income tax liability	**$ (1,656)**	$ (1,355)

(1) Included in prepaid expenses and other in the consolidated balance sheets.

(2) Included in other assets in the consolidated balance sheets.

(3) Included in other accrued liabilities in the consolidated balance sheets.

(4) Included in deferred income taxes and other liabilities in the consolidated balance sheets.

(5) In the second quarter of fiscal 2016, we adopted amended accounting guidance that deferred tax assets and liabilities should be classified as noncurrent on the consolidated balance sheet. See Note 1 for further discussion.

At June 30, 2016 we had gross federal, state and international loss and credit carryforwards of $199 million , $1.2 billion and $94 million , respectively, the tax effect of which is an aggregate deferred tax asset of $193 million . Substantially all of these carryforwards are available for at least three years. Approximately $92 million of the valuation allowance at June 30, 2016 applies to certain federal, state and international loss carryforwards that, in our opinion, are more likely than not to expire unutilized. However, to the extent that tax benefits related to these carryforwards are realized in the future, the reduction in the valuation allowance would reduce income tax expense.

We had $527 million , $542 million and $510 million of unrecognized tax benefits at June 30, 2016 , 2015 and 2014 , respectively. The June 30, 2016 , 2015 and 2014 balances include $355 million , $357 million and $322 million , respectively, of unrecognized tax benefits that, if recognized, would have an impact on the effective tax rate. The remaining unrecognized tax benefits relate to tax positions for which ultimate deductibility is highly certain but for which there is uncertainty as to the timing of such deductibility. Recognition of these tax benefits would not affect our effective tax rate. We include the full amount of unrecognized tax benefits in deferred income taxes and other liabilities in the consolidated balance sheets. The following table presents a reconciliation of the beginning and ending amounts of unrecognized tax benefits:

(in millions)	2016	2015	2014
Balance at beginning of fiscal year	$ 542	$ 510	$ 650
Additions for tax positions of the current year	22	15	16
Additions for tax positions of prior years	42	69	94
Reductions for tax positions of prior years	(48)	(42)	(40)
Settlements with tax authorities	(30)	(10)	(210)
Expiration of the statute of limitations	(1)	—	—
Balance at end of fiscal year	**$ 527**	$ 542	$ 510

It is reasonably possible that there could be a change in the amount of unrecognized tax benefits within the next 12 months due to activities of the U.S. Internal Revenue Service or other taxing authorities, possible settlement of audit issues, reassessment of existing unrecognized tax benefits or the expiration of statutes of limitations. We estimate that the range of the possible change in unrecognized tax benefits within the next 12 months is a net decrease of zero to $155 million , exclusive of penalties and interest.

We recognize accrued interest and penalties related to unrecognized tax benefits in the provision for income taxes. At June 30, 2016 , 2015 and 2014 , we had $145 million , $169 million and $143 million , respectively, accrued for the payment of interest and penalties. These balances are gross amounts before any tax benefits and are included in deferred income taxes and other liabilities in the consolidated balance sheets. During fiscal 2016 and 2014 , we recognized $9 million and $46 million of benefit for interest and penalties in income tax expense, respectively. During fiscal 2015 , we recognized $24 million of expense for interest and penalties in income tax expense.

We file income tax returns in the U.S. federal jurisdiction, various U.S. state and local jurisdictions, and various foreign jurisdictions. With few exceptions, we are subject to audit by taxing authorities for fiscal years 2006 through the current fiscal year.

During fiscal 2014 , the IRS closed audits of fiscal years 2003 through 2005. The IRS is currently conducting audits of fiscal years 2006 through 2014 , and our transfer pricing arrangements continue to be under consideration as part of these audits. While the IRS has made and could make proposed adjustments to our transfer pricing arrangements, or other matters, we are defending our reported tax positions, and have accounted for the unrecognized tax benefits associated with our tax positions.

We are a party to a tax matters agreement with CareFusion Corporation ("CareFusion"), which has been acquired by Becton, Dickinson and Company. Under the tax matters agreement, CareFusion is obligated to indemnify us for certain tax exposures and transaction taxes prior to our fiscal 2010 spin-off of CareFusion. The indemnification receivable was $172 million and $219 million at June 30, 2016 and 2015 , respectively, and is included in other assets in the consolidated balance sheets.

8. Commitments, Contingent Liabilities and Litigation

Commitments

Operating Leases

The future minimum rental payments for operating leases having initial or remaining non-cancelable lease terms in excess of one year at June 30, 2016 for fiscal 2017 through 2021 and thereafter are as follows: $119 million , $100 million , $81 million , $67 million , $50 million and $127 million . Rental expense relating to operating leases was $126 million , $104 million and $107 million in fiscal 2016 , 2015 and 2014 , respectively. Sublease rental income was immaterial for all periods presented.

Generic Sourcing Venture With CVS Health Corporation

In July 2014 , we established Red Oak Sourcing, LLC ("Red Oak Sourcing"), a U.S.-based generic pharmaceutical sourcing venture with CVS Health with an initial term of 10 years . Red Oak Sourcing

negotiates generic pharmaceutical supply contracts on behalf of both companies. We are required to pay 39 quarterly payments of $25.6 million to CVS Health which commenced in October 2014 . Due to the achievement of predetermined milestones, the quarterly payment to CVS Health increased by $10 million beginning in fiscal 2016 and by an additional $10 million beginning in the first quarter of fiscal 2017, resulting in a maximum quarterly payment of $45.6 million .

Legal Proceedings

We become involved from time to time in disputes, litigation, and regulatory matters.

We may be named from time to time in *qui tam* actions, which are initiated by private third parties purporting to act on behalf of federal or state governments and which allege that false claims have been submitted or have been caused to be submitted for payment by the government. After a private party has filed a *qui tam* action, the government must investigate the private party's claim and determine whether to intervene in and take control over the litigation. These actions may remain under seal while the government makes this determination. If the government declines to intervene, the private party may nonetheless continue to pursue the litigation on his or her own on behalf of the government.

From time to time, we receive subpoenas or requests for information from various government agencies relating to our business or to the business of a customer, supplier, or other industry participant. Most of these matters are resolved without incident; however, such subpoenas or requests can lead to the assertion of claims or the commencement of legal proceedings against us.

From time to time, we may determine that products we manufacture or market do not meet our specifications, regulatory requirements, or published standards. When we or a regulatory agency identify a quality or regulatory issue, we investigate and take appropriate corrective action. Such actions can lead to product recalls, costs to repair or replace affected products, temporary interruptions in product sales, action by regulators, and product liability claims and lawsuits, including class actions.

We accrue for contingencies related to disputes, litigation, and regulatory matters if it is probable that a liability has been incurred and the amount of the loss can be reasonably estimated. Because these matters are inherently unpredictable and unfavorable developments or resolutions can occur, assessing contingencies is highly subjective and requires judgments about future events. We regularly review contingencies to determine whether our accruals and related disclosures are adequate. The amount of ultimate loss may differ from these estimates.

With respect to the matters described below, we are unable to estimate a range of reasonably possible loss for matters for which there is no accrual, or additional loss for matters for which we have recorded an accrual, since damages or fines have not been specified or the proceedings are at stages where significant uncertainty exists as to legal or factual issues and as to whether such matters will proceed to trial. We do not believe, based on currently available information, that the outcomes of these matters will have a material adverse effect on our financial position, results of operations, or cash flows. However, the outcome of one or more of these matters could be material to our results of operations for a particular quarterly period.

We recognize income from the favorable outcome of litigation when we receive the associated cash or assets.

We recognize estimated loss contingencies for litigation and regulatory matters and income from favorable resolution of litigation in litigation (recoveries)/charges, net in our consolidated statements of earnings.

DEA Investigation and Related Matters

In February 2012, the U.S. Drug Enforcement Administration (the "DEA") issued an order to show cause and immediate suspension of our Lakeland, Florida distribution center's registration to distribute controlled substances, asserting that we failed to maintain required controls against the diversion of controlled substances. In May 2012, we entered into a settlement agreement with the DEA that resolved the administrative aspects of the DEA's action but did not resolve potential liability for civil fines in Florida or elsewhere for the conduct covered by the settlement agreement. In that regard, we are continuing to discuss a settlement with the U.S. Department of Justice. We incurred litigation charges of $3 million and $41 million for this matter during fiscal 2016 and 2015 , respectively. Our total accrual for this matter at June 30, 2016 and 2015 was $44 million and $41 million , respectively, which is included in other accrued liabilities in the consolidated balance sheets.

State of West Virginia vs. Cardinal Health, Inc.

Since June 2012, the West Virginia Attorney General has filed complaints against a number of pharmaceutical wholesale distributors, including us. The complaints, which were filed in the Circuit Court of Boone County, West Virginia, allege, among other things, that the distributors failed to maintain effective controls to guard against diversion of controlled substances in West Virginia, failed to report suspicious orders of controlled substances in accordance with the West Virginia Uniform Controlled Substances Act, and were negligent in distributing controlled substances to pharmacies that serve individuals who abuse controlled substances. The complaints seek, among other things, injunctive and other equitable relief and monetary damages. We are vigorously defending ourselves in this matter.

Product Liability Lawsuits

We and our Cordis business have been named as defendants in product liability lawsuits, including at August 9, 2016, 18 lawsuits involving claims by approximately 180 plaintiffs that allege personal injuries associated with the use of Cordis OptEase and TrapEase inferior vena cava (IVC) filter products. These lawsuits seek a variety of remedies, including unspecified monetary damages. We are vigorously defending ourselves in these matters.

Antitrust Litigation Proceeds

We received and recognized income resulting from settlements of class action antitrust lawsuits, in which we were a class member, of $80 million , $71 million and $24 million during fiscal 2016 , 2015 and 2014 , respectively.

9. Guarantees

In the ordinary course of business, we agree to indemnify certain other parties under acquisition and disposition agreements, customer agreements, intellectual property licensing agreements, and other agreements. Such indemnification obligations vary in scope and, when defined, in duration. In many cases, a maximum obligation is not explicitly stated, and therefore the overall maximum amount of the liability under such indemnification obligations cannot be reasonably estimated. Where appropriate, such indemnification obligations are recorded as a liability. Historically, we have not, individually or in the aggregate, made payments under these indemnification obligations in any material amounts. In certain circumstances, we believe that existing insurance arrangements, subject to the general deduction and exclusion provisions, would cover portions of the liability that may arise from these indemnification obligations. In addition, we believe that the likelihood of a material liability being triggered under these indemnification obligations is not probable.

From time to time we enter into agreements that obligate us to make fixed payments upon the occurrence of certain events. Such obligations primarily relate to obligations arising under acquisition transactions, where we have agreed to make payments based upon the achievement of certain financial performance measures by the acquired business. Generally, the obligation is capped at an explicit amount. See Note 10 for detail regarding contingent consideration obligations.

10. Fair Value Measurements

The following tables present the fair values for assets and (liabilities) measured on a recurring basis at June 30:

	2016			
(in millions)	**Level 1**	**Level 2**	**Level 3**	**Total**
Assets:				
Cash equivalents	**$ 516**	**$ —**	**$ —**	**$ 516**
Forward contracts (1)	**—**	**19**	**—**	**19**
Available-for-sale securities (2)	**—**	**200**	**—**	**200**
Other investments (3)	**103**	**—**	**—**	**103**
Liabilities:				
Contingent Consideration (4)	**—**	**—**	**(19)**	**(19)**

	2015			
(in millions)	Level 1	Level 2	Level 3	Total
Assets:				
Cash equivalents	$ 1,809	$ —	$ —	$ 1,809
Forward contracts (1)	—	5	—	5
Available-for-sale securities (2)	—	193	—	193
Other investments (3)	111	—	—	111
Liabilities:				
Contingent Consideration (4)	—	—	(53)	(53)

(1) The fair value of interest rate swaps, foreign currency contracts and commodity contracts is determined based on the present value of expected future cash flows considering the risks involved, including non-performance risk, and using discount rates appropriate for the respective maturities. Observable Level 2 inputs are used to determine the present value of expected future cash flows. The fair value of these derivative contracts, which are subject to master netting arrangements under certain circumstances, is presented on a gross basis in the consolidated balance sheets.

(2) We invest in marketable securities, which are classified as available-for-sale and are carried at fair value in the consolidated balance sheets. Observable Level 2 inputs such as quoted prices for similar securities, interest rate spreads, yield curves and credit risk are used to determine the fair value. See Note 5 for additional information regarding available-for-sale securities.

(3) The other investments balance includes investments in mutual funds, which are used to offset fluctuations in deferred compensation liabilities. These mutual funds primarily invest in the equity securities of companies with large market capitalization and high quality fixed income debt securities. The fair value of these investments is determined using quoted market prices.

(4) Contingent consideration represents the obligations incurred in connection with acquisitions. We do not deem the fair value of the contingent consideration obligations under any single acquisition to be significant. The estimate of fair value of the contingent consideration obligations requires subjective assumptions to be made regarding future business results, discount rates, discount periods, and probabilities assigned to various potential business result scenarios and was determined using probability assessments with respect to the likelihood of reaching various targets or of achieving certain milestones. The fair value measurement is based on significant inputs unobservable in the market and thus represents a Level 3 measurement. Changes in current expectations of progress could change the probability of achieving the targets within the measurement periods and result in an increase or decrease in the fair value of the contingent consideration obligation.

The following table presents those liabilities measured at fair value on a recurring basis using unobservable inputs (Level 3):

(in millions)	**Contingent Consideration Obligation**
Balance at June 30, 2014	$ 12
Additions from acquisitions	40
Changes in fair value of contingent consideration (1)	8
Payment of contingent consideration	(7)
Balance at June 30, 2015	$ 53
Additions from acquisitions	7
Changes in fair value of contingent consideration (1)	(16)
Payment of contingent consideration	(25)
Balance at June 30, 2016	**$ 19**

(1) Amount is included in amortization and other acquisition-related costs in the consolidated statements of earnings.

11. Financial Instruments

We utilize derivative financial instruments to manage exposure to certain risks related to our ongoing operations. The primary risks managed through the use of derivative instruments include interest rate risk, currency exchange risk, and commodity price risk. We do not use derivative instruments for trading or speculative purposes. While the majority of our derivative instruments are designated as hedging instruments, we also enter into derivative instruments that are designed to hedge a risk, but are not designated as hedging instruments. These derivative instruments are adjusted to current fair value through earnings at the end of each period.

We are exposed to counterparty credit risk on all of our derivative instruments. Accordingly, we have established and maintain strict

counterparty credit guidelines and only enter into derivative instruments with major financial institutions that are investment grade or better. We do not have significant exposure to any one counterparty and we believe the risk of loss is remote. Additionally, we do not require collateral under these agreements.

Interest Rate Risk Management

We are exposed to the impact of interest rate changes. Our objective is to manage the impact of interest rate changes on cash flows and the market value of our borrowings. We utilize a mix of debt maturities along with both fixed-rate and variable-rate debt to manage changes in interest rates. In addition, we enter into interest rate swaps to further manage our exposure to interest rate variations related to our borrowings and to lower our overall borrowing costs.

Currency Exchange Risk Management

We conduct business in several major international currencies and are subject to risks associated with changing foreign exchange rates. Our objective is to reduce earnings and cash flow volatility associated with foreign exchange rate changes to allow management to focus its attention on business operations. Accordingly, we enter into various contracts that change in value as foreign exchange rates change to protect the value of existing foreign currency assets and liabilities, commitments and anticipated foreign currency revenue and expenses.

Commodity Price Risk Management

We are exposed to changes in the price of certain commodities. Our objective is to reduce earnings and cash flow volatility associated with forecasted purchases of these commodities to allow management to focus its attention on business operations. Accordingly, we enter into derivative contracts when possible to manage the price risk associated with certain forecasted purchases.

The following table summarizes the fair value of our assets and liabilities related to derivatives designated as hedging instruments and the respective line items in which they were recorded in the consolidated balance sheets at June 30:

(in millions)	2016	2015
Assets:		
Foreign currency contracts (1)	**$ 1**	$ 3
Pay-floating interest rate swaps (2)	**33**	8
Pay-floating interest rate swaps (1)	**1**	—
Total assets	**$ 35**	$ 11
Liabilities:		
Foreign currency contracts (3)	**$ 3**	$ 2
Forward interest rate swaps (4)	**10**	—
Pay-floating interest rate swaps (4)	**—**	1
Commodity contracts (3)	**2**	2
Commodity contracts (4)	**1**	1
Total liabilities	**$ 16**	$ 6

(1) Included in prepaid expenses and other in the consolidated balance sheets.
(2) Included in other assets in the consolidated balance sheets.
(3) Included in other accrued liabilities in the consolidated balance sheets.
(4) Included in deferred income taxes and other liabilities in the consolidated balance sheets.

Fair Value Hedges

We enter into pay-floating interest rate swaps to hedge the changes in the fair value of fixed-rate debt resulting from fluctuations in interest rates. These contracts are designated and qualify as fair value hedges. Accordingly, the gain or loss recorded on the pay-floating interest rate swaps is directly offset by the change in fair value of the underlying debt. Both the derivative instrument and the underlying debt are adjusted to market value at the end of each period with any resulting gain or loss recorded in interest expense, net in the consolidated statements of earnings.

During fiscal 2016 , we entered into pay-floating interest rate swaps with total notional amounts of $600 million . These swaps have been designated as fair value hedges of our fixed rate debt and are included in other assets in the consolidated balance sheets.

During fiscal 2016 , we terminated notional amounts of $250 million of pay-floating interest rate swaps that were previously designated as fair value hedges.

During fiscal 2015 , we entered into pay-floating interest rate swaps with total notional amounts of $1,050 million , of which $250 million and $450 million was in connection with the registered debt offerings in June 2015 and November 2014, respectively. These swaps have been designated as fair value hedges of our fixed rate debt and are included in other assets in the consolidated balance sheets.

Also during fiscal 2015 , we terminated notional amounts of $875 million of pay-floating interest rate swaps in connection with the debt redemption in December 2014 as described in Note 6 . These swaps were previously designated as fair value hedges.

The following tables summarize the outstanding interest rate swaps designated as fair value hedges at June 30:

	2016		
(in millions)	Notional Amount	Maturity Date	
Pay-floating interest rate swaps	$ 1,963	Jun 2017 -	Sep 2025

	2015		
(in millions)	Notional Amount	Maturity Date	
Pay-floating interest rate swaps	$ 1,613	Jun 2017 -	Jun 2022

The following table summarizes the gain/(loss) recognized in earnings for interest rate swaps designated as fair value hedges:

(in millions)	2016	2015	2014
Pay-floating interest rate swaps (1) (2)	$ 23	$ 14	$ 23
Fixed-rate debt (1)	(23)	(14)	(23)

(1) Included in interest expense, net in the consolidated statements of earnings.

(2) Fiscal 2015 excludes $22 million fair value adjustment to the previously terminated interest rate swaps as a result of the December 2014 debt extinguishment as disclosed in Note 6 .

There was no ineffectiveness associated with these derivative instruments for any periods presented.

Cash Flow Hedges

We enter into derivative instruments to hedge our exposure to changes in cash flows attributable to interest rate, foreign currency and commodity price fluctuations associated with certain forecasted transactions. These derivative instruments are designated and qualify as cash flow hedges. Accordingly, the effective portion of the gain or loss on the derivative instrument is reported as a component of other comprehensive income and reclassified into earnings in the same line item associated with the forecasted transaction and in the same period during which the hedged transaction affects earnings. The ineffective portion of the gain or loss on the derivative instrument is recognized in earnings immediately.

During fiscal 2016 and 2015 we entered into forward interest rate swaps with a total notional amount of $300 million and $850 million , respectively, to hedge probable, but not firmly committed, future transactions associated with our debt.

Additionally, during fiscal 2015 we terminated $1,150 million in forward interest rate swaps that were previously designated as cash-flow hedges.

We enter into foreign currency contracts to protect the value of anticipated foreign currency revenues and expenses. At June 30, 2016 and 2015 , we held contracts to hedge probable, but not firmly committed, revenue and expenses. The principal currencies hedged are the Canadian dollar, Mexican peso, Thai baht, Chinese renminbi and euro.

We enter into commodity contracts to manage the price risk associated with forecasted purchases of certain commodities used in our Medical segment.

The following tables summarize the outstanding cash flow hedges at June 30:

	2016		
(in millions)	Notional Amount	Maturity Date	
Forward interest rate swaps	$ 300	Jun 2018 -	Jun 2028
Foreign currency contracts	183	Jul 2016 -	Jun 2017
Commodity contracts	22	Jul 2016 -	Mar 2019

	2015		
(in millions)	Notional Amount	Maturity Date	
Foreign currency contracts	146	Jul 2015 -	Jun 2016
Commodity contracts	22	Jul 2015 -	Mar 2018

The following table summarizes the gain/(loss) included in AOCI for derivative instruments designated as cash flow hedges at June 30:

(in millions)	2016	2015
Forward interest rate swaps	$ (10)	$ —
Commodity contracts	(3)	(3)
Foreign currency contracts	(4)	2

The following table summarizes the gain/(loss) reclassified from AOCI into earnings for derivative instruments designated as cash flow hedges:

(in millions)	2016	2015	2014
Foreign currency contracts (1)	$ 1	$ 1	$ —
Foreign currency contracts (2)	5	4	2
Foreign currency contracts (3)	(3)	(2)	1
Commodity contracts (3)	(5)	(1)	—

(1) Included in revenue in the consolidated statements of earnings.

(2) Included in cost of products sold in the consolidated statements of earnings.

(3) Included in SG&A expenses in the consolidated statements of earnings.

The amount of ineffectiveness associated with these derivative instruments was immaterial for all periods presented.

Economic (Non-Designated) Hedges

We enter into foreign currency contracts to manage our foreign exchange exposure related to intercompany financing transactions and other balance sheet items subject to revaluation that do not meet the requirements for hedge accounting treatment. Accordingly, these derivative instruments are adjusted to current market value at the end of each period through earnings. The gain or loss recorded on these instruments is substantially offset by the remeasurement adjustment on the foreign currency denominated asset or liability. The settlement of the derivative instrument and the remeasurement adjustment on the foreign currency denominated asset or liability are both recorded in other (income)/expense, net. The principal currencies managed through foreign currency contracts are the Canadian dollar, Mexican peso, euro, Thai baht and Chinese renminbi.

The following tables summarize the outstanding economic (non-designated) derivative instruments at June 30:

	2016	
(in millions)	Notional Amount	Maturity Date
Foreign currency contracts	$ 492	Jul 2016 - Jul 2016

	2015	
(in millions)	Notional Amount	Maturity Date
Foreign currency contracts	$ 398	Jul 2015 - Jul 2015

The following table summarizes the gain/(loss) recognized in earnings for economic (non-designated) derivative instruments:

(in millions)	2016	2015	2014
Foreign currency contracts (1)	$ (17)	$ (45)	$ 12

(1) Included in other income, net in the consolidated statements of earnings.

Fair Value of Financial Instruments

The carrying amounts of cash and equivalents, trade receivables, net, accounts payable, and other accrued liabilities at June 30, 2016 and 2015 approximate fair value due to their short-term maturities.

The following table summarizes the estimated fair value of our long-term obligations and other short-term borrowings compared to the respective carrying amounts at June 30:

(in millions)	2016	2015
Estimated fair value	$ 5,780	$ 5,521
Carrying amount	5,539	5,492

The fair value of our long-term obligations and other short-term borrowings is estimated based on either the quoted market prices for the same or similar issues or other inputs derived from available market information, which represents a Level 2 measurement.

The following table is a summary of the fair value gain/(loss) of our derivative instruments based upon the estimated amount that we would receive (or pay), considering counter-party credit risk, to terminate the contracts at June 30:

	2016		2015	
(in millions)	Notional Amount	Fair Value Gain/(Loss)	Notional Amount	Fair Value Gain/(Loss)
Pay-floating interest rate swaps	$ 1,963	$ 34	$ 1,613	$ 7
Foreign currency contracts	675	(2)	544	1
Forward interest rate swaps	300	(10)	—	—
Commodity contracts	22	(3)	22	(3)

12. Redeemable Noncontrolling Interests

In connection with the acquisition of a 71 percent ownership interest in naviHealth during fiscal 2016 as described in Note 2 , we recognized redeemable noncontrolling interests with a fair value of $119 million at the acquisition date. At June 30, 2016 , our ownership interest in naviHealth was 82 percent . The increase in our ownership interest was due to an additional capital contribution in connection with an acquisition by naviHealth.

The reconciliation of the changes in redeemable noncontrolling interests are as follows:

(in millions)	
Balance at June 30, 2015	$ —
Redeemable noncontrolling interests acquired	119
Net earnings attributable to redeemable noncontrolling interests	1
Net purchase of redeemable noncontrolling interests	(3)
Balance at June 30, 2016	**$ 117**

13. Shareholders' Equity

At June 30, 2016 and 2015 , authorized capital shares consisted of the following: 750 million Class A common shares, without par value; 5 million Class B common shares, without par value; and 500 thousand non-voting preferred shares, without par value. The Class A common shares and Class B common shares are collectively referred to below as “common shares”. Holders of common shares are entitled to share equally in any dividends declared by the Board of Directors and to participate equally in all distributions of assets upon liquidation. Generally, the holders of Class A common shares are entitled to one vote per share, and the holders of Class B common shares are entitled to one-fifth of one vote per share on proposals presented to shareholders for vote. Under certain circumstances, the holders of Class B common shares are entitled to vote as a separate class. Only Class A common shares were outstanding at June 30, 2016 and 2015 .

We repurchased $2.4 billion of our common shares, in the aggregate, through share repurchase programs during fiscal 2016 , 2015 and 2014 , as described below. We funded the repurchases with available cash. The common shares repurchased are held in treasury to be used for general corporate purposes.

During fiscal 2016 , we repurchased 8.2 million common shares having an aggregate cost of $651 million . The average price paid per common share was $78.98 .

During fiscal 2015 , we repurchased 13.1 million common shares having an aggregate cost of $1.0 billion . The average price paid per common share was $79.02 .

During fiscal 2014 , we repurchased 9.9 million common shares having an aggregate cost of $673 million . The average price paid per common share was $67.85 .

Accumulated Other Comprehensive Income/(Loss)

The following table summarizes the changes in the balance of accumulated other comprehensive income/(loss) by component and in total:

(in millions)	Foreign Currency Translation Adjustments and other	Unrealized Gain/(Loss) on Derivatives, net of tax	**Accumulated Other Comprehensive Income/(Loss)**
Balance at June 30, 2014	$ 63	$ 7	**$ 70**
Other comprehensive income/(loss), net of tax before reclassifications	(104)	9	**(95)**
Amounts reclassified to earnings	—	2	**2**
Total other comprehensive income/(loss), net of tax of $7 million	(104)	11	**(93)**
Balance at June 30, 2015	$ (41)	$ 18	**$ (23)**
Other comprehensive loss, net of tax before reclassifications	(82)	(9)	**(91)**
Amounts reclassified to earnings	—	(2)	**(2)**
Total other comprehensive loss, net of tax of $6 million	(82)	(11)	**(93)**
Balance at June 30, 2016	**$ (123)**	**$ 7**	**$ (116)**

Activity related to realized and unrealized gains and losses on available-for-sale securities, as described in Note 5 , was immaterial during fiscal 2016 and 2015.

14. Earnings Per Share Attributable to Cardinal Health, Inc.

The following table reconciles the computation of basic and diluted earnings per share attributable to Cardinal Health, Inc.:

(in millions, except per share amounts)	**2016**	2015	2014
Earnings from continuing operations	**$ 1,431**	$ 1,212	$ 1,163
Net earnings attributable to noncontrolling interest	**(4)**	—	—
Net earnings from continuing operations attributable to Cardinal Health, Inc.	**1,427**	1,212	1,163
Earnings from discontinued operations, net of tax	**—**	3	3
Net earnings attributable to Cardinal Health, Inc.	**$ 1,427**	$ 1,215	$ 1,166
Weighted-average common shares–basic	**327**	332	341
Effect of dilutive securities:			
Employee stock options, restricted share units, and performance share units	**3**	3	4
Weighted-average common shares–diluted	**330**	335	345
Basic earnings per common share attributable to Cardinal Health, Inc.:			
Continuing operations	$ 4.36	$ 3.65	$ 3.41
Discontinued operations	—	0.01	0.01
Net basic earnings per common share attributable to Cardinal Health, Inc.	$ 4.36	$ 3.66	$ 3.42
Diluted earnings per common share attributable to Cardinal Health, Inc.:			
Continuing operations	**$ 4.32**	$ 3.61	$ 3.37
Discontinued operations	—	0.01	0.01
Net diluted earnings per common share attributable to Cardinal Health, Inc.	**$ 4.32**	$ 3.62	$ 3.38

The potentially dilutive employee stock options, restricted share units and performance share units that were antidilutive for fiscal 2016, 2015 and 2014 were 2 million , 1 million and zero , respectively.

15. Segment Information

Our operations are principally managed on a products and services basis and are comprised of two operating segments, which are the same as our reportable segments: Pharmaceutical and Medical. The factors for determining the reportable segments include the manner in which management evaluates performance for purposes of allocating resources and assessing performance combined with the nature of the individual business activities.

The Pharmaceutical segment distributes branded and generic pharmaceutical, specialty pharmaceutical, over-the-counter healthcare and consumer products in the United States. This segment also operates nuclear pharmacies and cyclotron facilities, provides pharmacy management services to hospitals as well as medication therapy management and patient outcomes services to hospitals, other healthcare providers and payers, provides services to healthcare companies supporting the development, marketing, and distribution of specialty pharmaceutical products, and

repackages generic pharmaceuticals and over-the-counter healthcare products. This segment also imports and distributes pharmaceuticals, over-the-counter healthcare and consumer products as well as provides specialty pharmacy and other services in China.

The Medical segment distributes a broad range of medical, surgical and laboratory products and provides services to hospitals, ambulatory surgery centers, clinical laboratories and other healthcare providers in the United States, Canada and China. This segment distributes medical products to patients in the home in the United States. This segment also manufactures, sources and develops our own Cardinal Health brand medical and surgical products, which are sold directly or through third-party distributors in the United States, Canada, Europe and other regions internationally. This segment also provides post-acute care management and transition services and software to hospitals, other healthcare providers, and payers.

The following table presents revenue for each reportable segment and Corporate:

(in millions)	2016	2015	2014
Pharmaceutical	**$ 109,131**	$ 91,116	$ 80,110
Medical	**12,430**	11,395	10,962
Total segment revenue	**121,561**	102,511	91,072
Corporate (1)	**(15)**	20	12
Total revenue	**$ 121,546**	$ 102,531	$ 91,084

(1) Corporate revenue consists of the elimination of inter-segment revenue and other revenue not allocated to the segments.

We evaluate segment performance based on segment profit, among other measures. Segment profit is segment revenue, less segment cost of products sold, less segment distribution, selling, general, and administrative ("SG&A") expenses. Segment SG&A expenses include share-based compensation expense as well as allocated corporate expenses for shared functions, including corporate management, corporate finance, financial and customer care shared services, human resources, information technology, and legal and compliance. The results attributable to noncontrolling interests of consolidated entities are recorded within segment profit. Corporate expenses are allocated to the segments based on headcount, level of benefit provided, and other ratable allocation methodologies.

We do not allocate the following items to our segments: LIFO inventory charges/(credits); restructuring and employee severance; amortization and other acquisition-related costs; impairments and (gain)/loss on disposal of assets; litigation (recoveries)/charges, net; other income, net; interest expense, net; loss on extinguishment of debt; and provision for income taxes.

In addition, certain investment spending, certain portions of enterprise-wide incentive compensation, and other spending are not allocated to the segments. Investment spending generally includes the first-year spend for certain projects that require incremental investments in the form of additional operating expenses. We encourage our segments and corporate functions to identify investment projects that will promote innovation and provide future returns. As approval decisions for such projects are dependent upon executive management, the expenses for such projects are often retained at Corporate. Investment spending within Corporate was $34 million , $26 million and $33 million for fiscal 2016 , 2015 and 2014, respectively.

Beginning in fiscal 2016, we changed our methodology for allocating certain portions of enterprise-wide incentive compensation expenses among Corporate and the segments. This change did not impact consolidated operating earnings or net earnings and did not materially impact either segment during fiscal 2016.

The following tables present segment profit by reportable segment and Corporate:

(in millions)	2016	2015	2014
Pharmaceutical	**$ 2,488**	$ 2,094	$ 1,745
Medical	**457**	433	444
Total segment profit	**2,945**	2,527	2,189
Corporate	**(486)**	(366)	(304)
Total operating earnings	**$ 2,459**	$ 2,161	$ 1,885

The following tables present depreciation and amortization and additions to property and equipment by reportable segment and Corporate:

(in millions)	2016	2015	2014
Pharmaceutical	**$ 128**	$ 124	$ 128
Medical	**136**	119	130
Corporate	**377**	208	201
Total depreciation and amortization	**$ 641**	$ 451	$ 459

(in millions)	2016	2015	2014
Pharmaceutical	**$ 88**	$ 90	$ 72
Medical	**96**	87	72
Corporate	**281**	123	105
Total additions to property and equipment	**$ 465**	$ 300	$ 249

The following table presents total assets for each reportable segment and Corporate at June 30 :

(in millions)	2016	2015	2014
Pharmaceutical	**$ 20,662**	$ 17,385	$ 15,361
Medical	**10,236**	7,095	6,768
Corporate	**3,224**	5,662	3,904
Total assets	**$ 34,122**	$ 30,142	$ 26,033

The following tables present revenue and property and equipment, net by geographic area:

(in millions)	2016	2015	2014
United States	**$ 116,864**	$ 98,435	$ 87,449
International	**4,682**	4,096	3,635
Total revenue	**$ 121,546**	$ 102,531	$ 91,084

(in millions)	2016	2015	2014
United States	$ 1,558	$ 1,327	$ 1,301
International	238	179	158
Property and equipment, net	**$ 1,796**	$ 1,506	$ 1,459

16. Share-Based Compensation

We maintain stock incentive plans (collectively, the "Plans") for the benefit of certain of our officers, directors and employees. At June 30, 2016 , 20 million shares remain available for future grants under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan ("2011 LTIP"). Under the 2011 LTIP's fungible share counting provisions, stock options are counted against the plan as one share for every share issued ; awards other than stock options are counted against the plan as two and one-half shares for every share issued. This means that only 8 million shares could be issued under awards other than stock options while 20 million shares could be issued under stock options. Shares are issued out of treasury shares when stock options are exercised and when restricted share units and performance share units vest.

The following table provides total share-based compensation expense by type of award:

(in millions)	2016	2015	2014
Restricted share unit expense	$ 69	$ 69	$ 62
Employee stock option expense	21	21	21
Performance share unit expense	21	20	13
Total share-based compensation expense from continuing operations	**$ 111**	$ 110	$ 96

The total tax benefit related to share-based compensation was $38 million , $38 million and $33 million for fiscal 2016 , 2015 and 2014 , respectively.

Stock Options

Employee stock options granted under the Plans generally vest in equal annual installments over three years and are exercisable for periods ranging from seven to ten years from the grant date. All stock options are exercisable at a price equal to the market value of the common shares underlying the option on the grant date.

The following table summarizes all stock option transactions under the Plans:

(in millions, except per share amounts)	Stock Options	Weighted-Average Exercise Price per Common Share
Outstanding at June 30, 2014	10	$ 39.16
Granted	1	72.15
Exercised	(3)	36.21
Canceled and forfeited	—	—
Outstanding at June 30, 2015	8	46.50
Granted	1	84.11
Exercised	(2)	39.06
Canceled and forfeited	—	—
Outstanding at June 30, 2016	**7**	**$ 54.09**
Exercisable at June 30, 2016	**5**	**$ 42.82**

The following table provides additional detail related to stock options:

(in millions, except per share amounts)	2016	2015	2014
Aggregate intrinsic value of outstanding options at period end	$ 181	$ 281	$ 282
Aggregate intrinsic value of exercisable options at period end	161	193	185
Aggregate intrinsic value of exercised options	63	132	155
Net proceeds from share-based compensation	6	72	227
Excess tax benefits from share based compensation	33	52	39
Total compensation cost, net of estimated forfeitures, related to unvested stock options not yet recognized, pre-tax	22	23	24
Total fair value of shares vested during the year	20	20	20
Weighted-average grant date fair value per stock option	17.40	15.80	10.32

Stock options are granted to our officers and certain employees. The fair values were estimated on the grant date using a lattice valuation model. We believe the lattice model provides reasonable estimates because it has the ability to take into account individual exercise patterns based on changes in our stock price and other variables, and it provides for a range of input assumptions, which are disclosed in the table below. The risk-free rate is based on the U.S. Treasury yield curve at the time of the grant. We analyzed historical data to estimate option exercise behaviors and employee terminations to be used within the lattice model. The expected life of the options granted was calculated from the option valuation model and represents the length of time in years that the options granted are expected to be outstanding. Expected volatilities are based on implied volatility from traded options on our common shares and historical volatility over a period of time commensurate with the contractual term of the option grant (up to ten years).

The following table provides the range of assumptions used to estimate the fair value of stock options:

	2016	2015	2014
Risk-free interest rate	**1.5% - 1.9%**	1.8% - 2.1%	1.9% - 2.0%
Expected volatility	**23%**	26%	27%
Dividend yield	**1.8% - 2.0%**	1.7% - 1.9%	1.8% - 2.4%
Expected life in years	**7**	7	6

Restricted Share Units

Restricted share units granted under the Plans generally vest in equal annual installments over three years . Restricted share units accrue cash dividend equivalents that are payable upon vesting of the awards.

The following table summarizes all transactions related to restricted share units under the Plans:

(in millions, except per share amounts)	Restricted Share Units	Weighted-Average Grant Date Fair Value per Share
Nonvested at June 30, 2014	3	$ 45.65
Granted	1	72.33
Vested	(1)	44.94
Canceled and forfeited	—	—
Nonvested at June 30, 2015	3	59.69
Granted	1	83.89
Vested	(2)	54.29
Canceled and forfeited	—	—
Nonvested at June 30, 2016	**2**	**$ 71.73**

The following table provides additional data related to restricted share unit activity:

(in millions)	2016	2015	2014
Total compensation cost, net of estimated forfeitures, related to nonvested restricted share and share unit awards not yet recognized, pre-tax	**$ 79**	$ 77	$ 75
Weighted-average period in years over which restricted share and share unit cost is expected to be recognized (in years)	**2**	2	2
Total fair value of shares vested during the year	**$ 65**	$ 61	$ 55

Performance Share Units

Performance share units vest over a three -year performance period based on achievement of specific performance goals. Based on the extent to which the targets are achieved, vested shares may range from zero to 200 percent of the target award amount. Performance share units accrue cash dividend equivalents that are payable upon vesting of the awards.

The following table summarizes all transactions related to performance share units under the Plans (based on target award amounts):

(in millions, except per share amounts)	Performance Share Units	Weighted-Average Grant Date Fair Value per Share
Nonvested at June 30, 2014	0.9	$ 44.41
Granted	0.2	71.63
Vested (1)	(0.2)	41.59
Canceled and forfeited	—	—
Nonvested at June 30, 2015	**0.9**	**$ 50.31**
Granted	0.3	84.26
Vested (2)	(0.4)	39.81
Canceled and forfeited	—	—
Nonvested at June 30, 2016	**0.8**	**$ 63.96**

(1) Vested based on achievement of 120 percent of the target performance goal.

(2) Vested based on achievement of 133 percent of the target performance goal.

The following table provides additional data related to performance share unit activity:

(in millions)	2016	2015	2014
Total compensation cost, net of estimated forfeitures, related to nonvested performance share units not yet recognized, pre-tax	**$ 17**	$ 16	$ 15
Weighted-average period over which performance share unit cost is expected to be recognized (in years)	**2**	2	2
Total fair value of shares vested during the year	**$ 16**	$ 8	$ 7

Employee Retirement Savings Plans

Substantially all of our domestic non-union employees are eligible to be enrolled in our company-sponsored contributory retirement savings plans, which include features under Section 401(k) of the Internal Revenue Code of 1986, and provide for matching and profit sharing contributions by us. Our contributions to the plans are determined by the Board of Directors subject to certain minimum requirements as specified in the plans. The total expense for our employee retirement savings plans was $84 million , $91 million and $75 million for fiscal 2016 , 2015 and 2014 , respectively.

17. Selected Quarterly Financial Data (Unaudited)

The following is selected quarterly financial data for fiscal 2016 and 2015 . The sum of the quarters may not equal year-to-date due to rounding.

(in millions, except per common share amounts)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal 2016				
Revenue	$ 28,055	$ 31,445	$ 30,662	**$ 31,384**
Gross margin (1)	1,579	1,609	1,689	**1,665**
Distribution, selling, general and administrative expenses	842	922	914	**970**
Earnings from continuing operations	384	326	386	**335**
Earnings from discontinued operations, net of tax	—	—	—	**—**
Net earnings	384	326	386	**335**
Less: Net earnings attributable to noncontrolling interests	(1)	—	—	(2)
Net earnings attributable to Cardinal Health, Inc.	383	326	386	333
Net earnings from continuing operations attributable to Cardinal Health, Inc. per common share:				
Basic	$ 1.17	$ 0.99	$ 1.18	**$ 1.03**
Diluted	1.15	0.98	1.17	**1.02**

(1) Gross margin is impacted by LIFO benefit/(charges) of ($39) million , ($12) million and $51 million in the second, third and fourth quarter, respectively.

(in millions, except per common share amounts)	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Fiscal 2015				
Revenue	$ 24,070	$ 25,537	$ 25,375	$ 27,547
Gross margin	1,341	1,454	1,459	1,458
Distribution, selling, general and administrative expenses	775	815	803	847
Earnings from continuing operations	266	289	365	293
Earnings from discontinued operations, net of tax	—	—	—	2
Net earnings	266	289	365	295
Less: Net earnings attributable to noncontrolling interests	—	—	—	—
Net earnings attributable to Cardinal Health, Inc.	266	289	365	295
Net earnings from continuing operations attributable to Cardinal Health, Inc. per common share:				
Basic	$ 0.79	$ 0.87	$ 1.10	$ 0.89
Diluted	0.78	0.86	1.09	0.88

18. Subsequent Events

We repurchased 3 million common shares having an aggregate cost of $250 million from July 1, 2016 through August 5, 2016 . The average price paid per common share was $81.45 . We funded the repurchases with available cash.

Cardinal Health, Inc. and Subsidiaries

Schedule II - Valuation and Qualifying Accounts [1]

(in millions)	Balance at Beginning of Period	Charged to Costs and Expenses (2)	Charged to Other Accounts (3)	Deductions (4)	Balance at End of Period
Fiscal 2016					
Accounts receivable	**$ 135**	**$ 72**	**$ 2**	**$ (74)**	**$ 135**
Finance notes receivable	**14**	**6**	**—**	**(1)**	**19**
Sales returns and allowances	**305**	**2,207**	**—**	**(2,126)**	**386**
Other	**1**	**—**	**—**	**—**	**1**
	$ 455	**$ 2,285**	**$ 2**	**$ (2,201)**	**$ 541**
Fiscal 2015					
Accounts receivable	$ 137	$ 59	$ 5	$ (66)	$ 135
Finance notes receivable	18	—	—	(4)	14
Sales returns and allowances	273	1,988	—	(1,956)	305
Other	1	—	—	—	1
	$ 429	$ 2,047	$ 5	$ (2,026)	$ 455
Fiscal 2014					
Accounts receivable	$ 134	$ 51	$ 2	$ (50)	$ 137
Finance notes receivable	17	—	2	(1)	18
Sales returns and allowances	291	1,735	—	(1,753)	273
Other	1	—	—	—	1
	$ 443	$ 1,786	$ 4	$ (1,804)	$ 429

(1) Amounts included herein pertain to the continuing operations of the Company.

(2) Fiscal 2016, 2015 and 2014 include $5 million , $7 million and $9 million , respectively, for reserves related to customer pricing disputes, excluded from provision for bad debts on the consolidated statements of cash flows and classified as a reduction in revenue in the consolidated statements of earnings.

(3) Recoveries of amounts provided for or written off in prior years were $2 million , $1 million and $3 million for fiscal 2016, 2015 and 2014, respectively.

(4) Write-off of uncollectible accounts or actual sales returns.

Directors, Executive Officers and Corporate Governance

The following is a list of our executive officers:

Name	Age	Position
George S. Barrett	61	Chairman and Chief Executive Officer
Michael C. Kaufmann	53	Chief Financial Officer
Donald M. Casey, Jr.	56	Chief Executive Officer, Medical segment
Jon L. Giacomin	51	Chief Executive Officer, Pharmaceutical segment
Pamela O. Kimmet	58	Chief Human Resources Officer
Craig S. Morford	57	Chief Legal and Compliance Officer
Patricia B. Morrison	57	Executive Vice President, Customer Support Services and Chief Information Officer

The business experience summaries provided below for our executive officers describe positions held during the last five years (unless otherwise indicated).

Mr. Barrett has served as Chairman and Chief Executive Officer since August 2009.

Mr. Kaufmann has served as Chief Financial Officer since November 2014. From August 2009 until November 2014, he served as Chief Executive Officer, Pharmaceutical segment.

Mr. Casey has served as Chief Executive Officer, Medical segment, since April 2012. Before joining us, he served as Chief Executive Officer of the Gary and Mary West Wireless Health Institute, a non-profit research organization focused on lowering the cost of healthcare through novel technology solutions, from March 2010 to March 2012.

Mr. Giacomin has served as Chief Executive Officer, Pharmaceutical segment since November 2014. From January 2011 until November 2014, he served as President, U.S. Pharmaceutical Distribution.

Ms. Kimmet has served as Chief Human Resources Officer since June 2016. Prior to joining us, Ms. Kimmet served as Senior Vice President, Human Resources at Coca-Cola Enterprises, Inc. from October 2010 to June 2016.

Mr. Morford has served as Chief Legal and Compliance Officer since May 2009.

Ms. Morrison has served as Executive Vice President, Customer Support Services and Chief Information Officer since June 2011, and prior to that was Executive Vice President and Chief Information Officer from August 2009 until June 2011.

We have adopted *Standards of Business Conduct* that apply to all of our directors, officers and employees. The *Standards of Business Conduct* outline our corporate values and standards of integrity and behavior and are designed to protect and promote our reputation. The full text of the *Standards of Business Conduct* is posted on our website at www.cardinalhealth.com under "About Us — Corporate Citizenship — Ethics and Governance — Ethics and Compliance."

Any waiver of the *Standards of Business Conduct* for directors or executive officers must be approved by the Audit Committee. As required under SEC and New York Stock Exchange rules, we will disclose future amendments to our *Standards of Business Conduct* and waivers from the *Standards of Business Conduct* for our principal executive officer, principal financial officer, and principal accounting officer, or persons performing similar functions, and our other executive officers and directors on our website within four business days following the date of the amendment or waiver.

The other information called for by Item 10 of Form 10-K is incorporated by reference to our Definitive Proxy Statement (which will be filed with the SEC pursuant to Regulation 14A under the Exchange Act) relating to our 2016 Annual Meeting of Shareholders (our "2016 Proxy Statement") under the captions "Proposal 1—Election of Directors," "Section 16(a) Beneficial Ownership Reporting Compliance" and "Corporate Governance."

Exhibits, Financial Statement Schedules

(a)(1) The following financial statements are included in the "Financial Statements" section of this report:

(a)(2) The following Supplemental Schedule is included in this report:

All other schedules not listed above have been omitted as not applicable or because the required information is included in the Consolidated Financial Statements or in the Notes thereto.

Exhibit Number	Exhibit Description
2.1	Final Binding Offer dated March 1, 2015 by and between Cardinal Health, Inc. and Ethicon, Inc. (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on March 2, 2015, File No. 1-11373)
2.2	Stock and Asset Purchase Agreement, dated March 1, 2015 between Ethicon, Inc. and Cardinal Health, Inc. (incorporated by reference to Exhibit 2.1 to Cardinal Health's Current Report on Form 8-K filed on May 28, 2015, File No. 1-11373)
2.3	Amendment No. 1, dated as of October 2, 2015, to the Stock and Asset Purchase Agreement, dated as of March 1, 2015, by and between Ethicon, Inc. and Cardinal Health, Inc. (incorporated by reference to Exhibit 2.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2015, File No. 1-11373)
2.4	Letter Agreement between Ethicon, Inc. and Cardinal Health, Inc., dated May 29, 2015 relating to mechanics of agreeing to purchase price allocation (incorporated by reference to Exhibit 2.3 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2015, File No. 1-11373)
3.1	Amended and Restated Articles of Incorporation of Cardinal Health, Inc., as amended (incorporated by reference to Exhibit 3.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, File No. 1-11373)
3.2	Cardinal Health, Inc. Restated Code of Regulations (incorporated by reference to Exhibit 3.2 to Cardinal Health's Current Report on Form 8-K filed on June 30, 2016, File No. 1-11373)
4.1	Specimen Certificate for Common Shares of Cardinal Health, Inc. (incorporated by reference to Exhibit 4.01 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2001, File No. 1-11373)
4.2.1	Indenture, dated as of April 18, 1997, between Cardinal Health, Inc. and Bank One, Columbus, NA, Trustee (incorporated by reference to Exhibit 1 to Cardinal Health's Current Report on Form 8-K filed on April 21, 1997, File No. 1-11373)
4.2.2	Supplemental Indenture, dated October 3, 2006, between Cardinal Health, Inc. and The Bank of New York Trust Company, N.A., as trustee (successor to J.P. Morgan Trust Company, National Association, successor to Bank One, N.A., formerly known as Bank One, Columbus, N.A.) (incorporated by reference to Exhibit 4.3 to Cardinal Health's Current Report on Form 8-K filed on October 4, 2006, File No. 1-11373)
4.2.3	Second Supplemental Indenture, dated June 8, 2007, between Cardinal Health, Inc. and The Bank of New York Trust Company, N.A., (successor to J.P. Morgan Trust Company, National Association, successor to Bank One, N.A., formerly known as Bank One, Columbus, N.A.), as trustee (incorporated by reference to Exhibit 4.01 to Cardinal Health's Current Report on Form 8-K filed on June 8, 2007, File No. 1-11373)
4.3.1	Indenture, dated as of June 2, 2008, between Cardinal Health, Inc. and The Bank of New York Trust Company, N.A. (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on June 2, 2008, File No. 1-11373)
4.3.2	4.625% Notes due 2020 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on December 14, 2010, File No. 1-11373)
4.3.3	1.900% Notes due 2017 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on May 21, 2012, File No. 1-11373)
4.3.4	3.200% Notes due 2022 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on May 21, 2012, File No. 1-11373)
4.3.5	1.700% Notes due 2018 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on February 22, 2013, File No. 1-11373)
4.3.6	3.200% Notes due 2023 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on February 22, 2013, File No. 1-11373)
4.3.7	4.600% Notes due 2043 (incorporated by reference to Exhibit 4.3 to Cardinal Health's Current Report on Form 8-K filed on February 22, 2013, File No. 1-11373)
4.3.8	2.400% Notes due 2019 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on November 19, 2014, File No. 1-11373)

Exhibits

4.3.9	3.500% Notes due 2024 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on November 19, 2014, File No. 1-11373)
4.3.10	4.500% Notes due 2044 (incorporated by reference to Exhibit 4.3 to Cardinal Health's Current Report on Form 8-K filed on November 19, 2014, File No. 1-11373)
4.3.11	1.950% Notes due 2018 (incorporated by reference to Exhibit 4.1 to Cardinal Health's Current Report on Form 8-K filed on June 23, 2015, File No. 1-11373)
4.3.12	3.750% Notes due 2025 (incorporated by reference to Exhibit 4.2 to Cardinal Health's Current Report on Form 8-K filed on June 23, 2015, File No. 1-11373)
4.3.13	4.900% Notes due 2045 (incorporated by reference to Exhibit 4.3 to Cardinal Health's Current Report on Form 8-K filed on June 23, 2015, File No. 1-11373)
4.4	Agreement to furnish to the Securities and Exchange Commission upon request a copy of instruments defining the rights of holders of certain long-term debt of Cardinal Health, Inc. and consolidated subsidiaries (incorporated by reference to Exhibit 4.07 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2005, File No. 1-11373)
10.1.1	Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K/A filed on November 4, 2011, File No. 1-11373)*
10.1.2	First Amendment to Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.2 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2014)*
10.1.3	Form of Nonqualified Stock Option Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (grant made to executive officer in April 2012) (incorporated by reference to Exhibit 10.2 to Cardinal Health's Current Report on Form 8-K/A filed on November 4, 2011, File No. 1-11373)*
10.1.4	Form of Nonqualified Stock Option Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (grants made to executive officers in August 2012) (incorporated by reference to Exhibit 10.1.3 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2012, File No. 1-11373)*
10.1.5	Form of Nonqualified Stock Option Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (grants made to executive officers in August 2013 and thereafter) (incorporated by reference to Exhibit 10.1.4 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2013, File No. 1-11373)*
10.1.6	Form of Restricted Share Units Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (grants made to executive officers in August 2013) (incorporated by reference to Exhibit 10.1.7 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2013, File No. 1-11373)*
10.1.7	Form of Restricted Share Units Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (grants made to executive officers in August 2014 and thereafter) (incorporated by reference to Exhibit 10.1.8 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2014)*
10.1.8	Form of Performance Share Units Agreement under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.4 to Cardinal Health's Current Report on Form 8-K/A filed on November 4, 2011, File No. 1-11373)*
10.1.9	Form of Amendment to Stock Option and Restricted Share Units Agreements under the Cardinal Health, Inc. 2011 Long-Term Incentive Plan, the Cardinal Health, Inc. 2005 Long-Term Incentive Plan, the Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan and the Cardinal Health, Inc. Amended and Restated Outside Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.1.9 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2013, File No. 1-11373)*
10.2.1	Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, File No. 1-11373)*
10.2.2	First Amendment to Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, File No. 1-11373)*
10.2.3	Second Amendment to Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1.2 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, File No. 1-11373)*
10.2.4	Third Amendment to Cardinal Health, Inc. 2005 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2.4 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2014)*
10.2.5	Form of Nonqualified Stock Option Agreement under the Cardinal Health, Inc. 2005 Long-Term Incentive Plan (grants made to executive officers in September 2009) (incorporated by reference to Exhibit 10.1.3 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, File No. 1-11373)*
10.2.6	Form of Nonqualified Stock Option Agreement under the Cardinal Health, Inc. 2005 Long-Term Incentive Plan (grants made to executive officers in August 2010 and August 2011) (incorporated by reference to Exhibit 10.1.11 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2010, File No. 1-11373)*
10.3.1	Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.4 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2007, File No. 1-11373)*
10.3.2	First Amendment to Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.2.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2009, File No. 1-11373)*
10.3.3	Second Amendment to the Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (incorporated by reference to Exhibit 10.5 to Cardinal Health's Quarterly Report on Form 10-Q for the Quarter ended December 31, 2011, File No. 1-11373)*
10.3.4	Form of Directors' Restricted Share Units Agreement under the Cardinal Health, Inc. 2007 Nonemployee Directors Equity Incentive Plan (grants made in November 2013 and thereafter) (incorporated by reference to Exhibit 10.5.7 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2013, File No. 1-11373)*
10.4.1	Cardinal Health Deferred Compensation Plan, amended and restated effective January 1, 2009 (incorporated by reference to Exhibit 10.6.5 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2008, File No. 1-11373)*
10.4.2	First Amendment to Cardinal Health Deferred Compensation Plan (incorporated by reference to Exhibit 10.4 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2008, File No. 1-11373)*
10.4.3	Second Amendment to Cardinal Health Deferred Compensation Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended March 31, 2010, File No. 1-11373)*
10.4.4	Third Amendment to Cardinal Health Deferred Compensation Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2010, File No. 1-11373)*

Exhibits

10.4.5	Fourth Amendment to the Cardinal Health Deferred Compensation Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended March 31, 2011, File No. 1-11373)*
10.4.6	Fifth Amendment to the Cardinal Health Deferred Compensation Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, File No. 1-11373)*
10.4.7	Cardinal Health Deferred Compensation Plan, as amended and restated effective January 1, 2016 (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2015, File No. 1-11373)*
10.5	Cardinal Health, Inc. Management Incentive Plan (incorporated by reference to Exhibit 10.1 to Cardinal Health's Periodic Report on Form 8-K filed on November 10, 2014, File No. 1-11373)*
10.6	Cardinal Health, Inc. Policy Regarding Shareholder Approval of Severance Agreements (incorporated by reference to Exhibit 10.09 to Cardinal Health's Current Report on Form 8-K filed on August 7, 2006, File No. 1-11373)*
10.7.1	Employment Agreement, dated September 4, 2012, between Cardinal Health, Inc. and George S. Barrett (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on September 6, 2012, File No. 1-11373)*
10.7.2	Amendment, dated August 5, 2015, to Employment Agreement, dated September 4, 2012, between Cardinal Health, Inc. and George S. Barrett (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on August 6, 2015, File No. 1-11373)*
10.7.3	Amended and Restated Aircraft Time Sharing Agreement, effective February 5, 2014, between Cardinal Health, Inc. and George S. Barrett (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended March 31, 2014, File No. 1-11373)*
10.7.4	Aircraft Time Sharing Agreement, effective August 5, 2015, between Cardinal Health, Inc. and George S. Barrett (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on August 6, 2015, File No. 1-11373)*
10.8	Confidentiality and Business Protection Agreement, effective as of February 15, 2010, between Cardinal Health, Inc. and Michael C. Kaufmann (incorporated by reference to Exhibit 10.15 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2010, File No. 1-11373)*
10.9	Confidentiality and Business Protection Agreement, effective as of April 9, 2012, between Cardinal Health, Inc. and Donald M. Casey Jr. (incorporated by reference to Exhibit 10.14.1 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2012, File No. 1-11373)*
10.10	Confidentiality and Business Protection Agreement, effective as of September 9, 2014, between Cardinal Health, Inc. and Jon L. Giacomin (incorporated by reference to Exhibit 10.1 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014, File No. 1-11373)*
10.11.1	Form of Indemnification Agreement between Cardinal Health, Inc. and certain individual directors (incorporated by reference to Exhibit 10.38 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2004, File No. 1-11373)
10.11.2	Form of Indemnification Agreement between Cardinal Health, Inc. and certain individual executive officers (incorporated by reference to Exhibit 10.39 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2004, File No. 1-11373)
10.12.1	Issuing and Paying Agency Agreement, dated August 9, 2006, between Cardinal Health, Inc. and The Bank of New York (incorporated by reference to Exhibit 10.01 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.12.2	First Amendment to Issuing and Paying Agency Agreement, dated February 28, 2007, between Cardinal Health, Inc. and The Bank of New York (incorporated by reference to Exhibit 10.01 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.12.3	Commercial Paper Dealer Agreement, dated August 9, 2006, between Cardinal Health, Inc. and J.P. Morgan Securities Inc. (incorporated by reference to Exhibit 10.02 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.12.4	First Amendment to Commercial Paper Dealer Agreement, dated February 28, 2007, between Cardinal Health, Inc. and J.P. Morgan Securities Inc. (incorporated by reference to Exhibit 10.02 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.12.5	Second Amendment to Commercial Paper Dealer Agreement, effective as of December 31, 2012, between Cardinal Health, Inc. and J.P. Morgan Securities LLC (formerly known as J.P. Morgan Securities Inc.) (incorporated by reference to Exhibit 10.4 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.12.6	Commercial Paper Dealer Agreement, dated August 9, 2006, between Cardinal Health, Inc. and Banc of America Securities LLC (incorporated by reference to Exhibit 10.03 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.12.7	First Amendment to Commercial Paper Dealer Agreement, dated February 28, 2007, between Cardinal Health, Inc. and Banc of America Securities LLC (incorporated by reference to Exhibit 10.03 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.12.8	Second Amendment to Commercial Paper Dealer Agreement, effective as of December 31, 2012, between Cardinal Health, Inc. and Merrill Lynch, Pierce, Fenner & Smith Incorporated, f/k/a Banc of America Securities LLC (incorporated by reference to Exhibit 10.5 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.12.9	Commercial Paper Dealer Agreement, dated August 9, 2006, between Cardinal Health, Inc. and Wachovia Capital Markets, LLC (incorporated by reference to Exhibit 10.04 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.12.10	First Amendment to Commercial Paper Dealer Agreement, dated February 28, 2007, between Cardinal Health, Inc. and Wachovia Capital Markets, LLC (incorporated by reference to Exhibit 10.04 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.12.11	Second Amendment to Commercial Paper Dealer Agreement, effective as of December 31, 2012, between Cardinal Health, Inc. and Wells Fargo Securities, LLC, as successor in interest to Wachovia Capital Markets, LLC (incorporated by reference to Exhibit 10.6 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.12.12	Commercial Paper Dealer Agreement, dated August 9, 2006, between Cardinal Health, Inc. and Goldman, Sachs & Co. (incorporated by reference to Exhibit 10.05 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2006, File No. 1-11373)
10.12.13	First Amendment to Commercial Paper Dealer Agreement, dated February 28, 2007, between Cardinal Health, Inc. and Goldman, Sachs & Co. (incorporated by reference to Exhibit 10.05 to Cardinal Health's Current Report on Form 8-K filed on March 6, 2007, File No. 1-11373)
10.12.14	Second Amendment to Commercial Paper Dealer Agreement, effective as of December 31, 2012, between Cardinal Health, Inc. and Goldman, Sachs & Co. (incorporated by reference to Exhibit 10.7 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)
10.12.15	Form of Commercial Paper Dealer Agreement between Cardinal Health, Inc. and SunTrust Robinson Humphrey, Inc. (incorporated by reference to Exhibit 10.2 to Cardinal Health's Current Report on Form 8-K filed on April 21, 2009, File No. 1-11373)
10.12.16	Form of First Amendment to Commercial Paper Dealer Agreement between Cardinal Health, Inc. and SunTrust Robinson Humphrey, Inc. (incorporated by reference to Exhibit 10.8 to Cardinal Health's Quarterly Report on Form 10-Q for the quarter ended December 31, 2012, File No. 1-11373)

Exhibits

10.13.1	Five-Year Credit Agreement, dated as of May 12, 2011, among the Company, certain lenders, JPMorgan Chase Bank, N.A. as Administrative Agent, Bank of America, N.A. and Morgan Stanley Senior Funding, Inc. as Syndication Agents, Barclays Bank PLC and Deutsche Bank Securities Inc. as Documentation Agents, and J.P. Morgan Securities, LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Morgan Stanley Senior Funding, Inc. as Joint Lead Arrangers and Book Managers (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on May 13, 2011, File No. 1-11373)
10.13.2	Amendment No. 1 to Five-Year Credit Agreement (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on June 5, 2013, File No. 1-11373)
10.13.3	Amended and Restated Five-Year Credit Agreement, dated as of June 16, 2016, among Cardinal Health, Inc., JPMorgan Chase Bank, N.A. as Administrative Agent, Joint Lead Arranger and Joint Book Manager, Bank of America, N.A. as Syndication Agent, The Bank of Tokyo-Mitsubishi UFJ, Ltd., as Syndication Agent, Joint Lead Arranger and Joint Book Manager, Barclays Bank PLC, Deutsche Bank Securities Inc., Goldman Sachs Bank USA, HSBC Bank USA, National Association, Morgan Stanley Senior Funding, Inc. and Wells Fargo Bank, National Association, as Documentation Agents, and Merrill Lynch, Pierce, Fenner & Smith Incorporated, as Joint Lead Arranger and Joint Book Manager (incorporated by reference to Exhibit 10.1 to Cardinal Health's Current Report on Form 8-K filed on June 21, 2016, File No. 1-11373)
10.14.1	Tax Matters Agreement, dated as of August 31, 2009, by and between Cardinal Health, Inc. and CareFusion Corporation (incorporated by reference to Exhibit 10.3 to Cardinal Health's Current Report on Form 8-K filed on September 4, 2009, File No. 1-11373)
10.14.2	First Amendment to Tax Matters Agreement, dated as of May 28, 2012, by and between Cardinal Health, Inc. and CareFusion Corporation (incorporated by reference to Exhibit 10.20.2 to Cardinal Health's Annual Report on Form 10-K for the fiscal year ended June 30, 2012, File No. 1-11373)
12.1	Computation of Ratio of Earnings to Fixed Charges
21.1	List of Subsidiaries of Cardinal Health, Inc.
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
99.1	Statement Regarding Forward-Looking Information
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Management contract or compensatory plan or arrangement.

Form 10-K Cross Reference Index

N/A Not applicable

(a) The information called for by Item 11 of Form 10-K is incorporated by reference to our 2016 Proxy Statement under the captions “Compensation Discussion and Analysis,” “Executive Compensation” and “Director Compensation.”

(b) The information called for by Item 12 of Form 10-K is incorporated by reference to our 2016 Proxy Statement under the captions “Share Ownership Information” and “Equity Compensation Plan Information.”

(c) The information called for by Item 13 of Form 10-K is incorporated by reference to our 2016 Proxy Statement under the caption "Corporate Governance."

(d) The information called for by Item 14 of Form 10-K is incorporated by reference to our 2016 Proxy Statement under the caption “Audit Committee Report and Audit Matters.”

Additional Information

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized on August 12, 2016 .

Cardinal Health, Inc.

By: /s/ GEORGE S. BARRETT

George S. Barrett

Chairman and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed below by the following persons on behalf of the registrant and in the capacities indicated on August 12, 2016 .

Name	Title
/s/ GEORGE S. BARRETT **George S. Barrett**	Chairman and Chief Executive Officer and Director (principal executive officer)
/s/ MICHAEL C. KAUFMANN **Michael C. Kaufmann**	Chief Financial Officer (principal financial officer)
/s/ STUART G. LAWS **Stuart G. Laws**	Senior Vice President and Chief Accounting Officer (principal accounting officer)
/s/ DAVID J. ANDERSON **David J. Anderson**	Director
/s/ COLLEEN F. ARNOLD **Colleen F. Arnold**	Director
/s/ CARRIE S. COX **Carrie S. Cox**	Director
/s/ CALVIN DARDEN **Calvin Darden**	Director
/s/ BRUCE L. DOWNEY **Bruce L. Downey**	Director
/s/ PATRICIA A. HEMINGWAY HALL **Patricia A. Hemingway Hall**	Director
/s/ CLAYTON M. JONES **Clayton M. Jones**	Director
/s/ GREGORY B. KENNY **Gregory B. Kenny**	Director
/s/ NANCY KILLEFER **Nancy Killefer**	Director
/s/ DAVID P. KING **David P. King**	Director

Corporate and investor information

Corporate offices
Cardinal Health
7000 Cardinal Place
Dublin, Ohio 43017
614.757.5000
www.cardinalhealth.com
Twitter: @CardinalHealth

Common shares
Cardinal Health common shares are listed on the New York Stock Exchange under the ticker symbol "CAH" and are a component of the Standard & Poor's 500 Index.

Annual meeting
The 2016 Annual Meeting of Shareholders will be held at 8 a.m. local time on November 3, 2016, at Cardinal Health headquarters in Dublin, Ohio. Shareholders are cordially invited to attend.

Auditors
Ernst & Young LLP

Transfer agent and registrar
Shareholders with inquiries regarding address corrections, dividend payments, lost certificates or changes in registered ownership should contact the Cardinal Health stock transfer agent:

Computershare Trust Company, N.A.
211 Quality Circle
Suite 210
College Station, TX 77845
877.498.8861
www.computershare.com/investor

Financial information
Comprehensive financial and other information about Cardinal Health can be obtained by visiting the Investors page at ir.cardinalhealth.com.

Available information includes historical stock information, research analyst coverage, past and present financial statements, recent company presentations, SEC filings, corporate governance guidelines and board committee charters. This information — including the Cardinal Health Forms 10-K, 10-Q, 8-K and other published corporate literature — is also available without charge upon written request to the Investor Relations department at the corporate office, or by calling Investor Relations at 614.757.4757.

Cardinal Health uses its website as a channel of distribution for material company information. Important information, including news releases, financial information, earnings and analyst presentations, and information about upcoming presentations and events is routinely posted and accessible on the Investors page at ir.cardinalhealth.com. In addition, the Cardinal Health website allows investors and other interested persons to sign up to automatically receive email alerts when the company posts news releases, SEC filings and certain other information on its website.

For non-investor related inquiries, please call the company's main telephone number at 614.757.5000.

Fiscal 2016 cash dividend declarations

Fiscal quarter	Record date	Payment date	Per common share amount
1st	October 1, 2015	October 15, 2015	$0.3870
2nd	January 2, 2016	January 15, 2016	$0.3870
3rd	April 1, 2016	April 15, 2016	$0.3870
4th	July 1, 2016	July 15, 2016	$0.4489

Exhibit 12.1

Computation of Ratio of Earnings to Fixed Charges

(in millions, except ratios)	2012	2013	2014	2015	2016
Earnings from continuing operations before income taxes	$ 1,698.1	$ 888.3	$ 1,798.3	$ 1,967.3	**$ 2,275.6**
Plus fixed charges:					
Interest expense	92.3	119.2	129.4	137.0	**178.2**
Capitalized interest	6.0	1.7	1.2	1.8	**5.6**
Amortization of debt offering costs	2.8	3.5	3.6	7.6	**5.6**
Interest portion of rent expense	7.8	8.3	9.8	9.6	**11.5**
Fixed charges	108.9	132.7	144.0	156.0	**200.9**
Plus: amortization of capitalized interest	3.2	3.4	2.9	2.4	**2.5**
Less: capitalized interest	(6.0)	(1.7)	(1.2)	(1.8)	**(5.6)**
Earnings	$ 1,804.2	$ 1,022.7	$ 1,944.0	$ 2,123.9	**$ 2,473.4**
Ratio of earnings to fixed charges (1)	16.6	7.7	13.5	13.6	**12.3**

(1) The ratio of earnings to fixed charges is computed by dividing fixed charges into earnings from continuing operations before income taxes plus fixed charges and capitalized interest. Fixed charges include interest expense, amortization of debt offering costs and the portion of rent expense that is deemed to be representative of the interest factor. Interest expense recorded on tax exposures has been recorded in income tax expense and has therefore been excluded from the calculation.

Exhibit 21.1

Subsidiaries of the Registrant

Listed below are majority-owned subsidiaries of Cardinal Health, Inc. as of June 30, 2016. Subsidiaries excluded from the list below would not, considered in the aggregate as a single subsidiary, constitute a "significant subsidiary" of Cardinal Health, Inc. as that term is defined in Rule 1-02(w) of SEC Regulation S-X.

Subsidiary Name	State/Jurisdiction of Incorporation
Access Closure, Inc.	California
Allegiance Corporation	Delaware
AssuraMed, Inc.	Delaware
Cardinal Health 2, LLC	Nevada
Cardinal Health 3, LLC	Delaware
Cardinal Health 5, LLC	Delaware
Cardinal Health 6, Inc.	Nevada
Cardinal Health 7, LLC	Delaware
Cardinal Health 100, Inc.	Indiana
Cardinal Health 104 LP	Ohio
Cardinal Health 105, Inc.	Ohio
Cardinal Health 107, LLC	Ohio
Cardinal Health 108, LLC	Delaware
Cardinal Health 110, LLC	Delaware
Cardinal Health 112, LLC	Delaware
Cardinal Health 114, Inc.	Delaware
Cardinal Health 115, LLC	Ohio
Cardinal Health 116, LLC	Delaware
Cardinal Health 118, LLC	Delaware
Cardinal Health 119, LLC	Delaware
Cardinal Health 121, LLC	Delaware
Cardinal Health 122, LLC	Delaware
Cardinal Health 123, LLC	Delaware
Cardinal Health 124, LLC	Delaware
Cardinal Health 126, LLC	Delaware
Cardinal Health 127, Inc.	Kansas
Cardinal Health 200, LLC	Delaware
Cardinal Health 201, Inc.	Delaware
Cardinal Health 222 (Thailand) Ltd.	Thailand
Cardinal Health 247, Inc.	Colorado
Cardinal Health 249, LLC	Delaware
Cardinal Health 414, LLC	Delaware
Cardinal Health Australia 503 Pty. Ltd.	Australia
Cardinal Health Austria 504 GmbH	Austria
Cardinal Health Belgium 505 BVBA	Belgium
Cardinal Health Canada Inc.	Canada
Cardinal Health D.R. 203 II Ltd.	Bermuda
Cardinal Health Foundation	Ohio
Cardinal Health France 506 SAS	France
Cardinal Health Funding, LLC	Nevada
Cardinal Health Germany 507 GmbH	Germany
Cardinal Health (H.K.) Co. Ltd.	Hong Kong
Cardinal Health IPS, LLC	Delaware
Cardinal Health Ireland 419 Limited	Ireland
Cardinal Health Ireland 508 Limited	Ireland
Cardinal Health Italy 509 Srl	Italy
Cardinal Health Japan G.K.	Japan
Cardinal Health Korea Limited	Korea
Cardinal Health (L) Co., Ltd.	Malaysia
Cardinal Health Luxembourg 420 S.a.r.l.	Luxembourg
Cardinal Health Luxembourg 522 S.a.r.l.	Luxembourg
Cardinal Health Malaysia 211 Sdn. Bhd.	Malaysia
Cardinal Health Malta 212 Limited	Malta
Cardinal Health Managed Care Services, LLC	Delaware
Cardinal Health Mexico 244 S. de R.L. de C.V.	Mexico
Cardinal Health Mexico 514 S. de R.L. de C.V.	Mexico
Cardinal Health Netherlands 502 B.V.	Netherlands
Cardinal Health Pharmaceutical Contracting, LLC	Delaware
Cardinal Health Pharmacy Services, LLC	Delaware
Cardinal Health Portugal 513 Unipessoal Lda.	Portugal
Cardinal Health P.R. 120, Inc.	Puerto Rico
Cardinal Health P.R. 218, Inc.	Puerto Rico
Cardinal Health Singapore 225 Pte. Ltd.	Singapore
Cardinal Health Spain 511 S.L.	Spain
Cardinal Health Specialty Pharmacy, LLC	Delaware
Cardinal Health Switzerland 515 GmbH	Switzerland
Cardinal Health Systems, Inc.	Ohio
Cardinal Health Technologies, LLC	Nevada
Cardinal Health Technologies Switzerland GmbH	Switzerland
Cardinal Health UK 432 Limited	United Kingdom
Cirpro de Delicias S.A. de C.V.	Mexico
Convertors de Mexico S.A. de C.V.	Mexico
Cordis Cashel Company Unlimited	Ireland
Cordis Corporation	Florida
Cordis (Shanhai) Medical Devices Co., Ltd.	China
Cornerstone Partners G.P.O., L.P.	Tennessee
Curaspan Health Group, Inc.	Delaware
Dutch American Manufacturers II (D.A.M. II) B.V.	Netherlands
EPIC Insurance Company	Vermont
Griffin Capital, LLC	Nevada
Innovative Therapies, Inc.	Delaware
Instant Diagnostic Systems, Inc.	Alabama
Kinray, LLC	New York
Leader Drugstores, Inc.	Delaware
Marin Apothecaries	California
Medicine Shoppe International, Inc.	Delaware
Metro Medical Supply, LLC	Tennessee
NaviHealth, Inc.	Delaware
One Cloverleaf, LLC	Delaware
Pinnacle Intellectual Property Services, Inc.	Nevada
Pinnacle Intellectual Property Services-International, Inc.	Nevada
Post-Acute Care Center for Research, LLC	Delaware

Subsidiary Name	State/Jurisdiction of Incorporation
Quiroproductos de Cuauhtmoc S. de R.L. de C.V.	Mexico
R Cubed, Inc.	Delaware
RainTree GPO, LLC	Delaware
RGH Enterprises, Inc.	Ohio
RightCare Solutions, Inc.	Delaware
Rxealtime, Inc.	Nevada
Sonexus Health, LLC	Texas
The Harvard Drug Group	Michigan
Tradex International, Inc.	Ohio
WaveMark, Inc.	Delaware

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

(1) Registration Statement on Form S-3 No. 333-190741 of Cardinal Health, Inc.,

(2) Registration Statements on Form S-4 No. 333-62938 and No. 333-74761 of Cardinal Health, Inc., and

(3) Registration Statements on Form S-8 No. 33-42357, No. 33-64337, No. 333-72727, No. 333-90423, No. 333-91849, No. 333-38192, No. 333-38198, No. 333-56010, No. 333-129725, No. 333-144368, No. 333-149107, No. 333-155156, No. 333-163128, No. 333-164736, No. 333-177728, No. 333-183471, No. 333-206339, and No. 333-206340 of Cardinal Health, Inc.;

of our reports dated August 12, 2016 , with respect to the consolidated financial statements and schedule of Cardinal Health, Inc. and subsidiaries and the effectiveness of internal control over financial reporting of Cardinal Health, Inc. and subsidiaries, included in this Annual Report (Form 10-K) of Cardinal Health, Inc. and subsidiaries for the year ended June 30, 2016 .

/s/ Ernst & Young LLP

Columbus, Ohio
August 12, 2016

Exhibit 31.1

I, George S. Barrett, certify that:

1. I have reviewed this Form 10-K of Cardinal Health, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 12, 2016

/s/ G EORGE S. B ARRETT

George S. Barrett

Chairman and Chief Executive Officer

Exhibit 31.2

I, Michael C. Kaufmann, certify that:

1. I have reviewed this Form 10-K of Cardinal Health, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 12, 2016

/s/ MICHAEL C. KAUFMANN

Michael C. Kaufmann

Chief Financial Officer

Exhibit 32.1

Certification of the Chief Executive Officer and the Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Each of George S. Barrett, Chairman and Chief Executive Officer of Cardinal Health, Inc. (the "Company"), and Michael C. Kaufmann, Chief Financial Officer of the Company, certifies, pursuant to 18 U.S.C. Section 1350, that:

(1) the Annual Report on Form 10-K for the fiscal year ended June 30, 2016 containing the financial statements of the Company (the "Periodic Report"), which this statement accompanies, fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and

(2) the information contained in the Periodic Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: August 12, 2016

/s/ GEORGE S. BARRETT

George S. Barrett

Chairman and Chief Executive Officer

/s/ MICHAEL C. KAUFMANN

Michael C. Kaufmann

Chief Financial Officer

Exhibit 99.1

Statement Regarding Forward-Looking Information

As used in this exhibit, “we,” “our,” “us” and similar pronouns refer to Cardinal Health, Inc. and its subsidiaries, unless the context requires otherwise. Our filings with the Securities and Exchange Commission, including our Annual Report on Form 10-K for the fiscal year ended June 30, 2016 (the “2016 Form 10-K”), our quarterly reports on Form 10-Q or our current reports on Form 8-K (along with any exhibits and amendments to such reports), as well as our news releases or any other written or oral statements made by or on behalf of us, may include, directly or by incorporation by reference, forward-looking statements that reflect our current view (as of the date the forward-looking statement is first made) about future events, prospects, projections or financial performance. The matters discussed in these forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those projected, anticipated or implied in or by such statements. These risks and uncertainties include:

- competitive pressures in the markets in which we operate, including pricing pressures;
- uncertainties relating to the pricing of generic pharmaceuticals;
- uncertainties relating to the timing, frequency and profitability of generic pharmaceutical launches;
- our ability to maintain the benefits our generic pharmaceutical sourcing venture with CVS Health Corporation;
- with respect to our distribution agreements with branded pharmaceutical manufacturers, changes in the amount of service fees we receive or, in cases where part of our compensation under these agreements is branded pharmaceutical price appreciation, changes in the frequency or magnitude of such price appreciation;
- changes in the timing or frequency of the introduction of branded pharmaceuticals;
- actions of regulatory bodies and other governmental authorities, including the U.S. Drug Enforcement Administration ("DEA"), certain agencies within the U.S. Department of Health and Human Services (including the U.S. Food and Drug Administration, Centers for Medicare and Medicaid Services, the Office of Inspector General and the Office for Civil Rights), the U.S. Nuclear Regulatory Commission, the U.S. Federal Trade Commission, the U.S. Customs and Border Protection, various state boards of pharmacy, state controlled substance agencies, state health departments, state insurance departments, state Medicaid departments or comparable regulatory bodies or governmental authorities or foreign equivalents that, in each case, could delay, limit or suspend product development, manufacturing, distribution, importation or sales or result in warning letters, recalls, seizures, injunctions or monetary sanctions;
- difficulties or delays in the development, production, manufacturing, sourcing and marketing of new or existing products and services, including difficulties or delays associated with obtaining requisite regulatory consents or approvals associated with those activities;
- risks arising from possible violations of healthcare fraud and abuse laws;
- costs or claims resulting from potential errors or defects in our manufacturing of medical devices or other products or in our compounding, repackaging, information systems or pharmacy management services that may injure persons or damage property or operations, including costs from remediation efforts or recalls and related product liability claims and lawsuits, including class actions;
- risks arising from possible violations of the U.S. Foreign Corrupt Practices Act, Chinese anti-corruption laws and other similar anti-corruption laws in other jurisdictions and U.S. and foreign export control, trade embargo and customs laws;
- risks arising from our collecting, handling and maintaining patient-identifiable health information and other sensitive personal and financial information, which are subject to federal, state and foreign laws that regulate the use and disclosure of such information;
- risks arising from certain of our businesses being Medicare-certified suppliers or participating in state Medicaid programs, which businesses are subject to accreditation and quality standards and other rules and regulations, including applicable billing, payment and record-keeping requirements;
- risks arising from certain of our businesses manufacturing pharmaceutical and medical products or repackaging pharmaceuticals that are purchased through federal or state healthcare programs, which businesses are subject to federal and state laws that establish eligibility for reimbursement by such programs;
- the possibility of civil fines levied against us (in excess of the reserve we have accrued) by the U.S. Department of Justice for conduct covered by the settlement agreement that we entered into in connection with the DEA's suspension of our Lakeland, Florida distribution center's registration to distribute controlled substances;
- changes in laws or changes in the interpretation or application of laws or regulations, as well as possible failures to comply with applicable laws or regulations, including as a result of possible misinterpretations or misapplications;
- material reductions in purchases, non-renewal or early termination of contracts, or delinquencies or defaults by key customers;
- unfavorable changes to the terms of key customer or supplier relationships, or changes in customer mix;
- adverse changes in U.S. or foreign tax laws, unfavorable challenges to our tax positions and payments to settle these challenges;
- uncertainties due to government healthcare reform;
- changes in manufacturers' pricing, selling, inventory, distribution or supply policies or practices;
- changes in regulatory policies regarding pharmaceutical manufacturer product pricing practices;
- changes in hospital buying groups or hospital buying practices;

- changes in distribution or sourcing models for pharmaceutical and medical and surgical products, including an increase in direct and limited distribution;
- the risks of counterfeit products in the supply chain;
- changes to the prescription drug reimbursement formula and related reporting requirements for generic pharmaceuticals under Medicaid;
- increasing consolidation in the healthcare industry, which could give the resulting enterprises greater bargaining power and may increase pressure on prices for our products and services or result in the loss of customers;
- disruption or damage to, or failure of, our information systems, critical facilities, including our national logistics center, or distribution networks;
- risks to our business and information and controls systems in the event that the Pharmaceutical segment's planned multi-year systems replacement project or other business process improvements, infrastructure modernizations or initiatives to use a third-party service providers for key systems and processes are not effectively implemented;
- any compromise of our information systems or those of a third-party with whom we do business, including unauthorized access to or use or disclosure of sensitive information;
- the results, costs, effects or timing of any commercial disputes, government contract compliance matters, product liability claims or lawsuits, patent infringement claims, *qui tam* actions or other legal proceedings;
- whether we can obtain product liability insurance for a particular product and if so, whether such insurance is adequate to cover all future claims, settlements and judgments;
- our ability to maintain adequate intellectual property protections;
- the costs, difficulties and uncertainties related to the integration of acquired businesses, including liabilities relating to the operations or activities of such businesses prior to their acquisition, and uncertainties relating to our ability to achieve the anticipated results from acquisitions;
- risks and uncertainties relating to the acquisition of Cordis, including the ability to achieve the expected synergies and positive impact to operating results and the additional risks the Cordis acquisition subjects us to relating to regulatory matters, legal proceedings, tax laws or positions and global operations, including the effects of local economic environments and currency volatility;
- increased costs for commodities used in the Medical segment including various components, compounds, raw materials or energy such as oil-based resins, cotton, latex and other commodities;
- shortages in commodities, components, compounds, raw materials or energy used by our businesses, including supply disruptions of radioisotopes;
- the loss of, or default by, one or more key suppliers for which alternative suppliers may not be readily available;
- bankruptcy, insolvency or other credit failure of a customer or supplier that owes us a substantial amount;
- risks associated with global operations, including the effect of local economic environments, inflation, recession, currency volatility and global competition, in addition to risks associated with compliance with U.S and international laws relating to global operations;
- risks associated with volatility and disruption to the global capital and credit markets, which may adversely affect our ability to access credit, our cost of credit and the financial soundness of our customers and suppliers;
- our ability to introduce and market new products and our ability to keep pace with advances in technology;
- the costs, effects, timing or success of restructuring programs or plans;
- significant charges to earnings if goodwill or intangible assets become impaired;
- uncertainties relating to general political, business, industry, regulatory and market conditions; and
- other factors described in the “Risk Factors” section of the 2016 Form 10-K.

The words “expect,” “anticipate,” “intend,” “plan,” “believe,” “will,” “should,” “could,” “would,” “project,” “continue,” “likely,” and similar expressions generally identify “forward-looking statements,” which speak only as of the date the statements were made, and also include statements reflecting future results or guidance, statements of outlook and expense accruals. We undertake no obligation to update or revise any forward-looking statements, except to the extent required by applicable law.

This page is intentionally left blank

Appendix C: Proposal Compliance Matrix

RFP #3000011953		Proposer:		
RFP Section	**RFP Page(s)**	**Requirement**	**Proposal Section**	**Proposal Page(s)**
2.2.1	9	Table of Contents	2.2.1	i-ii
2.2.2	9-10	Cover Letter	2.2.2	1-2
Business Proposal				
2.9.1	14-15	Mandatory Qualifications	2.9.1	4-5
2.9.2	15-16	Conflict of Interests	2.9.2	7
2.9.3	16	Moral or Religious Objections	2.9.3	8
2.9.4	16	Material Subcontractors	2.9.4	9-10
2.9.5	16-17	Financial Condition	2.9.5, 2.9.5.1-1, 2.9.5.1-2	Exempt 5-3566
2.9.6	17	Required Forms and Certifications:		
2.9.6.1	17	✓ Proposal Compliance Matrix	2.9.6.1	Exempt 3567
2.9.6.2	17	✓ Certification Statement	2.9.6.2	Exempt 3569-3570
2.9.6.3	17	✓ Medicaid Ownership and Disclosure Form	2.9.6.3	Exempt 3571-3626
Technical Proposal				
2.10.1	18	Executive Summary	2.10.1	11-16
2.10.2	18	Organizational Experience:		
2.10.2.1	18	✓ Proposal Experience	2.10.2.1	17-18
2.10.2.2	18-19	✓ Staff Experience and Organizational Structure	2.10.2.1, 2.10.2.2-1, 2.10.2.2-2	19-38
2.10.2.3	19	✓ Material Subcontractors	2.10.2.3, 2.10.2.3-1	39-40, Exempt 1-1478
2.10.2.4	19	✓ Proposal Reference Contact Information	2.10.2.4	41-44
2.10.2.5	19-20	✓ NCQA Accreditation	2.10.2.5, 2.10.2.5-1	45-46, Exempt 1479-1504
2.10.3	20-21	Enrollee Value-Added Benefits	2.10.3, 2.10.3.4-1	47-62
2.10.4	21-22	Population Health	2.10.4	63-74
2.10.5	22-23	Care Management	2.10.5	75-88
2.10.6	23-24	Case Scenarios	2.10.6	89-104
2.10.7	24	Provider Network	2.10.7.1-1, 2.10.7.2-1	Exempt 1505-1508
2.10.8	25	Network Management	2.10.8	107-122
2.10.9	26-27	Provider Support	2.10.9	123-136
2.10.10	27-28	Utilization Management	2.10.10	137-154
2.10.11	28-29	Quality	2.10.11, 2.10.11.5-1, 2.10.11.6-1	155-174, Exempt 1509-1618
2.10.12	29-30	Value-Based Payment	2.10.12	175-190
2.10.13	30-31	Claims Management and Systems and Technical Requirements	2.10.13	191-200, Exempt 1-24
2.10.14	31-32	Program Integrity	2.10.14	201-210
2.10.15	32-33	Veteran and Hudson Initiatives Programs Participation	2.10.15	211-212

This page is intentionally left blank

Appendix D: Certification Statement

The undersigned hereby acknowledges she/he has read and understands all requirements and specifications of the Louisiana Medicaid Managed Care Organizations Request for Proposals (RFP), including attachments and appendices.

OFFICIAL CONTACT: The State requests that the Proposer designate one person to receive all documents and the method in which the documents are best delivered. Identify the Contact name and fill in the information below:

PROPOSER	Community Care Health Plan of Louisiana, Inc., dba Healthy Blue
VENDOR NUMBER	310066542
DATE	4/4/2019
LDR NUMBER	1356211
OFFICIAL CONTACT NAME	Aaron Lambert
EMAIL ADDRESS	aaron.lambert@healthybluela.com
FAX NUMBER	(225) 763-2179
PHONE NUMBER	(504) 836-8854
STREET ADDRESS	3850 N. Causeway Blvd. Suite 600
CITY, STATE, ZIP	Metairie, LA 70002

Proposer certifies that the above information is true and grants permission to the Department to contact the above named person or otherwise verify the information I have provided.

By its submission of this proposal and authorized signature below, Proposer certifies that:

1. The information contained in its response to this RFP is accurate.
2. Proposer complies with each of the mandatory requirements listed in the RFP and will meet or exceed the business and technical requirements specified therein.
3. Proposer accepts the procedures, evaluation criteria, mandatory contract terms and conditions, and all other administrative requirements set forth in this RFP.
4. Proposer's response is valid for at least one hundred and twenty (120) days from the date of Proposer’s signature below.
5. Proposer understands that if selected as the successful Proposer, he/she will have twenty (20) calendar days from the date of delivery of initial contract in which to complete contract negotiations, if any, and execute the final contract document. The Department has the option to waive this deadline if actions or inactions by the Department cause the delay.

6. Proposer certifies by signing and submitting a proposal for $25,000 or more, that their company, any subcontractors, or principals are not suspended or debarred by the General Services Administration (GSA) in accordance with the requirements in 2 C.F.R. §200 Subpart F. (A list of parties who have been suspended or debarred can be viewed via the internet at https://www.sam.gov.)
7. Proposer understands that, if selected as a contractor, the Louisiana Department of Revenue must determine that it is current in the filing of all applicable tax returns and reports and in payment of all taxes, interest, penalties, and fees owed to the State and collected by the LDR. Proposer shall comply with R.S. 39:1624(A)(10) by providing its seven-digit LDR account number in order for tax payment compliance status to be verified.
8. Proposer further acknowledges its understanding that issuance of a tax clearance certificate by LDR is a necessary precondition to the approval of any contract by the Office of State Procurement. The contracting agency reserves the right to withdraw its consent to any contract without penalty and proceed with alternate arrangements, should a prospective contractor fail to resolve any identified outstanding tax compliance discrepancies with the LDR within seven (7) days of such notification.
9. Proposer certifies and agrees that the following information is correct: In preparing its response, the Proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories, with the specific intent to accomplish a boycott or divestment of Israel. Proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. The State reserves the right to reject the response of the proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.

Original Signature

Aaron Lambert

Printed Name

April 4, 2019

Date

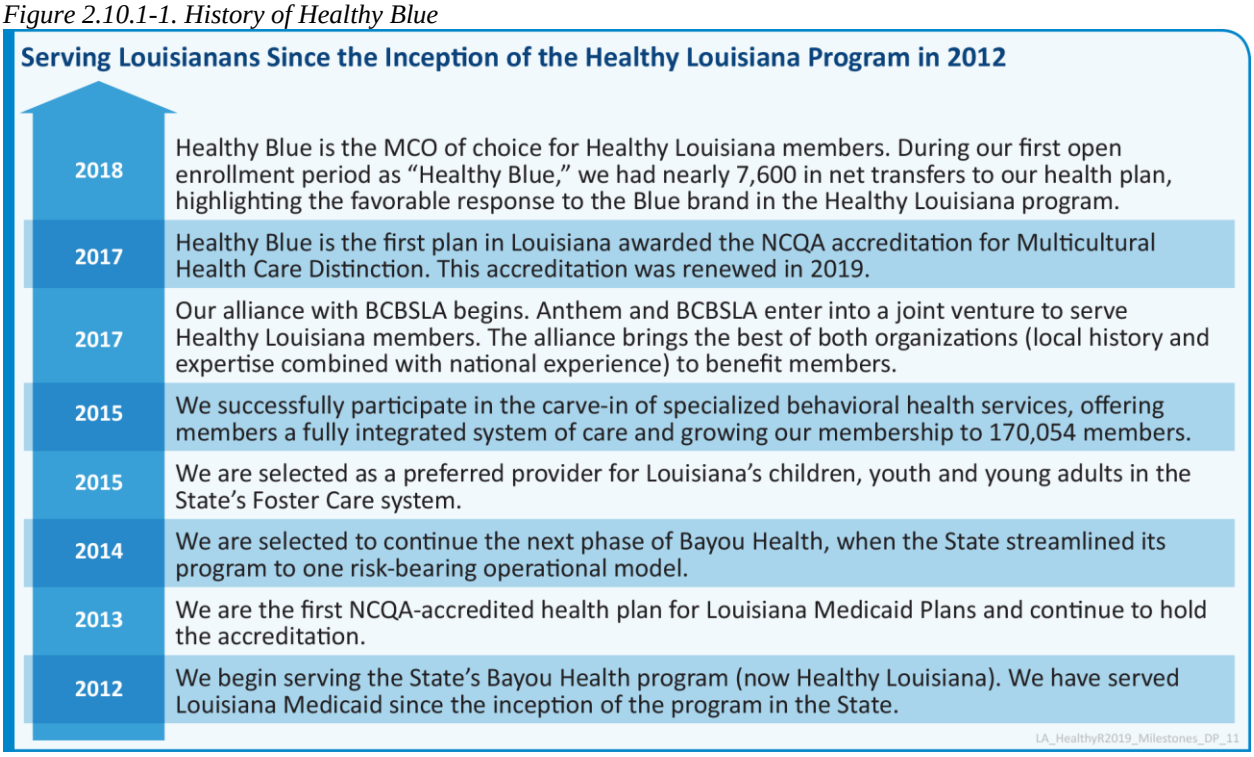
2.10.1 EXECUTIVE SUMMARY

Community Care Health Plan of Louisiana, Inc., dba Healthy Blue (Healthy Blue) is pleased to respond to the Louisiana Department of Health (LDH) and Bureau of Health Services Financing Request for Proposals for Louisiana Medicaid Managed Care Organizations. We have been a trusted partner to the State, our enrollees (members), our providers, and the communities we serve since the inception of the Healthy Louisiana program in 2012.

As seen in Figure 2.10.1-1, the Healthy Louisiana program has grown and evolved over the last seven years, our focus has remained the same: ***to be Louisiana's leader in improving health care outcomes for our members and communities***. What we do for Louisiana is personal to us. We care about the health of Louisianans and have remained steadfast in our pursuit to address the priorities, challenges, and needs of the members and communities we serve.

Our organizational mission and goals compliment and are aligned to the Institute for Health Improvement's Triple Aim (Triple Aim) framework of achieving better health, better care, and lower costs. Throughout our response, we place the Triple Aim icon near narrative that emphasizes the simultaneous pursuit of the three dimensions of the Triple Aim. At Healthy Blue, we understand that the pursuit of the Triple Aim will not be achieved through incremental modifications of the status quo, but through constant pursuit of solutions, innovations, and capabilities that truly optimize health system performance.

Figure 2.10.1-1. History of Healthy Blue



We Are Healthy Blue

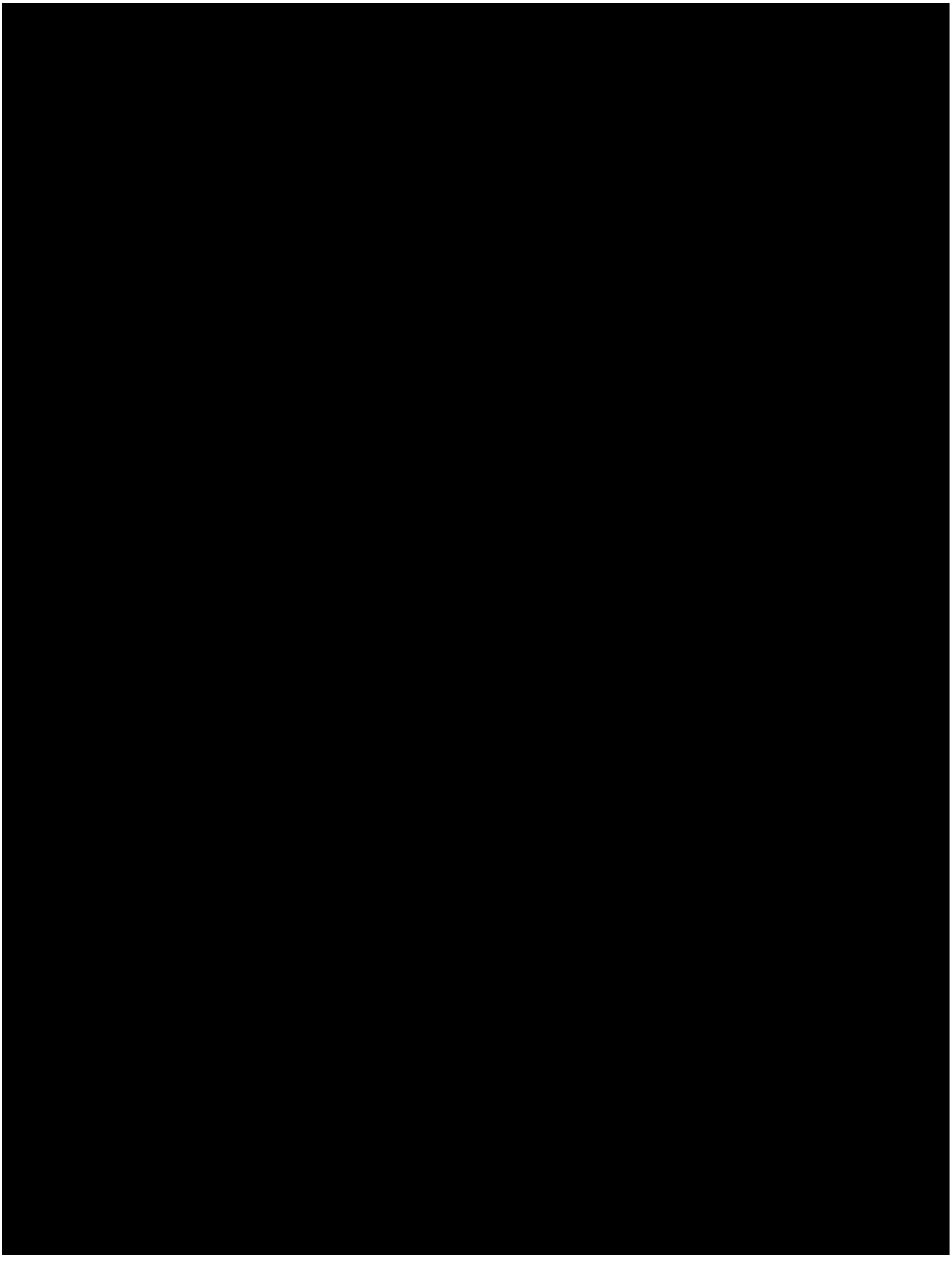
We are connected and committed to every parish in Louisiana and are proud to continue our impactful and important work to serve our communities and our members. Our organizational structure fosters innovation and local adaptability through team members who work across all of the parishes in the State, meeting one-on-one with members, providers, and stakeholders. We listen, learn, and develop solutions to meet evolving needs that improve member health, member experience, and administrative and fiscal efficiency.

Leveraging the Strength of Our Organization

Healthy Blue represents a joint venture between Anthem, Inc. (Anthem), one of the nation's leading Medicaid managed care organizations, and Blue Cross and Blue Shield of Louisiana (BCBSLA), the largest and most trusted choice for health care in the State of Louisiana. As Healthy Blue, we combine BCBSLA's stability, brand recognition, and established local presence with Anthem's best-in-class Medicaid solutions and capabilities. Healthy Blue is uniquely positioned to understand the broad spectrum of health issues and concerns facing Louisiana,

This page is intentionally left blank

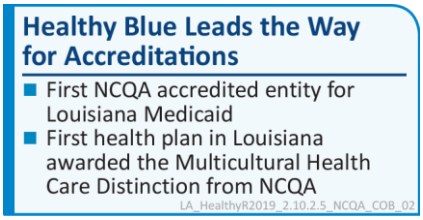
This page is intentionally left blank



2.10.2.5 NCQA Accreditation

At Healthy Blue, quality is foundational to everything we do. We continue to build on our accomplishments to provide a better health care experience for the enrollees (members) we serve. Our commitment to quality is demonstrated by our continued accreditation achievements. ***Neither Healthy Blue nor our affiliate health plans have experienced a suspension, denial, or revocation of accreditation.***

Healthy Blue Maintains "Commendable" NCQA Accreditation



Healthy Blue has been continuously accredited by NCQA since 2013 and our current certificate of accreditation is provided as Attachment 2.10.2.5-1, as well as certifications of accreditation in 20 other states where our affiliates operate. Healthy Blue currently holds a "commendable" status, as do many of our affiliates. Across Louisiana and our affiliates, ***we have a 100% success rate on accreditation applications***.

Healthy Blue was the first NCQA-accredited entity for Louisiana Medicaid, and we are proud to be the first health plan in Louisiana awarded the Multicultural Health Care Distinction from NCQA. This distinction is a symbol of quality in our organizational efforts to address the diverse needs of members across Louisiana. It recognizes our efforts to improve Culturally and Linguistically Appropriate Services (CLAS), and reflects that we meet or exceed standards in CLAS, including collecting race/ethnicity and language data, providing language assistance, being culturally responsive, upholding quality improvement guidelines of CLAS, and reducing health care disparities. In addition to Healthy Blue, 17 of our affiliates have achieved Multicultural Health Care Distinction from NCQA.

Healthy Blue's continued accreditation with NCQA underscores our ongoing commitment to quality and achieving the best outcomes for Healthy Louisiana enrollees. We constantly pursue solutions, innovations, and capabilities that maximize our performance and outcomes, and that support the Triple Aim framework and LDH's goals.

Our Healthy Blue members are served by NCQA-accredited disease management programs. Our organization's national disease management department holds NCQA Patient and Practitioner Oriented accreditation for asthma, coronary artery disease, congestive heart failure, COPD, depression, diabetes, HIV/AIDS, schizophrenia, and child/adolescent depression. Further, we recognize that NCQA has incorporated disease management into the new population health management standards that support the Triple Aim and the overall movement of the delivery system to holistic, fully integrated care. We follow these standards, which aim to encourage and reward health plans for aligning with the delivery system to achieve better population health outcomes.

Neither Healthy Blue nor our affiliate health plans have experienced a suspension, denial, or revocation of accreditation. Healthy Blue has completed one renewal cycle of both the NCQA Health Plan Accreditation and Multicultural Health Care Distinction, and our NCQA Health Plan Accreditation is scheduled for renewal in August 2019. We are fully prepared and expect to maintain or improve our accreditation status. We will continue to work diligently to sustain NCQA accreditation as part of our commitment to adhering to industry best practices so our Healthy Blue members receive the highest quality of services. Further, we will continue to collect, evaluate, and manage NCQA's rigorous health plan standards and use HEDIS® and other data measures to track and improve our performance. Figure 2.10.2.5-1 includes a list of all NCQA accreditations in the states where Healthy Blue and our affiliates operate.

Table 2.10.2.5-1. NCQA Accreditations for Healthy Blue and in States Where Our Affiliates Operate

State	Affiliate	Type of Accreditation & Status
Louisiana	***Community Care Health Plan of Louisiana, Inc., dba Healthy Blue***	Commendable, NCQA Health Plan with Distinction in Multicultural Health Care
California	Blue Cross of California Partnership Plan	NCQA Health Plan with Distinction in Multicultural Health Care
District of Columbia	Amerigroup District of Columbia	NCQA Health Plan
Florida	Simply Health Care Plans, Inc.	Commendable, NCQA Health Plan with Distinction in Multicultural Health
Georgia	AMGP Georgia Managed Care Company, Inc. (*dba Amerigroup Community Care)*	Commendable, NCQA Health Plan with Distinction in Multicultural Health Care
Indiana	Anthem Insurance Companies (dba Blue Cross and Blue Shield in Indiana)	Commendable, NCQA Health Plan with Distinction in Multicultural Health Care
Iowa	Amerigroup Iowa, Inc.	NCQA Health Plan with Distinction in Multicultural Health Care
Kentucky	Anthem Kentucky Managed Care Plain, Inc.	NCQA Health Plan with Distinction in Multicultural Health Care
Maryland	Amerigroup Maryland, Inc.	Commendable, NCQA Health Plan with Distinction in Multicultural Health Care
Minnesota*	Blue Cross Blue Shield of Minnesota dba Blue Plus	Commendable, NCQA Health Plan
Nevada	Community Care Health Plan of Nevada, Inc. dba Anthem Blue Cross Blue Shield Healthcare Solutions	NCQA Health Plan with Distinction in Multicultural Health Care
New Jersey	Amerigroup New Jersey, Inc.	Commendable, NCQA Health Plan with Distinction in Multicultural Health Care, LTSS Distinction
New York	Health Plus HP, LLC	Commendable, NCQA Health Plan with Distinction in Multicultural Health Care
South Carolina*	Blue Choice Health Plan of South Carolina	NCQA Health Plan
Tennessee	Amerigroup Tennessee, Inc.	Commendable, NCQA Health Plan with Distinction in Multicultural Health Care, LTSS Distinction
Texas	Amerigroup Texas, Inc.	Commendable, NCQA Health Plan with Distinction in Multicultural Health Care
Texas	Amerigroup Insurance Company	Commendable, NCQA Health Plan with Distinction in Multicultural Health Care
Virginia	HealthKeepers, Inc.	NCQA Health Plan with Distinction in Multicultural Health Care
Washington	Amerigroup Washington, Inc.	NCQA Health Plan with Distinction in Multicultural Health Care
Wisconsin	Compcare Health Services Insurance Corporation dba Anthem Blue Cross and Blue Shield in Wisconsin	Commendable, NCQA Health Plan with Distinction in Multicultural Health Care
West Virginia	UniCare Health Plan of West Virginia	NCQA Health Plan with Distinction in Multicultural Health Care

**Our affiliate serves as subcontractor to MCOs in Minnesota and South Carolina, where those MCOs hold the accreditation and our affiliate performs delegated quality management functions.*

Healthy Blue Does Not Subcontract Behavioral Health Services

Healthy Blue does not use a material subcontractor to administer behavioral health (BH) services, which allows us to offer a truly integrated care management model that combines physical and BH care, allowing for better consistency and quality management and promoting a seamless member experience. Our ultimate parent organization, Anthem, Inc. holds Managed Behavioral Health Organization (MBHO) Accreditation, and scored 100% on associated standards. Organizations earn their NCQA MBHO accreditation by proving proficiency across standards that include Quality Management and Improvement, Care Coordination, Utilization Management, Credentialing, and Members' Rights and Responsibilities. We leverage this NCQA-accredited BH approach as part of providing services to Healthy Blue members in a seamlessly integrated manner through our local Care Management team.

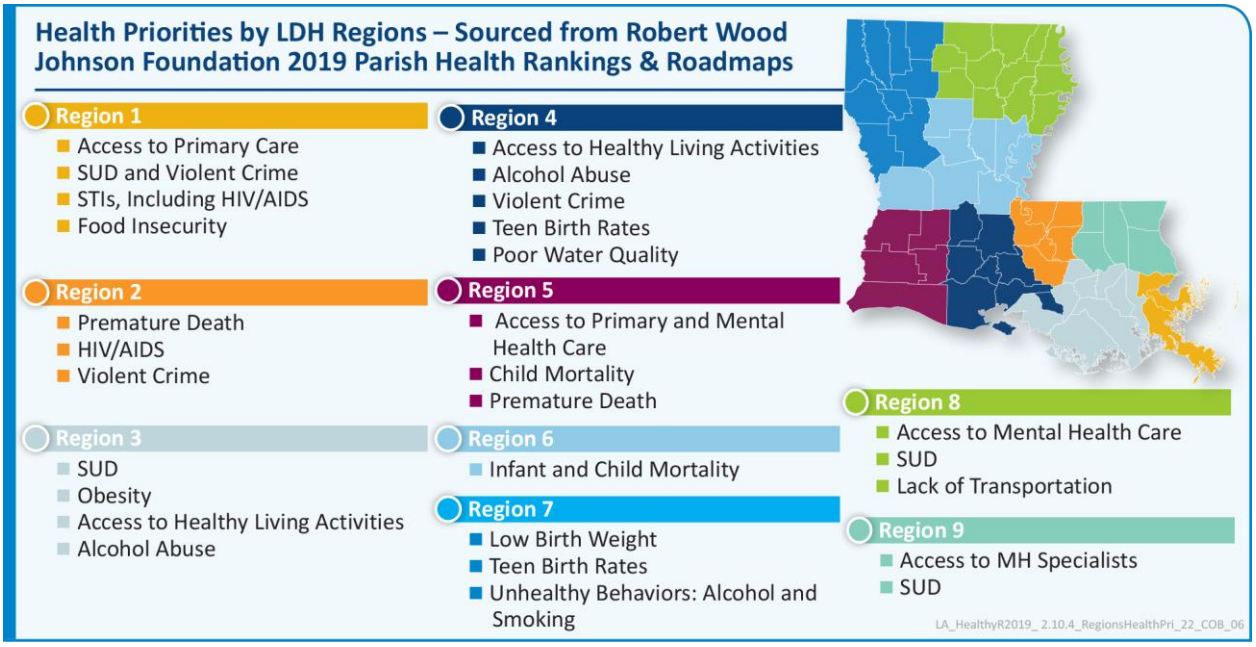
2.10.4 POPULATION HEALTH

2.10.4.1 Our Approach to Population Health Improvement

Healthy Blue's approach to population health management builds on our deep roots in the state and ongoing commitment to improving the health of Louisianans. We know that health is more than just the absence of illness — it is one's overall mental and physical well-being leading to a fulfilling life. Driven by enrollee (member) and community engagement, robust data informatics, integrated care management, and a commitment to quality, our population health program aligns with LDH's vision to improve the overall health rankings in Louisiana, by advancing health equity, increasing access, and removing barriers to health such as lack of stable housing and transportation, food insecurity, threats to physical safety and unhealthy environmental hazards. The key to our approach to population health management is our Healthcare Beyond program focused on social determinants of health (SDOH), such as affordable permanent or supportive housing and access to healthy, nutritious food and clean water, which impact the health and well-being of members and the communities in which they live.

Population health and its improvement over time is intrinsically connected to improved health equity and reduced health disparities. In Louisiana, parish health rankings indicate that poor health outcomes such as premature death and reported poor physical health days and mental health days, as well as negative health-related factors such as children living in poverty and teen births, disproportionately affect subpopulations of Black and Hispanic Americans.[1] America's Health Rankings of core measures in the state indicates that health disparities among Louisianans improved overall from 2017 to 2018.[2] However, population health-level data from our members, reflected in parish-level rankings, indicate clear health disparities and unique needs and gaps in care, preventive and acute. Additionally, Robert Wood Johnson Foundation[3] publishes an annual health rankings and roadmap for health priorities by LDH regions, as indicated in Figure 2.10.4.1-1. Healthy Blue, in partnership with community-based organizations and the Office of Public Health (OPH), has been and will continue to address these gaps through comprehensive population health services and programs.

Figure 2.10.4.1-1. Our Population Health Management Program Addresses Regional Needs Identified



[1] http://www.countyhealthrankings.org
[2] https://www.americashealthrankings.org/explore/annual/measure/Overall/state/LA
[3] http://www.countyhealthrankings.org

We are committed to partnering at a local level to address these priorities and nurture healthy parishes by supporting everyday needs. Healthy Blue's population health management program leverages a full spectrum of strategies derived from robust data and risk stratification, including Blue Cross and Blue Shield of Louisiana's (BCBSLA's) population health analytics that incorporate key data elements across multiple lines of business. We leverage this information to develop effective community-level and member-specific health promotion and prevention strategies along the care continuum — from care coordination and evidence-based condition-specific programs to episodic case management and our complex case management, based on the intensity of the member's and family's needs. Our multi-faceted program focuses on the unique needs of the individual from preventive to complex care, as well as an investment in programming and capacity to support the communities in which our members live. This is critical as we work to support LDH population health goals to transform health outcomes in Louisiana.

[redacted]

In accordance with the Model Contract, Section 2.6.1.1.1, Healthy Blue will develop a ***Population Health Strategic Plan*** aligned with the Louisiana Medicaid Managed Care Quality Strategy and submit it to LDH by March 1, 2020. Our current Population Health Strategic Plan provides us with a strong foundation. Our ***Population Health Management Workgroup***, including our Care Management, Utilization Management (UM), and Quality Management (QM) teams, focuses on four areas: keeping members healthy; members with emerging risk; patient safety or outcomes across settings; and multiple chronic illnesses. Informed by public health strategies such as using logic models to guide program development and link activities to measurable outcomes, we will build on our current efforts, continuing to listen to stakeholders to better understand their needs and preferences, and using data-driven analyses to understand the social, economic, familial, cultural, and physical environmental factors that are related to the distribution of health outcomes in Louisiana. Our plan will include specific strategies and tactics to address all of LDH's health priorities and use reliable measures to demonstrate our effectiveness in improving population health over time.

Identifying Baseline Health Outcome Measures and Targets

Our approach to population health management is data-driven and built on an understanding of multiple factors (social, economic, familial, cultural, and physical environment) and how these relate to the distribution of health conditions, health-related behaviors, and health outcomes among members in different geographic locations and diverse demographic groups (for example, socioeconomic, racial/ethnic, or age) in Louisiana. We know that measuring and analyzing data is critical to good decision-making and the development of meaningful interventions and assessing their impact on members' health outcomes.

Outcome Measures

Healthy Blue's long-term use of LDH Quality Performance Measures (RFP Attachment G), and participation in LDH Performance Improvement Projects (PIPs) to track health needs and health improvement of over 258,000 Louisiana Medicaid members gives us the data necessary to establish baseline health outcomes and identify targets for improvement. Our value-based programs and performance improvement and practice transformation strategies incent providers to align with and maximize opportunities for outcomes improvement. [redacted]. As a trusted partner of LDH, we commit to including new incentivized measures and related benchmarks based on 2018 performance, clinical priority, validation of LDH agency-wide priorities, and validation of technical specifications for state-specific measures.

Our collaboration with BCBSLA provides an expanded opportunity to use social mapping technology to capture community assessment results and identify areas of greatest need and opportunity for community-level interventions to improve health. Healthy Blue "adopted" Bastrop after identifying a roughly 6% increase in diabetes rates over a 10-year period. This increase, coupled with evidence of inadequate and unstable housing and poor access to nutritious food options, led to a collaboration between Healthy Blue and the City of Bastrop. Bastrop has a population of just over 25,000, nearly a quarter of whom are under age 18 and almost 20% whom are over age 65. Twenty-six percent of the population say they are in poor or fair health — 23% smoke, 41% are obese, 15% have limited access to healthy foods, and 40% get inadequate sleep. About 40% of the children in Morehouse Parish live in poverty.[4]

Healthy Blue's Community Service Partnership with the City of Bastrop

The City of Bastrop's 2018 partnership has been nothing short of fantastic!... Bastrop's Healthy Blue partnership has enabled the City of Bastrop to provide effective community outreach and support to assist Bastrop resident access to health care screenings and services beyond what is traditionally expected. In 2019, the City of Bastrop hopes to build on its Healthy Blue relationship...
– **Henry C. Cotton**
Mayor of Bastrop
Morehouse Parish
LA_HealthyR2019_2.10.4_Bastrop_22_TST_04

As we work with communities like Bastrop to improve population health, we will partner with the State to stratify quality measures by race/ethnicity and rural/urban status to narrow health disparities. This is a critical step toward advancing specific interventions that address key influencers of health.

Measuring Population Health

Annually, we conduct a population analysis which considers the cultural and socioeconomic needs of our membership. This analysis brings together internal and external data that we continuously review to inform our population health programs, identify baseline outcomes, and set targets so that we can adjust programs as needed to improve care and services. Our data sources include:

- Member demographic information, including age, gender, and self-reported race, ethnicity, and disability status
- Cultural needs and assessment reports, and social determinants such as literacy reports and crime rates
- U.S. Census Reports: U.S. census data on residents that speak a language other than English
- CAHPS® survey results on respondent race supplemental question related to satisfaction with doctors representing cultural and language needs
- Utilization data: top inpatient and outpatient diagnoses and reports on specific diseases/conditions
- Regular meetings with advocacy groups regarding the health concerns of specific populations

Setting Meaningful Targets

Our targets for tracking our members' measurable health improvements align with NCQA Quality Compass Scores and targets set by LDH related to Louisiana-specific measures. For example, we monitor 17P usage for members at high risk for preterm birth. Targets for non-HEDIS measures use baseline performance data, and goals are set using a 95% +/- confidence interval for the targeted population, or as set forth by LDH. We also look at benchmarks and targets from our affiliates in 21 other markets to better understand where our Louisiana members stand in comparison and identify best practices or innovations that might be suitable for adoption in Louisiana.

Measuring Population Health Status and Identifying Subpopulations

To measure population health status, Healthy Blue reviews all available data from the population/community level and the individual/member level. At the population level, we capture and review multiple data elements from community health needs assessments (HNAs), quantitative and qualitative data from primary and secondary sources about demographics, health needs and gaps in care, and data elements captured via social mapping tools and predictive modeling. At the individual/member level, we use multiple data elements from sources including claims and encounter data (financial) and utilization management data (under- and over-utilization), risk scoring, HNA results, and provider referral and member self-referral, balancing data sources to ensure a comprehensive picture. We then pinpoint the SDOH and clinical needs of our members to identify areas of greatest need for population-based interventions, as well as targeted programs to meet the needs of individuals.

Our ***Quality Improvement Program*** measures the success of our interventions for the population and the individual from initiation through implementation to track the health outcomes achieved. We can identify health outcome trends and commonalities in need of improvement, specific subpopulations most affected by disparate health

[4]http://www.countyhealthrankings.org/app/louisiana/2019/rankings/morehouse/county/outcomes/overall/snapshot

outcomes, and key determinants impacting health among those specific subpopulations. Using this comprehensive approach, we identify opportunities for targeted community and individual-level interventions.

In Louisiana, we have systematically assessed data about our population and members for over seven years, successfully leveraging lessons-learned to continually improve our data collection and analytic processes to identify high-risk subpopulations of members.

Healthy Blue actively employs several strategies to characterize, identify, and analyze our members with specialized and chronic care needs. In particular, claims data is periodically and systematically reviewed to identify member subgroups with high-risk characteristics. We use four major strategies of data analysis:

- Predictive Modeling using the Health Plan's Chronic Illness Intensity Index (CI^3)
- Ranking members from those with the highest use of emergency department (ED) and hospitalization to the lowest, then identifying statistical outliers for care management
- Identifying and analyzing trends related to chronic and wellness gaps in care, childhood screenings (including EPSDT), pre- and post-natal screenings, and ED utilization and hospital rapid readmissions
- Evidence-based literature reviews to identify national, Louisiana, and parish trends

Identifying Subpopulations to Target with Health Initiatives

An integrated, multidisciplinary care group — including associates from our Care Management, QM, and Network teams — is responsible for ensuring a comprehensive review of data. This group, headed by Dr. Cheryll Bowers-Stephens, BH Medical Director, holds administrative rounds to review population health data and identify areas for improvement. Through these reviews, we identify disparities in outcomes among members and specific subpopulations that may benefit from targeted interventions. In 2018, this group identified disparities and subpopulations affected by them and implemented the initiatives in Table 2.10.4.1-1.

Table 2.10.4.1-1. Subpopulations Identified and Health Initiatives Developed and Deployed

Subpopulation	Data Used to Identify Subpopulation	Targeted Initiatives and Strategies
Neonates with high-risk postpartum conditions	• Enhanced Inpatient Member Interaction (EIMI) data • Care management engagement/QM maternity PIP data • Health risk assessment, including key SDOH elements and prior pregnancy history	• Neonatal Intensive Care Unit (NICU)/care management intervention — increase 17P efforts • Deploy Navigators to meet face to face • Nurse family partnership referrals • Appropriate Emergency Room Utilization (AERU) program • Elli™ population health platform
High utilizers and rapid re-admitters of inpatient care and ED visits	• CI^3 reporting • Behavioral health (BH) dashboards • Short-length stay reporting	• Rapid Re-admitter program, including screening for homelessness • High Outreach for Patient Engagement (HOPE) • Pharmacy programs • Elli population health platform
Children < 6 years old who may be subject to over-prescribing for BH issues	• Claims and pharmacy reporting	• Parent and Child Interaction Therapy (PCIT) training for providers • ADHD PIP and ADHD Toolkit • Elli population health platform

As we did in Bastrop, Healthy Blue looks beyond clinical diagnoses to understand the impact of SDOH. [redacted]

INNOVATION [redacted]

Beyond analyzing quantitative data, we learn of members' unmet needs through Member Services Representatives, BH Crisis Line Representatives, 24/7 Nurse Line calls, and outreach activities by Healthy Blue peer-certified Outreach Specialists and Community Health Workers (CHWs). We also regularly engage with community organizations and advocacy groups to understand the broader needs within a specific community, such as the LGBTQ community and individuals with physical and emotional disabilities.

2.10.4.1.3 Identifying Key Determinants and Strategies for Targeted Interventions

To develop effective prevention and population health programs, we examine the distribution of outcomes across the population and identify the key determinants that drive these outcomes. We use data analytics, through tools such as Elli, and engage members, providers, and stakeholders in our shared communities.

In 2018, we conducted "listening sessions" and focus groups across the state on our behalf to gather feedback about Medicaid enrollees' unmet needs. The focus groups, conducted by a Hudson-certified business, solicited information about day-to-day life experiences and explored how enrollees use health benefits and community services. Focus group participants identified financial stress and instability as their primary barrier and reported that they value benefits that mitigate this stress, such as flexible funds. Results from the sessions informed our understanding of key SDOH impacting our members, and our development of programs and benefits described in our response to Section 2.10.3, Enrollee Value-Added Benefits.

First, We Listen

Our ***Community Connectors*** are liaisons between parishes, public health, and Healthy Blue. They identify opportunities to connect members with Healthy Rewards, VABs, and care management.

LA_HealthyR2019_2.10.3_CommConnectors_67_COB_02

Innovative Strategies in Housing

[redacted]

Healthy Blue Helps Members in Need of Stable Housing

In 2018, Healthy Blue helped members submit **82** PSH applications to the state. That same year, **52** members were selected for housing. As of Q1 2019, 446 Healthy Blue members are currently in PSH and **35** in Section 811 Project Rental Assistance (PRA) program.

In a case of just one Healthy Blue member housed in PSH, we realized a cost savings of over 63% per month while the member was housed, primarily due to savings in inpatient costs.

LA_HealthyR2019_2.10.4_Housing_22_DP_06

Homelessness Prevention

Our "upstream" homelessness prevention strategies wrap extra supports (low-risk case management or Community Health Workers (CHWs)) around those members who research shows are statistically at high risk of homelessness, such as young mothers; households with children between ages 0-6; members living in a hotel, at a friend's house,

bouncing between family members, or who need home modifications; and members who have experienced prior homelessness.

Identifying these members, offering care management and peer supports, and being prepared to provide financial or additional housing supports is crucial to helping them avoid potential housing instability and homelessness.

Homeless Member Engagement Program

INNOVATION

Many of Healthy Blue's highest utilizing members experience chronic homelessness, often in combination with comorbid health diagnoses such as serious mental illness (SMI), SUD, and complex physical health conditions. These members over-utilize inpatient and ED facilities to meet basic needs. Based on pilot programs in our affiliate health plans, we are launching a Homeless Member Engagement pilot program focused on housing our highest utilizers by collaborating with select housing providers, landlords, and BH providers to create radically flexible and individually tailored plans. Our goal is to "think outside of the box" with interventions that may include basic home modifications, landlord incentives, rent payment, peer support, care management, and other wraparound services.

Community Level Programs

Landlord Engagement Program. Healthy Blue will provide financial support for qualifying landlords to participate as part of the interdisciplinary team in ending homelessness and helping families remain stably housed. The program will provide flexible funding to landlords for:

- **Risk mitigation funds.** Reimbursement for lost rent or damage to units in excess of the security deposit
- **Stability bonuses.** Financial incentives at lease signing and lease renewal for serving high-barrier households
- **Upfitting costs.** Funds for small repairs to help pass inspection and use rental assistance programs
- **Barrier Buster Fees.** Flexible funding to overcome barriers to moving into a new unit
- **Community Landlord Liaisons.** Dedicated staff or agencies who provide customer service

Youth Rapid Rehousing Program for transition age youth ages 18 to 25 who are experiencing homelessness or transitioning out of foster care. We will partner with a housing services provider in the Baton Rouge region to fund the development or expansion of housing opportunities available to transition age youth.

Addressing Access to Nutritious Food and Food Insecurity

Since one in six Louisiana households struggle with food insecurity and Louisiana ranks toward the bottom of all states (45th) in the prevalence of obesity[5], Healthy Blue offers innovative programs to address access to healthy, nutritious foods to help improve these Louisiana outcomes. We are working with providers and communities to deploy a multi-pronged strategy aimed at improving access to healthier foods and decreasing reliance on convenience foods.

Food Insecurity Provider Incentive Program (FIPIP)

Healthy Blue is partnering with providers in the top 7 parishes with childhood food insecurity to assure Healthy Blue members have access to nutritious food, and make sure no child goes to bed hungry. Our Z-Code Incentive Program will financially incent our primary care providers (PCPs), OBs, and BH professionals to proactively evaluate Healthy Blue members' food security needs and refer those in need to local food banks. Providers will be asked to administer a short, two-question Hunger Vital Sign screening to our members. Upon completion of the assessment, providers can submit diagnosis code Z59.4 (Lack of adequate food and safe drinking water) on their claim form to receive their incentive. We will run claim reports to identify Healthy Blue members who received a Z59.4 diagnosis and send them to our Care Management team for outreach to provide assistance with appropriate services and interventions. In 2019, we will automate alert capability into our care management system, and in Member 360°SM for the members' PCPs, to trigger intervention and referrals.

LA_HealthyR2019_2.10.4_Z-Code_22_COB_04

Increasing Capacity for Fresh Foods

Recognizing the critical role that local food pantries play in addressing food insecurity, Healthy Blue invested in commercial grade refrigeration units at 10 pantries across the state to help them stock fresh foods. As part of our partnership with Louisiana Community and Technical College System (LCTCS), we also provided six refrigeration units to support pantries onsite at LCTCS campuses. Almost half of America's college students experience food insecurity[6] and providing supports for LCTCS students such as expanded food pantries and the Next Steps scholarships help them stay engaged in their education.

Building Healthy Habits through Education

Healthy Blue is focused on getting kids excited about fresh fruits and vegetables and helping parents find easy ways to feed their families nutritious foods to reverse trends in diet-related diseases.

---

[5] https://www.labudget.org/2018/09/food-insecurity-on-the-rise-in-louisiana/ and https://www.americashealthrankings.org/learn/reports/2018-annual-report/state-summaries-louisiana

[6] http://studentsagainsthunger.org/wp-content/uploads/2016/10/Hunger_On_Campus.pdf

- Since 2016, we have sponsored the Alexandria Farmer's Market, which encourages kids to try new fruits and vegetables. Our sponsorship added a Kids Club to teach kids about shopping, seasonality, and healthy eating.
- Through the Anthem Foundation, we funded Edible Schoolyard New Orleans at five locations at First Line Schools. Edible Schoolyard builds culturally diverse, intergenerational, and pluralistic communities of staff and volunteers committed to teaching, working, and growing together.
- Healthy Blue will bring the Green Bronx Machine (GBM) program to 20 Louisiana schools. GBM features year-round hydroponic tower gardens to engage children in growing vegetables in the classroom. This program has demonstrated increased test scores and attendance and gets kids excited about eating fruits and vegetables.
- To help support parents, Healthy Blue will work with Share Our Strength to promote resources available through their Cooking Matters program. Cooking Matters supports skill development to make cooking nutritious foods easy and provides digital meal planning and recipe tools, including an app and quick online videos.

Addressing Transportation Needs

Healthy Blue has been addressing transportation needs to improve the health of our members in Louisiana for over seven years and brings relevant Louisiana experience to our transportation strategy. While we continue to focus on expanding access to transportation, we also continue to look for opportunities to bring services to members. We partner with community organizations to provide mobile screenings, such as the Vision to Learn program that brings vision screenings and glasses to schools, and we continue to invest in telemedicine strategies. Healthy Blue has telemedicine programs that address both the physical and BH needs of our members, such as LiveHealth Online (LHO), currently available for physical health and soon to be available for BH, and OneTelemed to ensure 7- and 30-day follow-up appointments for members with BH crises.

[redacted]

Physical Safety

Crime and violence affecting individuals' physical safety can lead to premature death and cause non-fatal injuries, undue emotional distress, and reduced quality of life because people may be reluctant to engage in outdoor physical activity, contributing to higher body mass index scores and obesity. Children and adolescents exposed to violence are at risk for poor long-term behavioral and mental health outcomes throughout their lives, and Louisiana ranks at the top of all states (48th) with high rates of children experiencing at least two Adverse Childhood Experiences (ACEs). Healthy Blue supports the ***Playworks program*** to increase opportunities for physical activity and safe, meaningful play in Orleans and Jefferson Parishes. We will fund the program to expand in existing parishes and initiate new programs in East Baton Rouge and Shreveport Parishes. The program takes a proactive approach to bullying prevention and is focused on changing the underlying school environment by promoting respect, kindness and inclusion, and shifting school culture.

Healthy Blue staff and network providers can make a difference in the physical safety of our members through new trainings described in Table 2.10.4.1-2.

[redacted]

[redacted]

We have sponsored additional trainings and partnerships in the past, including a collaboration with Southern University at New Orleans (SUNO), and the Children's Bureau of New Orleans, coordinated training program to improve the trauma-informed system in Louisiana and to assist the Department of Child and Family Services (DCFS) in its mission to become a trauma-informed organization. We have also established collaborations with organizations dedicated to ensuring physical safety and ending interpersonal violence such as The Butterfly Society and The Louisiana Coalition Against Domestic Violence.

Care Management for Key Determinants of Health

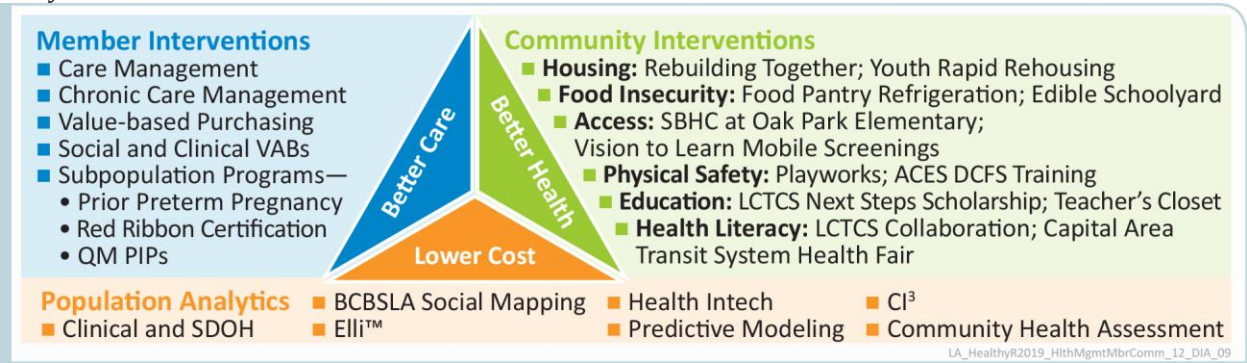
Healthy Blue supports members facing unmet social needs through our Care Management team, who will work with them to access care and service needs. Through person-centered care plans, CMs work with members, families or natural supports, and members' PCPs, building from the results of the HNA through the comprehensive assessment and care planning process to determine how they want to live their lives and identify the supports they need to achieve their goals.

[redacted]

2.10.4.1.4 Developing Integrated and Comprehensive Population Health Initiatives

Our multi-disciplinary care team reviews data, identifies areas in need of improvement, and develops, adapts, and deploys targeted population health programs. We know that our success improving member health depends on streamlined, comprehensive cross-functional collaboration of our QM, UM, Care Management, Pharmacy, Network, and Member Services teams. As outlined in Figure 2.10.4.1-2, our population health strategy weaves together programming across the continuum of member and community interventions, including provider education and incentives, targeted member supports, and community partnerships. These interventions, informed by diverse population analytics and LDH goals, work together to achieve the Triple Aim and ultimately, help change the health trajectory of Louisianans.

Figure 2.10.4.1-2. Population Health Strategy Incorporates Member and Community Interventions and Population Analytics



INNOVATION

As an example of our population health strategy, Healthy Blue is layering multiple approaches to help address housing and food insecurity and support measurable improvements. As outlined in Figure 2.10.4.1-2, population analytics indicate that housing and food insecurity are both opportunities for improving health outcomes through social interventions. Building from our existing

framework for connecting members with supports and services, we are expanding our identification strategy through two new provider incentive programs:

- [redacted]
- [redacted]

2.10.4.1.5 Other Considerations for Population Health Strategies

Healthy Blue, as part of a national organization with health plans operating Medicaid and similar programs in 22 markets, benefits from the sharing of best practices and lessons learned across a broad spectrum of populations and geographies.

Youth Rapid Rehousing Program

Healthy Blue is developing this program for Louisiana based on a partnership between our affiliate plan in Kentucky and Welcome House. In 2018, with the help of our Kentucky affiliate, Welcome House launched a program to support transition age youth ages 18-24. The Opportunity Youth Housing Initiative provides transitional housing supported by a Care Manager, access to food and hygiene items, and wraparound services focused on developing employment and life skills. The goal of the partnership is to stably house transition age youth to prevent them from becoming chronically homeless.

Homeless Member Engagement Program

Our Indiana affiliate partnered with the Indianapolis Mayor's office, a housing owner/manager, and an FQHC to develop a short-term housing program focused on transitional housing, connections to community services, physical health and BH services, and onsite peer support and care management. As of the end of 2018, the program has served 112 members, with 92% voluntarily participating in care management and life skills and 68% engaging with health care services. Initial results showed a 22% average decrease in total per member, per month cost, with a decrease in crisis utilization and an increase in preventive and chronic disease care and prescriptions. Based on the success of Indiana's program, Healthy Blue's Homeless Member Engagement program will target a similar population and leverage the approach to member support and engagement.

2.10.4.2 Population Health Strategies — Year 1 Milestones and Timeframes

Healthy Blue tracks, analyzes, and reports on member health outcome data. To measure population health, we know it is critical to develop plans with reasonable targets and establish detailed milestones that mark progress toward targets over time. Table 2.10.4.2-1 details population health strategies with milestones and timeframes for different LDH priorities. The table is not exhaustive of all Healthy Blue efforts; however, it demonstrates our capacity to clearly identify and measure critical, progressive milestones.

Table 2.10.4.2-1. Array of Population Health Priorities and Strategies for Healthy Blue Offering

Strategy	Description	Milestones	Timeframe (Year One)
Reduction of Key Communicable Diseases: HIV, HCV, and Syphilis			
Primary Care Training Program	Rural health training initiative, in partnership with Access Health AIDS Education & Training Center (AETC), through a combination of in-person and online trainings, publications, and direct mentorship.	• 2% Year-over-year (YOY) increase in HIV Suppression Rate • Increase HIV testing and provision of PrEP among priority populations	• Q2 • Q4
Reduce Infant Mortality			
Identification of High-risk Mothers with a	High-risk mothers who have had a previous preterm birth and are currently pregnant enroll into care management,	• Enroll 50% of identified high-risk moms	• Q4

Strategy	Description	Milestones	Timeframe (Year One)
Previous Pre-term Birth Engagement in Care Management	telehealth/at-home visits, or local care coordination to ensure appropriate referrals are made.	• 2% YOY decrease in low-birth weight (LBW) Measure	
Maternal Mortality and Morbidity			
New Baby, New Life℠	Our New Baby, New Life program is comprised of evidence-based member and provider interventions, and includes specialized interventions for women with high-risk pregnancies, including individualized OB care management focusing on an individual woman's specific risks and needs.	• 50th NCQA Percentile for Prenatal Care (PPC) • 2% YOY Improvement for Postpartum Care (PPV)	• Q4
Opioid Use Disorders			
Opioid Prescriber Management Program	The program will help reduce the opportunities of misuse of opioid treatment, including the development of opioid use disorders, by targeting outlier provider of opioid prescribing patterns, as well as assisting members in gaining access to more clinically appropriate treatment.	• Reduction of polypharmacy • 85% of providers identified by program receive intervention	• Q1-Q4
Obesity			
[redacted] Making Fitness Fun	In [redacted] Healthy Blue's Making Fitness Fun partners with a local organization to bring Zumba® classes into the community.	[redacted]	[redacted]
Diabetes			
Patient Safety and Clinical Pharmacy Services Program – Diabetes	Population health analysis showed that erratic ED use of diabetes medications is the top reason for ED visits and readmission. Members will receive patient education and comprehensive diabetes targeted intervention through care management and community outreach.	• 2% YOY increase in diabetic retinal exams, neuropathy and A1C testing	• Q1-Q4
Hypertension			
Hypertension Chronic Condition (HCC) Management	The purpose of the HCC management program is to provide secondary and tertiary prevention interventions based on a comprehensive, multidisciplinary, system-wide approach that encompasses evidence-based guidelines, provider practice, and member empowerment strategies to improve members' health outcomes. We also provide education to members about medication adherence and monitor this through our medication therapy management (MTM) program.	• 2% YOY Increase for Controlling High Blood Pressure (CBP) Measure	• Q1-Q4
Cardiovascular Disease			
Congestive Heart Failure (CHF) Chronic Condition Management	This program provides secondary and tertiary prevention interventions based on a comprehensive, multidisciplinary, system-wide approach that encompasses evidence-based guidelines, provider practice, and member empowerment strategies to improve members' health outcomes.	• 2% YOY Decrease in Heart Failure Admission Rate • 2% Improvement for (PBH) Measure • 2% Improvement YOY for SPC/SBD	• Q1-Q4
Tobacco Cessation			
[redacted]	[redacted]	[redacted]	[redacted]
Early Childhood Health and Development, Including ACEs			
Playworks Program	Healthy Blue has supported the implementation of the Playworks program to increase opportunities for physical activity and safe, meaningful play in Orleans and Jefferson Parishes. We will fund the program to expand in existing parishes and initiate in East Baton Rouge and Shreveport Parishes.	• Expand in existing parishes (Orleans and Jefferson) • Initiate program in new parishes (East Baton Rouge and Shreveport)	• Q2 • Q4
Additional Prevention and Population Health Management Programs to Encourage Improved Health and Wellness Among Members			
Addressing Food Insecurity – Refrigeration	Healthy Blue will address issues of food insecurity in areas of high need by supplying commercial refrigeration to 10 food banks across Louisiana for fresh produce storage.	• Identify areas with high rates of food insecurity • Donate 10 refrigerators to food banks in identified areas	• Q4

2.10.4.3 Our Experience Utilizing SDOH Data to Improve Health

Healthy Blue's ***Healthcare Beyond*** program to address SDOH is driven by our data analytics activities, leveraging multiple data sources and specialized analytical tools. While there is increasing attention on SDOH, BCBSLA and Healthy Blue have continually focused on member *and* community level social determinants in Louisiana as a critical component of integrated care and healthy communities.

Our Comprehensive HIV Intervention Addresses SDOH

Louisiana has one of the highest U.S. metropolitan rates of people diagnosed and living with HIV, with New Orleans-Metairie and Baton Rouge ranking second and third respectively. African-Americans in Louisiana are disproportionately affected by HIV, presenting 72% of new HIV cases, 74% of new AIDs cases, and 68% of all people living with HIV in the state. While the majority of people living with HIV (75%) are urban residents, a quarter (25%) live in rural areas, and as of 2017, 50% are over age 50.[7] A full 28% of Louisianans living with HIV are not in care, with those living in the Lake Charles and Monroe regions least likely to be in care.[8]

HIV Intervention Incorporates Prevention and Housing Strategies

Intervention. Our care management strategy for members living with HIV/AIDS includes interventions to address adverse SDOH they experience. We developed and continue to implement a high-touch care management intervention that prioritizes face-to-face member engagement. It is a multi-pronged approach that includes clinical and pharmacy, quality, and provider support and incorporates approaches to address members' housing needs. We have built relationships with "Continuum of Care" (COC) networks to help members experiencing homelessness directly access regional housing-related resources through coordinated entry, distinct from state-run PSH programs.

We established and sustain ongoing partnerships with organizations that offer housing such as HIV/AIDS Assistance for Region Two, Inc. (Baton Rouge), Acadiana Cares (Lafayette), Philadelphia Center (Shreveport), and Crescent Care (New Orleans) to identify all potential options available for Healthy Blue members. We included a leadership engagement strategy, reaching out to local organizations, such as NO AIDS Task Force in New Orleans (urban), GO CARE in Monroe (rural), and HEROES in Columbia (rural), inviting them to provide input from their communities and organizations. We plan to establish similar relationships in Baton Rouge, Lake Charles, and Shreveport.

Evaluation. To assess the effectiveness of our intervention, we gathered data related to housing and health outcomes. We kept track of the number of state PSH applications that members had completed and submitted with the support of our Supportive Housing Liaison, as well as the total number of members with HIV enrolled in the PSH program.

Health Outcomes. The results from our evaluation of the HIV intervention demonstrated improved health outcomes. For 128 members receiving care from Crescent Care providers, ***77% were retained in care***. As of Q3 2017, 72% reported successful viral suppression, a rate exceeding the HIV Affinity Group Action Plan goal of 70%.

SDOH Outcomes. As of September 2018, 23 members living with HIV were enrolled in the PSH program.

How Lessons Learned from This Intervention Can Be Applied to Other LDH Population Health Priorities. Through this initiative, we gained first-hand knowledge of the SDOH challenges facing our members with HIV and gained lessons learned knowledge as we helped them to navigate housing and access to providers and medication. CMs became more attuned to working with community partners and collaborating to

Along with five other payer organizations, Healthy Blue has been working with Shatterproof, an advocacy organization focused on improving the quality of SUD treatment at a national level. A component of this work includes market level pilots which will measure evidence-based care delivery elements that are shown to improve patient outcomes by using information from three sources: insurance claims, treatment program surveys, and consumer experience. Louisiana is one of five states that will be partnering with Shatterproof to assist with the creation of a provider rating system for addiction treatment programs.

LA_HealthyR2019_2.10.4_Shatterproof_22_COB_02

[7] http://www.cdc.gov/hiv/topics/surveillance/resources/reports/index.htm
HIV Surveillance Report, Volume 28, Diagnoses of HIV Infection in the United States and Dependent Areas, 2016; Louisiana 2017-2021 HIV/AIDS Strategy (LAHAS); and "One State, Two Epidemics" 2017 HEROES Report.

[8] http://www.cdc.gov/hiv/topics/surveillance/resources/reports/index.htm
HIV Surveillance Report, Volume 28, Diagnoses of HIV Infection in the United States and Dependent Areas, 2016; Louisiana 2017-2021 HIV/AIDS Strategy (LAHAS); and "One State, Two Epidemics" 2017 HEROES Report.

identify correct funding streams for benefits and services. This knowledge can be applied to other LDH population health priorities.

2.10.4.4 Collaborating with Community-based Organizations and the Office of Public Health

Healthy Blue is committed to continuing to build strong relationships with community-based organizations and the OPH to coordinate population health improvement strategies. Our Healthy Blue offering will draw on our Louisiana knowledge and the national experience of our affiliate health plans to leverage past successes and build improvements in population health outcomes, as shown in Table 2.10.4.4-1 which outlines initiatives previously deployed by Healthy Blue and community-based organizations and OPH.

Table 2.10.4.4-1. Initiatives to Collaborate or Align with Community and Office of Public Health Programs

Objective, Methodology, and Outcome
Healthy Blue-Ribbon Event
Objective: Establish collaborations with school-based health centers.
Methodology: Healthy Blue (through our QM department) & School-based Health Centers collaborate to organize events to educate and inform students of the importance of wellness visits, relationships with their PCPs, and overall health, as well as encourage to complete their annual wellness visits.
Outcomes: Well-child Visits at the 3rd, 4th, 5th, and 6th years; Adolescent Well-child Visits; member education, and gap closure.
Blue Bikes and Helmet Donations
Objective: To support local efforts to increase physical activity by making fitness fun, and to address transportation challenges.
Methodology: Healthy Blue donated 1,000 bicycle helmets to BCBSLA's Blue Bikes program. Additionally, Blue Bikes is continuing its work with local bicycle safety and advocacy organization Bike Easy. The two organizations are partnering to encourage more community-based engagement in bike share, promote road-sharing safety, and advocate for enhanced, more secure biking infrastructure in the city.
Outcomes: 1,000 bicycle helmets distributed to community members in New Orleans in 2018.
Drug Take Back Day Sponsorship to Reduce Risk of SUD
Objective: To collaborate with community partners to reduce the risk of SUDs in Baton Rouge.
Methodology: Healthy Blue and BCBSLA are partnering with the Drug Enforcement Administration, the Baton Rouge Health District, Our Lady of the Lake, Woman's Hospital, Baton Rouge General, Ochsner, Louisiana State Police, Baton Rouge Fire Department, Acadian Ambulance, Little Caesar's Pizza, the Louisiana Society of Health System Pharmacists, and the Federal Bureau of Investigation to sponsor a Drug Take Back Day on April 27, 2019. Informational booths and activities to engage both adults and children will be included.
Outcomes: 156 people attended the 2018 Drug Take Back Day event and dropped off 600 pounds of unwanted, unused prescriptions.
Playworks Program to Increase Opportunities for Physical Activity and Safe, Meaningful Play
Objective: To improve the health and well-being of children by increasing opportunities for physical activity and safe, meaningful play.
Methodology: Healthy Blue is supporting Playworks to combat bullying in elementary schools in the Orleans, Jefferson, East Baton Rouge, and Shreveport Parishes. Playworks operates in Orleans and Jefferson Parishes, providing recess and anti-bullying strategy support to schools serving 2000 students. Healthy Blue will fund Playworks to expand their reach in these parishes and establish a program in East Baton Rouge. Playworks will provide six full day trainings, two in each district for up to 40 teaching staff from more than one school attending, a subscription to Playworks University, which contains online courses and materials to assist safe play and anti-bullying strategies, and six follow-up face-to-face consultation visits in each district.
Outcomes: Healthy Blue will fund the Playworks expansion in existing parishes (Orleans and Jefferson) and implementation in two new parishes (East Baton Rouge and Shreveport), making four parishes by the end of 2019.

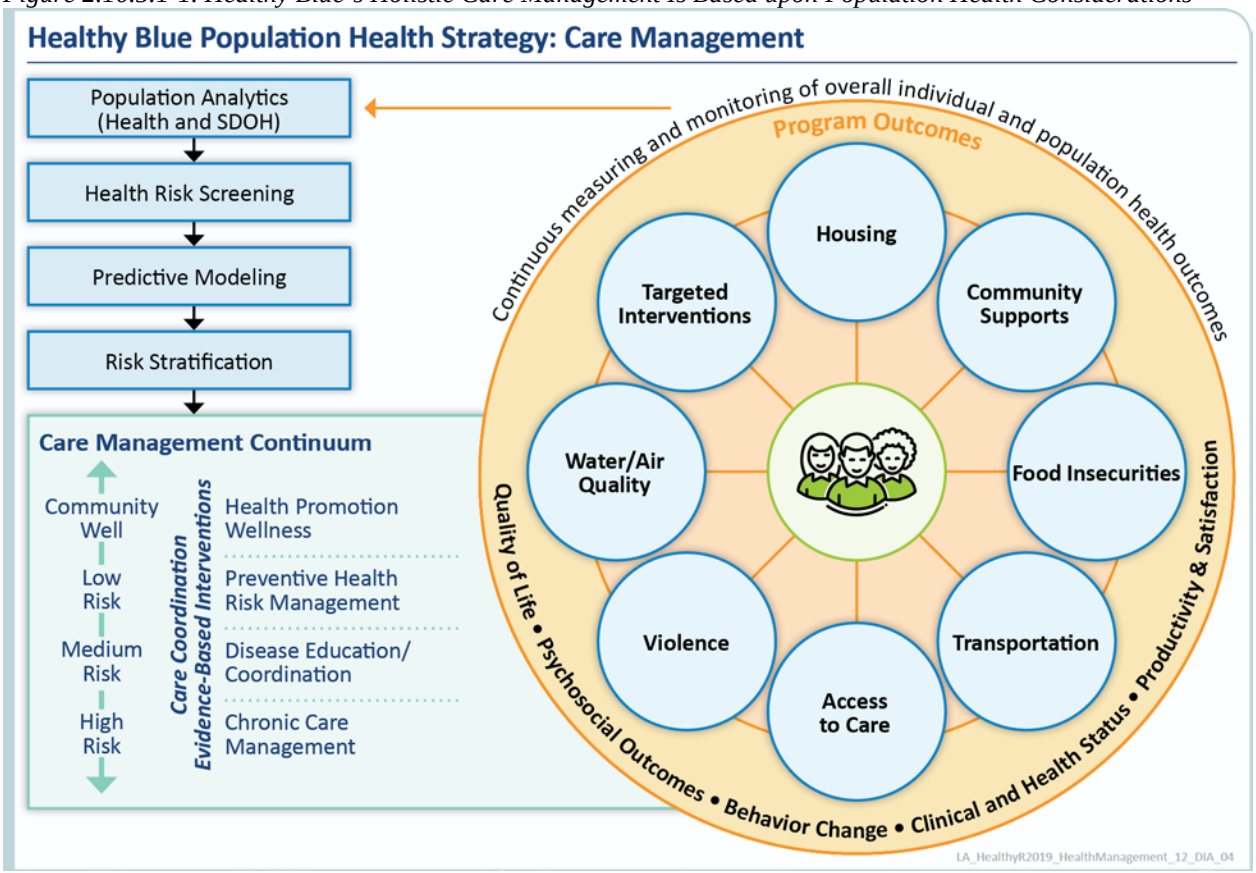
2.10.5 CARE MANAGEMENT

2.10.5.1 Healthy Blue's Approach to Care Management

Healthy Blue's care management mission is to support enrollees (members) in leading healthy lives and to be integrated into healthier communities. To create healthier communities, we support high-value care and service excellence. With members, we take a person-centered, holistic approach; build partnerships with community resources; work to identify and resolve their barriers to care; and facilitate equal access to health care for all. For providers, we support evidence-based practices and ongoing integrated care; consolidate therapeutic and social efforts on behalf of members; and reduce administrative burdens. For members and providers, education about mental health and substance use disorder and general health care are equal to the physical health (PH) care and social supports in our integrated care management model, delivering high-quality, cost-effective care that pursues all three domains of the Triple Aim.

Healthy Blue has been improving access to comprehensive primary care, specialty care, pharmacy, behavioral health (BH), and social supports and services in Louisiana since its inception in 2012. Our plan is influenced by the 85 years of experience and local expertise of BCBSLA, and by the resources and knowledge of Healthy Blue's affiliate health plans in 21 other markets. As of 2015, Healthy Blue is a fully integrated MCO in its organizational structure and operational functions: claims, quality data, electronic health records (EHR), clinical documentation systems, and BH and PH management. Through the years, we have continued to invest in programs and capabilities such as predictive data analytics that include social determinants to enhance our ability to improve the health of every population in Louisiana, at every level of acuity, as illustrated by Figure 2.10.5.1-1. As described in Section 2.10.4, Population Health, Healthy Blue's care management, quality management, and utilization management are integral components of population health management.

Figure 2.10.5.1-1. Healthy Blue's Holistic Care Management Is Based upon Population Health Considerations



Integrated Care that Improves Population Health and Cost Outcomes

First, We Listen [redacted] Our ability to listen and respond to the communities we serve improves outcomes. For example, Louisiana has the highest incidence of ADHD diagnoses in the country, according to the Centers for Disease Control.[1] Our Behavioral Health Medical Director, working to decrease fragmentation and improve integration of providers and care settings, developed and designed an ADHD training program with the community after receiving feedback through our Clinic Days program indicating an opportunity to better assist members and their families. Additionally, we conducted a Performance Improvement Project to coordinate integrated PH and BH service delivery along with pharmaceutical monitoring, identifying members of all ages with diagnoses of ADHD, depression, or anxiety in one of 10 primary care practices. Our ADHD training program achieved the following results:

- ***8% increase in members diagnosed with ADHD,*** stratified by age and foster care status, with documentation of BH pharmacotherapy (ADHD medication, antipsychotic medication, or other psychotropic medication)
- ***Use of a validated ADHD screening instrument increased from 22.7% to 46.67%***

Another vital aspect of our care management approach is outreach, which is described in Sections 2.10.4, Population Health. We have internal Outreach Specialists in Regions 1, 2, 4, 6, 7, 8, and 10 and in parts of Region 9 who are trained in peer support principles. We work with superutilizers of PH and BH services; external Navigators who focus on superutilizers with BH diagnoses and are trained in the principles of the Harold P. Freeman Center for Patient Navigation; and in 2020, will enhance our Community Outreach Strategy to deploy certified Community Health Workers (CHWs) for local care coordination to expand our current footprint. As illustrated by Roberto's story, Navigators have helped our members get aligned with community resources that improve psychosocial wellbeing as well as health outcomes.

The Navigator program has been operational since May 2017, resulting in a total savings in the first year of **$917 per member**, and has demonstrated reductions in both ED use and readmissions.
LA_HealthyR2019_Navigator_13_DP_03

Healthy Blue Navigator Supports Member on the Path to Success

Roberto, who lives with bipolar and major depressive disorders, faced numerous legal charges. He has been in the Navigator program for several months. Roberto's Navigator, trained in fundamental personal safety, maintaining professional boundaries with members and their families, situational awareness, and making her identity and role clear to all parties involved in Roberto's care, drove Roberto to his meetings with his parole officer 90 miles away. Roberto's PO informed the Navigator that he was concerned that a warrant would be soon be issued for charges against Roberto from 2010 for which Roberto had missed all court appearances. The Navigator and Roberto worked with the PO and the court to reduce the old charges and adjust the restitution requirement so that it was manageable for Roberto. The Navigator helped Roberto budget his income to make the restitution payments on time and continued to transport him to meetings with his PO and to court dates. Ultimately, the judge dropped the remaining charges against Roberto. His restitution was paid in full, and he is now completing his parole in full legal compliance. With the help of his Navigator, Roberto has found and maintained employment and become more mentally and emotionally stable. He hopes to visit with his son soon. Roberto's remarkable progress and motivation suggest that his chances for being hospitalized or incarcerated again are reduced; more importantly, Roberto is living a life more conducive to good mental and physical health.
LA_HealthyR2019_Roberto_RS_07

Integrated Care Management Team

Our ***Louisiana-based Care Management team*** has local knowledge of the providers and systems of care available to coordinate our response to members' needs. Seventy five percent of our Care Management staff have been with Healthy Blue since 2012. We have seen firsthand the impact that low health literacy, lack of access, and unmet social needs have on our members' health and ability to engage the services and supports that promote optimal health. Our approach provides acute care, inpatient, outpatient, and BH and social support services in a seamlessly integrated infrastructure. Our Louisiana-licensed PH and BH Medical Directors conduct twice-weekly integrated rounds with utilization management (UM) and Care Managers (CMs) to develop and implement solutions and interventions using evidence-based approaches to address the comprehensive PH, BH, and social support needs of each member enrolled in care management.

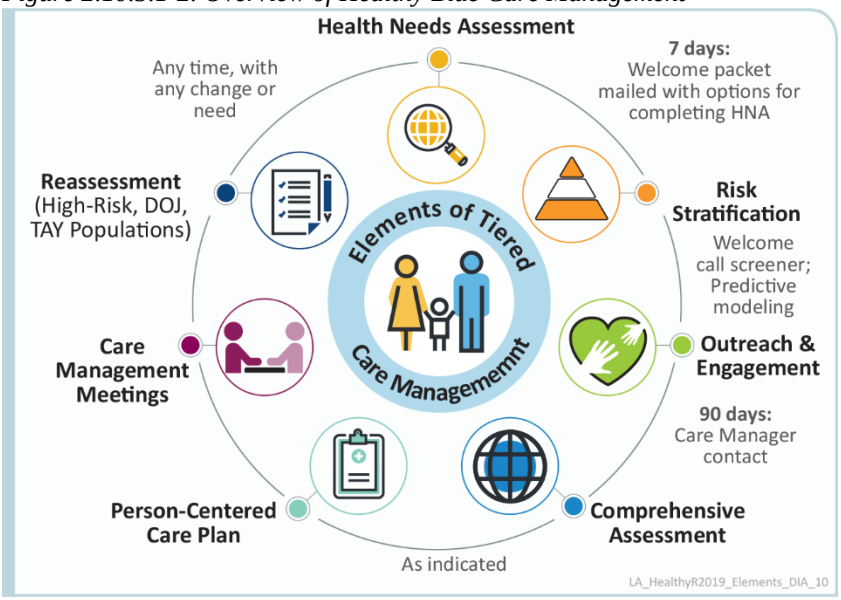
If a member with mental illness is experiencing homelessness, frequently visiting the local ED, and unable to maintain a supply of prescribed medications, our multidisciplinary care team, comprised of an Outreach Specialist and/or Navigator, BH clinicians, our Liaisons, a pharmacist, and a Housing Specialist, will gather resources from across our organization to assist that member. As soon as we know a member is pregnant, we activate prenatal supports and

[1] https://www.cdc.gov/ncbddd/adhd/prevalence.htm

services along with data analytics that assess utilization history and risk factors through every stage of her pregnancy. Our care management approach ensures that every member is surrounded by an active response team that might include any combination of system of care partners, primary care and specialist providers, family caregivers, virtual or face-to-face peer supports, community-based organizations, supportive programs like WIC and addiction recovery groups, or Healthy Blue Care Management team members.

Figure 2.10.5.1-2 is a diagram of our care management model, which begins with the health needs assessment (discussed in the next section) that new members are directed to within a week or two of enrollment. On a monthly basis, members are risk-stratified by predictive modeling, and those who are identified as at risk for hospital or frequent emergency department (ED) use or those with chronic, complex or specialized healthcare needs are contacted by a CM as soon as they are identified but no later than within 90 days. After making contact, the CM may perform more comprehensive or condition-specific assessments to aid in the development of a care plan in accord with the member's strengths and goals. The CM will bring in other resources as needed to address barriers to care such as a lack of transportation, food insecurity, unsafe housing, and social isolation. As the member's risk level changes (again, based upon monthly reports), reassessments are made to assist the CM in adjusting the person-centered care plan as described in more detail in Section 2.10.5.1.4, Healthy Blue Care Managers Develop Individualized, Meaningful Care Plans. Any contact between Healthy Blue and a member can trigger an assessment or reassessment.

Figure 2.10.5.1-2. Overview of Healthy Blue Care Management

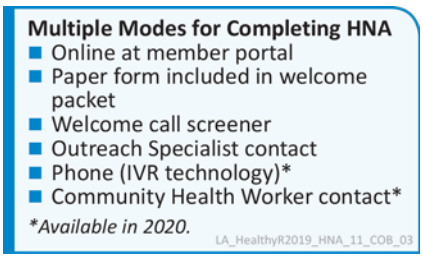


Our 24/7 Nurse Line and 24/7 BH Crisis Line are extensions of our local Care Management team. Staffed by nurses and BH clinicians, respectively, they are available to members around the clock for assessment of physical symptoms or to respond to a BH crisis, educate, and make referrals. All member interactions — even with the Nurse Line or BH Crisis Line — become part of their EHR, aggregated by Health Intech, our integrated managed care information system. Health Intech is a robust data infrastructure that guides the delivery of personalized and effective health interventions. It supports our care management functions and allows data sharing among providers, driving early identification of opportunities for intervention and health improvement. In the following sections, the icons from the Overview of Healthy Blue Care Management graphic will identify each stage of our care management process.

Process and Timeline for Health Needs Assessment

The health needs assessment (HNA) is one of our first opportunities to learn more about our members' health care conditions and barriers that they may be facing, so we work to make completing LDH's HNA as easy as possible by offering multiple, convenient options. We mail a printed copy of the HNA with the welcome packet to each new member or their caregiver within a week of enrollment, while at the same time initiating welcome calls to new members that help to identify any care or service needs. Outreach Specialists from our Healthy Blue Care Management team will directly contact new members who are in priority populations and who have Special Health Care Needs (SHCN). We continue to authorize and coordinate all existing health care services for members with SHCN for up to 90 calendar days or until we are able to conduct a full assessment of the member and complete a person-centered care plan. If a member loses Medicaid eligibility and is subsequently reinstated, and it has been more than 90 days from the member's previous eligibility, we will conduct an HNA within 90 days of reinstatement. In all matters related to the HNA and more comprehensive screenings, we will comply with Sections 2.7.2 and 3.1.15 of the Model Contract.

Welcome calls to new members offer a preliminary screening they can complete by phone or online. Even before an HNA is completed, the screener can tip off CMs to members who may have immediate physical, behavioral, or social needs. HNAs may be conducted any time a member experiences a transition or has contact with Member Services Representatives (MSRs), 24/7 Nurse Line Nurses, or 24/7 BH Crisis Line staff, has serial emergency encounters, is hospitalized, or when pharmacy use indicates that needs are not being adequately addressed. All Healthy Blue team employees who interact with members are trained to identify members' unmet SDOH needs such as housing, food, transportation, and interpersonal safety, as well as how to route each member to our Care Management team for further assessment of chronic or specific conditions and development of an individualized care plan. They are also trained to identify indicators of tobacco use and problem gaming, in accordance with the Model Contract.



The Healthy Blue HNA was designed to be brief to encourage completion while producing critical information about immediate needs and prioritizing outreach for care coordination and management. Our initial HNA collects demographic information, preferred language, information about current overall health, diagnoses and health history, medications, pregnancy and prenatal care, mental health, substance use, and unmet social needs. We have continued to actively pursue methods to increase member response to this valuable tool. In 2018, we built a link to the HNA in the member portal. In 2019, our MSRs are offering assistance in completing the HNA during the welcome call screener. When members agree to respond to the HNA, the MSR will capture the responses, and the information will be retained in the member's personal EHR in our Health Intech platform. [redacted]

Throughout 2019, we will be building strategic partnerships with trusted providers and organizations in Louisiana that specialize in member outreach and engagement as an additional strategy to increase HNA completion. We will be pursuing LDH approval to include text messaging as another option for completion of the HNA.

Identifying Enrollees for Care Management

Care management resources are focused on members who can be expected to benefit the most from management interventions. Our Health Care Analytics staff regularly use data from claims encounters, hospital discharge, UM, and pharmacy to assign a risk score to all eligible members.

Predictive Modeling

We recognize that the factors that accurately predict the PH and BH needs for adults covered under a Supplemental Security Income (SSI) or Medicare product may be quite different than those for children covered under the same SSI or Medicare product, adults receiving Temporary Assistance for Needy Families (TANF), or children covered under either TANF or the Children's Health Insurance Program (CHIP) products. Separate analysis of each subgroup allows flexibility in meeting the needs of these populations. We have also identified specific disease and condition cohorts based on predicted level of health risk and the likelihood that the risk can be reduced with care management.

Our predictive modeling Chronic Illness Intensity Index (CI^3) helps us proactively monitor and mine utilization data to identify members with high rates of utilization who may be at risk for ED visits, inpatient admission, medication adherence issues, or other problems that might be preventable. We notice when a member has three ED visits within a 60-day period because our data are continuously renewed and reviewed to spot individual or cohort patterns that can be corrected with intervention. CI^3 produces a risk profile of Low, Medium, or High, which serves as the initial basis for care management assignments and follow up. To accurately predict complexity and risk among members, our Likelihood of Inpatient Admission (LIPA) scale uses a combination of utilization (claims, encounter, and authorization data), [redacted]

demographic factors, and diagnostic information to predict the likelihood of inpatient admission within 60 days. With this information, we focus resources on members with the highest immediate risk.

Other predictive modeling tools help us generate risk scores for subpopulations to further stratify member risk level, prioritize outreach and assessment, and determine the scope and level of intervention needed:

- **ER TRIAGE** predicts the likelihood of low-level ER utilization
- **Statistical Obstetrical Risk (STORK)** determines risk of delivering an infant that may be admitted to the Newborn Intensive Care Unit
- **Readmission risk (RAR)** analyzes inpatient daily census report to determine likelihood of readmission
- **Behavioral Health First-time Admission (BH FTA)** identifies indicators of BH issues that may result in admission
- **Pharmacy** identifies indicators of underutilization, overutilization, and possible opioid use disorder

Additionally, our Continuous Case Finding process mines data from the previous 30 days to identify and prioritize our most current membership for care management. We are always looking for ways to enhance our predictive modeling and are adding BCBSLA's market-leading model as a supplement to the tools we have in place now.

In our first month of implementing Elli, we identified 39 members with diabetes, 6 with HIV/AIDS, and 7 with hemophilia (out of 1,838 new members) for outreach.
LA_HealthyR2019_Elli_DP_01

Our Health Care Analytics team recently developed an Early Warning Tool to identify new members with limited claims data who could potentially become superutilizers because of poor SDOH even sooner than our CI^3 predictive modeling does. We anticipate bringing the Early Warning Tool to Louisiana in 2020.

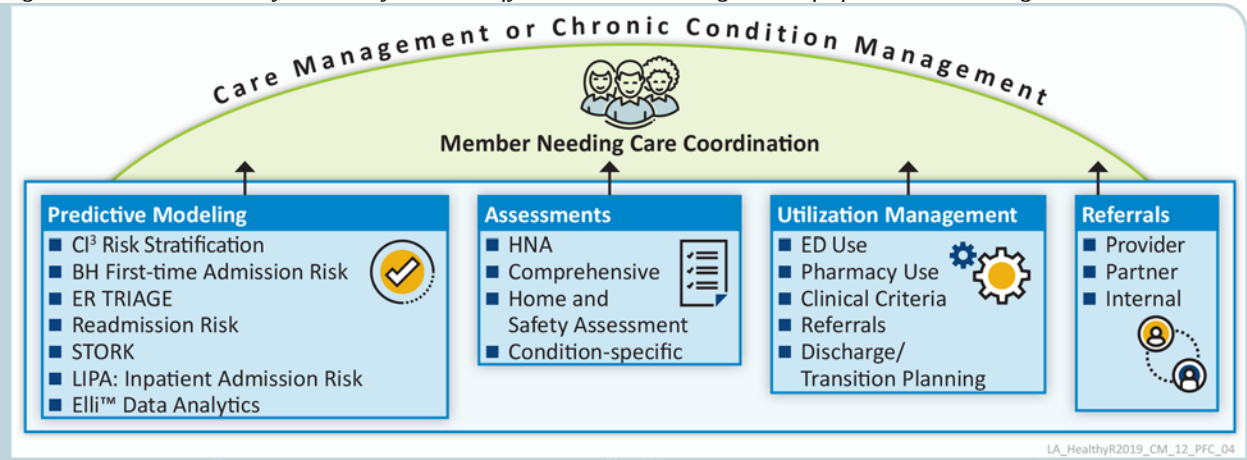
In addition to predictive analytics, we include clinical criteria to determine when a member may benefit from care management. Using inpatient/outpatient transitions; medical, BH, and pharmacy claims data; incident reports (suicide attempt, overdose); opioid patterns; and demographic variables to predict health risk may also result in identification for care management. Clinical criteria for referral to a CM may include, but are not limited to, the following:

- Subsequent readmission
- Three or more admissions within the previous 12 months
- Unplanned hospital admission of a member who was in care management in the previous 30 days
- Catastrophic illness and injury
- Chronic diseases not followed by Chronic Care Management
- Potential transplant candidates
- Patterns of inpatient and outpatient utilization
- Identified gaps in care
- Member-identified needs

Referrals

While data analytics are vital to our overview of population health, relationships with members are at the core of Healthy Blue's ability to quickly identify and respond to needs for care management. As mentioned in the previous section, all staff who interact with members are trained to recognize needs for referral and care management. Members are advised of care coordination and care management options and can request them, or self-refer. Furthermore, in our seven years in Louisiana, we have developed strong networks with providers and external organizations managing BH, dental care, and home- and community-based services. Any of those relationships could result in referral of a member to a CM. Figure 2.10.5.1-3 illustrates the many avenues by which we might identify members who need integrated care management.

Figure 2.10.5.1-3. Healthy Blue Ways to Identify Members Who Might Benefit from Care Management



Engaging Enrollees Who May Benefit from Care Management

Once members who may benefit from care management are identified, they are assigned to a designated CM based on their primary condition. Because Healthy Blue's care management model is fully integrated, we bring particular expertise to the task of managing care for members with comorbid PH and BH conditions with multidisciplinary support from our Community Outreach team, as well as our Housing Specialist and our Tribal Liaison. Regardless of member disease states, risk levels, or unique social or cultural concerns, our CMs and field-based Community Outreach team have access to the peers, resources, and knowledge to manage comorbid conditions and connect members to appropriate services and community-based supports.

Healthy Blue Is Privileged to Support Monica Johnson, Louisiana HIV/AIDS Activist

In 1984, while attending college, Monica received a blood transfusion. The following year, she was notified that the blood donor had died of AIDS. After five ELISA tests, she was told that her HIV test was "inconclusive." However, when she became pregnant in 1989, she learned that she was in fact HIV+. Monica's son Vaurice was born in 1990 and died in September 1993 from complications associated with AIDS. Since her son's death, and because of the stigma that she faced from her community due to her HIV status, Monica became an ardent HIV/AIDS activist. She founded H.E.R.O.E.S. (Helping Everyone Receive Ongoing Effective Support), a peer-based and peer-driven organization whose mission is to provide HIV education to people at-risk and to provide supportive services for HIV-infected individuals and their families with a primary focus on women and children.

When Monica joined Healthy Blue in 2017, her viral load had been at an undetectable level for more than 20 years, but she had been recently diagnosed with diabetes, as well as having diagnoses of high blood pressure, high cholesterol, neuropathy and arthritis — all in addition to her HIV diagnosis. Monica's Healthy Blue Care Manager has been meeting regularly with her to address her health needs and care concerns since she joined the plan in 2017. Since enrolling in Healthy Blue, Monica has gotten her diabetes, high blood pressure, and high cholesterol under control.

Monica told us that "the treatment that I have received through the Healthy Blue plan is state-of-the-art. I am very happy with my providers. In addition, I love the 'Making Fitness Fun' program. I highly recommend the Healthy Blue plan."

LA_HealthyR2019_Monica_RS_03

We use a myriad of methods to engage with identified members and offer care management support. All identified members are referred to our Care Management department and flagged for follow-up. The assigned CM attempts to connect with the member first by phone, at different times of the day and days of the week, and will send an "unable to contact" letter if phone calls are not successful. The CM or MSRs may search past enrollment files, claims information, and publicly available data sources such as Department of Corrections. Outreach Specialists will also search pharmacy, durable medical equipment, home delivery, and non-emergency transportation data to obtain updated contact information. In 2020, we anticipate gaining access to Homeless Management Information Services (HMIS), which collates information from homeless shelters, housing, and service providers, to identify members who may be experiencing homelessness.

After a third unsuccessful attempt to reach a member, CMs mail the member a letter offering assistance and encouraging the member to call back. Outreach Specialists and Community Connectors will contact providers and community partners who may have had recent contact with members who cannot be reached by any other means. Members prioritized for in-person outreach include those who are experiencing homelessness or who have other high-risk factors as indicated by prior claims history, admission/discharge/transfer alerts, or from internal and external referrals. [redacted] igure 2.10.5.1-4 shows our workflow for locating and engaging members in care management.

[redacted]

Our CMs engage members with motivational interviewing, coaching, recovery and resiliency protocols, suggestions for small, manageable modifications to assess member readiness for change, and person-centered care planning techniques. They explore and resolve barriers with the member, family members, caregivers, and health care providers as they emerge to help members actively self-manage and improve their quality of life. CMs build trusting relationships with members and their families and involve them directly in planning their care. They make telephonic and in-home visits for high-intensity intervention and clinical care management, as appropriate for each member's assessed needs and preferences and based upon the experience of our CMs. Because we want each member to have a trusted and familiar point of contact, we avoid disruption of that relationship.

We work with members toward their desired health care outcomes, empowering them to understand and use the benefits, services, and options available to help them meet their individual health needs. CMs inform members about telemedicine resources such as LiveHealth Online for PH needs; Bright Heart Health for pain management and medication-assisted therapy for substance use disorder; One Telemed for access to BH specialists; and Care Innovations remote health monitoring for select conditions. [redacted] CommonGround for BH education and support; and My Advocate™ for pregnancy education.

We were able to determine that **3097 out of 5149 (60.15%)** of members have utilized Telemed services in Q1 2019.
LA_HealthyR2019_2.10.4_Telemed_COB_01

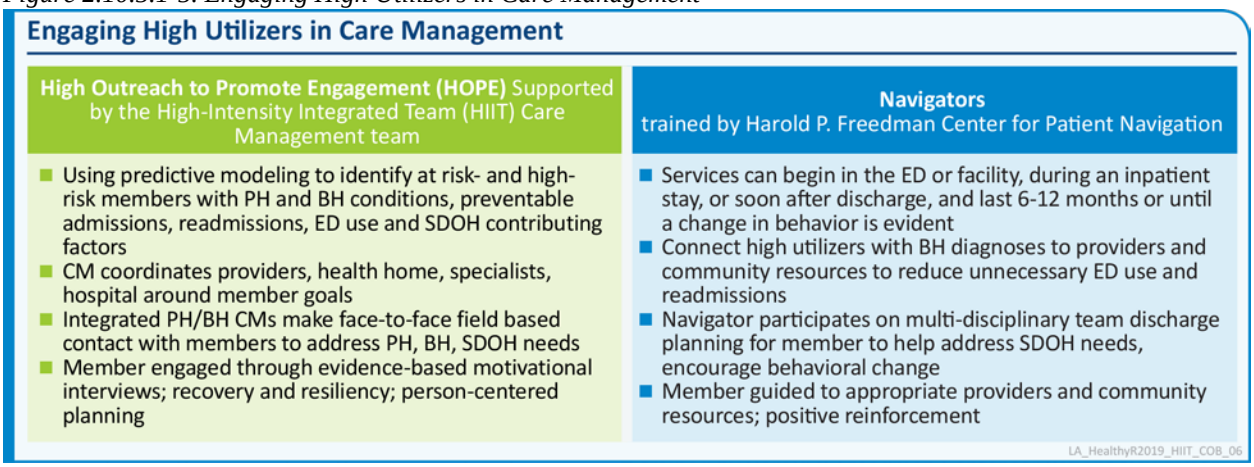
A Care Management Success Story

Dan, 62, had left-side weakness and paralysis as the result of two strokes, as well as hypertension, HIV, an enlarged prostate, and heart and kidney failure. He had relocated to Bunkie to get away from a New Orleans environment that had enabled his past cocaine use and had successfully overcome his addiction. Because of the strokes, his speech was slurred. With Dan's permission, his Care Manager initially worked with his brother to discern what Dan needed. Dan did not have a phone, so the Care Manager first arranged for him to have a SafeLink phone, and then helped him find a PCP, cardiologist, urologist, infectious disease specialist, and dental care. The Care Manager made sure Dan had transportation to every appointment and assisted with scheduling and medication management. The infectious disease specialist diagnosed Dan with hepatitis C and quickly started treatment for it. Today, free of hepatitis C, Dan's speech has improved and he schedules all his own appointments and transportation. Dan is one of Healthy Blue's care management success stories!
LA_HealthyR2019_Dan_13_RESU_01

Complementing these proactive engagement measures, our Louisiana-based Care Management team responds to inbound calls to properly route members to the appropriate CM. Medical Management Specialists are trained to connect callers to the most appropriate CM or warm-transfer urgent or crisis calls to the most appropriate responder. Every attempt to reach or respond to members is documented in Health Intech and is available to providers, the interdisciplinary team, and reportable to LDH on a monthly basis. Once members are enrolled in care management, CMs may make face-to-face visits and telephone calls to help them stay motivated and on track to make meaningful, incremental health and behavioral changes.

Our Healthy Blue Medical Advisory Committee (MAC), with representation from participating providers in Louisiana, is involved in the development, monitoring, and evaluation of the care management program. They give us excellent feedback based on their local understanding and influence our approaches to care management. They work with us to identify and address barriers to member engagement in care, offering practical experience and direction that continue to expand our outreach through community partners and providers as show in Figure 2.10.5.1-5

Figure 2.10.5.1-5. Engaging High Utilizers in Care Management



Tiers of Case Management

Data collected during the clinical intake and identification process described in Section 2.10.5.1.2, Identifying Enrollees for Care Management, is captured in our clinical data warehouse. Members who have not been identified with risk factors, gaps in care, or were not referred to care management are designated as Community Well. For them, care management emphasizes wellness and prevention, reinforcing healthy behavior with health promotions, health screening reminders, and care coordination to guide access to benefits, value-added benefits, enhanced benefits, and services. Members identified as likely to benefit from care management services are stratified to one of three tiers: Low, Medium, or High risk, as illustrated in Figure 2.10.5.1-6. These groupings trigger care management interventions. The risk levels build upon one another and define the types of services, supports, and resources for members at each level. Our tiers of case management comply with Section 2.7.2 of the Model Contract.

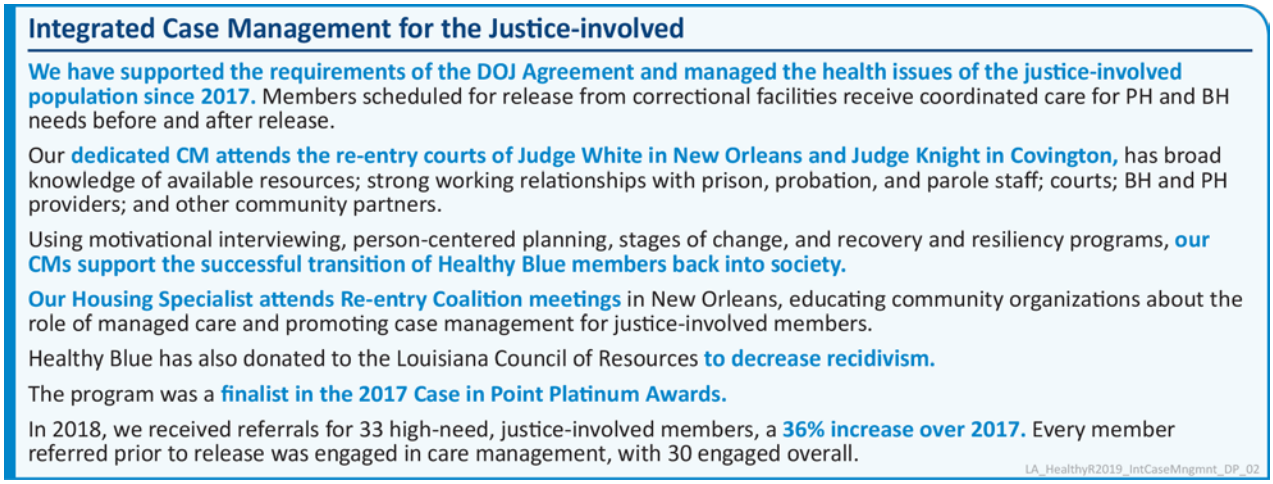
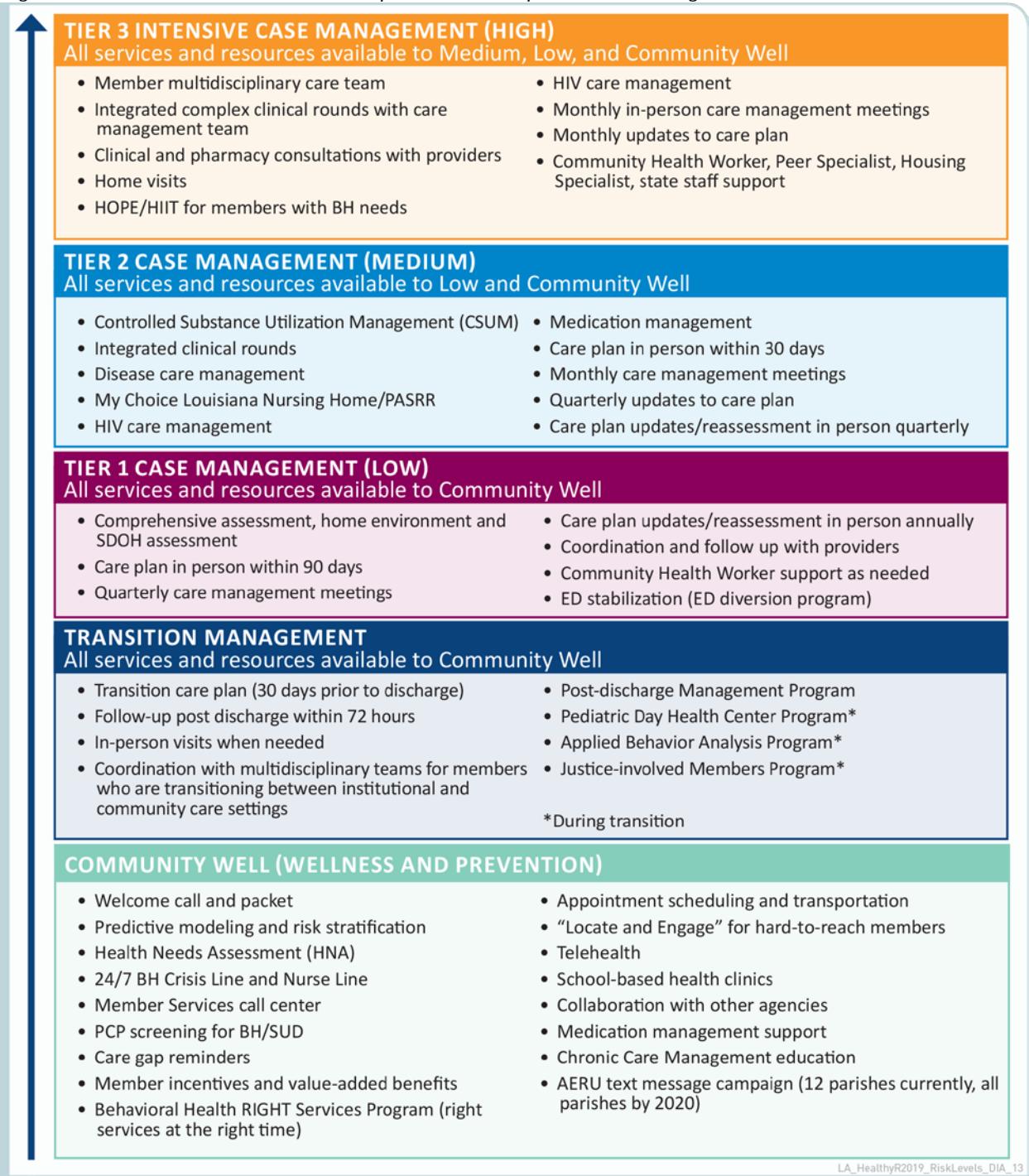


Figure 2.10.5.1-6. Services and Resources for Each Level of LDH Care Management Risk



Note: *Currently, 96% of Healthy Blue members are in the Community Well category.*

Members in the Medium or High risk levels may benefit from additional resources such as CHWs, Peer or Housing Specialists, and LDH Transition Coordinators to address increased acuity. We understand that members' PH or BH risks and social circumstances might fluctuate over time, so risk stratification is regular and dynamic. We generate monthly risk profiles for each member and use our CMs' clinical judgment to identify changes in status and quickly respond to those changing needs. We also keep communication open with members so they can request a care management program or increase the intensity of our interventions to meet their needs.

All members will have ongoing access to our Member Services department to request coordination of care and benefits, including transportation, and will receive communications about self-care, management of chronic conditions, and reminders to complete all recommended preventive services. All members can request to speak to a CM at any time by calling our Member Services department. Community Well members will not be assigned a CM unless they request one.

Healthy Blue has been a steady presence at the table alongside us in working to transform the lives of the formerly incarcerated population. They truly demonstrate commitment to building relationships with partners at work on the ground, and show that they understand that an individual's well-being goes far beyond their ability to access health care. We believe that Healthy Blue will not only be a strong partner in Louisiana's Medicaid program, but also to the community organizations that support those individuals in need.
– **Kiksha Constantine Martin**
Senior Project Manager for Reentry
City of New Orleans
LA_HealthyR2019_Kiksha_TST_02

Members with Low, Medium, and High risk who consent to care management are assigned to an experienced CM. Assignments are based upon whether the member's primary concern is a PH or BH condition; what the member's primary language is; and where the member lives. We work hard to assign members to CMs who live in and are familiar with resources in the same community. Many of our CMs have been with the plan since its beginning and bring decades of experience with the Louisiana health care system and community resources to our members. Their work demonstrates their passion and purpose, strong technical and skills, cultural competence, and service ethic. Our Care Managers are RNs, LCSWs, LMFTs, LPCs, and LPNs. They receive further integrated PH/BH care management training through MyLearning, an internal employee instruction site. 18 of Healthy Blue's CMs have been trained in Person Centered Thinking®, shifting their orientation from caring *for* members to working *with* them to establish their own goals and make decisions that improve their overall health and quality of life. Caseloads for High-risk care management programs are about 1 CM to 45 members, based upon the complexity of the members' conditions.

Our CMs are available for members and providers with any questions or concerns. When a particular CM is unavailable, the member can be referred to a backup CM for assistance during business hours. Members also have access to an emergency backup CM via an after-hours phone line. Additionally, our CMs collaborate with and consult our integrated multidisciplinary care team of Medical Directors, psychologists, addictionologists, pharmacists, registered dieticians, and health educators. A primary CM may be supported with additional CMs or non-clinically trained specialists when members have complex PH and BH comorbidities, so even the most complex of members has a single point of care coordination. For members in any risk category, we offer specialized assistance with transitional case management in accordance with Section 2.7.6.4 of the Model Contract.

Members who are transitioning out of the justice system will be offered Medium- or High-risk care management according to need to ensure continuity of care. Justice-involved members transitioning from a nursing facility to the community will be eligible for transitional care management (Medium- or High-risk) for at least one year under the guidance of LDH. Healthy Blue and our providers comply with the mandates of the Americans with Disabilities Act in helping each member locate providers with the closest, most accessible facilities and least restrictive environments. CMs thoroughly review and comply with care plans formulated for members before they joined Healthy Blue and make any necessary adjustments for appropriate care in their updated risk ranking and circumstances. CMs carefully plan transitions out of inpatient settings in advance of discharge and record follow-up appointments, updated medications, self-management measures to be taken, and request prior authorizations. They will follow up with members within 72 hours of transition and phone, mail, or fax updates to providers as necessary. No transitions are made nor is information shared without the explicit consent of the member or their parent or guardian. The CM oversees the entire transition, safeguarding the member's goals and serving as their advocate in the health care system and community.

Healthy Blue Helps Member Henry Transition from a Nursing Facility Back into the Community

Henry, 62, has numerous health conditions, including diabetes, hypertension, anxiety, depression, and substance use disorder. He was a resident of Kinder Retirement and Rehabilitation Nursing Facility for approximately three years before he no longer met the criteria to be there. Henry was referred to Healthy Blue's BH case management program as part of My Choice Louisiana, which provides transition planning and support. Angie, Henry's Care Manager, quickly determined his needs and engaged Merakey Assertive Community Treatment (ACT) to assist with the transition.

Angie drove three and a half hours to Merakey's Lake Charles facility to meet face-to-face with the Social Services Director, the OBH Transition Coordinator, the Merakey Program Director, and Henry to create a treatment and transition plan that worked for him. Henry and his care team agreed that a senior housing complex in Mermentau would meet all of his needs. For the next month, Angie and the team worked to ensure that Henry had everything he needed for the transition, including furniture, cell phone, medications, and toiletries. **Henry moved into his new apartment less than two months after his referral to Healthy Blue. He said, "I didn't think I could do it. I was scared, but now I'm ready to be home."**
LA_HealthyR2019_Henry_RS_02

Healthy Blue Care Managers Develop Individualized, Meaningful Care Plans

Using our comprehensive assessment tool with hierarchy and branching logic that probes more than 20 potential clinical areas for risk factors and includes specialized, evidence-based assessment modules for specific conditions and populations, the CM will review the member's PH and BH history, diagnoses, unmet social and ongoing clinical needs (including dental), current or past substance use, medications, and formal and informal caregiver supports. We use assessment tools appropriate for adults and children, BH concerns, and specific conditions.

Through a comprehensive assessment, the CM learns about the member's needs in detail. CMs note any cognitive or physical limitations, evaluate risk behaviors, and assess psychosocial and environmental needs to develop a person-centered care plan at the required tier of service. They encourage each member to participate in planning for community integration and self-advocacy. The care plan clearly outlines the member's relevant history, health status, support system, and wellness goals, and communicates the role each person or service plays in helping the individual achieve those goals, along with personal details such as crisis plans and pets' names to facilitate a focused, individualized response at any level of care. It identifies all members of the interdisciplinary team and their contact information. It notes the times and dates for face-to-face visits with the member. It describes clearly how barriers will be addressed and when. The care plan is organized around evidence-based clinical practice guidelines, which the CM supports by confirming that the member is keeping appointments, completing appropriate screenings or lab work, and engaging in self-care measures such as diet modification and blood glucose testing as outlined in the plan.

The member, the member's family, caregiver, providers, and other community supports will be involved in the development of the care plan as part of an interdisciplinary team. The CM helps the member identify who will be involved in the interdisciplinary team, and obtains and documents the member's consent to participate in the care planning process. The CM will support the person-centered process by scheduling a date, time, and location for the assessment and care planning that is agreeable to the member. If the member wants the team to meet face-to-face, the CM will schedule the interdisciplinary team accordingly. The CM will also make any accommodations such as interpreters or other ancillary services to facilitate everyone's active participation.

With the results of the comprehensive assessment and the member's personal EHR in Health Intech, the CM will guide the member through the care planning process, identifying short- and long-term goals, preferences, needs, and desired outcomes. The CM will assist the member in understanding their choices for care, services, and supports available for their particular needs, including non-covered services and supports from other State programs. The CM will respond to all questions that the member has and follow up on any requests or preferences.

Ongoing Monitoring of the Care Plan

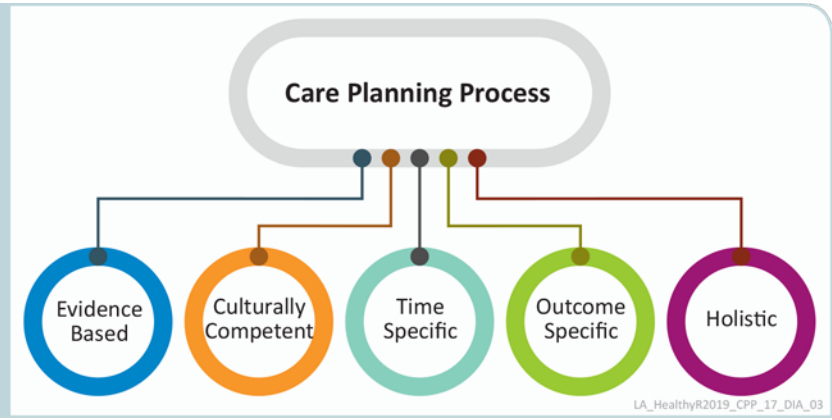
The CM and member will regularly review the care plan, reconvening the interdisciplinary team as needed, but no less than annually for Low-risk members, quarterly for Medium-risk members, and monthly for High-risk members. They will also review the care plan at the member's request, during reassessments, and when member circumstances or needs change significantly. The CM will gather information from the member's PCP, other providers, and interdisciplinary team participants identified by the member. Healthy Blue will make sure each care plan is documented and stored in Health Intech, and made available to the member and the PCP. The care plan is accessible to all CMs and providers, so teams can work in concert to assist members with comorbid conditions. For example, a BH CM coordinating hospital discharge for a member with depression may need assistance from a medical CM to verify that diabetes or other chronic conditions are well-controlled during the transition. CMs also link members with the social and community supports they need to stay on track. This is especially critical for members with BH conditions who may be homeless; who are involved with multiple agencies, such as juvenile justice and child welfare; or who have co-occurring substance use disorders or medical conditions that make it challenging for them to navigate the system. We include CHWs and home- and community-based organizations with whom we have built relationships when planning for a member's care.

If a member's condition deteriorates or improves, or as the member's interdisciplinary team or parent/guardian requests, the care plan is adjusted and communicated to the team. CMs prepare and present cases at rounds to get input from Medical and BH Directors, pharmacist, Utilization Managers, and subject matter experts on the care plan; to discuss suggested modifications; and to discuss community resources available to the member. At every point, the member and their current needs are at the center of the planning process.

Care Plans Address Social Determinants

Because we take a holistic view of our members, Healthy Blue care plans include goals related to supporting member SDOH needs. CMs, with support from our Outreach Specialists, will help to locate and connect the member to supports and service options within their community. [redacted]

Our Care Management team also includes key staff with knowledge and expertise in SDOH issues in Louisiana. For example, if a member is homeless, the CM will work with the Housing and Outreach Specialists to refer the member to the appropriate resources and assist with the completion of applications for housing.



If a member has serious mental illness but would like to get back into the work force, we reach out to our connections with the Capital Area Reentry Coalition, Louisiana Workforce Commission, or Job Corps to help the member gain or expand employment opportunities. For members with serious mental illness who live in nursing facilities, Healthy Blue can authorize and pay for mental health rehabilitation services, give them the option of living with a qualifying caretaker, or help them to get PSH placement. CMs and Navigators (see Section 2.10.5.1, *Supporting the Triple Aim with Effective Care Management*) can assist with transportation to appointments and agencies in the community to help members overcome barriers to care (for example, to meet with a recovery group or potential employer).

In 2019, we are introducing a program specifically designed to support provider identification of members with food access challenges. [redacted] In all of these examples, our CMs are identifying options for members and including those options in their person-centered care plans to help them live healthier lives in the environment of their choice.

A Better Path in Sight

Cedric is one of our members with a developmental disability and multiple medical and psychiatric conditions. Cedric, who is in the BH-only coverage group, was released from jail with a two-week supply of medications, no refills, and only a partial bottle of his glaucoma drops. Without the drops, he feared he would lose his eyesight. Cedric's CM located a 340 B pharmacy that would cover all of his medications except the eye drops, but was unable to find anyone to refill his glaucoma drops. Cedric began to worry that he might be better off in jail if he had to go without glaucoma treatment. His CM had attempted to contact every institution that might be able to help without success, so her supervisor contacted Karissa Page at LDH, who connected her to the Medical Director at the FIT Forensic Clinic at UMCNO. Even though the clinic was in the process of relocating, the Medical Director filled the prescription and hand-delivered it to Cedric at his home, taking some time to talk with him about his medical concerns and allaying some of the fears he expressed. Cedric was very grateful and now gets his treatment at the FIT clinic.

LA_HealthyR2019_Cedric_RS_02

Coordination with Providers and State Staff to Eliminate Duplication of Services

As an incumbent, Healthy Blue is familiar with the services and supports provided by LDH and the Office of Public Health. For members who are seeking or receiving these services, we will include these system-of-care partners in the member's interdisciplinary team and care plan as appropriate. We will also reach out to these other CMs for collaboration in care planning so as to not duplicate services. CMs can facilitate information-sharing with the entire health care team to make sure services are synchronized, unduplicated, and consistently delivered. We also want providers to view our Navigators and CMs as care management partners who reduce their administrative burden and improve the quality of care for Louisianans, helping them avoid unnecessary or duplicative services. Providers can access all data on member care plans, assessments, and progress as well as services being provided to that member. We make it easy for providers to notify us through the provider portal if they discover any duplication of services. Providers and LDH staff with access to Health Intech can review care plans and assessment information to spot any duplication of services, medications, outreach, or support. Having all treating providers equally involved in the care management planning process with the coordination of a primary CM prevents duplication between providers.

Coordinated Service Improves a Member's Quality of Life

Twenty-year-old Ben was evaluated by the Office of Developmental Disabilities in 2018 and met the criteria for one of their waiver programs. Ben, who has DiGeorge syndrome, has been wheelchair-bound since he suffered anoxic brain damage after a stroke during open heart surgery at age seven. Because of his contractures, Ben cannot extend his arms, and his ability to use his hands is limited to a pincher grasp. He is incontinent and wears diapers. Ben was placed on the waiting list, which made him eligible to be a Chisholm Class member. His mother chose to have a state Support Coordinator to ensure that she and Ben had knowledge about and access to covered and non-covered Medicaid services while waiting for the waiver to be issued. The Support Coordinator called Healthy Blue to request assistance in locating a Personal Care Services provider in Ben's region. All calls involving Chisholm Class members are referred to our Prior Authorization Liaison (PAL), who provided a list of agencies for the Support Coordinator to contact. All Chisholm Class members are offered care management, and any Chisholm Class member who is having difficulty obtaining services is automatically referred to a Care Manager (CM), whose goal is to gain an in-depth understanding of the needs of the member and his caregiver. When he entered care management, Ben's mother reported that his wheelchair was broken and that he had outgrown it. He was using a bath chair that someone had made for them but had outgrown that as well. His mother was paying for his diapers and said she had been trying without success to get help with Ben for years. Ben's CM worked with his mother, our PAL, the Support Coordinator, and DME providers to get Ben a new wheelchair and bath chair, diapers, and Personal Care Services. To make sure the chairs fit and were the appropriate type, a physical therapist visited Ben's home. Ben's mother was very appreciative of the coordinated effort to make her son more comfortable and safe.

LA_HealthyR2019_Ben_RS_03

This page is intentionally left blank

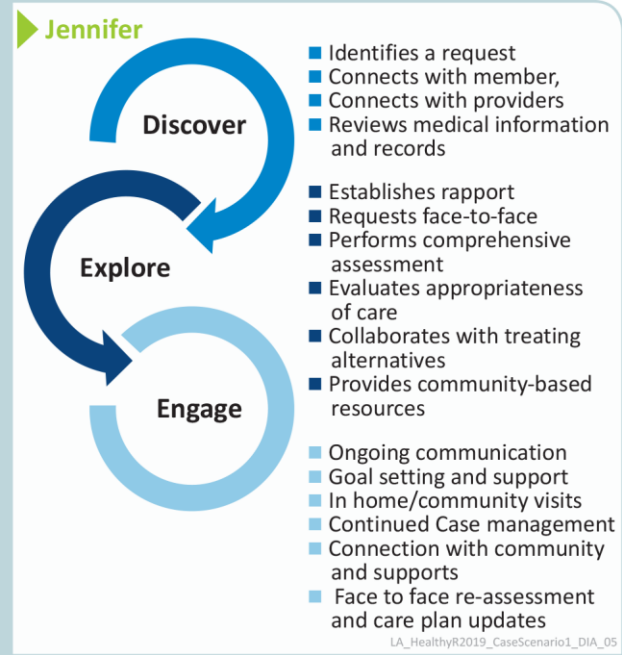
2.10.6 CASE SCENARIOS

2.10.6.1 Case 1: Jennifer Needs Help with Chronic Pain

At Healthy Blue, ***everything we do begins and ends with the enrollee (member)***. We focus on supporting members to be the drivers of their care using a holistic, person-centered approach and coordinating physical health (PH), behavioral health (BH), medications, and social supports that address their needs. We focus on members' strengths, abilities, preferences, and goals, assuring the ***right care occurs, in the right place, and at the right time***.

Discover

Healthy Blue's priority is to address Jennifer's immediate need — to alleviate her back pain.



Jennifer, who has been participating in our care management program, recently had a third visit to the emergency department (ED) for her back pain. Sarah, her Care Manager (CM), has routine meetings with Jennifer on her health needs, and learns that Jennifer visited an Adventist Health St. Helena surgeon who submitted a prior authorization request for orthopedic spinal surgery. Sarah reached out to the utilization management (UM) reviewer who is addressing Jennifer's health concern. Together, they discovered that the Medical Director recommended Jennifer receive physical therapy services prior to surgery. While coordinating Jennifer's overall care, the UM reviewer has been working with Jennifer's primary care provider (PCP) and surgeon to explore and identify physical therapy providers near her home. Sarah convenes a meeting with Jennifer and an interdisciplinary conference that includes her PCP, OB/GYN, surgeon, the UM reviewer, and Healthy Blue Medical Director to ensure service planning addresses her most immediate need of pain reduction and management. Sarah reviews Jennifer's personal health record in our Health Intech platform and gathers additional information from the surgeon, PCP, Jennifer's OB/GYN, and other providers with whom she has been working. These comprehensive details assist the team to develop options for Jennifer's care plan that will impact her future health outcomes.

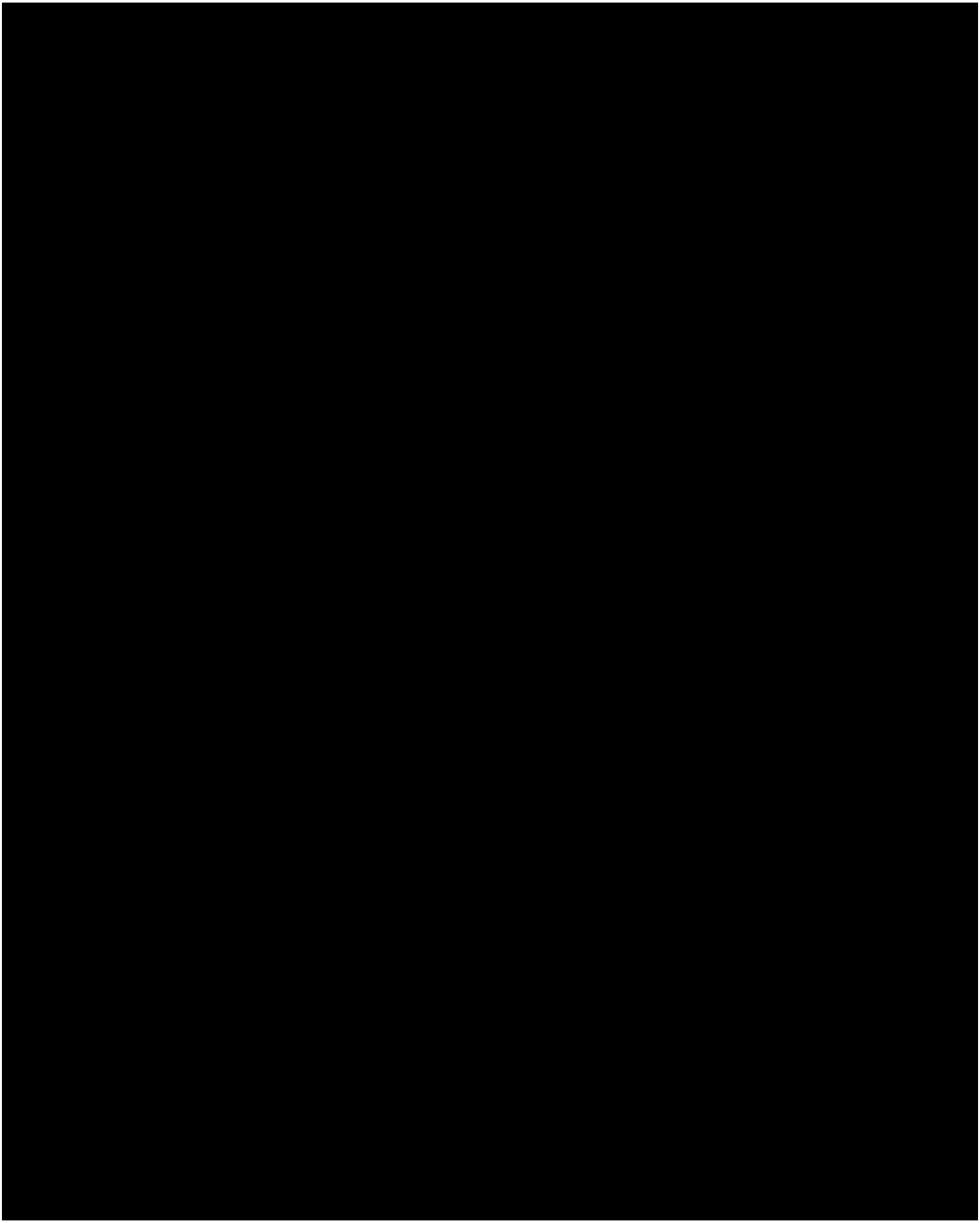
Additional information includes, but is not limited to:

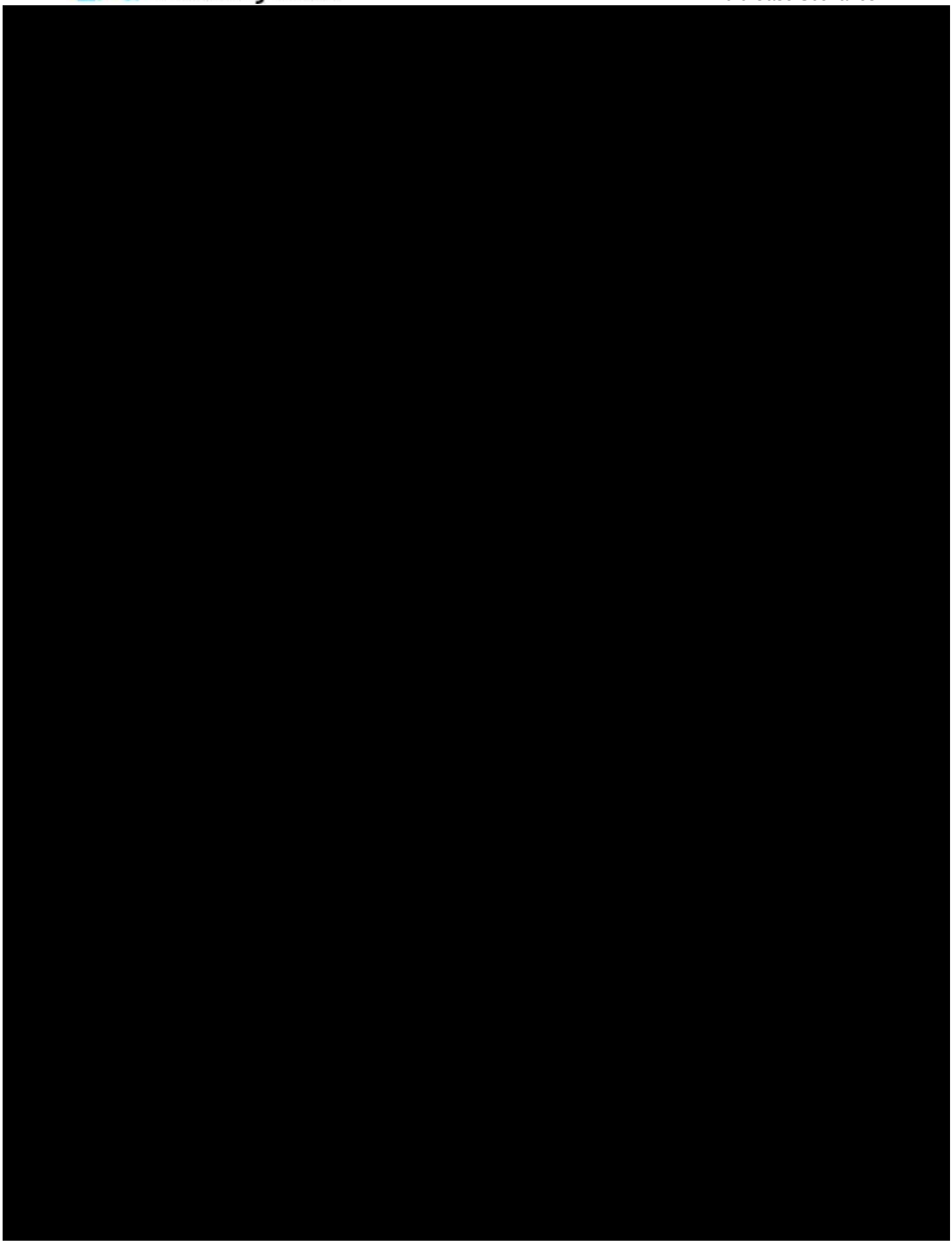
- Pain management treatment that Jennifer has been receiving and if she is still taking it
- Less invasive treatments, like Physical Therapy, that have been attempted and if they meet AIM Spine Surgery Guideline criteria
- Current plans to treat Jennifer's Hepatitis C (HCV)
- Status of Jennifer's diabetes and hypertension and provision of any guidance for weight control
- Current interventions to address her frequent use of the ED
- If Jennifer's children are currently diagnosed with or at risk for any BH or PH conditions
- Current gaps or needs based on social determinants of health (SDOH), such as lack of healthy nutrition resources, transportation, housing, social connections, childcare needs, or other factors

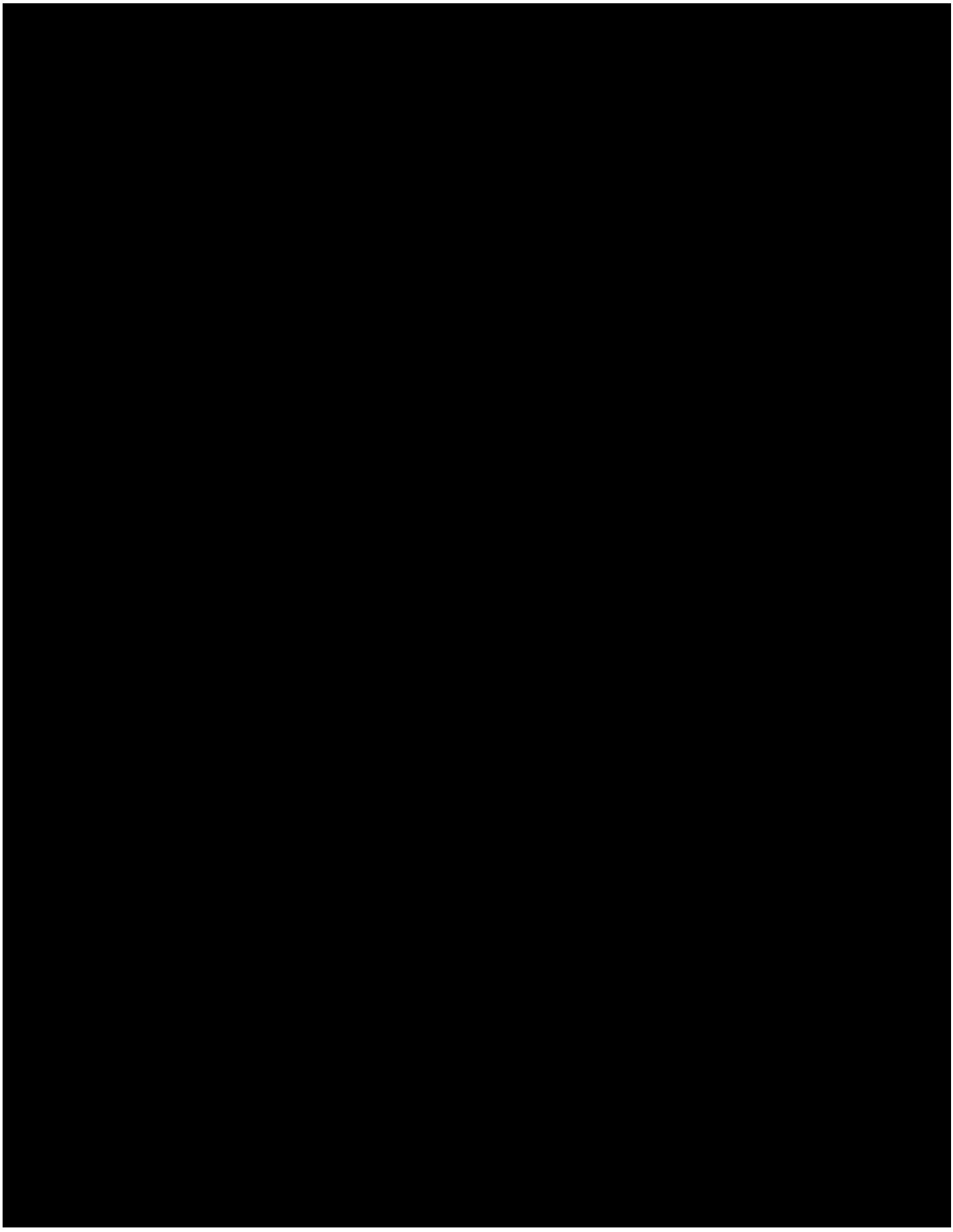
St. Helena Parish is sparsely populated with about **12,000 residents**, **27%** of whom are at or below the poverty rate and **50%** are single-parent households. Only **6%** of the residents have access to a readily available source of food and **21%** are experiencing some level of food insecurity. About **37%** of the adult population are obese.
LA_HealthyR2019_StHelena2_COB_02

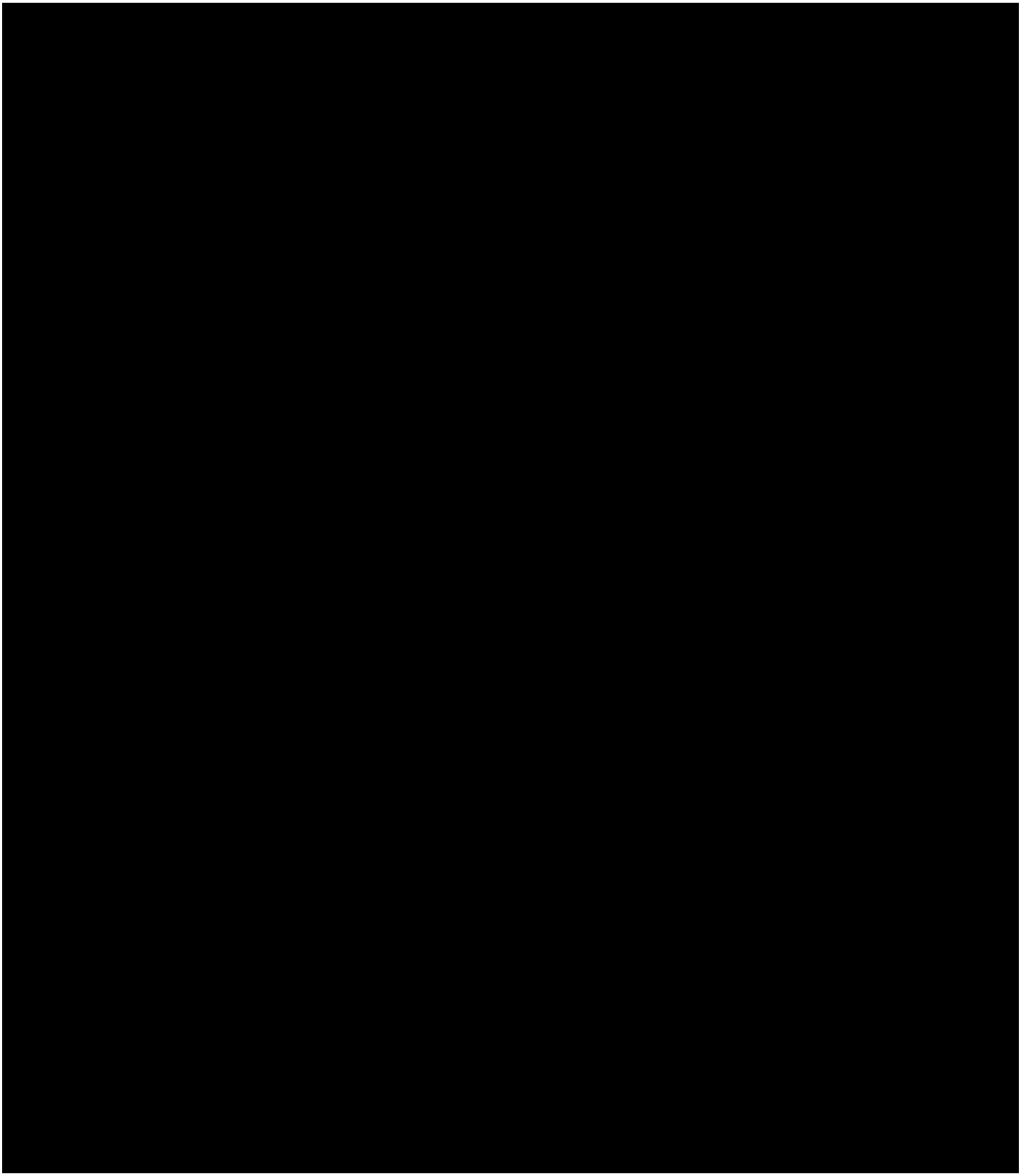
Gathering comprehensive information based on Jennifer's unique needs helps us to holistically address them from her perspective. Our integrated, multidisciplinary UM process leverages relevant evidence-based practices and industry-recognized clinical guidelines, while partnering with treating providers and working with Jennifer to improve her health, well-being, and quality of life. We respond to Jennifer's unique needs and situation, and consider her home environment, family and caregiver supports and resources, and characteristics of the local health care system that is serving her when making medical necessity decisions.

Jennifer's holistic needs encompass more than the initial service request, so Sarah will continue to interact with Jennifer to begin the reassessment and care plan revision process, described in the following subsections.









2.10.6.2 Case 2: Jacob Needs Immediate Attention for BH Issues

We coordinate all aspects of a member's care through our person-centered care management approach. For children and adolescents like Jacob, we work with families and/or caregivers with awareness of, and sensitivity to, the personal experiences and preferences of members and their families. Our focus is on supporting families so that we can help achieve the best possible outcomes for the child and equip parents or guardians with the resources, tools, and information they need to be the best advocate for their child and the family's overall health.

Discover

Healthy Blue's primary focus is to identify and address Jacob's need for the least restrictive setting and to achieve the best health care outcome for him and his family. Jacob is currently in the ED and the evaluator is recommending a brief psychiatric inpatient stay for Jacob to stabilize his current symptoms. However, the ED is unable to locate an available bed in a facility. While Jacob is waiting in the ED, his father and stepmother contact Healthy Blue, explaining that the hospital is recommending an inpatient stay but that they are unable to locate a bed for Jacob. After Jacob's parents share the details of Jacob's situation — outlining to the UM reviewer his history of abuse and the current worsening symptoms of post-traumatic stress disorder (PTSD) and self-harm behavior — the UM reviewer, working with Jacob's family, notifies Jacob's CM, Michael. The original assessment of Jacob's health conditions has already resulted in a high-risk Tier 3 stratification, so the UM reviewer and Michael immediately ***mobilize the Healthy Blue Clinical team and BH Coordinator to intervene and address Jacob's need for inpatient treatment***. Michael engages with the BH Coordinator and goes to the ED to meet with Jacob and his family in person to discuss the situation and to assist with coordination of services for Jacob. We also contact Dr. Hammer, a psychiatrist on our advisory board, to go to the ED and complete an evaluation of Jacob's current needs, including validation of a Certificate of Need to determine the right care currently for Jacob.

While Michael is with the family, he completes the screening questions for a referral to the LDH Coordinated System of Care (CSoC). ***Building shared capacity to improve health care quality through data and collaboration between MCOs and providers, we work closely with the administrator of the CSoC to conduct weekly rounds for the members we have in common and will contact them to let them know of this new referral.***

Our team takes an intensified approach to engage Jacob and his family while also leveraging relationships with providers and resources to locate needed bed availability. This integrated approach includes our UM and Care Management teams, our BH Coordinator, our Liaison to the Office for Citizens with Developmental Disabilities (OCDD), with which Jacob is already involved, and our BH Medical Director. These teams work together with Jacob's providers, the hospital and their evaluation staff, and Jacob's family to stabilize the psychiatric crisis and quickly identify resources to find relief for the family. This includes connecting with Capitol Area Human Services (CAHS) for potential crisis stabilization availability that can provide the recommended services. ***The Healthy Blue Clinical team immediately begins a search for the next available inpatient bed for Jacob, regardless of whether the availability is within our provider network or with an out-of-network provider.***

The UM reviewer, after relaying the next steps to Jacob's family, contacts the ED to gather the needed clinical information to complete a prior authorization for services, so that when a bed is available, a transfer can happen expeditiously. This discussion includes the recent visit to the ED, discharge or provider recommendations, current symptom and behaviors, history, and any medication changes. Michael and the UM reviewer speak with the ED discharge planning staff to review the discharge plan from the prior visit and to determine if it included a crisis plan. If there was a crisis plan, we also seek to find out what it was about the plan that didn't work. This step affords our Care Management and UM teams the opportunity to coordinate how effectively ED staff and Healthy Blue are communicating regarding Jacob's needs when he presents at the ED. As a result of shared identification of gaps, we ***work to partner with the ED to enhance our notification processes when Jacob is in need of emergency services,***

including the use of admission, discharge, and transfer tools that can provide real-time information about Jacob's condition to the Healthy Blue and ED teams. This will help both the facility and Healthy Blue to put in place the necessary care coordination for Jacob and his family and mitigate lengthy ED stays while hospital staff are waiting for resources to be available to Jacob.

The UM reviewer and Michael work in tandem to develop a solution for Jacob and his family so that services are not delayed and he can be safely transitioned into the most appropriate treatment setting.

Explore

Person-centered Approach

Michael convenes a meeting of Jacob's interdisciplinary team, which has been established since Jacob began receiving care management services from Healthy Blue, and reaches out to Jacob and his father and stepmother to begin the process of conducting a reassessment with Jacob, his family, and Jacob's providers to create an individualized care plan that will align with provider treatment plans. As we mobilize our internal clinical staff to locate provider and facility resources and coordinate with CSoC, Michael concurrently collects information regarding Jacob's BH and PH conditions, his treatment history, abuse history, and the SDOH that may be directly or indirectly impacting the development and treatment of Jacob's PH and BH conditions. ***Michael partners with Jacob's providers to obtain the most complete and accurate picture of his health and treatment from their perspective.***

East Baton Rouge Parish is the largest parish in Louisiana, with **22.7% of its population** below 18 years old. Approximately **75% of children** in the parish are eligible for free or reduced lunch and **25% of parish children** live in poverty. It is primarily urban and suburban and is the most highly educated parish in the state, with about **13% of families** living below the poverty line. LA_HealthyR2019_BatonRouge_DP_01

Michael spends face-to-face time with Jacob and his family in the ED, keeping them informed on our ability to identify the most appropriate treatment setting based on Jacob's individual needs and the needs of his family to accomplish the best possible outcome. Michael continues to establish trust, develop a relationship with them, and reassures them that this process will not delay the search for an inpatient bed for Jacob. Michael is familiar with East Baton Rouge Parish and the surrounding parishes, so he can identify potential providers for Jacob, such as the Cognitive Development Center of Baton Rouge, Start, Lighthouse Community Care, Merakey Pennsylvania, and Volunteers of America in Greater Baton Rouge.

Jacob is reported to have experienced early childhood abuse over several years and has an existing diagnosis of autism spectrum disorder, so Michael reaches out to our OCDD Liaison to determine if Jacob is receiving any Home and Community-Based Services (HCBS) through state-funded programs, such as Individual and Family Support and/or the Flexible Family Fund. We will also inquire about Medicaid HCBS Waiver programs.

Michael also meets privately with Jacob's father and stepmother to discuss their current mental status, find out how they are feeling, and to help identify their treatment needs to address the resurgence of their BH conditions. They are not members of Healthy Blue, but as part of a holistic, coordinated approach, we want to be sure that they are receiving the care they need. Michael encourages them to reconnect with their individual providers and to participate in the family treatment services that will be provided through the hospital, CSoC, and the Children's Choice Waiver, if Jacob qualifies. Michael will assist Jacob's parents in requesting the required assessment for waiver eligibility and inclusion in the Children's Choice or other appropriate waiver programs. If they need referrals or recommendations to providers, Michael will assist them in this effort. ***We strive to achieve positive health outcomes for Jacob by focusing on his family as a whole, with him as an integral part of it, rather than treating Jacob in isolation.***

Key Areas of Jacob's Comprehensive Assessment
Bio-psychological
• Multiple ED admissions • PTSD • Anxiety • Depression • Self-harm behavior • Autism spectrum disorder
Social and Supports
• Relationship with family, including stressors and past abuse history — is there a need for family therapy or parenting education? • Assessment of barriers to accessing educational resources — does Jacob have a current IEP? Is there a need for an education re-evaluation? • Access to autism spectrum disorder supports and services — has Jacob been receiving these supports and services? • Discussion of possible CSoC, Children's Choice, and other supports — which supports will be most appropriate? • Father and stepmother access to individual treatment for their BH issues — would they like to return to previous providers?

Screening and Assessment Tailored to Jacob's Needs

Time is of the essence for our response to Jacob and his family. The interdisciplinary team takes a person-centered, multi-agency approach to how they gather information regarding Jacob's health status and treatment history, along with addressing his father's and stepmother's current diagnoses and the escalations that they have experienced with their symptoms. Jacob's father and stepmother are engaged in a discussion about their treatment

history and how they want to move forward. If there is a need for their own treatment or to revisit medication options, Michael offers support and referrals to connect them to services addressing their BH conditions.

Michael also engages with our CSoC program liaison. CSoC provides a Wraparound Facilitator to develop a care plan to identify services and supports to meet the needs of children with BH concerns and their families, as well as other needed services and supports that affect their well-being. Children and youth who qualify for the CSoC program are referred to the CSoC program administrator to specifically address BH service needs. Michael and our Clinical team coordinate closely with CSoC through our multi-agency approach.

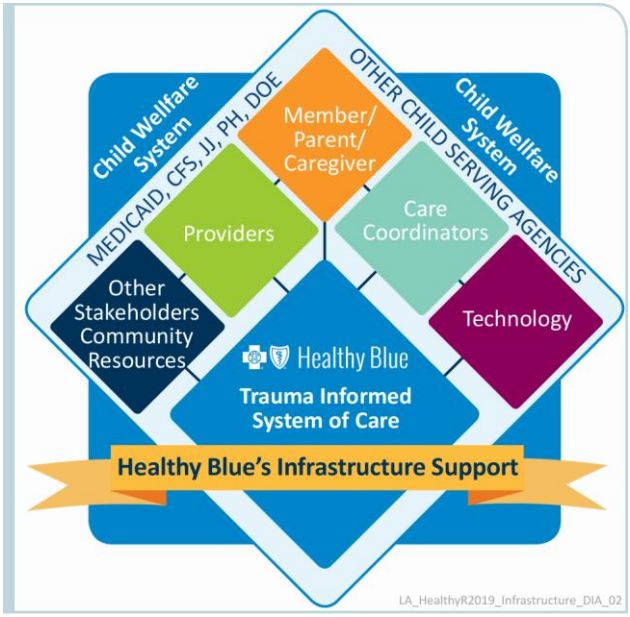
We also need to learn about Jacob's school situation. Michael asks Jacob's family if Jacob has an Individualized Education Plan (IEP) and is enrolled in any special education programs. If Jacob is receiving services in school, Michael seeks permission from the family to speak to the school personnel to obtain any pertinent information and education records. It is especially important to speak with his teacher(s) to obtain their insights into Jacob's behavior and educational challenges. Michael also requests results of assessments, including psychological testing, administered in school as part of the IEP eligibility process, to augment our screening and assessment process. During the reassessment process, Michael collects information about Jacob's functional and accessibility needs and goals. ***A critical part of this interaction is for Michael to find out the goals for Jacob and his family along with planning for their desired outcomes of treatment.***

Engage

Michael takes this information and works with Jacob and his family to explore and identify the most appropriate placement that will meet Jacob's needs once his symptoms are stabilized. This, along with any other health and SDOH needs, are incorporated into Jacob's care plan, which represents the goals that Jacob and his family have identified and addresses his health issues from a whole-person approach.

Addressing Jacob's Immediate Needs

Our task is to determine the safest placement for Jacob as quickly as possible to address his distress. We seek to locate an appropriate facility, regardless of its network status with Healthy Blue that is closest to Jacob's home to reduce the travel burden on his family. The Healthy Blue Clinical team secures a bed at River Oaks Hospital in New Orleans for immediate transfer and initiation of treatment. River Oaks Hospital provides comprehensive therapy services in addition to a trauma unit which will address Jacob's past trauma history. While at the hospital, Jacob can be evaluated for trauma-informed care, Adverse Childhood Experiences, and other trauma experience information that is helpful for his treatment plan. Jacob and his family are safely transported to River Oaks Hospital via LogistiCare's secure patient transport.

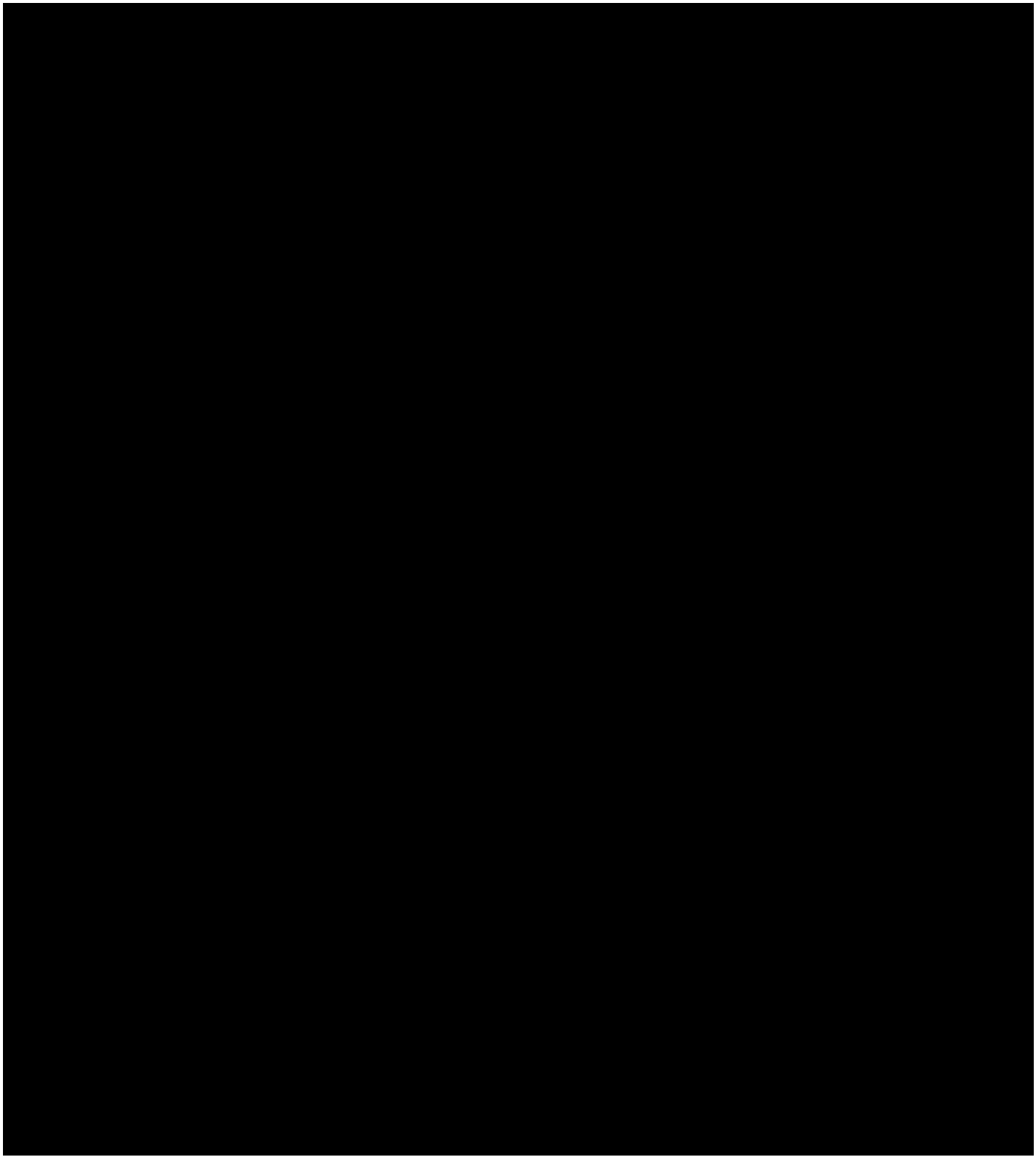


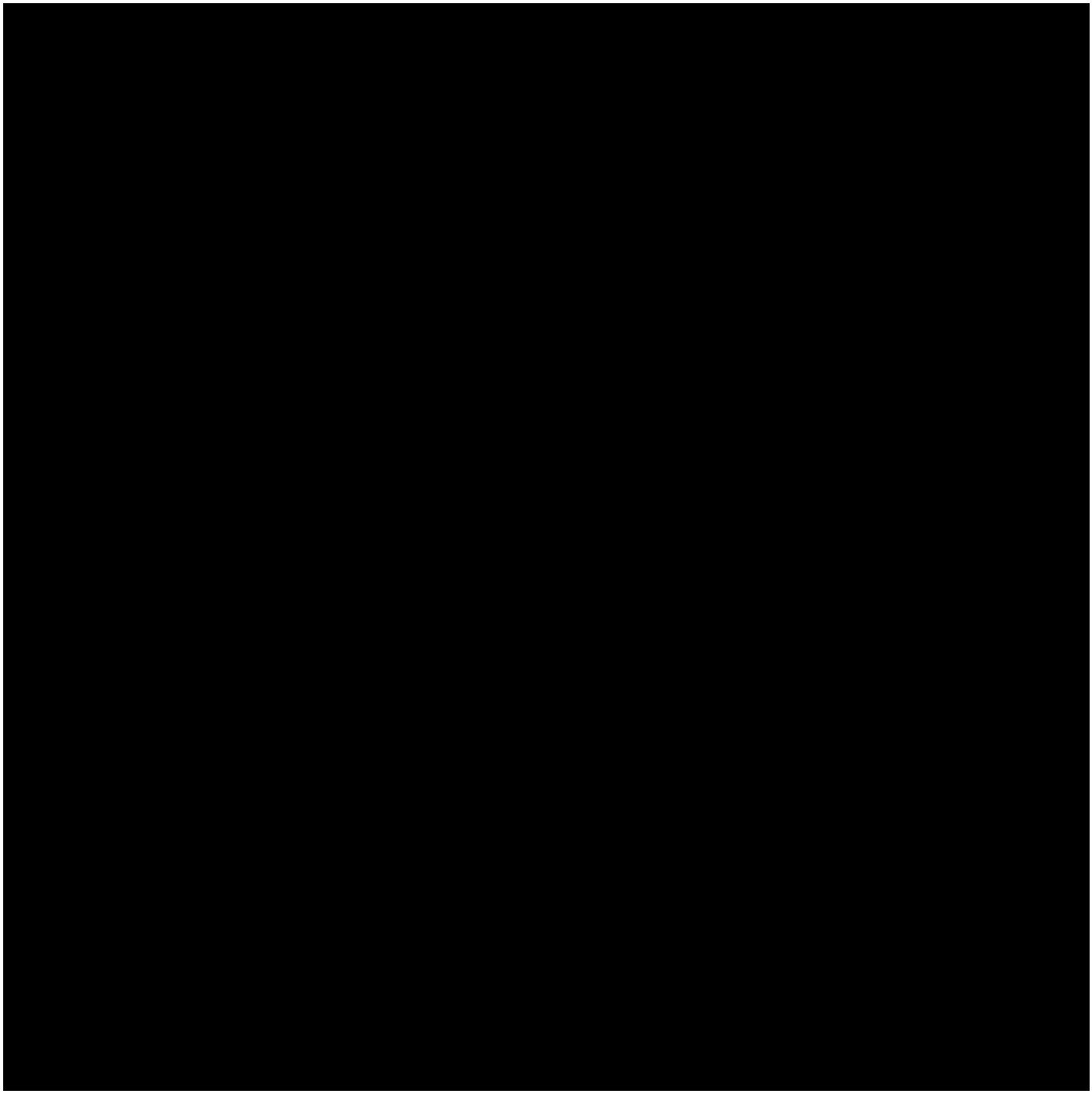
Jacob's stay at River Oaks Hospital is intended for short-term stabilization while the Healthy Care Manager works with Jacob and his family to develop a plan for the services they will need once he is discharged. Potential services include a brief stay in a Therapeutic Group Home and then return home with wraparound support.

Development of Jacob's Person-centered Care Plan

Once Jacob is safely in treatment, Michael convenes Jacob's interdisciplinary team to focus on what Jacob wants and needs in this process. The team also takes Jacob's family's desires regarding Jacob's treatment future into account in the care plan. The team now includes CSoC and Children's Choice representatives, educational representatives, wraparound and other in-home support providers, or any other caregivers or resources with which they are now working, in addition to the participants that Jacob and his family chose when the team was originally formed. This multi-agency approach is an effective method to verify that all involved parties and organizations are informed and aware of Jacob's status and needs at any given time.

As a critical component of Jacob's care plan, ***the team develops a crisis plan that can be deployed by Jacob's family in case of an emergency***, as demonstrated in Table 2.10.6.2-1. The crisis plan includes instructions for both Jacob and his family when his symptoms escalate. The crisis plan also helps Jacob identify the steps he needs to recognize when he is



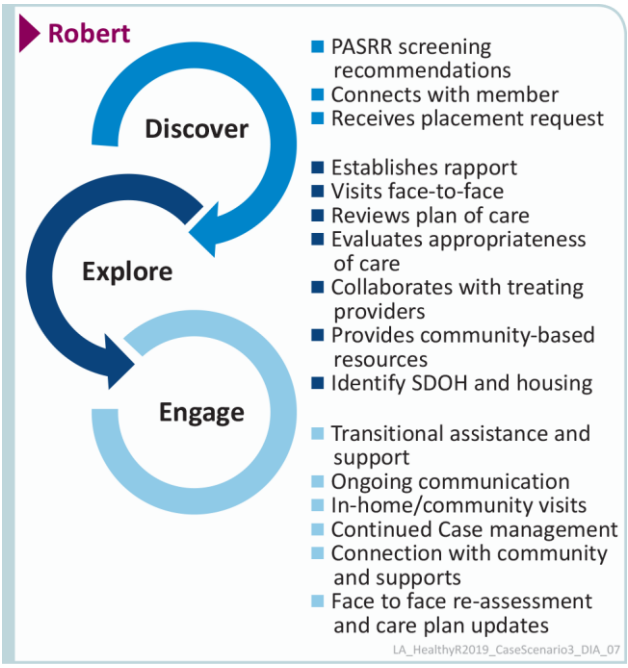


2.10.6.3 Case 3: Robert is Ready to Return to the Community

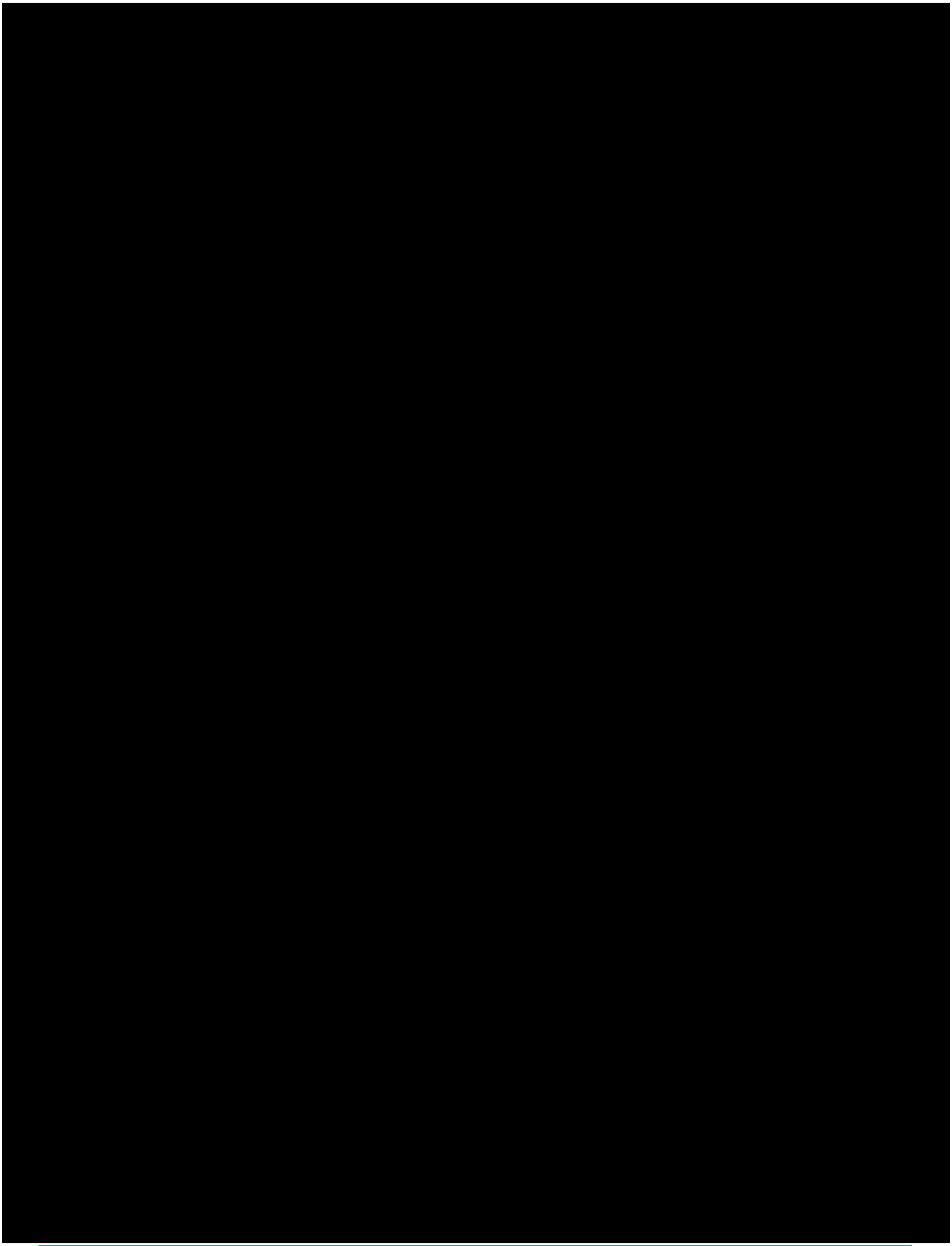
Healthy Blue is committed to safely transitioning members who qualify to transition home or other community-based settings through ongoing communications with the member, family members, and long-term care (LTC) facility staff. In the transition planning process, we work with members like Robert and their natural supports to identify risks and resources that can support the member in the new setting. We convene interdisciplinary transition conferences, including LTC staff, to develop transition plans that address our members' needs, priorities, and preferences. Our primary focus for members in LTC facilities is to promote best practices for care coordination that provide our members with the right combination of excellent, holistic care and services in a supportive setting that prioritize their desires and goals.

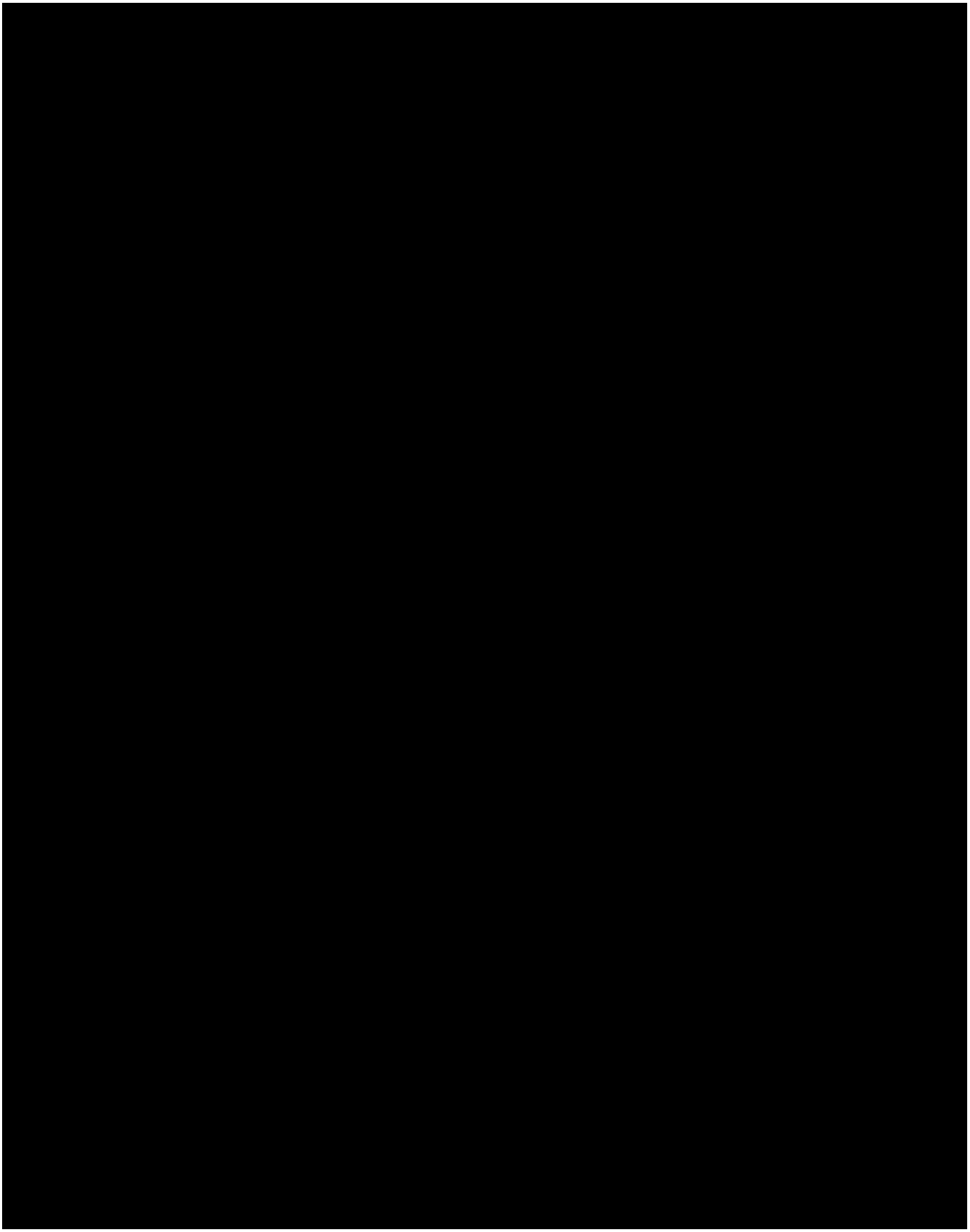
Discover

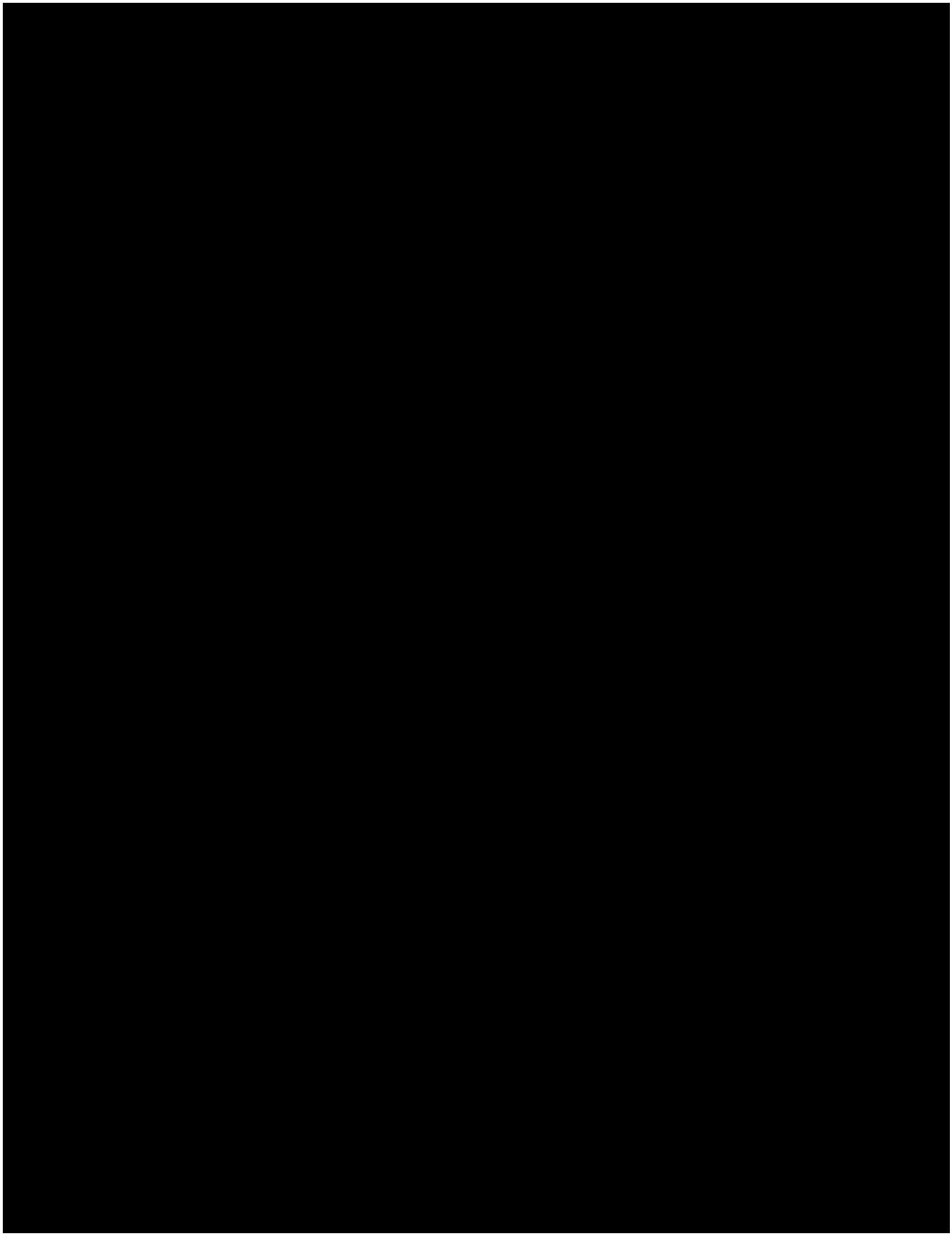
Healthy Blue's Nursing Home Care Manager, Amanda, was contacted by the Office of Aging and Adult Services (OAAS) through My Choice Louisiana, a program specifically designed for individuals with serious mental illness to transition from a nursing facility back to the community. This communication guided Amanda in her next visit with Robert at Kinder Retirement and Rehabilitation Center to continue discussing transition to the community. Robert's recent Pre-Admission Screening and Resident Review (PASRR) Level II assessment has been completed and indicates he no longer meets criteria and nursing home placement is not recommended. Robert is also interested in returning to the community.

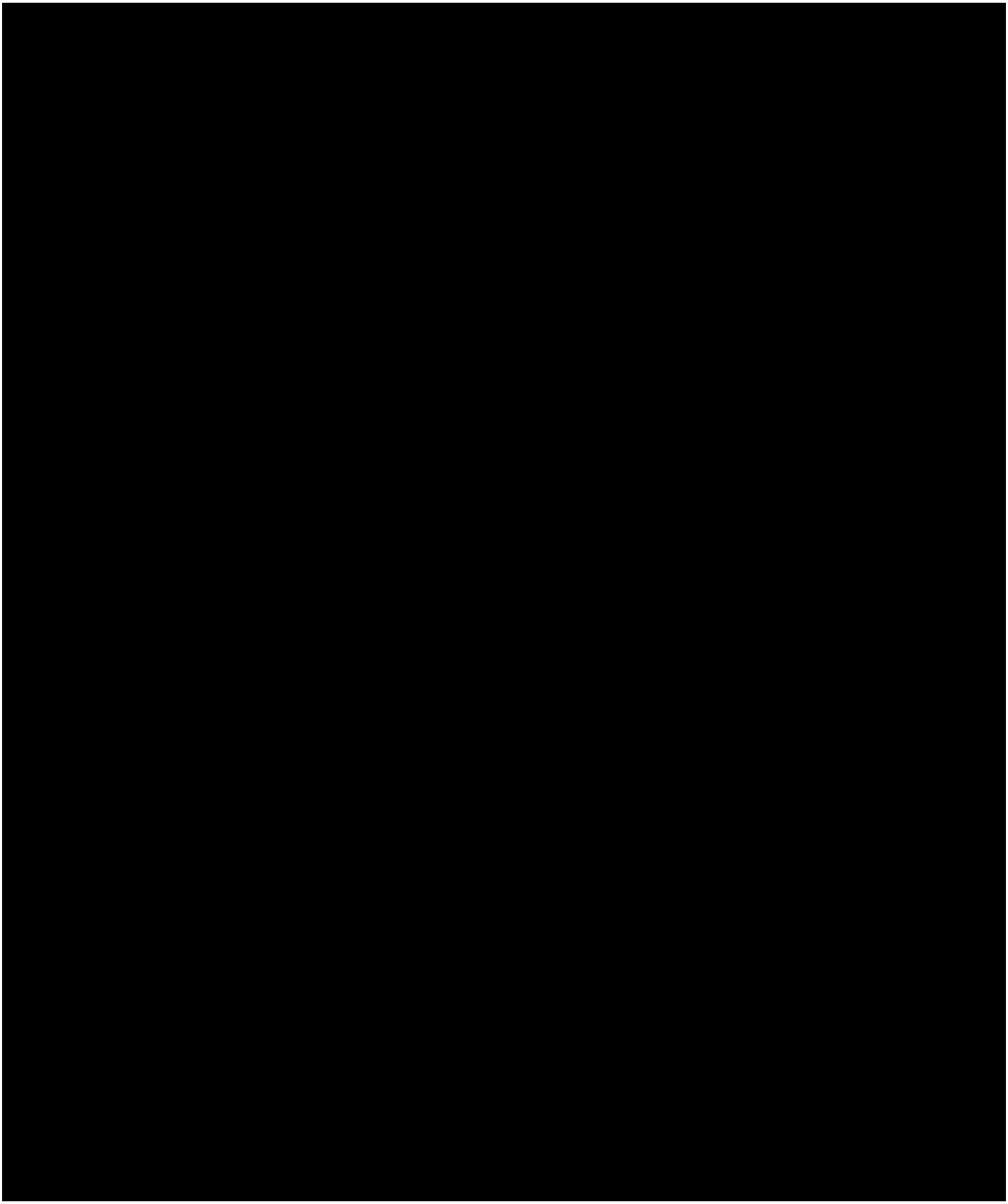


Amanda has already been collaborating with Robert and the facility's Social Services Director (SSD) to develop a plan and begin the process of transitioning Robert to an alternative residence in or near Jefferson Davis Parish, where he currently lives and wants to remain. Amanda is a contributing member of our Population Health Management Workgroup; she understands the resources of Jefferson Davis Parish and the impact they have on Robert on his path to better sustained health. Amanda focuses heavily on coordination of care with other relevant facility staff, including the Director of Nursing; Robert's PCP, psychiatrist, and chosen pharmacy; community-based BH providers; occupational therapy providers; and other non-clinical community resources, such as senior recreation, churches, or clubhouse programs. Since Robert is also Medicare-eligible, Amanda assists with his application for Medicare enrollment. Amanda continues to work with Robert on transition planning while Medicare eligibility is being determined. Once Medicare is active, Amanda aids Robert in coordinating services with his selected Medicare providers. Our aim is to assist Robert to create a support network before his transition to independent living. ***Amanda has partnered with providers and resources and has identified the Merakey Assertive Community Treatment (ACT) team and Riverbend Senior Apartments in Mermentau as possible choices for Robert. The Permanent Supportive Housing and PRA 811 Housing programs, including the Volunteers of America, will also identify potential housing choices for Robert, if he is approved.***









This page is intentionally left blank

2.10.7 PROVIDER NETWORK

Provider Network includes the following attachments:

- Attachment 2.10.7.1-1: Provider Network Listing Response
- Attachment 2.10.7.2-1: Provider Network Capacity Response

2.10.7 Provider Network is in excess of 10 pages; therefore, we have included them in our flash drive for electronic submission only per ***Addendum #2, Question 8.***

This page is intentionally left blank

2.10.8 NETWORK MANAGEMENT

Healthy Blue has a well-established, comprehensive, statewide Medicaid network of more than 21,600 unique providers that currently serves more than 258,000 Healthy Louisiana enrollees (members). As an incumbent Managed Care Organization (MCO) in Louisiana for over seven years, we partner with traditional and non-traditional, urban and rural providers to improve timely access to care, promote healthy lifestyles, and effectively manage costs.

Our Network Management strategy complements LDH's goals for member access to high-value care, innovation, a culture of continuous quality improvement, and service excellence by assuring members are cared for by high-performing, engaged providers that collaborate with us in a consistent and on-going basis. We are committed to deploying an on-going effort of support and collaboration through our ***Provider Promise: to deliver a best-in-class experience by simplifying health care so our providers can focus on member health***. We bring this commitment to life through the following distinct pillars that align our suite of provider programs and solutions:

- **Capacity for Efficient Care.** Assuring cost-effective provider capacity and compiling the appropriate mix of network providers and resources capable of delivering a culturally sensitive, effective model of care
- **Accountable Reimbursement.** Enhancing the fiscal ability of providers to transform care delivery in their practice to a model based on population health that emphasizes high quality and improved efficiency outcomes
- **Administrative Simplification.** Making it easier for providers to efficiently and effectively care for their patients through administrative simplification, specialized service models, and technical supports that reduce administrative burdens and increase provider and patient satisfaction
- **Health Advocacy.** Connecting, in a personal way, the highest performing and most appropriate providers of care with our members to optimize health outcomes and assure effective management of member social determinants of health (SDOH)

A distinction of Healthy Blue is our collaboration with BCBSLA, which gives us an incredible opportunity to influence and strengthen the health care delivery system across Louisiana. As a respected organization in the state of Louisiana — and with over 85 years of experience — BCBSLA's commitment to Louisiana has been unwavering. Providers and members alike know that the Blue brand means quality. Through our collaboration with BCBSLA, we have been able to expand our provider and community partnerships, opening the door for increased access to services and resources for our members.

Healthy Blue and BCBSLA work together to educate providers on our collective ability to best serve our members. In a highly personalized approach, senior leadership from Healthy Blue conduct provider visits at least monthly that offer individualized discussions with large provider groups to deepen and solidify our network relationships. Our leaders discuss the overall health care landscape, specific benefits of being a Healthy Blue network provider, the value of our work with BCBSLA, and our combined approaches to improve the health of members and their families. [redacted]

In 2018, our leaders met with key provider groups throughout Louisiana, including:

- Affinity Health Group
- Children's International Medical Group
- Bryan Sibley
- David Raines Community Health Centers
- Louisiana State University (LSU) – Shreveport
- Sulphur Pediatric Center
- Ochsner Medical Center
- Tulane University
- Access Health
- Daughters of Charity
- Franciscan Missionaries of Our Lady Health System (FMOLHS)

LA_HealthyR2019_2.10.8_KeyProviderList_55_COB_02

Healthy Blue provides our members with timely access to an extensive, statewide network of culturally competent primary and specialty care services providers, ***which includes more than 2,780 primary care providers (PCPs) — including more than 2,400 that treat adults and over 2,500 that treat children and adolescents, as well as over 200 hospitals, more than 15,000 specialists and ancillary providers, and over 4,600 BH professionals***. Our strong relationships with Louisiana's providers position us as we monitor our network, identify network gaps, and solve for those gaps. We maintain and manage our network according to our detailed, comprehensive Provider Network Development and Management Plan for monitoring our network, identifying network gaps, and expeditiously resolving those gaps. Our Network Development team continually focuses on network enhancements to expand access. [redacted]

[redacted]

Our dedicated Provider Relations team live and work in their local communities and build trusting and collaborative relationships with providers through a "boots on the ground" approach. They monitor the network as well as key access measures, and educate and service providers using a high-touch, one-to-one methodology. ***In 2018, our Provider Relations Representatives (PRRs) met with more than 1,820 providers and provider groups, in addition to conducting numerous Joint Operating Committee (JOC) and Care Delivery Transformation (CDT) meetings with providers across the state.***

Our Provider Solutions department is organized into dedicated Network Development and Provider Relations teams to maximize their effectiveness in monitoring and expanding our network access and supporting our network providers. Our Network Development team is responsible for:

- Identifying network gaps to maximize member access
- Deploying strategies to increase provider capacity to meet the needs of members where gaps have been identified
- Monitoring the network to assure compliance with Contract requirements
- Recruiting and retaining providers, and monitoring their success in meeting goals for quality and access
- Assuring our network meets the multi-lingual, multi-cultural, and disability needs of our members

We discuss each of these responsibilities in detail in the following subsections. We affirm we will provide or assure the provision of all MCO-covered services specified in the Contract and that availability and accessibility of those services, including geographic access, and appointment and wait times for members will be in accordance with the access and network adequacy standards set forth in the Contract, applicable federal regulations, and Attachment D, Provider Network Standards.

2.10.8.1 Identification of Network Gaps

We continuously monitor, maintain, and update our network to offer our Healthy Blue members full access to core benefits and covered services within LDH standards for timely access to care and services.

To evaluate the current accessibility of our network and project future needs, we consider:

- The anticipated number of members
- The multi-lingual, multi-cultural, and disability needs of members
- The expected member utilization of services
- The numbers and types of providers, and provider-to-member ratios
- The geographic location of providers and members

We review multiple sources of data to identify network gaps and enhancement opportunities based on patterns, trends, and service demands specific to the region and parish. These data sources include:

- **Monthly Network Changes.** We review all network additions, deletions, and PCP capacity changes, by provider type and location, every week. We compare results to LDH time and distance standards, and deploy targeted provider recruitment (discussed in Section 2.10.8.4) and contracting strategies (discussed in Section 2.10.8.2) to address gaps and increase provider capacity
- **Annual Member Satisfaction Surveys.** Our Quality Management department engages a qualified, LDH-approved vendor to administer the most current version of the CAHPS® survey. We review results to identify areas where members indicate gaps may be preventing full satisfaction. Based on results, we deploy targeted provider recruitment and contracting strategies to mitigate gaps, and additional provider training through our PRRs and Provider Training Specialists to improve service excellence.
- **Annual Provider Satisfaction Surveys.** Findings from our provider satisfaction surveys are supplemented by findings from LDH's surveys, and results from both are used to identify improvement opportunities. These surveys include key questions about the quality and adequacy of our provider network. We place great emphasis on provider satisfaction to assure our members are being cared for by high-performing, engaged providers. Based on survey results, we deploy strategies designed to increase retention and provider satisfaction.
- **Continuous Employee Feedback.** Our PRRs, Care Managers (CMs), Quality Management employees, and Member Services Representatives (MSRs) provide feedback on the quality, access, and availability of our provider network to maximize success. They are in the field daily working with stakeholders — members, families, providers, and community-based organizations. These stakeholders are best poised to provide feedback concerning needs and opportunities, help us solve challenges, and assure we are delivering the best possible array of services to meet member needs.
- **Network Strategy Workgroup Meetings.** This cross-functional workgroup meets twice per month and includes representatives from Provider Relations, Network Development, Medical Management, Quality Management,

Compliance, Community Outreach, Government Relations, and Finance. It provides valuable insight and feedback to assure our network has the right number, mix, and geographic distribution of providers to meet the needs of our members. Led by our Provider Services Manager, participants include our Chief Executive Officer, Chief Medical Officer, Behavioral Health Medical Director, and Chief Operating Officer. A key focus of this workgroup is assuring data accuracy related to our provider network and its ability to address member access issues.

- **Provider Advisory Committees.** Serving as our Provider Advisory Council, our Provider Advisory Committee (PAC) is key to gathering provider input and feedback on our programs, value-based strategies, clinical policies and practice guidelines, and the services we deliver to providers as well as members. We use the PAC to advance State goals and objectives. For example, during our February 27, 2019 meeting, we discussed our new Food Insecurity Value-Based Payment (VBP) program and our ADHD Toolkit and training to advance evidence-based practices. ***Additionally, Healthy Blue and BCBSLA deploy a cross-pollination strategy at respective PACs by assuring that at least one member is common to both committees. This allows us to gain insight into and leverage strategies that have been successful for BCBSLA, and vice versa.***
- **Joint Operating Committee (JOC) Meetings.** Each of our network provider groups that participate in our Category 3 Alternative Payment Models (APMs) host JOCs at least quarterly to discuss strategies to unify and simplify resource coordination, enhance provider and member experiences, and coordinate education and co-education initiatives. JOCs create a forum to proactively address evolving areas of potential concern, organizational changes, and clinical care initiatives that enhance member outcomes. Provider participants include representatives from Quality, Operations, Regulatory, Payer Relations, Population Health, and Marketing; Healthy Blue participants include our Executive Leadership team, Clinical Directors and leads, Care Management, Quality, Operations, Finance, Network Solutions, and Member Services.
- **Quarterly Health Education Advisory Committee Meetings.** This committee includes Healthy Blue and representatives from community-based organizations that provide services to members. During the meetings, we solicit feedback for ways to improve timely access to care, promote healthy lifestyles, and effectively manage costs. For example, in March 2018, we received feedback that the number of materials provided to members, including information related to providers and covered services, overwhelmed them. Based on this feedback, in December 2018, we introduced a streamlined member welcome packet with a quick reference card for accessing provider-related information from our member website. Similarly, in June 2018, we received feedback related to member SDOH that transportation was needed to address food insecurities. In addition to adding provider training related to available member transportation modes, we donated 15 commercial refrigerators to local food pantries across the state to help increase access to fresh fruit and vegetables.
- **Member Grievance Information.** We review member grievances and provider complaints to monitor provider adherence to access standards. Our MSRs review, log, and categorize grievances by cause, disposition, and type. This includes grievances regarding access to care. Action plans are developed, and results are tracked to closure.

We also use various sources of member input to identify gaps in our provider network. For example, we conduct research and obtain information using focus groups (with LDH approval) and one-to-one member interactions. We also conduct online and third party provider network comparisons. For example, we utilize Zelis (formerly known as Strenuus), a market-leading provider of health care competitive analysis, to assess our network in comparison to other MCOs to help us identify additional providers for contracting to fill gaps. The resulting data is used to evaluate our network access at both the provider and group levels.

We will leverage our relationship with BCBSLA to address the operational, day-to-day aspects of providing care to our members. BCBSLA representatives participate in our Network Strategy Workgroup meetings to address both provider and member needs, identify network gaps, and assure timely access to culturally competent primary and specialty care services necessary to promote LDH's goals.

In addition, we will closely monitor LDH's implementation of the centralized Credentials Verification Organization (CVO) for credentialing providers across MCOs. Upon CVO implementation, we will outreach to targeted providers, including PCPs, pediatricians, pediatric specialty providers, and OB/GYNs, within 30 days of being notified by LDH that a given provider has been credentialed by the CVO to invite them to join our network. Additionally, we will direct providers that are not already enrolled in Louisiana's Medicaid program, but are interested in joining our network, to the CVO to complete the credentialing process. Our provider website will also include a link to the CVO website. We will notify LDH should we be informed that a credentialing determination has not been made within 30 calendar days of the provider's application.

Time and Distance Standards

We use GeoAccess® reports to identify gaps related to time and distance standards. On a quarterly basis, using data analytic tools, we conduct a network assessment against LDH time and distance standards to verify that our network

(including hospitals, groups, PCPs, specialty providers, and BH providers) meets adequacy and accessibility standards to deliver covered services to our members. We generate and review GeoAccess reports to determine any network gaps based on where our members live.

We submit the results to LDH using our Provider Services/Network Adequacy Report, which includes analysis of GeoAccess Miles and Minutes reports, physical health (PH) and BH network adequacy, and required provider to member ratios. Based on our ongoing evaluation of our statewide network adequacy, we identify areas of focus for ongoing network development activities to further assure gaps are addressed proactively.

After-hours Clinic Availability

To measure and verify compliance with acceptable after-hours coverage, Healthy Blue conducts a quarterly After-hours Access to Care Audit of a random, statistically valid sampling of providers in each provider category, using the following data sources to formally assess our performance against our own standards and LDH standards:

- Accessibility of Services surveys conducted by an NCQA-certified survey vendor
- CAHPS Survey (Adult and Child)
- Complaints or grievances related to appointment access

Results from our most recent After-hours Access to Care Audit showed 76% of our members received after-hours care within 30 minutes. Additionally, 80% of members reported that they received care as soon as it was needed, when care was needed right away.

Our Provider Relations team also monitors and validates after-hours clinic and appointment availability during their in-person visits to provider offices. When they identify a provider who is not complying with after-hours coverage, they investigate the issue and determine whether to take corrective action.

Our Access and Availability Compliance Committee meets monthly to review and analyze the data and assist with prioritization of opportunities to improve continuity and coordination of care. This committee includes stakeholders and staff from Provider Relations, Network Development, Utilization Management, and Quality Management. The Committee is solely dedicated to making sure that appropriate steps are swiftly taken to address deficiencies in compliance by providers who serve our Healthy Blue members.

We implement focused initiatives to improve access to after-hours clinics and reduce the number of members presenting to the emergency department (ED) for after-hours care, including enhancing our network of urgent care facilities. [redacted]. In addition, ***we are strategically collaborating with PCPs affiliated with St. Martin Parish Hospitals and Natchitoches Regional Medical Center, compensating them with additional reimbursement to incent them to expand office hours and encourage their participation in our After-hours Primary Care program***, which also offers additional reimbursement for extended evening and weekend hours.

Closed Panels

Healthy Blue historically maintains a high percentage of PCP locations with open panels. This can be attributed to the strong partnerships we have developed. Our Provider Relations team is the hub for provider support, communication, and problem solving. Every member of our team lives in the communities we serve in Louisiana. We are the local touchpoint in the provider's back yard, and we bring consistent leadership and continuity to Louisiana's Medicaid provider community. ***Of all of our network PCP group locations across the state, 83% have open panels.***

Our PRRs review panel status reports on an ongoing basis and our Network Strategy workgroup reviews reports twice monthly. Should we identify a need for additional PCPs with open panels, we develop a detailed action plan — including staffing, responsibilities, resources, and a timeline to mitigate the situation. Some of our strategies include: (1) working with existing providers with closed panels to meet requirements for re-opening their panels, or asking them to accept the member on an exception basis; (2) collaborating with providers to open new practice sites and use physician extenders and Community Health Workers; (3) leveraging relationships with Independent Practice Associations (IPAs) and other provider organizations to recruit additional physicians; (4) referring members to out-of-network (OON) providers through single case agreements (SCAs) in the event care is unavailable within a reasonable distance to the member; and (5) facilitating transportation services as needed.
In addition, our value-based model contracting language also promotes increased access to primary and preventive care and wellness through a variety of program measures and participation criteria that include appointment availability, after-hours access, and open panels.

2.10.8.2 Increasing Provider Capacity and Meeting Needs Where Gaps Have Been Identified

Our members and their care are our priority. We deploy resources, tools, and strategies around assuring their goals and well-being. We are driven by purpose and excel through innovation in our efforts to improve access to care, promote healthy lifestyles, and effectively manage costs. To this end, Healthy Blue is committed to the following strategies and innovations to increase provider capacity for our members.

1. Targeted Provider Contracting to Increase Network Capacity

Our targeted provider contracting initiatives are based on and driven by our GeoAccess gap analyses. Our Network Development team is dedicated to reducing provider complexity and administrative burden; and focusing on continuously improving access to care, increasing provider capacity, and looking for ways to integrate PH and BH. In response to our gap analyses, we have initiated the following strategies to increase access and provider capacity, and effectively address the needs of our Healthy Blue members.

PCPs. Healthy Blue continues to expand primary care access by leveraging our work with BCBSLA and targeting key practices across Louisiana that have limited participation under Louisiana Medicaid. For example, based on the strength of our collaboration with BCBSLA, ***North Oaks Pediatric Clinic and Pontchartrain Pediatrics*** are now contracted with our network resulting in expanded PCP access in Region 9 (the North Shore).

Psychiatric Residential Treatment Facilities (PRTFs). Louisiana has a deficiency of PRTFs throughout the state. ***We have diligently worked to attract PRTFs and have dedicated a Network Development Specialist for contracting these providers.*** [redacted]

Patient-Centered Medical Homes (PCMHs) and Patient-Centered Specialty Practices (PCSPs). PCMHs and PCSPs are an effective way to expand provider capacity through implementation of a person-centered, team-based care model. Within our Network Development team, we have a dedicated PCMH/PCSP Medical Practice Consultant to work with non-PCMH/PCSP providers so that they can become NCQA-recognized. ***In Louisiana, our network includes 38 PCMH recognized provider groups representing 91 practice locations.*** In 2018, we expanded the program to include PCSP recognition with a focus on BH providers to further facilitate integration of PH and BH. To assist providers with the costs of NCQA recognition, we reimburse practices 20% of their NCQA PCMH/PCSP application fee. We will also provide practices who achieve PCMH/PCSP recognition with 50% reimbursement of their application fees up to $1,000 when they achieve NCQA recognition. We educate providers one-to-one through provider services site visits and personal outreach about the benefits of NCQA recognition, and how Healthy Blue will assist them in achieving recognition. Our PRRs and PCMH/PCSP Medical Practice Consultant reach out to targeted PCPs, FQHCs, RHCs, and specialty groups to provide technical assistance toward becoming a PCMH/PCSP recognized practice.

> *Your support for our organization will help us to expand our mobile integrated healthcare program, which will equip us to better serve our community. I am impressed with your company's early investment in better understanding the new populations you seek to serve in Louisiana.*
> – **Asbel Montes**
> VP, Acadian Ambulance Service
> LA_HealthyR2019_2.10.9_Asbel_TST_03

Community Paramedicine Program. [redacted] Healthy Blue CMs are available telephonically, and as a team, they coordinate the immediate health needs of the member, including scheduling provider office visits, transportation, and medications. Additionally, they educate the member on community resources, health education, and provide a safety check for smoke detectors, carbon monoxide detectors, and overloaded electrical circuits.

[redacted]

Single Case Agreements. ***To assure no member goes without medically necessary care,*** our Network Development team works diligently to secure SCAs when options are unavailable in network. SCAs are also a conduit — once we have an SCA in place, we work with the provider to bring them into our network. [redacted]

2. Supporting Provider Workforce Expansion

Healthy Blue benefits from the resources of The Anthem Foundation and the BCBS Foundation, the philanthropic arms of Anthem and BCBSLA. ***In December 2018, the BCBSLA Foundation provided a $300,000 grant and worked with the Workforce Development Board to train 180 nurses and six clinical instructors to help ease the shortage of nurses in the 12-parish Monroe Region in northeast Louisiana. The program is expected to provide more than 15,000 additional patient care services by the end of the three-year funding period.*** This grant is focused on redesigning the way various higher education and provider organizations work together to solve a workforce shortage permanently and sustainably.

3. Value-based Provider Incentive Programs

We incent providers to expand and offer additional services in rural areas, and provide after-hours and weekend appointments. We encourage providers to participate in our After-hours Primary Care program, which offers additional reimbursement for extended evening and weekend hours. Our value-based contracting models promote increased access to primary and preventive care and wellness through a variety of program measures and participation criteria that include appointment availability and after-hours access. In addition, our models encourage providers to expand their capacity and operational efficiency, and to enhance patient education and engagement through the use of physician extenders. Our comprehensive array of provider incentive programs is designed to enable providers to expand capacity by requiring open panels as an eligibility requirement while rewarding them for their performance and progress in meeting LDH and Healthy Blue program goals. We have developed these programs using our experience in the Healthy Louisiana program, our understanding of LDH priorities, the knowledge we have gained from serving Louisiana members, and our relationships with providers statewide. A detailed description of all of our value-based provider incentive programs can be found in our response to Section 2.10.12, Value-Based Purchasing.

4. Employing Innovative Telemedicine Solutions

Healthy Blue and our affiliates are leaders in implementing innovative telemedicine solutions to increase provider capacity and expand member access to services. Our comprehensive telemedicine solutions are designed to meet members where they are, whether in their home, or at a primary care clinic, a BH or SUD clinic, or other provider location.

Our telemedicine strategy supports: (1) increased access to specialists by enabling PCPs to use telemedicine technology, distance learning (through Project ECHO® (Extension for Community Healthcare Outcomes)), and e-consults; (2) leveraging provider capabilities to offer virtual visits, enabling member access to specialty care and BH/SUD treatment within seven days and 30 days of hospital and ED visits; (3) improved person-centered care in areas where access is limited or unavailable by offering low acuity urgent care and BH care through telemedicine; and (4) member access to Direct to Consumer (DTC) telemedicine visits via a smartphone, tablet, or computer. Figure 2.10.8.2-1 provides an overview of our [redacted]

2.10.8.3 Strategies for Monitoring Compliance with Provider Network Standards

Inclusive of Provider Types Specified in 2.10.8.3.1 – 2.10.5.3.10

Healthy Blue is committed to assuring timely access to all providers, including cardiologists for pediatric and adult members, dermatologists, endocrinologists, licensed mental health specialists for pediatric and adult members, neurologists for pediatric and adult members, OB/GYNs, pediatric orthopedists, PCPs for pediatric and adult members, psychiatrists for pediatric and adult members, and pulmonologists for pediatric and adult members. We are also committed to timely access to BH and SUD services.

We continuously monitor access and availability to confirm compliance with provider network standards and assure provider accessibility for members, as well as anticipated Medicaid enrollment. We use GeoAccess reports to evaluate member driving distance to PCPs, specialists, ancillary providers, and hospitals. Access to providers is also monitored through member-to-provider ratio reports. Specific GeoAccess reports include:

- **Geographic Overview Maps** that display PCP and specialty care provider locations by geographic area
- **Provider and Member Maps** that plot members and providers of any or all specialties and overlay the provider network against the membership base with the appropriate radius encompassing each provider to identify geographic coverage in a particular area
- **Member Accessibility Summaries** that provide an overview of the entire analysis displayed in a given report and detail the number and percentage of members with and without access to a PCP or key specialist
- **Accessibility Details** which provide the total number of members, providers, and the member-to-provider ratio for a specified demographic or geographic area, as well as a detailed analysis of a member's choice of up to five providers, and the average distance to achieve access

Our experienced Network Development Analysts review access data and compare the needs of the member population in each parish against the adequacy of our network to verify the strength of our network in terms of access and ability to provide needed care to members. Our Provider Relations and Quality departments measure and verify compliance with Contract access to care requirements for all providers, including those listed in RFP Subsections 2.10.8.3.1-2.10.8.3.10, as summarized in Table 2.10.8.3-1.

We continually evaluate the efficacy, capacity, and accessibility of our providers and seek to maximize member interaction with providers who consistently deliver high-quality care. We utilize our Appointment Availability Audit survey, which measures wait times for various appointment types, including BH/SUD services; and our After-hours Access to Care Audit survey, which measures access to providers (including BH/SUD service providers) outside of normal business hours to determine provider adherence to Healthy Blue and LDH goals. When we determine a provider is not in compliance with Healthy Blue and LDH's goals, our PRRs engage with the provider to identify performance improvement opportunities and support member needs.

Table 2.10.8.3-1. Our Network Analysts Use Multiple Means to Assure Our Network Meets the Needs of Members

Frequency	Activity
Ongoing	• Conduct provider profiling and benchmarking to identify outliers • Review network adequacy reporting from LDH in comparison to our network data for each provider type • Monitor member comments or complaints, appointment availability, OON utilization, and provider compliance with after-hours coverage through surveys or selective on-site and desktop audits (for providers under targeted reviews) • Analyze Member Advocate, Member Advisory Group, and Clinical and Administrative Advisory Committee input, which offer important local insight into access and availability • Communicate with our Utlization and Care Management teams to make sure members have adequate access to the appropriate providers • Constant collaboration between the Network Development team, Utilization Management, and Care Management team to identify areas and specialties where services are difficult to secure
Monthly	• Monitor OON referral patterns for each provider type
Quarterly	• Assess network access related to LDH standards for each provider type, including review of GeoAccess reports to identify and fill any network gaps • Review trends based on feedback from our Access Navigators
Semi-Annually	• Review the network in compliance with NCQA standards and Healthy Blue's own policies

Supporting Members and Providers with Scheduling of Appointments

Members always have direct access to specialists; Healthy Blue does not require referrals. We are committed to providing continuity, coordination, and quality of health care services for our members. Our model provides hands-on assistance to both members and providers when seeking qualified specialists.

Healthy Blue is adding Access Navigators to our team. Access Navigators will help providers find the right specialist to meet a member's needs. Our Access Navigators will take into consideration not just medical specialty, but also direct experience with the member's very specific needs based on our assessment.

In addition to the Access Navigators, our Care Management team is available to help members access a specialist or answer questions about direct access to specialists. The assistance does not end with finding a specialist — we coordinate schedules, help make appointments, and facilitate information sharing in advance of the appointment for a seamless care experience.

In addition, when we identify an area of BH expertise needed by our members, our Access Navigators, working in collaboration with our integrated Provider Relations team, help members, providers, and BH clinicians identify specialized BH providers with the required expertise in our network.

Healthy Blue trains our CMs and MSRs on covered services, making referrals when they identify needs, coordinating services, and supporting members with the scheduling of appointments. We staff our Member Services Line with MSRs specially trained to assist our Healthy Blue members. This assistance includes helping members schedule appointments, arranging for transportation if needed, identifying community resources, and addressing any other barriers to care members may have. Our MSRs also perform warm transfers, as necessary, including to appropriate BH clinicians (via our 24/7 BH Crisis Line) or clinical RNs (via our 24/7 Nurse Line), to further assure we fully meet each member's needs.

To assist our providers with scheduling appointments, our Provider Services Line (844-521-6942) is available 24/7. Our PRRs are available to help providers with questions, verify member eligibility, obtain authorization requests, make referrals, and schedule appointments.

2.10.8.4 Strategies for Provider Recruitment and Retention

Healthy Blue has in-depth knowledge of the provider landscape in Louisiana and extensive experience recruiting and contracting providers to support the Healthy Louisiana program. Meeting the needs of our members requires creativity and collaborative approaches to enhance service delivery. As shown in our Section 2.10.7 Provider Network Listing and Provider Network Capacity (PNC) submission, Healthy Blue boasts a robust statewide network to meet the needs our members. However, from our experience, we know that a small percentage of members in some zip codes and parishes may need to travel further in order to access these services, and that in some instances, there are no providers available within the prescribed time and distance standard.

Table 2.10.8.4-1 summarizes our provider network access percentages for the listed provider types (per our PNC submission).

Table 2.10.8.4-1. Healthy Blue Provider Network Access by Provider Type

Provider Type	Access Percentage	
Cardiologists (Adult/Pediatric)	100%	
Dermatologists	98.5%	
Endocrinologists	Adult: 95.6%	Pediatric: 95.4%
Licensed Mental Health Specialists (Adult)	Urban: 99.3%	Rural: 100.0%
Licensed Mental Health Specialists (Pediatric)	Urban: 99.4%	Rural: 100.0%
Neurologists (Adult/Pediatric)	Adult: 99.6%	Pediatric: 99.6%
Obstetricians/Gynecologists	Urban: 92.5%	Rural: 91.7%
Orthopedists (Pediatric)	Urban 99.7%	Rural 99.7%
Primary Care Providers (Adult)	Urban 96.7%	Rural 100.0%
Primary Care Providers (Pediatric)	Urban 96.7%	Rural 100.0%
Psychiatrists (Adult)	Urban 95.7%	Rural 97.5%
Psychiatrists (Pediatric)	Urban 95.8%	Rural 97.7%
Pulmonologists (Adult/Pediatric)	98.9%	

Provider Recruitment Strategies

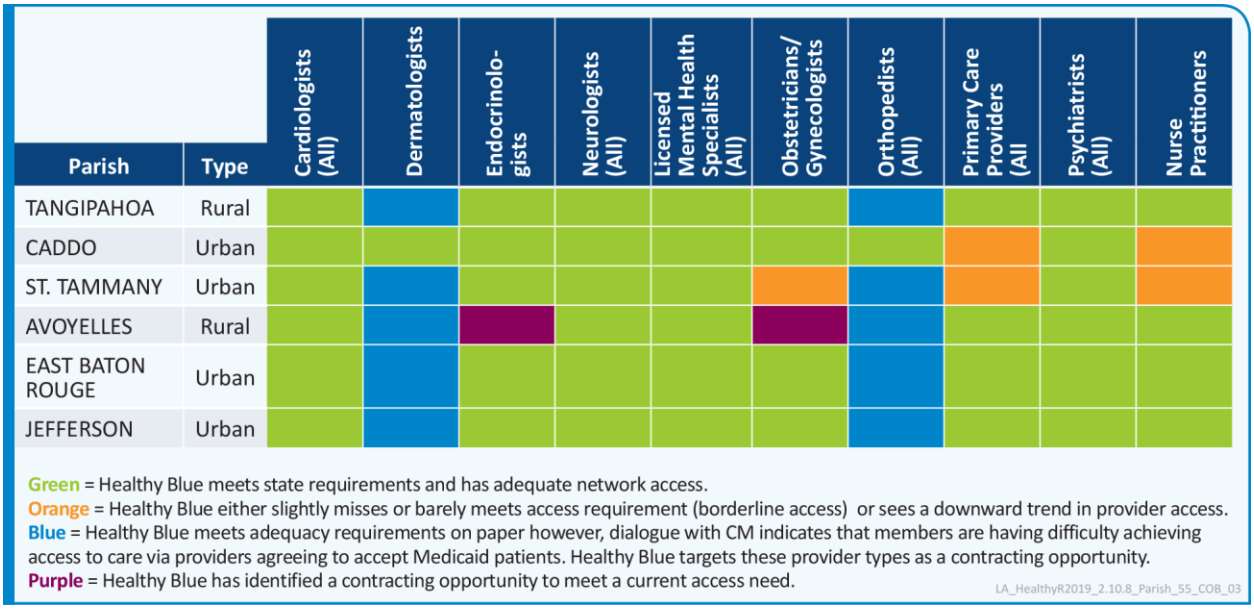
To better meet our members' needs and provide access to a comprehensive array of PH and BH services, Healthy Blue's dedicated Network Development team focuses on expanding the system of care by developing innovative programs and provider contracts. Led by our Director of Network Development, our Network Development team is divided to service specific regions in the state (Lafayette/Lake Charles/Alexandria; Bayou/Jefferson; Baton Rouge/Northshore; Shreveport/Monroe). Team members offer in-person contact to providers within the regions they support and are responsible for collaborating with providers to identify the types of services needed in each region, assessing providers' capabilities and interest in developing new or enhanced services, providing technical assistance in program development, and recruiting and contracting for new types of services.

Our targeted provider recruitment focus our recruiting efforts on areas of greatest need based on our analysis, such as geographic coverage, cultural competency, and providers with expertise in serving members with disabilities and complex needs. We utilize our proven recruitment strategy as shown in Figure 2.10.8.4-1.

Figure 2.10.8.4-1. Healthy Blue's Recruiting Strategy

We work closely with our Utilization Management team to identify gaps in services based on the unique characteristics of the populations we serve, including child, adolescent, and young adult members with complex needs, chronic conditions, and/or disabilities. We identify gaps using multiple data sources such as GeoAccess reports, network adequacy analysis, and feedback from our members and our Clinical team. Our zip code and parish level analytics tools (an example of which is below in Figure 2.10.8.4-2) allow us to zero in on areas where network enhancement opportunities exist.

Figure 2.10.8.4-2. Example of Healthy Blue's Network Development Analytics Tools



We use various sources to identify potential providers, including: (1) input from members and their families; (2) Provider Advisory Committee and Member Advisory Committee recommendations regarding members' needs and preferences for services; (3) recommendations from local stakeholders, advocates such as the Louisiana Federation of Families for Children's Mental Health and the Louisiana Behavioral Health Advisory Council, and provider associations and medical societies; and (4) recommendations from our clinical leadership and Care Management teams; (5) assessments of our network in comparison to other MCOs. We also target key practices across Louisiana that either have limited participation under Healthy Louisiana or are choosing to work with only one MCO.

Our targeted provider recruitment strategy has resulted in significant new network additions to close gaps and enhance access in areas of need. Figure 2.10.8.4-2 shows newly added providers as the result of our network analytics in parishes identified in Table 2.10.8.4-2.

Table 2.10.8.4-2. Newly Added Providers to Address Identified Access Gaps

Parish	Newly Added Providers Since 2016
Tangipahoa	6 PCPs
Caddo	5 PCPs, 1 Endocrinologist, 1 Orthopedist, 1 OB/GYN
St. Tammany	2 PCPs, 1 Pulmonologist
Avoyelles	6 PCPs (Avoyelles Hospital RHC)
East Baton Rouge	10 PCPs, 4 Dermatologists, 4 Neurologists, 1 OB/GYN
Jefferson	6 PCPs, 3 Orthopedists

Provider Retention Strategies

Our locally-based Provider Relations team members are embedded in their communities across the state, engaging providers in person, virtually, and through telephonic and other means to build trusting, open communication and develop collaborative relationships. We leverage our deep understanding of Louisiana's Medicaid provider community and the health care needs of our members to inform our provider retention strategy. As a result, ***less than 1% of providers voluntarily terminate from our provider network***. With our focus on reducing providers' administrative burden so they can take care of our members, our successful Louisiana provider retention strategy includes:

- Extensive, one-to-one provider engagement from our PRRs.
- On-demand technical assistance to help providers succeed, such as proactively contacting providers if we identify possible provider submission errors through ongoing claims review.
- Proactive, comprehensive, regionally-focused provider education that begins prior to contracting and includes our innovative multi-modality intentional trainings through our Healthy Blue Training Academy.
- Assistance for providers at the point of care by providing actionable information using a variety of delivery methods to help providers manage their members' care, including alerting providers to care gaps through online clinical alerts, providing periodic gaps in care reports for their assigned members, and providing access to Health Intech. In addition, our extensive use of VBP programs rewards providers for high-quality, cost-effective care, leading to increased provider satisfaction and deepening the level of provider collaborative care engagement.
- Practices to simplify and minimize the provider's administrative burden, including technology solutions such as online claims and prior authorization submission, and leveraging our relationship with BCBSLA to identify opportunities for joint provider trainings and offer a one-stop-shop to address needs related to both Healthy Blue and BCBSLA.

Healthy Blue's Provider Concierge Program is designed to increase retention and provider satisfaction by rewarding high-performing providers with differentiated concierge-type service, tailored to their practice, that includes a single point of contact for operational support functions and payment matters including onboarding, claims, data updates, and credentialing. That point of contact is responsible for hosting planned, proactive, and regular communication between provider groups and the Healthy Blue Provider Relations and Network Development teams. They also serve as a centralized navigator for expedited access to various shared services teams. Our Provider Concierge program is focused on continually making it easier for the provider to do business and is one of the ways we deliver on our Provider Promise to simplify health care so providers can focus on health.

Metrics Used to Determine Provider's Success in Meeting Quality and Access Goals

Guided by LDH's goal to improve access to care, promote healthy lifestyles, and effectively manage costs, we use quality and performance metrics to determine a provider's success in making progress toward access and quality performance:

- Open panel status
- Appointment availability and timeliness (measured through a quarterly appointment availability survey of emergent, urgent, and routine appointment availability); PRRs check appointment access during provider visits
- After-hours accessibility through a quarterly survey
- After-hours visit rates based on claims analysis of after-hours billing
- Potentially avoidable ED visit rates by PCP, which are an indicator of PCP accessibility
- Potentially avoidable readmission rates, which are an indicator of provider accessibility and follow-up care
- Improvement in HEDIS measures performance
- Reduction in or closure of HEDIS gaps in care

We assure members have ready access to care; support innovation and a culture of continuous quality improvement; and advance evidence-based practices, high-value care, and service excellence by aligning our members with higher performing providers and creating a reimbursement platform for providers that incents advancement along the value-based continuum. Providers achieve high performer designation by developing their capabilities to deliver enhanced levels of care, simultaneously affording them opportunities to reap financial benefits as true partners invested in creating healthier communities.

Our VBP programs are our biggest driver of performance. The programs incentivize providers to improve both access and quality and offer providers the opportunity to earn additional reimbursement through meeting value-based quality targets, which they can then use to build practice infrastructure to further expand capacity.

2.10.8.5 Strategies to Meet Member Multi-lingual/Multi-cultural/Disability Needs

Healthy Blue is committed to assuring that our provider network is able to meet the multi-lingual, multi-cultural, and disability needs of the individuals and families in the communities we serve. A testament of this commitment, in 2016, we received NCQA's Multicultural Health Care Distinction, which is awarded to organizations that engage in efforts to improve Culturally and Linguistically Appropriate Services (CLAS) and reduce health care disparities. The Multicultural Health Care Distinction recognizes how well Healthy Blue is improving quality by adhering to collection standards for race/ethnicity and language data, facilitating language assistance, cultural responsiveness, quality improvement of CLAS, and reducing health care disparities.

Addressing disparities and promoting more equitable health outcomes are goals we share with LDH. In April 2019, our ultimate parent organization, Anthem, was awarded the *Innovation in Advancing Health Equity Award* from the National Business Group on Health for its efforts to advance health equity by addressing the demographic and socio-economic influences that impact environments where people live, learn, work, and play.

Our network providers are required to deliver services in a culturally competent manner to all members, including those with limited English proficiency and diverse cultural and ethnic backgrounds; and disabilities, including, but not limited to, cerebral palsy, developmental delays, muscular dystrophies, paraplegia, quadriplegia, spina bifida, Alzheimer's, dementia, and Parkinson's; and regardless of gender, sexual orientation, or gender identity. We detail our cultural competency and ADA compliance requirements in our provider handbook, online directory, and through ongoing communications.

Cultural competency, multi-lingual support, accessibility to the provider's premises, and any special communication abilities are an integral part of our provider network development efforts. We ask providers to disclose race, languages spoken at provider offices, ADA compliance, and any special accommodations for members with disabilities on their application and credentialing paperwork. Members can access this information through our provider directory, or they can contact Member Services.

We maintain a database that includes languages spoken by our network providers, and whether offices are able to accommodate special access needs (for example, extra-large wheelchairs, wide hallways, or adjustable examination tables). This information is required on provider credentialing applications, entered into our database, and used to produce and update our provider directory. For example, our database indicates network providers with office staff that speak 32 different languages, including sign language. Additionally, our language interpretation staff are available upon request 24/7 to support member and caregiver telephonic communications with BH and other providers during appointments, in over 200 languages. Healthy Blue interpretation staff are versed in health care, including PH and BH terminology to support "meaning-for-meaning" interpretation.

Updates to provider demographic data, including language and disability information, are entered into the database as received from provider offices, during in-person visits by our Network Development and Provider Relations teams, and during recredentialing activities. We identify network disparities and barriers to care and address them through increased provider recruiting efforts.

Cultural Competency Training and Resources

We are committed to making sure our providers are fully trained in the delivery of culturally appropriate services for our members, their families, and their communities. All providers receive cultural competency training during initial onboarding, educational outreach from Provider Relations, and annual training thereafter. Our Healthy Blue Training Academy also provides training and resources specifically related to cultural competency. Training is offered in a variety of formats, including webinars, online recourses through our provider portal, and individual training as needed.

Our cultural competency training helps make certain our providers understand that delivering services to people of all cultures, races, ethnic backgrounds, sexual orientations, abilities, and

beliefs must occur in a manner that recognizes, values, affirms, and respects the worth and dignity of all members. For example, Robert Blue, our Tribal & I/DD Liaison and Cultural Competency Trainer, incorporates training on Tribal-specific processes and protocols to strengthen the relationships between providers and Tribal health programs.

Our training curriculum builds the skills necessary to deliver knowledgeable and accessible assistance and services to Louisiana members of all cultures and abilities. It includes definitions, benefits of cultural competency, government regulations, values, language resources, health-related beliefs, culturally-specific health disparities, and SDOH. Our Cultural Competency Training module is continuously updated to provide the most current content.

Through our website, providers have on-demand access to training and other resources related to cultural competency, such as; (1) our Cultural Competency Plan; (2) examples of best practices; (3) a review of the 15 national CLAS standards with a link to the U.S. Department of Health and Human Services website for more information; (4) "My Diverse Patient Trainings," including Breast Cancer Screening for African American Women, and Creating an LGBT-Friendly Practice; (5) intentional training programs that support foster care, adoption assistance, serious mental illness (SMI), intellectual/developmental disabilities (I/DD), Moving Toward Equity in Asthma Care, and other person-centered topics that facilitate improved quality and outcomes; (6) a new program created by the Industry Collaboration Effort (ICE) Cultural & Linguistic workgroup regarding culture and the impact on health care; and (7) a link offering providers no-cost medical education credits from Georgetown University for further study of cultural competency topics.

Healthy Blue's Tribal & I/DD Liaison and Cultural Competency Trainer, Robert Blue (center), Chief Johnny Ellis 'Jed' Duhon of the Louisiana Atakapa Eagle Tribe (right), and Chief James 'Graywolf' Gill of the Louisiana Choctaw Turtle Tribe (left)
LA_HealthyR2019_2.10.8_TribalLiason_PICT_01

Our Cultural Competency Toolkit provides resources to help address the very specific operational needs that often arise in a busy practice because of the changing service requirements and legal mandates. It also helps providers assess their level of competency.

Assuring that our network management and care coordination strategies meet the disability needs of our members is a key priority for Healthy Blue. All of our network providers are expected to meet federal and State accessibility standards and those standards defined in the Americans with Disabilities Act of 1990. Our PRRs also verify physical accessibility for members with disabilities during visits to provider offices. Through our Healthy Blue Training Academy, we educate providers about identifying and working with members with physical and I/DDs. We also allow vulnerable populations, including persons with multiple disabilities, to select their attending specialists as their PCP as long as the specialist is willing to perform the responsibilities of a PCP.

We have been actively engaged with the Office of Citizens With Developmental Disability (OCDD) and are aware of concerns related to members with I/DDs. Robert Blue has worked with LDH and has attended every listening tour session along with Secretary Gee to better understand the needs of the I/DD community. As a result, we know that one of LDH's biggest concerns is about members with both developmental disabilities and co-occurring BH conditions. Through our PRTF contracting initiative, we have been working with several BH facilities, including ***Restorative House of Bogalusa, Acadia Healthcare, and Louisiana Methodist Children's Home***, to convert beds and open units to increase capacity for PRTF services.

Healthy Blue's I/DD Liaison, CMs, and BH clinical leadership participate in care coordination conferences with OCDD's Resource Center team members, OCDD's State Office leadership, and the Louisiana Office of Behavioral Health. When there is a child with a co-occurring BH condition who has involvement with OCDD, we convene care coordination telephonic meetings with OCDD representatives to support treatment planning and service integration for the child's care in the most appropriate treatment setting.

2.10.8.6 Protocols for Terminating Network Providers for No Cause

We work diligently to contract with and retain providers in our network. Termination of providers without cause from our network is rare. However, should there ever be a need to terminate a terminate a provider agreement without cause, we will identify and provide LDH with an accounting of all members who have received services from the impacted provider within the past 12 months by, at minimum, claims analysis and PCP selection. Providers terminated without cause receive, via certified mail, notice of our termination and appeal procedures, and LDH is immediately notified. We give hospitals and provider groups 90 days prior notice to a contract termination without cause. We also comply with termination reporting requirements of State licensing agencies and the National Practitioner Data Bank, the Federal Healthcare Quality Improvement Act, and other organizations as required by law. Healthy Blue's

procedure, Timely Notification of Participating Provider Termination, is designed to assure timely notification to the appropriate State agency, our affiliates, our vendors, and our members, of the termination of providers from our participating provider panel, as the result of regulation, contract requirements, or direction of LDH representatives. In accordance with this procedure, Healthy Blue will provide written notice to LDH no later than seven business days of any network provider contract termination by Healthy Blue or the provider, should it materially impact our provider network. We will state the reason(s) for the proposed action in our notification to LDH. If the termination is related to our operations, we will also include our plan for assuring that there will be no stoppage or interruption of services to members. Healthy Blue will also submit, as needed, as assurance when there has been a significant change in operations that would affect adequate capacity and services. These changes include, but are not limited to, changes in value-added benefits and services, payments, or eligibility of a new population.

Minimizing Member Impact

Our members are our first priority. Healthy Blue is committed to connecting members with the services they need, when they need them, and in the setting they choose. We recognize that our members' needs change frequently and supporting them during critical transitions between care settings is one of the most crucial care coordination functions. These transitions exemplify some of the most vulnerable times for our members; therefore, our CMs are dedicated to facilitating safe and successful member transitions between health care settings. We support member voice and choice and help our members prepare for transitions before they occur by providing information on continuity of care, coordination of care, and how they can access supports.

We give a written notice of a provider's termination to each member who either received primary care from the provider, or who was seen on a regular basis by the provider. When a treating provider terminates from our network for any reason other than for cause, we enable members in active treatment to continue care with that provider. Medically necessary care from that provider may continue through completion of treatment or until the member selects another treating provider, up to 90 days or until the member is reasonably transferred without interruption of care. If a provider is unavailable to deliver previously authorized services in a timely fashion, we work with the member to identify an equally qualified alternative provider in or out of our network, as needed. When members transition between providers, we facilitate the sharing of existing treatment plans between the providers and send the new provider the member's care plan. Our network providers are contractually required to share treatment plans when they are transferring or coordinating care. Table 2.10.8.6-1 describes each of the critical components of our approach to facilitating continuity of care for all members.

Table 2.10.8.6-1. Components of Effective Continuity of Care

Component	Description
Authorizations	We honor all existing authorizations with the same provider, including those with external organizations providing carved out services, and frequency of service identified on the member's care plan for up to 90 days following enrollment. During this time, CMs complete an assessment as needed and develop a new care plan with the same or alternate services and supports based on the member's holistic needs. CMs continually monitor the member's progress and continued need for authorized services. Our clinicians complete the necessary prior authorization request to prevent disruption in care.
Dedicated Care Managers	During the initial assessment, CMs take the time to get to know the member, learning about their preferences, family, and supports, and identify and understand the member's needs. By proactively obtaining a copy of the member's plan of care, past assessments, and open service authorizations, and through outreach to the providers with established relationships with the member, the CM lays the foundation for continuity of care.
Care Plans	CMs review new members' care plans for appropriateness of care, arrange for all medically necessary services, and identify any gaps in care. They review and honor new members' care plans. The health plan completes a thorough review that supports the existing care plan or work with the member, family members, caregiver, and providers to develop a new care plan. We identify any gaps in care and refer the member for additional services, if needed.
Timely and Accurate Information	Our clinical support tool, Member 360°$_{SM}$, combines member data and information from various sources into a single record to provide a holistic picture of the member's utilization, care management services, and gaps in care. Member 360° includes such information as member health risk assessments, care plans, longitudinal member health records, and clinical data. Elli™, a risk intelligence solution that delivers population analytics and individual member profiles, incorporates Louisiana-specific encounter data and maps socioeconomic to clinical data to support a 360° view of our members, resulting in lower costs and better member health.
Non-contracted Providers	Our Clinical team identifies members receiving services from out-of-network providers and contacts our Provider Relations department for outreach and contracting. If we are not able to contract with the provider, we work closely with the member to choose another provider; or, if in the best interest of the member, we work with the provider to establish on SCA to provide on-going care. We do not enter into SCAs with any providers who have sanctions.
Member Grievance Information	We continuously review member grievances to monitor provider adherence to access and availability standards as our members transition to and from our health plan. Additionally, our Member Advisory Committees, focus groups, and one-on-one member interactions provide us information on the adequacy and availability of network providers that help to shape our focus and management of our provider network.

This page is intentionally left blank

2.10.9 Provider Support

Recognizing the importance of supporting our network providers, our Provider Solutions team is the hub for provider support, communication, and problem solving. ***Every member of our team lives in the communities we serve in Louisiana.*** We know the provider community because we are neighbors and friends, our children go to the same schools, and we attend the same community events. When a provider seeks help, we answer the call with a personalized, open door approach. ***We are the local touchpoint in the provider's backyard and we bring consistent leadership and continuity to Louisiana's Medicaid provider community.***

Healthy Blue understands the important role providers serve in the health care delivery system. Not only do providers deliver health care services, they also serve as the member's primary health advocate and health champion. Positive provider experiences are critical to our success because satisfied providers contribute to our ability to improve member access to care, promote healthy lifestyles, and effectively manage costs. To transform the current state of health care, we empower providers through our ***Provider Promise: to deliver a best-in-class provider experience by simplifying health care so our providers can focus on member health***. As we detail in Section 2.10.8, Network Management, our Provider Promise encompasses four distinct pillars that align our suite of provider programs and solutions with LDH goals: a capacity for efficient care, accountable reimbursement, administrative simplification, and health advocacy. Together, these four pillars guide our processes for effectively engaging and supporting providers over the course of the Contract, including improving quality and reducing costs through delivery system and payment reform.

A distinction of Healthy Blue is our relationship with BCBSLA. ***Our companies are joined together by the strength of the Blue brand, and we are known as trusted partners to providers who are contracted with both Healthy Blue and BCBSLA. We have the distinction of being able to work together to support providers with multiple touchpoints in the field, in a highly personalized manner.*** For example, if a provider question or concern related to Healthy Blue comes up during an interaction with a BCBSLA Provider Relations Representative (PRR), a seamless referral is made to Healthy Blue's Provider Relations team to assist the provider, and vice versa. In addition, ***senior leadership from both companies strive to conduct provider meetings or participate in mutual forums like health fairs at least monthly that offer individualized discussions to deepen and solidify our network relationships***. Topics include the value of our collaboration and our combined approaches to improve the health of members and their families.

Our provider support strategies are tailored to advance state priorities and assure each provider's ability to achieve the goals for quality, and we are committed to supporting our network providers in clinical transformation and care improvement efforts at a regional and practice level as they are outlined by our Provider Support Plan and the State's Model Contract.

2.10.9.1 Healping Providers to Assure They Receive Timely Payment and Appropriate Support over the Course of the Contract

Our network providers are the most critical component of care delivery. As such, in line with our ***Provider Promise of administrative simplification***, and ***LDH's goal of reducing complexity and administrative burden***, our provider support model is designed to offer our network providers support so they are able to spend most of their time delivering care, instead of on administrative tasks. Our commitment to administrative simplification and provider support guides our processes for effectively managing provider relations and communications, as well as our development and implementation of specialized service models and technical supports that promote accuracy, reduce administrative burden, and increase provider and patient satisfaction.

Healthy Blue has extensive experience working with the many different provider types in Louisiana and blends best practices and innovative solutions to assure our network providers receive timely payment. For example, we offer multiple billing methods, including both paper and electronic, with the flexibility to support non-standard billing processes for non-traditional services that are not easily supported using standard claim forms. We adjudicate claims daily; run payment cycles nightly, Monday through Saturday; and make claims payments twice weekly.

Our team is knowledgeable in administering a wide range of provider payment methodologies supporting State policy, as well as a variety of industry-standard claim adjudication controls. We understand that providers have different levels of experience with billing processes, and believe that it is important to meet them where they are, providing the right assistance, to the right provider, at the right time. Therefore, we educate providers on claims and encounters submission as part of our new provider orientation, and offer providers individualized training as needed until they feel comfortable navigating the system on their own. This may include test claims and denial monitoring designed to avert downstream problems.

Our claims processes are highly efficient and accurate and support both physical health and behavioral health (BH) operations. This enables us to achieve the highest degree of claims adjudication accuracy, and increased provider satisfaction through prompt claims payment and focused attention to claims inquiries, as well as performance and scalability to support current volumes and future growth.

Processes to Effectively Manage Provider Relations and Communications

We place value and emphasis on flexibility and process adjustment as we employ the following processes to effectively manage provider relations and timely communications:

- ***Empower*** our locally-based Provider Solutions team as the hub for all provider support and problem solving.
- Offer ***high-touch, personalized*** provider assistance and training, meeting face-to-face with large and small, urban and rural providers in their offices.
- Obtain ***provider feedback and input*** on policies and programmatic solutions through, Provider Advisory Group (PAG) meetings, Joint Operating Committee (JOC) meetings, Care Delivery Transformation (CDT) meetings, and joint statewide provider workshops in collaboration with BCBSLA.
- ***Increase investments*** in enhanced email communication capabilities, including the use of email blasts.
- Provide ***multiple communication channels***, including electronic venues like our provider website, provider portal, and traditional communication methods, including fax blasts and mailings. Our provider website is a critical tool to enhance provider communication, deliver actionable information, and streamline plan administration. It features tools that promote convenience and transparency while simplifying practice management. Through these channels, we are able to disseminate information to our providers quickly and efficiently, providing immediate access to important information and connecting them with the tools and resources they need to deliver appropriate care.

> *...When problems arise, regardless of whether they are related to claims, credentialing, membership, or something else, Healthy Blue has a team of individuals that are diligent about following them to resolution.*
> **– Greg W. Ivey**
> Chief Operating Officer
> The Pediatric Center
> January 9, 2019
> LA_HealthyR2019_2.10.9_Greg_55_TST_04

Through our hands-on, personal touch approach to provider relations, our flexible and proactive approach to issue resolution, and our comprehensive approach to communications, we are able to meet the needs and preferences of our providers.

Activities and Approaches to Minimize Provider Complaints, Contracting Issues, and Prior Authorization, and Claims Concerns

Our Provider Solutions team is dedicated to supporting our network providers with complaints resolution, contracting issues, and concerns related to prior authorizations and claims, as well as processes related to credentialing, needs assessments, electronic remittance advice/electronic funds transfer (ERA/EFT), and issues resolution. Within our Provider Relations department, our PRRs are the local touchpoint for technical support. They are available to meet face-to-face with providers and offer immediate support. They also help educate providers on the resources available through our provider website that promote communication, convenience, and support the complaint and resolution process. This includes links to online training, our provider manual, provider bulletins, and network e-updates that include important information on claims submission processes, pharmacy, BH, and the prior authorization process. Additionally, we closely monitor our social media platforms in a proactive effort to field potential provider complaints. If a provider voices dissatisfaction on one of our social media platforms, such as Facebook, we immediately outreach to that provider in an effort to resolve the issue.

On a 24/7 basis, providers also have access to our toll-free provider call center (1-844-521-6942) for any help needed, questions, or concerns. The general Provider Services Line hours of operation are 7:00 a.m. – 7:00 p.m. CT with interactive voice response (IVR) self-service available after hours. Providers can also contact us through email. We monitor our Healthy Louisiana-dedicated email inbox (lainterpr@healthybluela.com) Monday-Friday.

Process for Determining Adequate Provider Relations Staffing

Our Provider Relations staffing model uses several factors to project required staff to support the needs of our providers. For example, we know that primary care providers (PCPs) and other high-volume providers require more intensive support. Our staffing model is designed to assure all of our providers receive the highest level of service and support aligned with their needs and our Provider Promise.

Our Provider Solutions department is organized into two distinct teams, our Network Development team dedicated to provider contracting, and our Provider Relations team dedicated to provider support. To determine adequate staffing in our Provider Solutions department, we:

- Analyze the total number of network providers by category (for example, PCPs, specialists, Rural Health Clinics (RHCs), Federally Qualified Health Centers (FQHCs), hospitals, and BH providers), and locations where they serve our members.
- Inventory the number of providers participating in one or more of our Value-Based Payment (VBP) programs.
- Evaluate anticipated provider training needs, including webinars, seminars, and meetings (for example, JOC and CDT meetings).
- Project the anticipated number of new providers per year, and providers currently in contract negotiation or credentialing.
- Categorize our providers into tier levels based on provider type, volume of members, and services provided to our members. For example, Tier 1 (PCPs including FQHCs and RHCs, BH including mental health rehabilitation, hospitals, and groups participating in our VBP programs) receive scheduled monthly visits; Tier 2 (licensed mental health professionals and high-volume specialists such as OB/GYNs) receive scheduled quarterly visits; Tier 3 (all other providers) receive scheduled semi-annual or annual visits, and unscheduled visits.
- Estimate the number of face-to-face visits, per PRR, per month based on the number of assigned providers in each tier.

We continually review our staffing model, taking into account feedback from various sources, including our providers, Network Strategy Workgroup, PAG, JOC, CDT, and Quality Management (QM) department. Additionally, each manager and department routinely reviews their specific responsibilities and determines whether a sufficient number of employees are committed to the department to meet staffing needs. Changes in volume, service delivery, and products are reviewed, and staffing is adjusted based on these changes. For example, based on feedback, ***in July 2018, we added a dedicated Network Education Representative to our Provider Solutions department, and are further expanding provider training support to include additional Provider Training Specialists as part of our commitment to addressing provider education needs***. Our ***Provider Training Specialists*** support our PRRs with delivering frequent provider contact communication and education, helping to assure providers receive the timely and relevant information they need in the way that is most convenient for them.

Strategies to Provide Effective and Timely Communications

Healthy Blue is committed to maintaining a strong communication link with our network providers. Our strategies to assure effective and timely communication are outlined earlier in Section 2.10.9.1, and include our Provider Solutions team, a hub for all provider support, communications, and problem solving. This also includes our provider website, providers.healthybluela.com, which offers links to our training and resources including our prior authorization lookup tool (PLUTO), claims status inquiry, eligibility and benefits inquiry, member reports, pharmacy information, provider newsletters, LDH communications, and provider updates.

In an effort to deliver information in a timely and efficient manner, we deploy a comprehensive communications strategy that includes email blasts, fax blasts, letter and newsletter mailings, and more. Communication preferences vary from provider to provider, and our many flexible communication methods allow us to provide information in whatever way works best for a particular provider, whether they are a large practice, hospital, or small rural PCP.

A testament to the effectiveness of our provider communications — on our 2018 Provider Satisfaction Survey, more than 82% of provider respondents indicated they were satisfied with our general provider communications.

Strategies to Develop a Provider Education Program

We have developed and deployed a robust provider education program administered through our Healthy Blue Training Academy. Our provider education encompasses a comprehensive approach to all LDH-required and Healthy Blue-offered provider training. Our Healthy Blue Training Academy incorporates multi-modality delivery training processes (in-person, online courses, tailored webinars, and written materials), as well as mechanisms for tracking, monitoring, alerting, and reporting compliance and completion of training.

Through our Healthy Blue Training Academy's robust features, we offer required, regionally identified, population-specific, and culturally competent education. Ongoing training occurs several times per year, and on an as-needed basis for program and regulation updates. Our Provider Relations staff, including our Provider Training Specialists, support individual and on-site training sessions on-demand, or when we identify a need. We also offer group presentations, webinars, and quarterly statewide workshops. Trainings are specific to provider type and are tailored to meet each provider's individual needs. Our Training Academy is described in more detail in Section 2.10.9.3.6.

Collaborative Provider Education Strategy

We leverage our alliance with BCBSLA and work together to educate providers on our collective ability to best serve our members. For example, BCBSLA and Healthy Blue identify opportunities to jointly offer training on topics that include opioid management, HEDIS®-related care gap management, integrated BH best practices, and optimal management of hypertension and diabetes. While great emphasis is placed on clinical education opportunities, we also recognize the importance of providing joint trainings that address the operational, day-to-day aspects of providing care to our members. ***The combination of BCBSLA and Healthy Blue gives us the unmatched ability to tailor training topics based on our experience in Louisiana and our combined approaches to improve the health of members and their families.***

Healthy Blue also joins BCBSLA at its statewide provider workshops to address questions that may come up regarding Healthy Blue processes including credentialing, billing and claims, fraud, waste, and abuse (FWA), care management, online services, authorizations and appeals, Alternative Payment Models (APMs), and other opportunities for advancing provider partnerships. ***Our joint participation in these forums saves providers time by offering a one-stop-shop to address their needs.***

2019: Healthy Blue and BCBSLA Co-host an Event in Shreveport
LA_HealthyR2019_2.10.9_Events_PICT_02

We place great value on collaborative provider education. We also work with other MCOs to host educational events and address Healthy Louisiana provider education needs around important health care issues that affect our member populations. We participate in monthly meetings with representatives from the other MCOs to discuss current collaborations and brainstorm around future collaborations. This has resulted in coordinated provider trainings focused on Level of Care Utilization System (LOCUS) and Child and Adolescent Level of Care Utilization System (CALOCUS), Parent-Child Interaction Therapy (PCIT), FWA training, and more.

Supporting Providers with High Claims Denial Rates

We have an established process to support providers with high claims denial rates. ***Our process is in compliance with ACT 710.*** We proactively conduct a root cause analysis of providers with a high volume, or a high dollar value of denied claims using our internal Denied Claims Report. This report is generated weekly, and on-demand as needed, and includes detailed information related to all claims where the total claim paid amount is equal to zero. The report includes the provider ID, name, and the number of denied claims. A denial explanation code is used to categorize each denial. In 2018, the top three reasons for denials were: duplicate claim or charges processed under original submission, preauthorization not obtained, and member termination. In an effort to address these issues, we have implemented an enhanced provider onboarding process where we generate test claims and thoroughly demonstrate the claims submittal process, as well as demonstrate appropriate PLUTO preauthorization processes and verifying member eligibility via our provider website.

Our PRRs work with our Claims Analysts, Appeals Specialists, Internal Resolution Analysts, Provider Claims Educator, and other operational units and employees who are dedicated to assuring our Healthy Louisiana network providers receive timely claims payment, and to identify the primary cause for denials. Our PRRs and Network Education Representative also meet with providers one-to-one, and work with them and their billing offices to understand claims denials, and if applicable, resubmit claims for payment.

Evaluating and Resolving Provider Disputes

First, We Listen

Healthy Blue offers providers a “no wrong door” approach with many avenues to voice a concern or file a dispute; including by phone call, email, through our provider self-service website, in writing, verbally during visits with our PRRs, through our provider call center, or in-person by visiting our local health plan offices. Our Provider Solutions team and our PRRs intently listen to all provider concerns with the goal of resolving every issue in a timely manner. ***Using the information registered in all levels of the dispute process, we work to perform root-cause and trending analysis to minimize future disputes.***

All of our employees who may have contact with providers receive training on our processes for accepting, evaluating, and resolving provider disputes, whether they are verbal or written. Some disputes are evaluated and resolved instantaneously during in-person provider visits by our PRRs. Other dispute resolutions may take more time as they involve more focused research. All issues that result from an in-person visit with a PRR are documented in Salesforce, a web-based application that allows our PRRs and local leadership to track and trend information. Additionally, disputes are recorded and tracked in our centralized provider grievance and appeals system.

In the event a provider becomes dissatisfied with our resolution efforts, our team of dedicated local complaint resolution experts will engage. This Baton Rouge-based team is responsible for acknowledging all formal complaints by telephone within 24 hours of receipt, and via email within two business days of receipt. The acknowledgement includes direct contact information for one point of contact in Baton Rouge responsible for assisting the provider with follow-up questions related to the complaint, and outlining the steps that will be taken to resolve the dispute. We conduct thorough research into each provider complaint using applicable statutory, regulatory, contractual, and provider contract provisions, collecting all pertinent facts from all parties and applying Healthy Blue written policies and procedures to determine additional actions required. Final resolution is communicated to the provider within one business day of completion, and includes the opportunity to notify us if they are dissatisfied with the outcome. The final resolution email also requests feedback on every closed complaint to provide real-time feedback on providers' satisfaction with our process. As seen in Table 2.10.9-3 in Section 2.10.9.4, ***100% of respondents indicated their issue was resolved to their satisfaction, and over 95% responded as being "very satisfied" with our resolution of the complaint***.

Disputes Specific to the Automatic Assignment Policy and the Assignment of an Individual Enrollee

We educate providers on the automatic assignment policy, as well as the provider's right and methods to dispute member assignment during new provider orientation and via our provider website and provider bulletins.

Providers identified as having members who are eligible for PCP reassignment, defined in HPA 19-5 and IB 19-6, are allowed 15 business days to review and have the right to dispute reassignment. To dispute a reassignment, the provider must submit valid documentation, such as a medical record, proof of billed claim, or Third Party Liability demonstrating they have seen the member within a 12-month lookback period. Following review by our Provider Solutions team, if the dispute is determined to be a valid request, the member will remain in the provider's panel.

Our Provider Solutions team is also responsible for handling disputes related to members being assigned to a provider. These disputes are promptly reviewed by a cross-functional committee, which includes leaders from Healthy Blue Operations, Quality, and Provider Relations. The committee speaks with both the member and the provider, and reviews any applicable documentation, such as claims. If the committee finds that the request to move the member out of the provider's panel is a valid request — meaning not discriminatory or related to cost savings under a VBP arrangement — the member will be moved out of the provider's panel and placed with an appropriate alternative provider. If the committee finds that there is no basis for removal of the member from the provider's panel, the member will remain with the provider, and our Provider Relations team will provide coaching if necessary.

In cases where a member has been or becomes abusive towards the provider or the provider's staff, as well as instances related to providers who drop members from their panels due to the high cost of treatment, our PRRs work with the affected provider and member to address and resolve the situation.

2.10.9.2 Supporting Providers to Improve Quality and Reduce Costs through Delivery System and Payment Reform Strategies

To transform the current state of health care, we are empowering providers through our Provider Promise and our commitment to accountable reimbursement — our strategy for partnering with physicians, facilities, and non-traditional providers to accelerate the shift from volume-based care to patient-centered, value-based care that improves member access, promotes healthy lifestyles, and effectively manages costs. We are changing the health care landscape by aligning our members with higher performing providers and creating an accountability platform for providers that incents advancement along the value-based continuum, to achieve high performer designation by developing their capabilities to deliver enhanced levels of care. Simultaneously, we afford providers opportunities to reap financial benefits as true partners invested in creating healthier communities. A complete list of VBP programs with a description of each is detailed in Section 2.10.12, Value-Based Payment.

Our strategy is to maximize each member's use of higher performing providers in terms of cost and quality. ***We understand that successful managed care models for all members, including our most vulnerable and underserved populations who face significant social determinant of health (SDOH) challenges, requires adequate geographical access to the right combination of high performing providers and customized, community-based resources with specialized knowledge and capabilities to attain better health outcomes.*** Therefore, in addition to accountable reimbursement, our teams of dedicated PRRs, CDT Consultants, and Practice Consultants empower both VBP and non-VBP providers to attain and excel at the highest level of performance.

We support providers to improve quality and reduce costs with a combination of clinical, financial, and operations data, and shared decision-making initiatives that facilitate care coordination. These initiatives offer further provider insight into understanding the needs of the population so that services can be better planned, coordinated, and

delivered, thereby improving member engagement. We believe the most effective way to align quality and performance outcomes to optimize value is the overlay of our VBP programs with state-specific provider reimbursement strategies that focus on the evolving needs of the state and our members.

Supporting Primary Care Providers in Delivery System Reform

Our delivery system reform model was initially developed as a result of working with providers to transform their practices into Patient-Centered Medical Homes (PCMHs) using NCQA standards. ***Our network currently includes 38 PCMH-recognized provider groups, representing 91 practice locations.*** We reimburse practices 20% of their NCQA PCMH application fee and 50% reimbursement of their application fees up to $1,000 when they achieve NCQA recognition. Our model reflects tenets established by the American Academy of Pediatrics, the American College of Physicians, the American Academy of Family Physicians, and the American Osteopathic Association. It adds value to our members, providers, and LDH by:

- Promoting primary and preventive health care services that improve health outcomes and cost savings
- Supporting providers who transform their practices to a more population-centric model using nationally recognized standards
- Reporting data to providers to help them better understand the health status and needs of their member panel through useful, specific quality and medical cost management reports
- Providing a dedicated Louisiana team of CDT Consultants who engage with each PCMH to support practice improvements and facilitate information-sharing
- Offering participating practices opportunities to earn additional compensation for meeting quality and other health care access targets
- Actively engaging members with a high-touch approach that empowers them to manage their health

Our PRRs are the individual touchpoint for PCPs and link them with our dedicated CDT Consultants, and/or our cross-functional team of Maternal Child Health/EPSDT Coordinator, Medical Directors, Health Promotion Representatives, and HEDIS and quality experts to promote population health priorities. For example, our PRRs can link PCPs to our QM Practice Consultant, who is available to help with care reporting related to diabetes, and conduct member classes at PCP locations related to diabetes prevention and living with diabetes. Similarly, our Maternal Child Health/EPSDT Coordinator is available to meet face-to-face with providers to review OB Profile reports, discuss areas for improvement, and develop provider-specific quality improvement goals related to maternal and infant health. Our Health Promotions Representatives are also available to assist PCPs with addressing gaps in care with a focus on well child treatments.

Our CDT model yields best practices of high-performing providers, such as improved patient access and communication, coordination of care, and more engaging patient relationships. Our coordinated team assists providers by delivering and disseminating patient profiles, predictive modeling analysis, risk stratification data, and clinical intervention alerts that enable physicians to identify and build individualized care plans for their highest-risk patients, while assuring that all patients receive care that meets evidence-based preventive, acute, and chronic care guidelines. Members become more active participants in their own health and well-being when network physicians treat them like true health care partners. Our CDT Consultants empower our VBP providers to do this by actively engaging in planning a truly integrated care delivery model and taking the time to understand what is important to members as we jointly establish practice goals.

I very much appreciate your support of our efforts as a multispecialty health group to serve the citizens of Northeast Louisiana. Your support and efforts to work on a team-based approach have allowed us to provide critical services for the region. I believe that your innovations in child obesity and asthma will make a significant contribution to improving the lives of people who participate in the Healthy Louisiana Program.
– Michael C. Echols,
Director of Business Development
Affinity Health Group
LA_HealthyR2019_2.10.9_Michael_TST_02

Our local CDT model continually improves VBP performance. For example, we offer programs for physicians including PCPs, OB/GYNs, and psychiatrists, as well as non-physicians. Our progressive model also offers a diverse mix of incentives to organizational provider entities, provider office staff, and hospitals. As our CDT team envisions beyond VBP, collectively they strive to develop additional network strategies to enhance delivery of integrated physical health (PH) and BH care, care delivery reform, and the incorporation of SDOH, which are recognized as significant influencers of our members' health outcomes.

Our ***Provider Concierge Program***, as described in Section 2.10.8.4, is designed to increase retention and provider satisfaction by supporting high-performing providers through differentiated concierge-type service, tailored to their practice, that includes a single point of contact for operational support functions and payment matters including onboarding, claims, data updates, and credentialing. For example, the program includes Account Service Coordinators who provide differentiated concierge-type service for our high-performing providers. They are the single point of contact for expedited access to various Healthy Blue shared services teams, and facilitate group

training for all provider education needs and requests. The program also includes a dedicated Account Manager who serves as a liaison between the provider and key stakeholders. The Account Manager works collaboratively with the provider to learn their business model, advocates for the provider, proactively identifies provider needs, and recommends ways to improve existing relationships through lessons learned. At our highest level, the premier level, the Account Manager provides a full suite of additional consultative services including strategic planning for successful practice transformation. Our Provider Concierge Program is focused on continually making it easier for the provider to do business and is one of the ways we deliver on our Provider Promise to simplify health care so providers can focus on health. [redacted]

Supporting Behavioral Health and Other Specialty Providers in Delivery System Reform

Our Provider Promise provider collaboration strategy fully supports LDH's goal to decrease fragmentation and increase integration as part of delivery system reform across providers and care settings, particularly for members with BH and OB needs. We work to improve cross-agency BH coordination to make sure members have a greater awareness of and access to mental health, substance use disorder (SUD), and PH care services. We offer provider education and administrative supports, including integrated PH and BH service management and tools, such as evidence-based screenings and virtual specialty consultations, to help identify members' holistic needs, make timely referral to services, and effectively coordinate clinical care. We provide training to network PCPs for screening and identifying BH disorders and referring members for BH services. This includes clinical coordination and BH Screening, Brief Intervention, and Referrals to Treatment (SBIRT) techniques. We work closely with PCPs to share evidence-based practices and offer the tools and training to complete SBIRT processes, and we reimburse PCPs for SBIRT services as permitted.

We have integrated our dedicated Provider Relations team of PRRs to more effectively focus on helping providers promote a holistic approach to integrated PH and BH care. For example, we offer BH providers education related to referring members with untreated PH issues to their PCP for examination, as well as their responsibility to send the PCP quarterly reports on members' BH status. Our online Coordination of Care form helps BH providers share information with PCPs and other specialists when a member enters BH treatment. This form provides the physician with a better understanding of the member's BH treatment needs. We encourage the use of this form during our interactions with providers and ask that they incorporate it into each member's treatment plan.

[redacted]

Our PRRs and PCMH Consultant reach out to targeted PCPs, FQHCs, RHCs, and specialty groups to provide technical assistance toward becoming NCQA-recognized Patient-Centered Specialty Practices (PCSPs) to further facilitate integration of PH and BH. To assist providers with the costs of NCQA recognition, we reimburse practices 20% of their NCQA PCSP application fee. We will also provide practices who achieve PCSP recognition with 50% reimbursement of their application fees up to $1,000 when they achieve NCQA recognition.

Supporting Behavioral Health and Other Specialty Providers

Healthy Blue has been a beacon in the community in advocating and improving healthcare access to Louisiana Residents. They have been a major supporter of one of our organization's longest running educational programs, the Annual Education Conference on Alzheimer's Disease. Healthy Blue understands the importance of Alzheimer's education for caregivers and has been a supporter of the conference since 2015. They help our organization further its mission to teach, care for, and connect with individuals with Alzheimer's and other memory-related impairments.

– Kristi Mellion, MPH
Program Supervisor
Alzheimer's Services of the Capital Area

LA_HealthyR2019_2.10.9_Kristi_55_TST_01

We work closely with BH providers, clinics, multi-specialty groups, group practices, and individual practitioners to make sure members have access to necessary services and community supports, and to assure that providers have information and help to meet each member's holistic needs. Specifically, we offer:

- Notification of a member's inpatient admission and of those needing community outreach
- Support coordinating a member's inpatient visit and assisting with discharge planning
- Help identifying gaps in or barriers to care and making sure members receive necessary services
- Support monitoring for quality of care concerns, assessing next steps, and implementing action plans to resolve issues during scheduled provider meetings where we share data and clinical information
- Hosting of community events and summits to strengthen provider relationships and improve the delivery of care

Sharing Timely, Actionable Provider Performance Data

At Healthy Blue, we know that collaboration and sharing of timely, actionable performance data is essential to helping providers improve their performance. Sharing provider performance data is an important component of our Quality Assurance and Performance Improvement (QAPI) program, discussed in detail in Section 2.10.11.3, which informs our overall approach to provider performance improvement. Our strategies for sharing provider performance data are in accordance with the Louisiana Medicaid MCO Model Contract, Section 2.17.7, VBP Data Sharing and Collaborative Efforts, and Section 2.17.12, Data Sharing in VBP Arrangements.

We work collaboratively with providers participating in our VBP programs and align provider profiles with our VBPs to drive performance improvement. We promptly share data with providers through an enhanced array of performance reporting including scorecards, action plans, and interactive management tools to improve efficiency, minimize administrative burden, and drive performance improvement.

We collect and analyze quality and performance data (including medical, behavioral, ancillary, lab, and pharmacy) to support our VBP programs including enrollment data, claims and encounters data, authorization data, grievances and appeals data, provider and member satisfaction surveys, and HEDIS results.

Our Health Intech member dashboard is available to all providers through our secure provider website. It gives electronic access to member data and allows providers access to a single view that displays data in an easy to navigate dashboard including HEDIS care alerts, authorizations, prescriptions, and claims; and organized by type, such as inpatient, emergency department (ED), and office visits. The dashboard serves as our primary method for sharing member care management information, including plans of care. Data is updated daily with near real-time provider availability on demand.

Our PRRs offer providers outreach and education related to our VBP programs and practice transformation, and offer assistance with data and report interpretation and other activities that support the provider's performance improvement. An expansive description of our provider performance improvement reports and data sharing tools are detailed in Section 2.10.12.4, Value-Based Payment; and an overview of our strategies to advance provider quality measures through performance data is discussed in Section 2.10.11.1, Organizational Commitment to Quality Improvement.

To further enhance our provider performance data sharing strategy, Healthy Blue will participate in the Louisiana Health Information Network (LHIN) Encounter Notification Service (ENS). LHIN ENS is the largest statewide all-payer health information exchange. Through LHIN ENS participation, we will be able to access real-time admission, discharge, and transfer (ADT) information to alert our Care Managers and our members' PCPs of an ADT event. LHIN ENS participation will complement and enhance our already robust clinical information and provider performance data sharing tools.

2.10.9.3 Provider Engagement Model

As the hub of our provider engagement model, our locally-based integrated Provider Solutions team employs a high-touch approach, with significant emphasis on proactive and local provider engagement, towards our common goal of improving member access to care, promoting healthy lifestyles, and effectively managing costs. We accomplish this by:

- Developing collaborative relationships, including extensive, one-to-one outreach through local PRRs
- Offering proactive, comprehensive provider education in a variety of venues and participation methods from face-to-face meetings and workshops to webinars and online tutorials
- Implementing provider incentive programs that reward providers who deliver measurable better care and achieve more positive patient outcomes
- Assisting at the point of care by providing member utilization data to identify gaps in care and to assure that the member receives all appropriate services
- Delivering sound reimbursement practices, including prompt and accurate claims payment
- Streamlining utilization management practice, including electronic submission of authorization requests
- Simplifying and minimizing administrative burden, including online claim submission tools

We engage providers to foster a mutually beneficial relationship and encourage feedback at multiple touch points. These include visits by our PRRs, Account Service Coordinators, and other members of our Provider Relations department. We also include providers in our monthly JOC, CDT, PAG, and our National Provider Advisory Group meetings. ***Through our alliance with BCBSLA, we are able to deploy a unified provider engagement approach at our respective Provider Advisory Committees by assuring that at least one member is common to both committees. This allows us to gain insight into BCBSLA provider engagement best practices, and vice versa.***

Our approach i ncludes our PRRs as the main point of contact for coordination and engagement with other departments, functional areas, subject matter experts, and the resources of our national organization to emphasize relationship development with our network providers. We visit all providers at least annually, but we also routinely and regularly visit high-volume providers more frequently based on their volume of members, claims, and encounters. All visits are planned and tracked with our Provider Relations Visit Checklist and Salesforce (described in detail in the following section, Mechanisms to Track Interventions with Providers). Our market leadership, in developing practice administrator and physician consultative councils for our current network, further supports the sharing of information and collaboration with our provider clients.

For our Healthy Blue providers, our comprehensive, secure provider portal offers access to program and provider-specific information as well as a variety of tools and resources, including a downloadable copy of our provider manual and a variety of training and education resources, such as the latest provider communications toolkits, like our Early and Periodic Screening, Diagnosis and Treatment (EPSDT) Toolkit, all designed to make our providers' jobs easier. We showcase basic information and tools such as prior authorization procedures, formularies, and reimbursement policies, and use the portal to deliver information to providers, including announcements, alerts, and forms. The latest forms and training materials are always available on the provider portal.

Additionally our Provider Relations team works diligently with our Provider Data Management department to assure we have correct information on file for our providers, as this information is reflected in our provider directory. Having accurate and up-to-date provider practice details is key to assuring access to care for our members. In addition to providers' ability to update their information through our provider portal at any time, we proactively reach out to providers to confirm and update their information through surveys, fax blasts, and during one-on-one visits with our PRRs.

Staff that Play a Role in Provider Engagement

Healthy Blue is fully invested in the Healthy Louisiana program and Louisiana's provider community. [redacted]. This team brings longevity and consistency to the program. Our Provider Solutions leadership team has been with Healthy Blue since the beginning of our existing contract. In addition, we are proud of the longevity of our Network Development/PRR staff. Our Provider Solutions team has had no turnover since 2017, an indicator of their commitment to our providers and members. [redacted] Our complete staffing model with organizational charts can be found in Section 2.10.2.2, Staff Experience and Organizational Structure.

Presence and Role of Provider Field Representatives

Our PRRs are our primary face to our network providers. They are ***the local touchpoint for providers and represent a unified front in the field***. Because they physically live and work in the areas they serve, they are highly approachable and able to proactively answer and resolve contract questions, reimbursement disputes, non-routine claim issues, and billing questions. They are committed to providing excellent customer service that results in superior provider satisfaction. Our PRRs make regularly scheduled and as-needed visits to each provider, and make it their mission to offer technical assistance and guidance related to resolution of issues that require the intervention of the Network Development department. They offer collaborative provider training, and deliver a best-in-class provider network experience by simplifying health care so our providers can focus on member health. They also validate provider data and demographics.

The role of our PRRs is evolving towards becoming highly proficient CDT extenders, adjunctive team members who cross-functionally target and qualify providers with well-matched APM programs. After engagement is triggered, our PRRs assist with the onboarding of providers into their selected APM program. To support the onboarding process, and as an increasing ongoing role of critical value, provider education is coordinated by our PRRs and dedicated Provider Training Specialists using the multiple modalities found within our Healthy Blue

Training Academy curriculum. Our PRRs are crucial to our ability to improve member access to care, promote healthy lifestyles, and effectively manage costs.

Mechanisms to Track Interactions with Providers

As part of our Provider Engagement model, we use Salesforce as our primary mechanism to track Provider Solutions department engagement with providers. All of our Provider Solutions employees are required to document scheduled and ad hoc visits, website and email interactions, verbal interactions, and any other direct or indirect provider engagement in this system.

We use our Provider Relations Visit Checklist to track provider visits. This Checklist is a comprehensive document that covers all key areas a PRR or other Healthy Blue representative should touch on during a provider visit including:

- Any operational issues
- Any contracting issues (the PRR pulls this information from our Provider Contract Repository prior to the visit)
- Present and anticipated quality initiatives and present and future provider quality incentive programs (the PRR obtains this information from our QM department prior to the visit)
- Current training with upcoming requirements (the PRR reviews the provider's training record and conducts web portal training if required)
- Current claims summary, sharing payment and denial trends as applicable (prior to the visit, the PRR conducts an accounts receivables financial review including reviewing the IRU Provider Experience Report, Detailed Summary Report, Demographic Detail Report, Claims Detail by TIN and Date of service, and Appeals and Grievance Report)

Our Checklist includes an area to record and track action items. Provider signatures are required on each Checklist to confirm their participation in the visit and acknowledge their agreement to any follow-up action items identified. Prior to the visit, an agenda is developed and any needed materials are distributed. The checklist is stored in our Provider Relations tracking system housed on SharePoint.

Following the visit, a written follow-up is sent to the provider; information is entered into Salesforce; and the PRR initiates internal meetings as appropriate, assigns action items, and assures deliverables are met and action items are closed.

Collecting and Analyzing Utilization Data and Provider Feedback to Identify Training Needs

We use multiple tools and reports to collect and analyze utilization data and provider feedback that informs training needs. For example, we review claims, including our internal Denied Claims Report; billing and coding data; prior authorization data; utilization management (UM) and case management (CM) data; and physician referrals, single case agreements (SCAs), and out-of-network (OON) authorizations on a weekly basis to identify trends and patterns. We also review provider feedback surveys and UM/CM feedback as it becomes available. We collect and analyze feedback from our PAG related to the implementation of new programs, policies, initiatives, and incentive programs to minimize provider abrasion. Our QM oversight process includes review of quality data (for example, HEDIS measures) to identify gaps and provider practice patterns that would be indicative of a quality issue. For instance, we reviewed ADHD medication utilization to identify outlier providers and developed a specialized CME ADHD training for these providers.

In addition to our internal analyses, we work with various provider associations (including ***the Louisiana Primary Care Association (LPCA), the Louisiana Rural Health Association (LRHA), and the Louisiana Hospital Association (LHA), Louisiana Academy of Family Physicians, and Louisiana Medical Group Management Association***) who do direct outreach to their membership to identify provider training needs and provide feedback during CDT meetings and clinical workshops. As additional training needs are identified, we work collaboratively to develop and deliver the appropriate trainings to providers. For example, we recently collaborated with the LHA to conduct a multi-MCO training to the hospitals related to operations, claims, and UM policies and procedures. In addition, we are leveraging the power of our relationship with BCBSLA for opportunities to jointly conduct provider workshops and trainings which expand opportunities for data collection and provider feedback to inform and enhance our provider training offerings.

When we identify a negative trend or pattern, we perform a root cause analysis to determine if there is an internal problem, and to identify areas that would benefit from additional internal or external training. We take immediate action to remediate internal issues and, if required, initiate additional training for employees. If we identify a provider issue, we personally engage the provider(s) involved to discuss the issue and develop an action plan, including the implementation of additional training.

Metrics Used to Measure Provider Satisfaction

Our annual provider satisfaction survey (PSAT) process includes an objective, systematic review of activities and systems that assesses quality of care and service that meets or exceeds all acceptable prevailing standards. This NCQA-approved survey is fielded annually in the summer and is jointly managed by the Quality Management and Provider Relations departments. PSAT targets a randomized sample of provider types (PCPs, specialists, BH specialists, and OBs), prioritizing high-volume providers in each region or parish. Providers may complete the survey online or in hard copy. Our PRRs encourage non-responders in person or via telephone to complete the survey to reach an appropriate sample size for analysis. All completed surveys are processed to produce detailed summaries of results, and results are compared to prior years' metrics to identify upward and downward trends. We evaluate provider satisfaction with our communications, services, and procedures, then use the results as part of our continuous quality improvement efforts to provide strategic direction for efforts to strengthen provider engagement and relationships. We gauge satisfaction with Healthy Blue in the following areas:

- Overall satisfaction and loyalty
- Claims processing and provider reimbursement
- Utilization management and Chronic Care Management
- Local health plan provider services
- Provider training and education
- Communication and technology
- Continuity and coordination of care
- Cultural competency
- Language
- Provider complaints resolution

In 2018, our PSAT sampling methodology targeted 1,000 contracted practitioners: 50% PCPs, 30% specialists, 10% OB/GYNs, 10% BH/LTSS/nursing facilities. Overall Satisfaction as indicated by the 2018 survey results are shown in Figure 2.10.9-2, and our strategies to address provider dissatisfaction are detailed in Table 2.10.9-1.

PSAT information helps us better understand our provider network, its needs, challenges, and opportunities for member-focused, cost-saving innovations. PSAT feedback also enables us to identify training needs by asking providers what information they would like from our offerings. Training topics may include Chronic Care Management programs, HEDIS measures, participation in a quality incentive program, innovative programs to implement, after-hours care, electronic claims processing, and any other subjects they specify.

In addition to our annual PSAT, we conduct ongoing quality assurance by offering providers the opportunity to fill out a provider satisfaction survey after each web-based, call center, or in-person interaction with one of our PRRs and monitoring our operational performance to ensure we meet our service commitments. Our ongoing operational monitoring will yield reports that we use to identify individual providers experiencing problems with claims submission or other needs.

Approach and Frequency Provider Training

Our approach to training our network providers, including LDH reporting requirements, is in accordance with the Model Contract, Section 2.10.7. Through our Healthy Blue Training Academy, we give training to all providers and their staff on contract requirements. They receive initial training within 30 days of becoming a Healthy Blue network provider, with ongoing provider training sessions several times per year, and on demand as-needed. Our provider training is delivered in-person by our regionally-based PRRs and our dedicated Provider Training Specialists; as well as online via webinar, and in various meeting forums. In addition to in-person training, we also use our provider portal, provider bulletins/fax blasts, newsletters, email blasts, conference calls, and more to offer training.

Our training curriculum is tailored to address Healthy Louisiana-specific benefits and LDH requirements for all provider types. Additionally, we offer specialized training for various provider types to better meet the needs of our members; for example, BH providers receive specialized training related to fail first, step-therapy, approved prescribing caps, Child and Adolescent Needs and Strengths (CANS), Level of Care Utilization System (LOCUS), and Office of Behavioral Health (OBH) standardized training for non-licensed providers. ***Working in collaboration with LSU School of Public Health, Auburn University, and another MCO, we have developed and recently implemented parent-child interaction therapy (PCIT) training. In addition, we are working with Tulane University to develop and deploy trauma-informed care (TIC) and post-traumatic stress disorder (PTSD) training for providers in 2019.***

We deploy group training in the form of statewide "Road Shows" when we recognize the need for training around a topic that affects many of our providers. Most recently, we hosted several seminars across Louisiana to discuss how precise and accurate ICD-10-CM coding can help providers meet HEDIS measures and close care gaps. Nearly 50 providers from the New Orleans, Baton Rouge, and Monroe areas attended the seminars and received Continuing Education Units (CEUs) for their participation.

As shown in Figure 2.10.9.3-1, we incorporate convenient, on-demand access and multi-modality delivery channels into our training to maximize provider participation, increase efficiency, reduce administrative burden, and promote enhanced service quality to our Healthy Blue members. We continuously update our training to assure it contains current, relevant program information aligned with provider and member needs.

Table 2.10.9.3-1 provides a summarized listing of training topics. Cultural competency training is completed as part of initial provider orientation, as well as part of ongoing training.

Figure 2.10.9.3-1. The Healthy Blue Training Academy Offers Convenient, On-demand Training

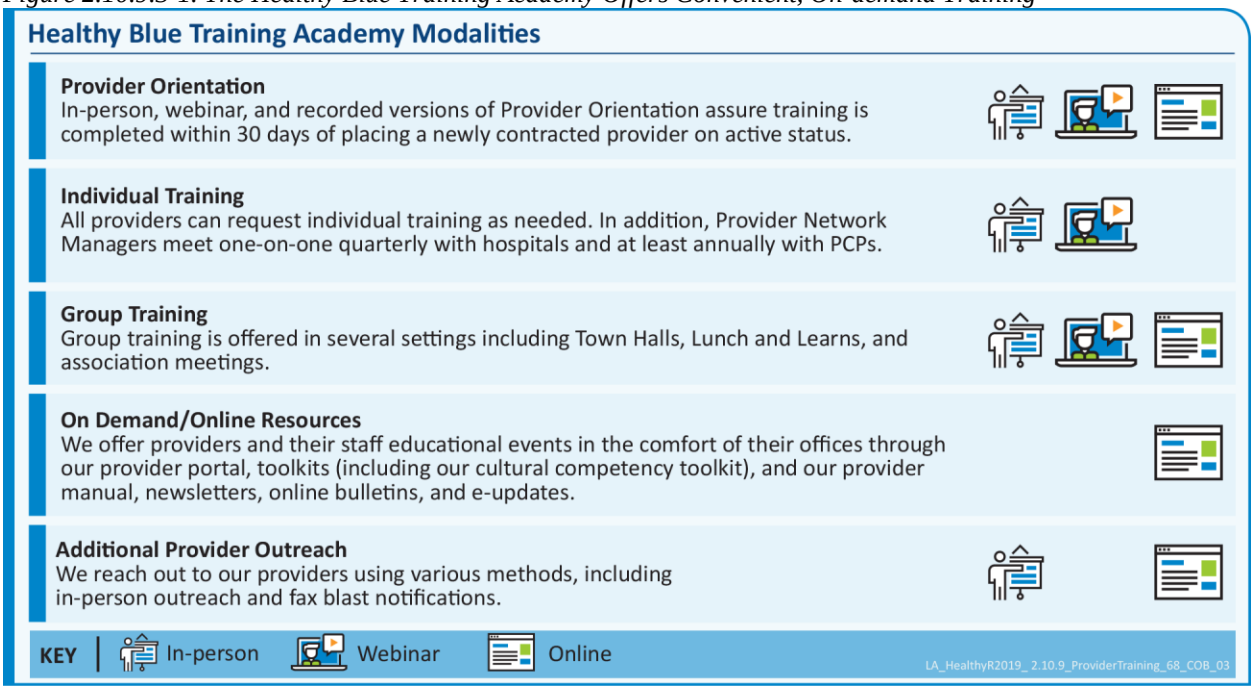


Table 2.10.9.3-1. Healthy Blue's Provider Training Topics at a Glance

New Provider Orientation	
• Introduction to Healthy Blue, our Provider Solutions department, and working with an MCO • Review of the Healthy Louisiana Program Policies, Priorities, and Processes • Benefits and Covered Services (Including Early and Periodic Screening, Diagnosis and Treatment (EPSDT); Emergency Services; and Pharmacy) • Overview of Enrollment and Credentialing Processes • Provider Roles and Responsibilities • Verifying Eligibility, Pre-authorization, Referral and/or Authorization of Services • Person-centered Care Planning • Integrating Physical and Behavioral Health • Early Childhood Intervention (ECI) • Appointment Access Standards and Timeframes • Billing Procedures, Claims Submission, Processing, Required Documentation, and Payment • Provider Manual, Web Portal, and Resources	• Provider Grievances and Appeals, Dispute Resolution Processes, Helping Members File Grievances and Appeals • Preventive Health Care Guidelines • Medical Necessity Criteria • Healthy Blue's Quality Management Program, HEDIS, and the Provider's Role in the Program • Reporting Requirements, including Communicable Disease Reporting; and Fraud, Waste, and Abuse • Privacy/Confidentiality of Protected Health Information • Use of Evidence-based and Clinical Practice Guidelines • Value-added Benefits and Social Supports • Social Determinants of Health • Mental Health and Substance Use Disorder Protocols and Resources • Alternative Payment Model (APM) training, including enabling provider readiness for value-based reimbursement • Member and Provider Satisfaction Surveys • The Importance of Encounter Data
Cultural Competency Training	
• The Healthy Blue Cultural Competency Plan • Cultural Competency Assessment Tools • Understanding and increasing awareness of the multi-lingual, multicultural, and disability needs of the individuals and families in Louisiana communities • Review of the 15 National Standards for Culturally and Linguistically Appropriate Services (CLAS) • Culture and the impact on Health Care • Understanding SDOH	• Expectations for providers and staff (including mandate to continually expand cultural competency knowledge and skills) • Compliance with physical access requirements and ADA accessibility standards for members, including those with physical or cognitive disabilities • My Diverse Patient Trainings (including Breast Cancer Screening for African American Women, and Creating an LGBT-Friendly Practice) • Examples of Best Practices

Behavioral Health Disorders Training	
• Screening for, Identifying, and Coordinating BH Disorders (including screening tools) • Responding to members with Co-occurring Mental Health and Substance Use Disorders • Referring Members to a BH Specialist • Supporting Integrated Care at the Pediatric Practice Level	• Collaborating with Other Providers Involved in Member Care • Behavioral Health and Substance Use Disorder (SUD) training, including provider skills trainings • Community Mental Health program and provider trainings related to suicide risk, prevention and post-intervention, and claims submission procedures

2.10.9.4 Provider Satisfaction Survey Results

Healthy Blue places great emphasis on results of our annual Provider Satisfaction Survey, as these results aid us in identifying improvement opportunities. As illustrated by Figure 2.10.9.4-2, most providers are satisfied overall and provider participation in the survey has increased year over year.

Addressing Provider Dissatisfaction and Monitoring Improvement

Findings from Healthy Blue's annual Provider Satisfaction Survey are supplemented by findings in LDH's annual Provider Satisfaction Survey, allowing us to have a full view of provider needs. The Healthy Blue Provider Satisfaction Taskforce analyzes results from both surveys to identify improvement opportunities, as well as necessary actions to address satisfaction in these areas.

Figure 2.10.9.4-2. Healthy Blue Provider Satisfaction Survey Results: Overall Satisfaction (2016-2018)

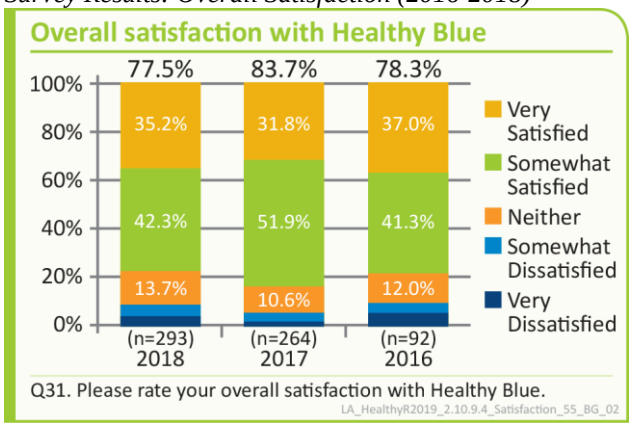


Table 2.10.9.4-2 illustrates improvement opportunities identified as a result of the 2018 Provider Satisfaction Surveys, and includes interventions/actions and evaluations of effectiveness.

Table 2.10.9.4-2. Healthy Blue Provider Satisfaction Improvement Opportunities (2018)

Improvement Opportunity	Interventions, Actions, and Evaluation of Effectiveness
Provider Enrollment Process	• We worked with other MCOs to develop a recommendation for LDH to contract with a Credentials Verification Organization (CVO) to improve verification operations and protect members by ensuring a consistent, effective, and diligent verification process. • We implemented email communication to providers with applicable instructions to submit data missing from credentialing applications. • We updated the process to build provider profiles in claims systems with minimum data requirements to begin the credentialing process.
Provider Complaints System	• We created a local complaints team (as discussed in Section 2.10.9.1.4, Evaluating and Resolving Provider Disputes) with service level agreements of less than 30 days and 24-48 hour response time to providers with both oral (phone) and written (email) communications. • We monitor the effectiveness by including a provider survey, through which mostly positive feedback has been received. Providers who do not indicate 100% satisfaction receive outreach from the health plan.
• Coordination of Care • Accuracy/Timeliness of Information Exchange • Sufficiency of Information to Coordinate Care	• We educate providers on Member 360°$_{SM}$, which gives providers instant access to all member medical data including visits, labs, pharmacy, and care management. • We educate providers on Availity functionality, including eligibility and benefit inquiries, claims submissions, PCP member panel listings, and precertification requests. The Availity portal optimizes the flow of information between health care stakeholders (professional and facility providers, health plans, pharmacies, and others) through a secure web-based exchange.
• Claims Processing • Timeliness and Accuracy of Claims Payment	We have deployed ongoing claims-specific provider education in the form of Provider Bulletins, as well as face-to-face education from PRRs, to educate providers on the timeline for configuration updates and claims payment corrections.
• Communication • Quality/Effectiveness of Provider Newsletters	We transitioned from a quarterly to bi-monthly newsletter. We work with our National Provider Communications team on an ongoing basis to determine what content should be included in the newsletter as opposed to, or in addition to, another communication avenue.

The specific interventions and actions noted are monitored on an ongoing basis by the Healthy Blue Provider Satisfaction Taskforce. This taskforce, which is dedicated solely to improving provider satisfaction, meets monthly to assess the impact of interventions that have been implemented in an effort to improve the overall provider experience. Internal goals are set for each measure and are reassessed as new survey results or provider feedback is received. We anticipate that the focused effort of this taskforce will improve our satisfaction scores, as we continue our "Drive to 85," our ultimate goal of 85% provider satisfaction.

Provider Dissatisfaction in the Form of Provider Complaints

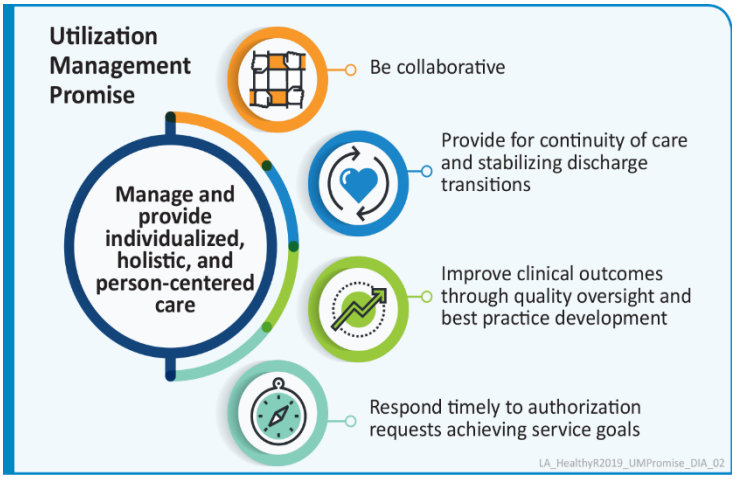
We are committed to expeditiously resolving provider dissatisfaction. If provider dissatisfaction is submitted to Healthy Blue in the form of a formal complaint, our complaint team (as detailed in Section 2.10.9.1.4, Evaluating and Resolving Provider Disputes) is engaged to address the complaint and trigger prompt response and assistance for the provider. In an effort to continually improve provider satisfaction, we solicit provider feedback through the distribution of a Provider Complaint Resolution Satisfaction Survey, which is included in every provider resolution notification email. Table 2.10.9.4-3 shows an example our high provider satisfaction for this survey.

Table 2.10.9.4-3. 2018 Provider Complaint Resolution Satisfaction Survey Results

Questions	Answers
Was your issue resolved to your satisfaction?	100% - 'Yes'
How responsive have we been to your questions or concerns?	80.95% - 'Extremely Responsive' 14.29% - 'Very Responsive' 4.76% - 'Somewhat Responsive'
Overall, how satisfied/dissatisfied are you with our resolution of your complaint?	95.24% - 'Very Satisfied' 4.76% - 'Somewhat Satisfied'
Based on this experience, how would you rate Healthy Blue's customer service?	90.48% - 'Excellent' 9.52% - 'Average'

2.10.10 UTILIZATION MANAGEMENT

Utilization management (UM) is a key component of Healthy Blue's successful integrated care management program. Our coordinated comprehensive approach ensures that enrollees (members) receive timely, appropriate care through individualized, innovative programs and coordination of services and community resources. We follow an evidence-based hierarchy of established medical necessity criteria, supported by policies and procedures when applying medical necessity criteria to service authorization requests ***based on individual member needs***. Our Louisiana strategies for managing high-quality care and services include the following:



- Working collaboratively with our providers to deliver the right care, in the right place, at the right time
- Applying industry-recognized, evidence-based clinical criteria to each individual service request
- Employing Louisiana-based clinical and non-clinical staff who are familiar with the health needs of their communities, local practitioners, and ancillary support providers
- Implementing specialty programs focused where evidence has indicated prior authorization (PA) and education can result in improved access to quality care and reduction in low-value care: high-tech radiology, cardiology, medical and radiation oncology, sleep medicine, musculoskeletal and pain management, and genetic testing
- Working with providers to identify and enroll members in the most appropriate options using Alternative Payment Models (APMs) that focus on high-quality, high-performing providers
- Facilitating provider access to data, information, and systems that ease administrative burden of review and approval processes and support efficient delivery of services (for example, as a direct result of our analysis, we recently removed PA for pediatric echocardiograms when requested by cardiologists)
- Systematically capturing and reporting over- and under-utilization data to identify performance opportunities

Guidance and Quality Oversight

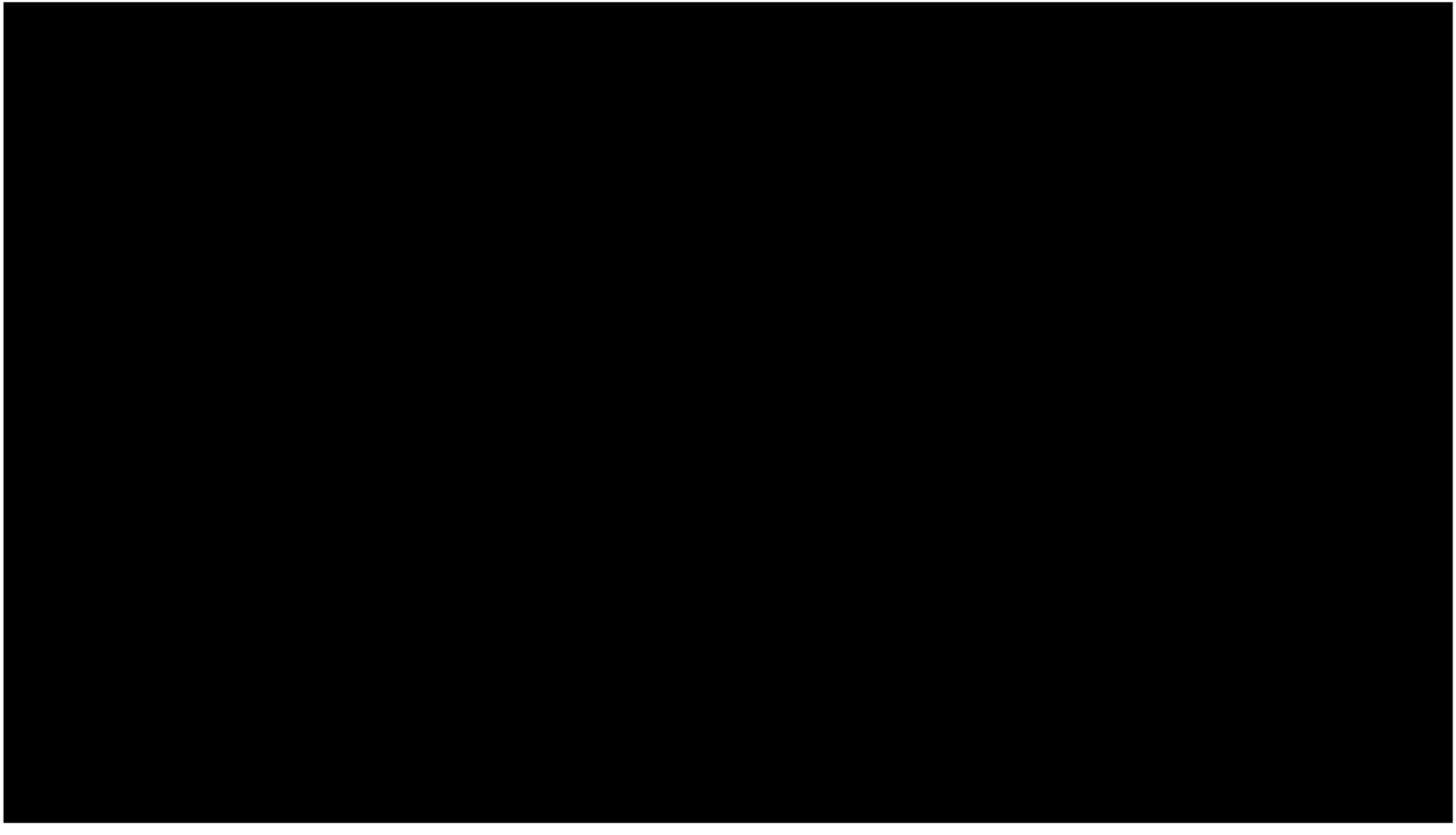
Healthy Blue reviews and updates UM clinical guidelines and practices at least semi-annually and more often when State requirements or utilization trends require revisions. Medical necessity guidelines are adjusted after review of clinical indications for new medical services or procedures and new uses of existing services or procedures. We promote health using an integrated and holistic UM approach that addresses both physical and behavioral health (PH and BH) conditions as well as social determinants of health, responding to the unique needs and situation of each member. We consider members' home environments, family and caregiver supports and resources, cultural and linguistic needs, social circumstances, and characteristics of the local health care system in making medical necessity decisions. The Utilization Management Committee (UMC), Quality Management Committee (QMC), and Medical Advisory Committees (MAC) review and annually approve the Healthy Blue UM program description, assuring local accountability and consideration of regional practice variations. The UM program routinely connects our Regulatory, Compliance, Provider Relations, Pharmacy, Medical Finance, and our National Customer Care teams, including Member Services and other key stakeholder groups, to identify quality-of-care concerns, disproportionate utilization trends, duplicative services, adverse access patterns, lack of continuity, and coordination of care processes. Together with our NCQA-accredited programs for Chronic Care Management, data analysis, and a drive to continue to improve, Healthy Blue has a robust and proven approach to UM.

2.10.10.1 Authorization of Services

Our integrated approach starts with Louisiana-based Medical Director leadership. The daily operations of our UM clinical teams are overseen jointly by our Chief Medical Officer/Medical Director, Dr. Raymond Poliquit, and Dr. Cheryll Bowers-Stephens, BH Medical Director. Our daily processes and workflows integrate UM/care management functions to address whole-person care. Figure 2.10.10.1-1 outlines our PA workflow, with timing of expedited determinations, pre-service, concurrent, and pharmacy requests for services requiring PA, concurrent, or retrospective review. Our medical necessity review process ensures that each request is reviewed on a case-by-case basis, considering the specific needs of each member at the time of the request.

Our goal is for members and providers alike to easily understand and identify which services require PA. While authorization requests may typically begin with a treating provider, we also accept authorization requests directly

from our members. Emergency services do not require PA. Most routine outpatient services, like visits with a primary care provider (PCP), screening and evaluations for Early and Periodic Screening, Diagnosis and Treatment (EPSDT) or well-child visits, do not require PA, so members have easy access to routine and evaluation-based services. We focus our PA efforts on inpatient admissions, outpatient surgeries and procedures, out-of-network services, home care, durable medical equipment, rehabilitation services, select medications, and diagnostic procedures. We disseminate changes in authorization requirements by immediately sending out provider notices, posting changes at the provider portal and member websites, and updating member and provider handbooks. Provider Relations Representatives (PRRs) also update providers in person and over the phone. We are continuously evaluating opportunities to reduce administrative burden and eliminate barriers to medically necessary PH and BH services, while at the same time developing systems to avoid the provision of unnecessary or inappropriate care.



This page is intentionally left blank

We designed our workflow, policies, and processes for timely utilization decisions that accommodate the clinical urgency and necessity of any situation. ***Our UM clinical staff are available 24/7 to assist providers with urgent or emergent requests.*** Healthy Blue takes a "no wrong door" approach to authorization requests; we receive authorization requests via telephone, facsimile, and our provider portal. When we receive an authorization request, our UM reviewer begins to put the clinical information into our integrated Health Intech platform and evaluate the clinical information against appropriate medical necessity guidelines. The UM reviewer may discuss with the treating provider the services being requested, and when indicated, may also discuss potential alternatives to the requested services. When the information provided for services meets medical necessity, the authorization is completed and documented in our system. If an alternative service or level of care is recommended, the UM reviewer works in conjunction with the provider and Care Management team to arrange for the alternative service and secures PA, if applicable. Should the UM reviewer be unable to ascertain sufficient or additional information to determine medical necessity, the request is routed to a Louisiana-licensed Medical Director, who makes the final determination. In fact, any adverse determination regarding medical necessity is made by a Louisiana-licensed Medical Director. Providers can request a peer-to-peer consultation to discuss the case and potential treatment or service alternatives. As part of our appeal procedures, we include an Informal Reconsideration process that allows the member (or provider/agent on behalf of a member) a reasonable opportunity to present evidence and allegations of fact or law in person as well as in writing. At the time of any adverse determination or partial adverse determination, we advise the member and provider in writing, detailing the specific reasons for the determination, the factors considered, and any additional information or actions available to the member or provider.

We are advancing the Triple Aim objectives of better care, better health, and lower costs. We agree that members should be treated in the least restrictive settings possible, and that they should have a choice of where they go for services. We inform our members of these rights in the member handbook and in all of our care management interactions.

Authorization Processes

We cover out-of-network services when emergency services are needed by a member either in or outside the service area. If a member is engaged with an out-of-area provider, we develop a strategy with the member and provider(s) to transition the member to a network provider once stable, or if the care requires long-term treatment available from a network provider. No pre- or post-authorization is required for emergency services. In an out-of-network emergency situation, it is not necessary for the member or provider to contact us prior to treatment. While we do not deny claims based on failure to receive notification of emergency services, we encourage members and providers to contact us within 24 hours of treatment so we can begin care management and facilitate any necessary authorizations for ongoing service or transfers to network providers. Follow-up activity is based on the severity of the member's health issue.

Our UM program is designed to reduce the likelihood of avoidable hospital stays and readmissions by using evidence-based criteria to validate the appropriateness of admission and initiating discharge planning to verify that each member transitions safely to outpatient services. In the proposed Contract period, we will continue to honor all existent medically necessary covered services for enrollees coming to Healthy Blue from other MCOs, regardless of whether they are in or out of network, for up to 90 days. During this time, we work with the provider and the member to minimize service disruption and assure a smooth transition to a network provider.

Once a member is admitted into treatment, the UM team monitors our daily census reports for open cases and prioritizes those requiring immediate action for continued-stay review and discharge planning. They also monitor data and trends in weekly or monthly reports to identify opportunities to re-evaluate workflows or processes. We begin discharge planning at admission. Daily integrated rounds involve discussion of the member's treatment and identify supports to promote safe discharge. Our discharge plans cover all basic living requirements and access to safe and affordable housing, education, employment, and food assistance, when indicated, to advance member health.

Inter-rater Reliability (IRR) and Performance Improvement and Enhancement (PIE) Audits

Our UM policies and review practices affirm that covered services are medically necessary and not arbitrarily or inappropriately approved, denied, or reduced in number, duration, or scope because of a diagnosis, type of illness, or condition. We train all licensed clinical staff to apply medical necessity criteria, and we thoroughly review their decisions. Healthy Blue uses IRR to confirm that we have consistently applied medical necessity criteria. We conduct annual IRR reviews of our clinical teams to verify consistency and accuracy in application of medical necessity criteria. ***Overall, our UM team scored a total of 95% on the 2018 IRR review.*** Results are reported to the Medical Directors, UM Committee, Quality Management Committee, and Medical Advisory Committee annually.

Our PIE program supports consistent application of review criteria for authorization decisions and continuously evaluates our UM program using monthly clinical and non-clinical audits (including call reviews), outcomes reporting, and process validation for compliance with UM policies. Since implementation of the PIE program, we

have seen clinical staff adherence to process and UM criteria improvement. ***Our 2018 PIE Audit score indicated that our UM reviewers are currently performing at 97.6% compliance.***

The audits identify staff who need additional training, as well as opportunities for new training modules or refreshers that would benefit the entire UM team. We report IRR and PIE results to our Quality Management Committee to also identify areas for improvement and develop action plans. If a reviewer falls below our IRR compliance threshold of 90%, and PIE compliance threshold of 96%, we develop an individual corrective action plan to address the deficiency. These evaluations may also be used to inform areas of workflow adjustments, identify areas for improvement, and create enterprise trend comparisons.

2.10.10.2 Meeting Contract Requirements for Utilization Management

UM Criteria and Their Application

To inform our UM team and support evidence-based medical necessity decisions, Healthy Blue uses Milliman Care Guidelines® (MCG), our MAC-approved medical policies, medical specialty society guidelines, clinical drug policies and procedures, and nationally recognized references such as the American Society of Addiction Medicine (ASAM). Our criteria and guidelines have a comprehensive range of level-of-care alternatives sensitive to the differing needs of adults, adolescents, and children. We adapt these criteria to follow all requirements established by LDH for administering Louisiana covered Medicaid benefits, including State and federal EPSDT standards, to better meet members' needs. Specifically for our members, in collaboration with LDH, provider partners, and other MCOs, we use Louisiana-specific guidelines for Applied Behavioral Analysis (ABA), Community Psychiatric Support and Treatment (CPST), Psychosocial Rehabilitation (PSR), Assertive Community Treatment (ACT), Therapeutic Group Home (TGH), and Clinical Observation services. Our contracts with LDH and regulatory guidelines from CMS supersede MCG and our medical policy criteria. Our UM medical necessity criteria and practice guidelines are posted on our Healthy Blue website and are available upon request by members or providers.

We are acutely aware of, and responsive to, the different needs of members with multiple chronic conditions. UM reviewers consider the severity of illness, presence of multiple conditions (complex medical conditions, pregnant women, substance use disorder, durable medical equipment, and pharmacy requests), episode-specific variables, and level-of-care alternatives for the needs of adults, adolescents, and children. We evaluate application of our criteria based on individual member needs and preferences, an assessment of the availability of services within the local delivery system, and the treating provider's request. We also consider community-based supports and services to make sure that services are not duplicated. We work with our Care Management team to be sure our comprehensive range of level-of-care assessments is sensitive to the needs of children, adolescents, and adults, as well as members with Special Health Care Needs. When using the criteria to match a level of care to a member's current condition, UM reviewers also consider social determinants such as safe housing, food security, transportation, and employment needs. Our team remains involved with members, their families, and providers throughout their care and continually works to determine the most appropriate services and settings, levels of care, availability of services, and providers in the community where our members live.

Healthy Blue Puts Member Needs First

When 10-year-old Lexi was admitted to the hospital with acute cholangitis, her condition did not appear to meet MCG criteria, despite the fact that she had a history of liver transplant: she was afebrile, had no leukocytosis, her urinalysis was clear, and she was hemodynamically stable. However, she required IV antibiotics for the cholangitis. Her case was referred to Dr. Poliquit, who explored alternative levels of care for administration of the IV antibiotics with the inpatient UM reviewer. Because there were no pediatric home health services in Lexi's area and the regimen was more intensive than an outpatient treatment would be, Dr. Poliquit approved Lexi's admission for IV antibiotics and she got the treatment she required.

LA_HealthyR2019_Lexi_RS_02

Consideration of Complex Variables in Applying UM Criteria

We consider multiple factors in authorizing services. For hospitalized members with chronic or complex comorbidities who require more intensive or integrated coordination, our UM reviewer will connect with our Care Managers (CMs) to increase the intensity of interventions in the member's care plan. The CM may conduct a face-to-face visit with the member at the inpatient setting, or with providers, family members, or others involved in the member's care. For all members, but especially for those with complex or comorbid conditions and multiple admissions, we consider the member's home situation and authorize more days based upon clinical need to assure safety and support for the member. When we receive requests for BH inpatient services, we consider suicidal risk or danger to others, presence of acute psychotic symptoms, level of functional impairment, self-injury, or uncontrolled risk-taking behaviors. Our integrated care management and UM programs are beneficial here. For example, if a Healthy Blue child member goes to the emergency department (ED) experiencing a BH crisis, the UM Manager contacts the CM to confer on the case as soon as UM is notified. If the facility uses the Louisiana Health Information Exchange (LaHIE), we are notified electronically. A children's CM is assigned according to the

presenting issue. The CM contacts the hospital representative to identify the best placement option, and contacts the parents or guardian to give them their name and contact information to begin transitioning the child to the best care setting.

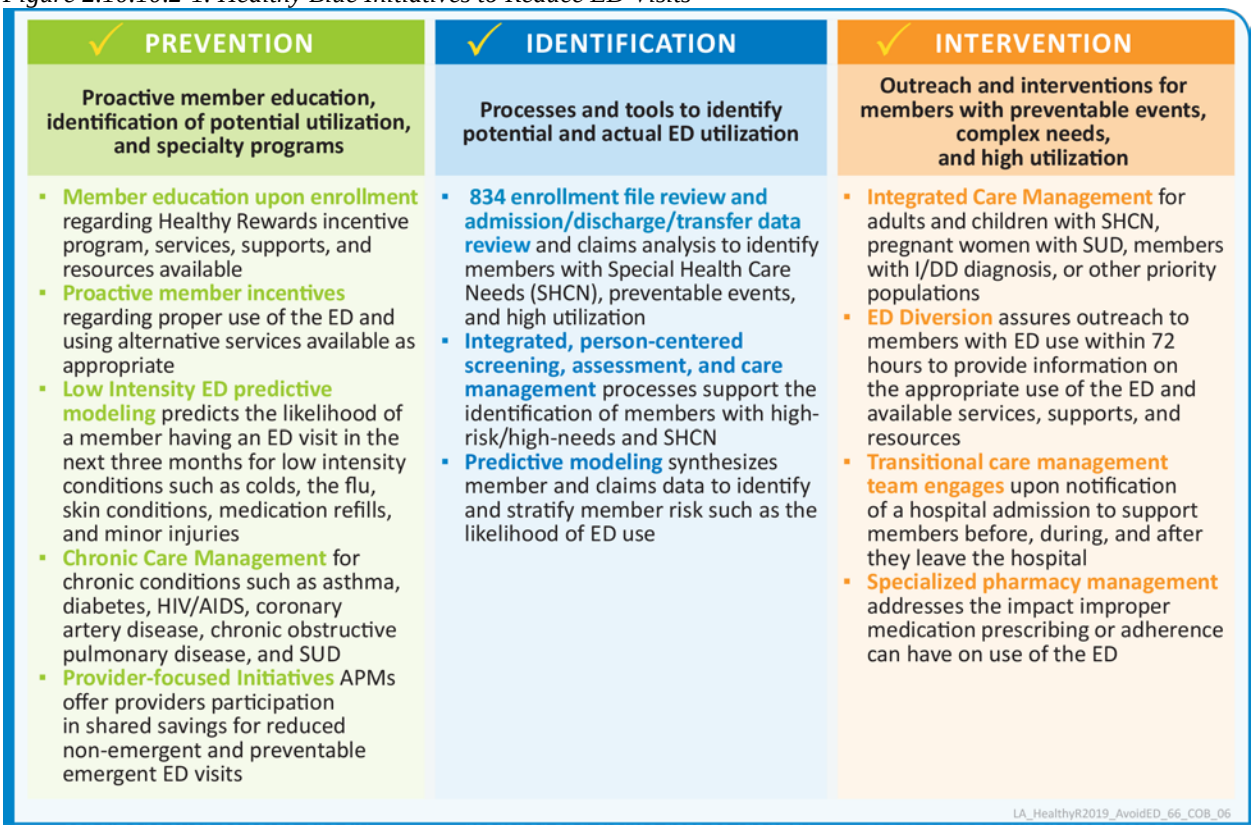
Some members with substance use disorder (SUD) have difficulty complying with treatment. CMs connect these members with providers and community and peer supports that can assist in their recovery. For example, we might offer the member a sober-living environment to encourage recovery if their home environment enables substance use, or we may offer a specialized residential program for a pregnant member with a history of substance use to reduce the potential for harm to her and her baby. In all of these cases, we apply guidelines in ways that will produce good outcomes for our members and their community.

For members who receive Medicaid and Medicare services, our integrated model and "no wrong door" approach cuts across traditional Medicare-Medicaid service boundaries. We address the member's PH, BH, and social support needs through coordinated contacts with the Medicare benefits administrator and our CM. We monitor Medicare provider claims for all dual-eligible members to identify gaps in care. We collaborate with members and their PCPs or other providers to close care gaps. We identify and address HEDIS® alerts generated by our Health Intech platform for both Medicaid- and Medicare-covered gaps in care.

Monitoring and Addressing Frequent ED Use

Healthy Blue has a number of active strategies to reduce avoidable use of the ED: member education, promotion of alternative settings, identification of care coordination and care management needs using tools such as the comprehensive health needs assessment, and intervention and outreach to resolve barriers to care such as lack of transportation. Our strategies are designed to help members, their families, and caregivers anticipate, identify, and respond to potential emergencies, improving the safety of the member and facilitating the use of the most appropriate care and settings. Our broad array of tools and resources identifies, predicts, and tracks ED utilization, and our Care Management team engages members with education and supportive relationships. Figure 2.10.10.2-1 illustrates our multifaceted, integrated care management (UM/CM) approach: prevention, identification, and intervention.

Figure 2.10.10.2-1. Healthy Blue Initiatives to Reduce ED Visits



Using Data, Predictive Modeling, and Care Management Interventions

We identify individuals with emerging or high risk of an ED visit with proven predictive modeling tools, and proactively coordinate their services and supports to achieve optimal outcomes. We can calibrate solutions and track changes in member risk levels over time. ***We have developed specific screening tools to support early identification of members at risk for ED usage and who may benefit from our diversion programs based on severity of illness:***

- **Predictive models.** Chronic Illness Intensity Index (CI[3]); Likelihood of Inpatient Admission (LIPA) Index; Readmission Assessment Risk (RAS); Behavioral Health First-time Readmitters Program
- **ED TRIAGE tool.** Synthesizes member data and assigns risk scores to indicate likelihood of ED visits for ambulatory care sensitive conditions
- **Low-intensity ED tool.** Predicts the likelihood of a member having an ED visit in the next three months for low-intensity conditions; scores will trigger proactive outreach by our CMs, assessment, and service planning as needed to mitigate ED utilization
- **Louisiana Health Information Exchange (LaHIE).** Allows secure, statewide exchange of health information
- [redacted] INNOVATION

To predict the risk for readmission within 30 days of a hospitalization, Healthy Blue enters ICD-10 codes, length of inpatient stay, medical service (surgical, OB), age, and discharge diagnosis and disposition to the pool of information about the member, which includes demographic and diagnostic information. The details of a member's inpatient stay and their likelihood of readmission scores are recorded on an Admit/Discharge Report, which is distributed to our local governing entities (LGEs).

Using these tools, we identify likely ED utilizers or rapid re-admitters with a BH diagnosis and two or more ED visits in a 30-day period (for any reason) for integrated assessment and care planning, monitoring, provider partnerships, and improved care transition supports. We also look for opportunities to engage our local care coordinators, such as Navigators or Outreach Specialists, as extensions of our care management interventions to reduce readmission risk (see Section 2.10.5.1, Supporting the Triple Aim with Effective Care Management).

At least monthly, our ED Task Force, a multidisciplinary care team, gauges the effect of our ED strategy by reviewing ED visits, inpatient admissions, readmissions, medical and pharmacy utilization metrics, follow-up after hospitalization for mental illness, and follow-up after ED visit for alcohol or other substance use or dependence.

ED Diversion Strategy: Connecting Members to Primary Care and BH Providers

We know that members with gaps in preventive care use emergency services more frequently than those who are engaged in their health care, and that they have the most positive outcomes and fewer avoidable ED visits when they are regularly engaged with their PCP or BH provider. Our ED Task Force, using focused data mining, created a program called Appropriate Emergency Room Utilization Program (AERU). We piloted the program in Jefferson, Lafayette, Orleans, East Baton Rouge, and Ouachita Parishes, which are service areas with the highest volume of members with two or more visits to an ED within a 12-month period. We identify members who have not had contact with a PCP or who have a PCP but may be at risk for frequent emergencies. They receive a directed educational call that reminds them to visit their PCP, what kinds of conditions typically present for urgent care instead of emergent care, and where to go for urgent care. The CM reminds members of our non-emergency resources such as the 24/7 Nurse Line, 24/7 BH Crisis Line, and urgent care clinics where they are available. The 24/7 clinical call teams provide members with evidence-based service recommendations that may prevent an unnecessary ED visit:

AERU Program to Reduce Unnecessary ED Use

Results: Over 2,500 members in Orleans, Jefferson, Ouachita, Lafayette, Rapides, East Baton Rouge, Tangipahoa, St. Tammany, and St. Charles Parishes enter the health care system at the appropriate level of care. Savings from the AERU program between 2017 and 2018 were $490,391, and we expect to see further significant decreases by reducing preventable ED visits and hospitalizations.

LA_HealthyR2019_AERU_66_COB_05

- Nurse Line clinicians can assess physical symptoms and severity; address many non-emergent conditions and their treatment with sophisticated decision tree software to support their clinical judgment; assess each caller's needs; suggest self-care for non-emergent conditions; recommend next steps for treatment of common ailments such as upper respiratory infections and urinary tract infections; and direct the member to the most appropriate point of care
- BH clinicians can engage with members to address emergent issues; suggest referrals for treatment; provide education on behavioral health services; direct the member to emergent care; and coordinate with local crisis response resources

We promoted the AERU program at marketing and member events, on a radio ad campaign, in social media, with website/portal information on proper ED utilization and member alternatives to the ED, and on informational magnets. Members were engaged in AERU for at least 30 days and up to a year depending on individual member need. The Clinical team met routinely to discuss members in interdisciplinary rounds, identify barriers, and develop best practices to promote engagement in the program. Information from AERU is shared with our Quality Management team to help identify HEDIS gaps and assist providers in closing gaps in care. By incorporating home visits with a nurse practitioner, AERU closed HEDIS gaps and connected members to a PCP follow-up.

Proactively Addressing Chronic Pain, Substance Use, and Medication Safety

Chronic pain is another leading cause of high-frequency ED use and puts members at risk for opioid use and dependence, which can further lead to injuries and overdose that require ED treatment. Our ED strategy and care management program addresses adolescent and adult pain management, ED frequency, outlier opioid use, and hepatitis C diagnosis without substance use as a cluster.

- **Sickle cell disease.** Our Data Analytics team associates a particular diagnosis and claim type as a proxy for missed care opportunities. When they examined ED use by members with sickle cell disease, they found a high rate of ED use was associated with poor access to, or use of, primary or urgent care settings for pain management. By connecting these members with a provider and establishing an ED diversion program with an interdisciplinary team approach, we supported planned access to care that eliminated long, uncomfortable waits in the ED. As an adjunct to this program, our pharmacy clinical quality program focuses on hydroxyurea non-compliance in diagnosed members and closing the gap for members not taking it to reduce ED use for pain management. Our efforts to close gaps in care for members with sickle cell disease in Louisiana resulted in an improvement of 10.19% in hydroxyurea treatment in 2018. Most importantly, medication compliance improves the quality of life for our members' with sickle cell disease.
- **Hepatitis C.** Hepatitis C is another intermittently or chronically painful condition that can lead to inappropriate ED use. To expand awareness of this condition, our specialty Pharmacy team sends mailers and automated calls to help new patients understand the importance of medication adherence and to remind them to fill their medications on time. We immediately engage diagnosed members in care management, helping them understand the options available to them, encouraging treatment completion to circumvent the need for pain control.
- **Substance use disorder (SUD).** Nationally, we are seeing increases in opioid-related ED visits. When we see indicators of potential substance use (including obtaining prescriptions from numerous physicians and/or pharmacies without providers' knowledge, or obtaining or dispersing prescriptions by fraudulent actions), we reach out to the member and their providers, gather information, and help arrange a screening, brief intervention, referral, and treatment. Our Clinical team evaluates trends using data related to ED admissions with an overdose diagnosis as well as SUD diagnoses from similar services and across populations to compare utilization rates of members with similar diagnoses and acuity.
- **Medication therapy management (MTM).** Healthy Blue offers MTM for members managing multiple chronic disease states and medications. Pharmacists conduct a comprehensive medication review and consult the members' provider(s) if they detect a potential interaction or adverse reaction; educate members about their medications; monitor therapeutic goals; prevent medication errors; and follow up with members on a medication regimen as part of an effort to improve their safety. They also generate personal medication lists for members to take with them to medical visits. Member qualifications of chronic disease states were modified after an analysis in 2017 to prioritize members who would receive the most benefit from a comprehensive medication review. An outcomes analysis will be made mid-2019. In 2018, Healthy Blue members received 2,099 comprehensive medication reviews from community pharmacists, with 8,006 interventions from a pharmacist regarding medication adherence, diabetic education, and gaps in drug therapy. Also in 2018, Healthy Blue's Dr. Poliquit piloted our ***Patient Safety and Clinical Pharmacy Services*** program for diabetic members managed by Louisiana Federally Qualified Health Centers (FQHCs). The program was designed to address ED use by diabetics who were not medically compliant and ended up in EDs with poorly controlled diabetes.

Expanding Alternatives to the ED

We continually work with our provider community and LDH to give members alternatives to ED visits. [redacted]

crisis stabilization services.

[redacted]

We take a focused approach when a Healthy Blue youth or the Department of Children and Family Services (DCFS) member goes to the ED experiencing a BH crisis. Once the Utilization department is notified, the UM Manager engages with the CM to confer on the case. If the facility is in the LaHIE, we are notified electronically. Our BH Liaison, part of our youth-focused Care Management team, deploys a CM to assist based on the presenting issue. The CM contacts the hospital representative to assist with identifying the best placement option. The CM also contacts the parent or guardian to inform them of the CM's name and contact information, and begin the collaboration process of transitioning the child to the right setting at the right time in the safest manner.

Finally, our Community Outreach Strategy, which includes Community Outreach Care Specialists, Peer Support Specialists, and Navigators, reach out to members who have high ED utilization for direct support and care coordination in the communities in which they live, as described in Section 2.10.4.5, Piloting a Community Health Worker Demonstration Project. Table 2.10.10.3-2 lists our offerings to assist members with alternatives to the ED, such as telehealth, expanding access to specialty providers, and value added benefits available to members.

Pre-admission Screening and Concurrent Review

We recognize the role we play in the prescreening of inpatient admissions, nursing facilities, Psychiatric Residential Treatment Facilities (PRTFs), and Coordinated System of Care (CSoC) services, as well as continued-stay reviews. These screening mechanisms assist both the MCO and LDH with assessing availability of member services, ensuring consistent application of medical necessity criteria for level-of-care determinations, promoting consultation with the requesting provider, collaboration between agencies, and the ability to arrange for another level of care if appropriate. Our LDH-informed policies and processes comply with requirements as identified within the MCO Manual and Contract regarding prescreening and concurrent reviews.

Pre-admission Screening and Resident Review (PASRR)

We receive referrals from the Office of Behavioral Health (OBH) to assess the appropriateness of nursing facility placement and the need for, and facilitation of, BH services. Every member with a serious mental illness (SMI) or an intellectual disability in the application to Medicaid-certified nursing facilities gets a PASRR Level II evaluation to determine need, least-restrictive setting, and recommended services in compliance with the Americans with Disabilities Act. Using the criteria set forth in 42 C.F.R. Part 483, Subpart C and the PASRR Level II standardized evaluation form provided by LDH, Healthy Blue conducts PASRR Level II evaluations of members upon referral from LDH to determine the need for nursing facility services or the need for specialized services to address mental health issues while the member is in a nursing facility. In compliance with 42 C.F.R. §483.130, we monitor members in nursing facilities who have been through the PASRR process, who are identified with SMI, and those receiving specialized services. We defer to State findings on PASRR Level II. In compliance with 42 C.F.R. §483.120 and the DOJ Agreement, we will report all PASRR specialized BH to LDH on a quarterly basis, and all PASRR Level II evaluations will be repeated annually.

At present, **21 Healthy Blue members** with SMI have been identified for transition from a nursing facility back into the community; **3 have successfully transitioned**; and **12** other transitions are under negotiation. Only **6** were identified as inappropriate to transition or changed their minds about the transition.

LA_HealthyR2019_SMI_DP_01

Psychiatric Residential Treatment Facilities (PRTFs)

Prescreening is completed within 24 hours for members under 21 who are referred to PRTFs. In consultation with the member's guardian or the referring party, we will identify a facility with in- or out-of-network availability. When there is an admission to any facility, on-site concurrent review nurses immediately begin planning for each member's discharge. They assess member progress and anticipated needs at discharge; work with the facility to verify the medical necessity of continued stays; and coordinate discharge planning to facilitate a safe transition to the next level of care. We verify that the right services are integrated, not duplicated, and are provided at the right time based on the member's changing needs. For youth transitioning from a secure setting to a PRTF under Healthy Blue management, we will coordinate completion of a Certificate of Need. BH and PH Medical Directors make a ruling when medical necessity is in question, and when a request is denied, we inform the member and their parent or guardian in writing within 48 hours and offer information about alternatives and their right to appeal. Once a member is admitted, we seek recertification of the stay every 60 calendar days. For PRTF screens to be complete, we meet with the multidisciplinary care team to determine other community-based options.

Louisiana's Coordinated System of Care (CSoC)

Healthy Blue completes the initial screening for children and youth who may qualify for CSoC waiver services. We administer the three-question, State-mandated screening as part of our UM and CM processes when a member is identified as at-risk for hospitalization and resides in a home or community setting, or at least 90 days prior to an expected discharge from a residential service. Should the member screen positive, we refer and coordinate with the CSoC administrator. After screening, we inform and educate families about specialized services and how to contact the contract administrator. We also collaborate with the contract administrator on the outcomes of those who are enrolled in CSoC services in our weekly rounds. We enroll those who are not enlisted in CSoC in our care management program.

	2017	2018
Number of CSoC Initial Risk Screeners performed	423	495
Number of youth who screened positive	402	471
Percent of youth who screened positive	95.0%	95.2%
Number of youth who screened positive who were referred to CSoC contractor	379	455
Percent of youth who screened positive who were referred to CSoC contractor	94.3%	96.6%

LA_HealthyR2019_CSoC_COB_01

Concurrent Reviews

We conduct concurrent review for all inpatient and residential services if the provider and member determine that treatment should continue beyond initial authorization. During this process, the UM reviewer will engage CM coordination, Chronic Care Management functions, and discharge planning for placement, medications, and authorizations as needed. In performing concurrent reviews, UM reviewers assess individual member progress and needs during the episode of care and coordinate before discharge to facilitate the member's smooth transition between levels of care or home, and to prevent delays in discharge caused by unanticipated care needs. UM reviewers apply clinical UM guidelines to requested services and the member's assessed needs to determine the necessity of the service and continued length of stay. The UM reviewer may seek additional information from the member, provider, and Care Coordination team to affirm the requested service is the most appropriate to meet the member's documented need. If it appears that criteria are not met for continued services, we consult a Medical Director. The Medical Director and provider might also meet to discuss the necessity for the service and other relevant information. Discharge planning before a member leaves the hospital helps avoid a costly readmission or another acute episode.

Healthy Blue Complies with Mental Health Parity Requirements

Healthy Blue brings all of our health care resources and experience to Medicaid members with mental health and substance use issues. Our PA, medical necessity criteria, network policy, and procedures are in compliance with the federal Mental Health Parity and Addiction Equity Act of 2008 and 42 C.F.R. Part 438 Subpart K. Criteria for medical necessity determinations for mental health and SUD benefits to any member, potential member, or provider are available on our website and by request, per 42 C.F.R. §438.236(c) and 438.915(a). We adjust services and subcontractor relationships as needed to remain in compliance with LDH parity reviews. Healthy Blue also participates in Anthem's Parity Governance Committee, which reports into the Medical Compliance Committee as well as other clinical committees regarding overall parity compliance. Anthem's Parity Governance Committee activity supports our individual health plan efforts and gives us oversight and guidance in sustaining compliance with the Mental Health Parity and Addiction Equity Act.

How We Identify and Mitigate Overutilization

Healthy Blue uses analytical tools to proactively and retroactively identify overutilization. These tools include ***predictive modeling, member trending, provider ranking, services from highest to lowest utilization, and data analysis of ED use and rapid hospital readmission***. When indicated, we may seek additional quality of care guidance and identification of potential fraud, waste, and abuse (FWA). We review both primary care utilization patterns and servicing provider billing patterns in the context of local, regional, and national benchmarks to identify providers whose utilization patterns are atypical. The Analytics team identifies outlier members and providers based on relative distribution of services and then refers to the appropriate Healthy Blue functional area for intervention. For example, using gap-in-care algorithms, our analytics team looks for certain services when the member is pregnant, has a diagnosis such as sickle cell disease, or uses the ED, and refers those members to care management.

Our retrospective drug utilization program analyzes historical drug utilization data and identifies opportunities to encourage clinically appropriate utilization while promoting medication compliance and safety. We will continue to track medication utilization, helping us ensure that all medications are dispensed with information about proper use

Healthy Blue's Toolbox for Identifying Overutilization

Data- and information-sharing helps providers act on opportunities to improve their performance and ensure continuity, coordination, and the delivery of integrated care. Using profile reports, we compare provider performance to a peer cohort on established benchmarks. Healthy Blue's access to the Health Intech platform gives interdisciplinary teams actionable medical, BH, and pharmacy information in near-real time. It alerts providers to gaps in care and prompts them to engage the member in appropriate services. Member 360°SM gives a comprehensive view of all member interactions, authorizations, claims, clinical history, utilization, assessments, care management, and care plans in a central, single, personal health record.

Daily reports on members awaiting approvals, data needed to complete approvals, amount of time members have been in care and at a certain level of care, number engaged in intensive outpatient care or receiving outpatient hospital services, and the number in inpatient care inform UM and CM teams on utilization trends, confirms members are getting the right care, and how well we are meeting our fiduciary responsibilities.

Dashboard clearly presents weekly readmission trends, average length of stay, days per thousand, and outpatient services, most common diagnoses, and top admitting providers.

Over-and Under-utilization reports are evaluated for member aggregate data and provider-specific trends that indicate that a peer review with our Medical Directors or support from our Provider Relations Representatives might be beneficial.

Pharmacy claims data review helps us flag both over-utilization and under-utilization of medications.

LA_HealthyR2019_Toolbox_66_COB_03

and potential side effects or interactions. They too can quickly spot polypharmacy patterns that warrant further investigation or coordination of care. Our PBM's Clinical Pharmacy Care Center is staffed with pharmacists and nationally certified pharmacy technicians who can prompt member outreach or education in cases of atypical medication utilization.

[redacted]

he information will be presented to prescribers in the form of a report card, and we will offer providers multimodal support to reduce opioid misuse and abuse. Additionally, we will assess members' risk of opioid misuse, and for those identified as at-risk or high-risk, a clinical pharmacist will call the prescriber to discuss medication-related concerns and develop an action plan.

Continual data mining identifies both overutilization and underutilization. We conduct ongoing review and analysis of our claims and encounter data to identify member subgroups at-risk for high utilization of acute, chronic, or preventive services. The reports generated from these analyses help us identify outliers and opportunities for intervention. Quality Management and Provider Relations information is also integrated into these reports. Populations we identify as having high utilization risk are:

- Neonates with high-risk postpartum conditions
- Children under six with BH concerns, like ADHD
- Pregnant women with prior preterm delivery
- Members of any age with specialized health care needs
- Members with SUD
- High-frequency ED users and rapid readmitters
- Members with chronic pain
- Members with high predictive modeling scores

Our Performance Improvement Projects (PIPs) also support our effort toward an integrated UM and care management approach.

[redacted]

Twice weekly, we assemble our UM and CM teams to meet with our Medical Directors and Addictionologist to discuss members who are not progressing optimally, such as those with long lengths of stay or complex discharge plans. In integrated rounds, we can identify barriers that may interfere in discharge planning, opportunities for intervention, and strategies for positive wellness outcomes. Healthy Blue used a similar approach in evaluating BH services for members receiving mental health rehabilitation (MHR). We formed dedicated teams to review these services and members, successfully shifting members to traditional outpatient BH services by reducing CPST units per 1,000 by 8.74% and PSR units per 1,000 by 3.47%.

Healthy Blue works to identify and reduce overutilization among members with chronic conditions. For example, if claims suggest a member is using a rescue inhaler for asthma and not using a prescribed controller, or has not had a follow-up visit for persistent asthma, a message is sent to both the provider and member to prompt a review of symptoms and their acuity and to adjust medication regimens as needed. If a report on stimulants prescribed by age band indicates that a child under the age of seven is taking four or more psychotropic medications (regardless of whether they are stimulants, antidepressants, antipsychotics, or sedative hypnotics), our Medical Director, Pharmacy Director, and BH CM, in partnership with our PRRs, will conduct outreach and education to the provider as well as record reviews.

When utilization patterns suggest the need to reach out to members, our interdisciplinary team collaborates to determine an appropriate strategy. Healthy Blue's UMC feeds into our parent organization's UMC for review of over- and underutilization from a multidisciplinary perspective. [redacted] We recently identified a gap in the continuum of care between inpatient psychiatric hospitals and outpatient services. To effectively align members with appropriate care while also reducing unnecessary inpatient admissions and readmissions, we contracted with Oceans Behavioral Hospital Intensive Outpatient Program to provide a minimum of three hours per day for psychiatric intensive outpatient services for members not meeting inpatient criteria.

We mitigate under- and overutilization by continually educating providers on clinical practice guidelines and evidence-based clinical practices. We share data with providers with potentially aberrant patterns to discern possible root causes and coach them on resolving any over- or underutilization patterns. When appropriate, we work with providers to develop corrective action plans that guide them in improving their overall performance. Our PRRs subsequently monitor their performance for six months to align practice patterns with norms. We support providers in independently recognizing members in need of services. For example, we provide PCPs with reports listing members who are due or overdue for wellness visits, immunizations, or screenings. Finally, we report any suspicious billing to our organization's Special Investigation Unit.

2.10.10.3 Historical Experience with UM

Healthy Blue has been providing UM services in Louisiana since 2012. Our history here guides our daily work and enforces our efforts to facilitate the ***right care, in the right place, at the right time***. We are further supported by BCBSLA's 85 years of experience working with local communities and managing care with local resources and by Anthem and our affiliate health plans in coordinating care for members in Medicaid and CHIP programs in 21 markets. Healthy Blue has been providing skilled nursing facility coverage in lieu of long-term acute care services since 2012, placing eligible members in least-restrictive services while ensuring medical needs are met. With our combined national background and local expertise, we bring a wealth of best practices and a depth of expertise to UM.

Challenges Associated with High Utilization and Medical Trends

Challenges we face with regard to current medical trends and high utilization are managing the historical pattern of delivery of services, addressing the needs of our expansion population, the psychosocial determinants of our members, and our ability to identify and use in lieu of services or non-covered benefits for treatment alternatives. We discern trends and variables that affect the State and try to improve them on as many fronts as possible. With our service delivery providers, we want to connect members to the least-restrictive services, promote a community engagement structure, and bridge gaps in care with in lieu of and intermediate services. Our multifaceted UM procedures improve access to care. Also, Healthy Blue participated in the development of the Common Observation policy with LDH in MCO workgroup meetings, drafting several policy points that were incorporated into the final product.

Initiatives to Manage High Utilization

In addition to previously mentioned programs and measures, we have current and upcoming initiatives to address high utilizers. Our AERU outreach and BH Patient Navigation initiatives work to reduce avoidable hospital admissions and readmissions, as described in this Section and Section 2.10.5.1, Supporting the Triple Aim with Effective Care Management. The VBP models described in Sections 2.10.9, Provider Support, 2.10.11, Quality, and 2.10.12, Value-Based Payment also encourage appropriate utilization.

In collaboration with LDH, we sought to reduce overall MHR and PSR costs by 14%. As mentioned earlier, we met with our Medical Directors to refine understanding of medical necessity guidelines and the delivery of PSR services. We increased the frequency of medical necessity reviews for children and youth in those services, and incorporated the evidence-based Child and Adolescent Service Intensity Instrument and the Child and Adolescent Needs and Strengths survey. We also participated in provider trainings related to level-of-care screenings for PSR and MHR

services throughout 2018. Our joint effort resulted in a continued trend of 20% redirection of services from MHR and PSR to outpatient treatment in 2018.

The **Healthy Blue Pediatric Day Health Care** (PDHC) program was developed for members needing a level of care that is not available in an integrated setting. Our PDHC program provides services to meet the medical, social, and developmental needs of children from birth to 21 years of age who have complex medical conditions that require skilled nursing care or ongoing therapeutic interventions to preserve and maintain functionality, prevent death, treat disease, ameliorate disability or other adverse health conditions, or to prolong life. PDHC is a community-based alternative to long-term and extended in-home nursing care. PDHC does not provide respite care, and it is not intended to be a backup for respite care. PA is required for all PDHC services. Services may be provided seven days a week and up to 12 hours per day for qualified Medicaid recipients as documented in the care plan. The PDHC facility Medicaid per diem rate covers:

- Nursing care
- Respiratory care
- Physical therapy
- Occupational therapy
- Speech-language therapy
- Social services
- Personal care assistance with Activities of Daily Living (ADLs)
- Transportation to/from the PDHC facility

[redacted] The program requires collaboration between Medical Directors, UM, CMs, and a liaison to get the best outcome for member. CMs made two face-to-face visits to all members who requested this level of service and spoke with parents or DCFS caregivers and providers to get a complete picture of the member. Each case was presented at rounds twice per week to discuss the scope of the child's needs and situation. We work to transition these children to school systems, Early Steps, and home health when they are medically stable. We have engaged patient care services, private-duty nursing, and permanent residential treatment facilities to ensure they are receiving appropriate care. ***Louisiana has recognized the best practice of keeping members in care management or PDHC programs, and we are now assisting other MCOs in the state with similar programs.***

Reducing Readmission Risk with Discharge Planning and Integration

We recognize that the key to reducing readmission and continued inpatient services is coordinated discharge management and follow-up. So that members can recover in the least-restrictive setting, at home, in their own communities, we connect them to the care, support, and resources they need and make sure that they clearly understand their discharge plan, risks, and medication directions to prevent a return to the hospital.

Our dedicated Readmission Reduction CM presents cases at rounds within three days of member admission to the hospital, working with our UM reviewer, other CMs, hospital staff, and discharge planners to assess needs and set up providers for post-transition care. CMs are stationed in high-volume inpatient facilities to facilitate short-term transitional care for members moving from inpatient to outpatient care or at risk for an ED visit after a hospitalization. They identify and reinforce member strengths and preferences. They work with each hospital's discharge planner to establish a safe, comprehensive discharge plan, often on interdisciplinary teams that include people from community agencies, family members, and Navigators. Discharge planning considers home environment; dietary needs; mobility and activity restrictions; medication reconciliation CMs educate members about signs and symptoms that would indicate a turn for the worse and anticipate and address barriers to follow-up care. CMs work with members to review the situation or condition that led to the hospitalization and to provide condition-specific education and monitoring. CMs follow up with calls at seven and 30 days after a hospitalization to confirm that members have the services and care they need for a successful transition out of the inpatient setting. Table 2.10.10.3-1 presents other elements of our readmission reduction efforts and their results.

Table 2.10.10.3-1. Programs Designed to Reduce Hospital Readmissions

Program	Description	Results
Enhanced Inpatient Member Interaction (EIMI)	After a deep dive into re-admissions data identifying key partners and member specifics [developed to reduce admissions and bed days]	• Since October 2018, prevented 27 admissions
High Outreach to Promote Engagement (HOPE) (supported by High-intensity Integrated Team, or HIIT)	Supplement to CM; home visits according to the needs of individual member; work in conjunction with UM reviewers and directly with facility providers and staff to coordinate discharge planning (for example, conducting medication reconciliation with a member to strengthen treatment adherence after discharge)	• 75 members engaged in program • 3.9% overall claims reduction PMPM after six months of engagement
ED Readmisison Task Force	Multidisciplinary committee leveraging data and analytics and a Critical Incidents dashboard with member metrics indicating who might present to the ED after suicide attempt, with suicide ideation, or with SUD during pregnancy	• Development and oversight of EIMI, AERU, HOPE, PIP, Navigators, and member outreach

Chronic Care Management for PH and BH Conditions

Our care management programs continue to grow in focus and efficiency, as do options for telehealth and integrated care solutions. Healthy Blue offers NCQA-accredited care management for any combination of the following conditions:

- Pregnancy, preconception health, and NICU
- Schizophrenia
- Depression
- Major depression in children and adolescents
- Asthma
- Coronary artery disease
- Diabetes
- Congestive heart failure
- HIV/AIDS

For members engaged in Chronic Care Management, inpatient utilization decreased by 25% among members with HIV/AIDS, by 15.5% for members with depression, by 10.8% for members with hypertension, and by 10.3% for members with diabetes. In 2017, there was a 380% increase in members engaged in care management for depression, a 175% increase in members engaged in care management for coronary artery disease, and a 144% increase in care management for congestive heart failure. Overall active engagement increased 41.3% between 2017 and 2016. Members enrolled in Chronic Care Management rated the program and their CMs 4.9 out of 5 in a recent survey. Strong, positive relationships with CMs circumvent escalation of conditions to clinical levels. Our care management program is greatly reducing utilization rates and having a positive effect on population health.

2017 Provider MedReview Outcomes for Eligible Members

- **25.6% overall improvement** in medication adherence
- **20.5% increase** in diabetics started on a statin
- **23.8% increase** in members started on statin post-MI
- **34.5% increase** in members discontinuing PPI after appropriate length of time
- **52.5% decrease** in risk of drug-to-drug interactions
- **26.2% decrease** in risk of adverse reaction
- **30.8% decrease** in children under six on ADHD stimulants
- **43.4% decrease** in safety risks for potential drug-age interactions
- **40.7% resumption** of anticoagulant therapy among members for whom it was appropriate
- **38.8% resumption** of Tamoxifen therapy among members for whom it was appropriate

LA_HealthyR2019_MedReview_66_COB_03

Comprehensive Medication Management

Comprehensive medication reviews by pharmacists prevent medication duplications, inappropriate or extenuated use, and incorrect dosing, any of which could lead to an unnecessary encounter. Our BH polypharmacy program focuses on outreach to physicians of members with multiple prescribers and multiple psychotropic medications in the same class, and our BH Child/Age Appropriateness program addresses inappropriate prescribing in children under six taking psychotropic medications. Providers in those instances are prompted to confirm that the polypharmacy is appropriate, change the therapy, or consult with a clinical pharmacist to review and discuss medications. Every month, we fax providers MedReview summaries of their members identified as having a gap in maintenance medication refills, inappropriate polypharmacy, or omission of care for diabetes, asthma, hypercholesterolemia, hypertension, or depression.

Our controlled substance utilization monitoring (CSUM) program[1] is a retrospective drug utilization review that notifies prescribers of members who have filled 10 or more prescriptions for controlled substances (excluding diagnoses of cancer, palliative/hospice care, sickle cell, burns, or multiple sclerosis) in a three-month period. By law, initial opioid prescriptions are limited to seven days. Our CSUM program reduces FWA by addressing drug-seeking behavior and doctor or pharmacy shopping.

Furthermore, if a member is obtaining prescriptions from numerous physicians or pharmacies without provider knowledge or is suspected of selling or fraudulently redistributing their medication, Healthy Blue will activate its 24-month lock-in program for that member. Members are notified of this development via certified mail and given 30 days to designate their preferred pharmacy. Providers and the pharmacy are notified of the member's choice on the 31st day after notification of lock-in. Claims for lock-in members will only be reimbursed when filled at their designated pharmacy (excluding emergency prescriptions).

CMs educate members on appropriate pharmacy utilization, risks of their pattern of medication use, and the importance of regular medication renewal. This program supports care coordination and Chronic Care Management in a way that simultaneously maximizes member safety and controls Medicaid spending.

In 2018, our pharmacy lock-in program resulted in a **40% decrease** in the number of controlled substance prescriptions quarter over quarter for members in the program.

LA_HealthyR2019_Pharmacy_49_DP_01

[1] The CSUM program was temporarily suspended to allow for implementation of additional exclusions specific to Louisiana, but it will resume in June or July 2019.

Initiatives to Address Use of Low-value Care

Healthy Blue designs every process to drive high-value, low-cost care. We realize that changing health care culture and patient expectations is a slow process, but we make every effort to educate and review clinical practice guidelines with providers (and members, by request), to adopt the best practices promoted by experts, and to continually analyze data to produce optimal outcomes.

Healthy Blue mitigates overuse and overtreatment with constant attention to data: provider panel reports, disease-band groupings, PA requests, Symmetry Episode Treatment Groups®, and UM data gathering and sharing as described in Sections 2.10.10.2.2, Monitoring and Addressing Frequent ED Use, and 2.10.10.2.5, How We Identify and Mitigate Overutilization. See also Section 2.10.5.1.2, Identifying Enrollees for Care Management, for a comprehensive review of our data analytic applications and capabilities, and Section 2.10.11, Quality, to see how we detect and address FWA. We are actively exploring with our UMC an initiative to reduce high-level definitive drug testing to encourage providers to order the least-invasive drug screening to meet member need. Additionally, Healthy Blue participates in a provider outreach program regarding use of extended BH therapy services (using CPT®code 90837). This program pulls provider-specific data for a 12-month period. Providers identified as outliers are notified and sent clinical practice guidelines and information about key indicators.

Healthy Blue also supports the goals of *Choosing Wisely*. Several of Anthem's physicians used nationwide commercial health plan population data to quantify service trends for some of the early *Choosing Wisely* recommendations through a retrospective analysis of claims data. They found that there were significant decreases in the use of imaging for headache (from 14.9% to 13.4%) and for cardiac imaging (from 10.8% to 9.7%). Healthy Blue applied lessons learned from that study in developing our precertification list and clinical practice guidelines.

Initiatives for Managing Limited Availability of Mental Health and SUD Services

While educating members on appropriate ED use, Healthy Blue engages in prevention and support for members struggling with mental illness and/or SUDs. We understand that BH crises frequently result in ED use, but they are not the kind of crises for which many EDs are equipped. Not all EDs have psychiatrists or child psychiatrists available for consult when a member presents in a high state of acuity or agitation, so we contract with network psychiatrists for ED psychiatric evaluations. Table 2.10.10.3-2 outlines resources our members might use to avert crises before they occur and prevent a trip to the ED for BH conditions.

Initiatives to Reduce Denial of Prior Authorizations

We pay careful attention to provider input about whether a PA requirement is burdensome or unnecessary and systematically track provider complaints by subject every month as part of our quality management (QM) program. When there are denials, it is often due to a lack of information, so we try to guide providers to give us all the necessary information for an approval. QM staff report trends to Healthy Blue leadership. To the extent there are negative trends, we develop interventions or policy changes to address them. For example, in 2019, we adapted our PA processes for MHR to allow providers to complete their treatment plans during the first 90 days of services without PA. Our Addictionologist designed a training for providers at SUD facilities in Louisiana with patterns of high utilization by cross-referencing ASAM levels of care (3.3, 3.5, 3.7) with UM criteria and standardizing expectations at each level of care. Our UM department and facilities in Baton Rouge and New Orleans took the training, which also assisted in reducing underutilization for SUD detection.

Healthy Blue's provider website offers the latest provider communication, toolkits designed to make the provider's job easier, our PA lookup tool, formularies, and reimbursement policies. The website delivers timely and relevant information, announcements, alerts, forms, and a listing of Provider Relations Representatives by region for providers, their staffs, and other stakeholders. While we work hard to keep providers up-to-date and incorporate their input into our PA procedures, occasionally we do still have to intervene to correct PA patterns.

When we must intervene at the provider level, we often recommend review or continuing education with the provider in question. We re-examine provider performance within six months of any intervention. However, we may also revise provider contracts, redistribute provider panels, engage the provider in a quality incentive program, adjudicate pre- or post-payment claims, or, in the most concerning instances, conduct a FWA investigation.

Streamlined Processes for Pharmacy Enhance Ease of Use

We have made additional improvements to our pharmacy service authorization process. We implemented electronic prior authorization (ePA) to reduce administrative burden and expedite approvals for prescribers. It builds upon e-prescribing processes with which many providers are already familiar and automatically generates approval and denial notices to members and providers in accordance with State and federal requirements.

AutoPA at pharmacy points of sale uses intelligent and automated logic that checks the claims system against the member's prescription profile and medical claim data to determine if the prescription meets established PA criteria. If the prescription has autoPA rules attached and meets criteria, it will process without the need for a traditional PA. AutoPA reduces provider burden and eliminates delays for the member. In 2018, use of integrated claims data and autoPA resulted in a 14.4% reduction in PA volume for our providers.

This page is intentionally left blank

2.10.11 QUALITY

2.10.11.1 Organizational Commitment to Quality Improvement

Quality management and quality improvement (QM/QI) are an essential part of how Healthy Blue meets the needs of our enrollees (members), providers, and community partners and achieves LDH's goals and objectives. Quality is embedded in our organizational mission, embraced within our workplace culture, and is at the heart of everything we do. ***Every employee at Healthy Blue is a quality champion, practicing continuous quality improvement (CQI), supporting innovation, and being an essential stakeholder in our path to quality excellence.***

Our steadfast commitment to quality is demonstrated throughout Healthy Blue. We employ a rigorous approach to QM/QI, with every QM employee participating in our annual HEDIS® Boot Camp and QM Enrichment Training, providing all QM employees with the understanding needed to execute on core quality tasks. We also offer Quality trainings to all Healthy Blue staff. Our Quality Assessment and Performance Improvement (QAPI) Program reflects a CQI philosophy. [redacted]

Results & Successes

Healthy Blue, our parent organization, and affiliated health plans bring solid NCQA accreditation experience:

- Commendable Health Plan Accreditation (for Medicaid product)
- Disease Management Accreditation
- Health Information Product Certification
- Managed BH Organization Accreditation
- Multicultural Health Care Distinction

We are the only LDH MCO that offers this depth of accreditation.

LA_HealthyR2019_2.10.11_NCQA_48_RESU_04

Healthy Blue's QM/QI approach and QAPI Program align with LDH's priorities, goals, and objectives. Our program complies with the current LDH Contract, State and federal laws and regulations, Louisiana Department of Insurance requirements, and industry standards, including measures defined by NCQA, The Joint Commission, Agency for Healthcare Research and Quality, and others as specified in Attachment G. We have reviewed the Model Contract and are fully prepared to implement the necessary changes to meet, if not exceed, requirements.

Our data-driven QM/QI strategies are based on more than seven years of experience measuring, evaluating, and refining our Medicaid program. We also leverage the 85 years of experience BCBSLA has and the more than 28 years of Medicaid managed care experience our ultimate parent organization, Anthem, Inc. (Anthem), brings.

We continuously evaluate quality data, our membership and membership characteristics, utilization patterns, and year-over-year performance measures to develop innovative strategies to enhance our NCQA-accredited framework to improve health outcomes for our members, support network providers, and drive health plan performance. [redacted]

INNOVATION

All of our efforts have been designed around critical quality measures in alignment with LDH priorities that impact our membership. [redacted] From 2017 to 2018, we made significant improvements in several measures, including those in Tables 2.10.11.1-1 and 2.10.11.1-2.

Table 2.10.11.1-1. Healthy Blue Has Achieved Significant Improvements in HEDIS and CAHPS Measures

Measure	2017	2018	Percent Improvement
Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents (WCC): BMI Percentile (Total)*	38.43	59.85	↑ 55.74%
Comprehensive Diabetes Care: Eye Exams*	47.45	55.96	↑ 17.93%
Antidepressant Medication Management: Effective Continuation Phase Treatment*	28.93	34.11	↑ 17.91%
Adult BMI Assessment*	71.46	81.75	↑ 14.40%
WCC: Counseling for Physical Activity (Total)*	33.56	37.71	↑ 12.37%
Antidepressant Medication Management: Effective Acute Phase Treatment*	43.51	48.79	↑ 12.14%
Rating of Specialist Seen Most Often- Child with Chronic Conditions	88.03	96.00	↑ 9.05%
WCC: Counseling for Nutrition (Total)*	43.52	47.20	↑ 8.46%

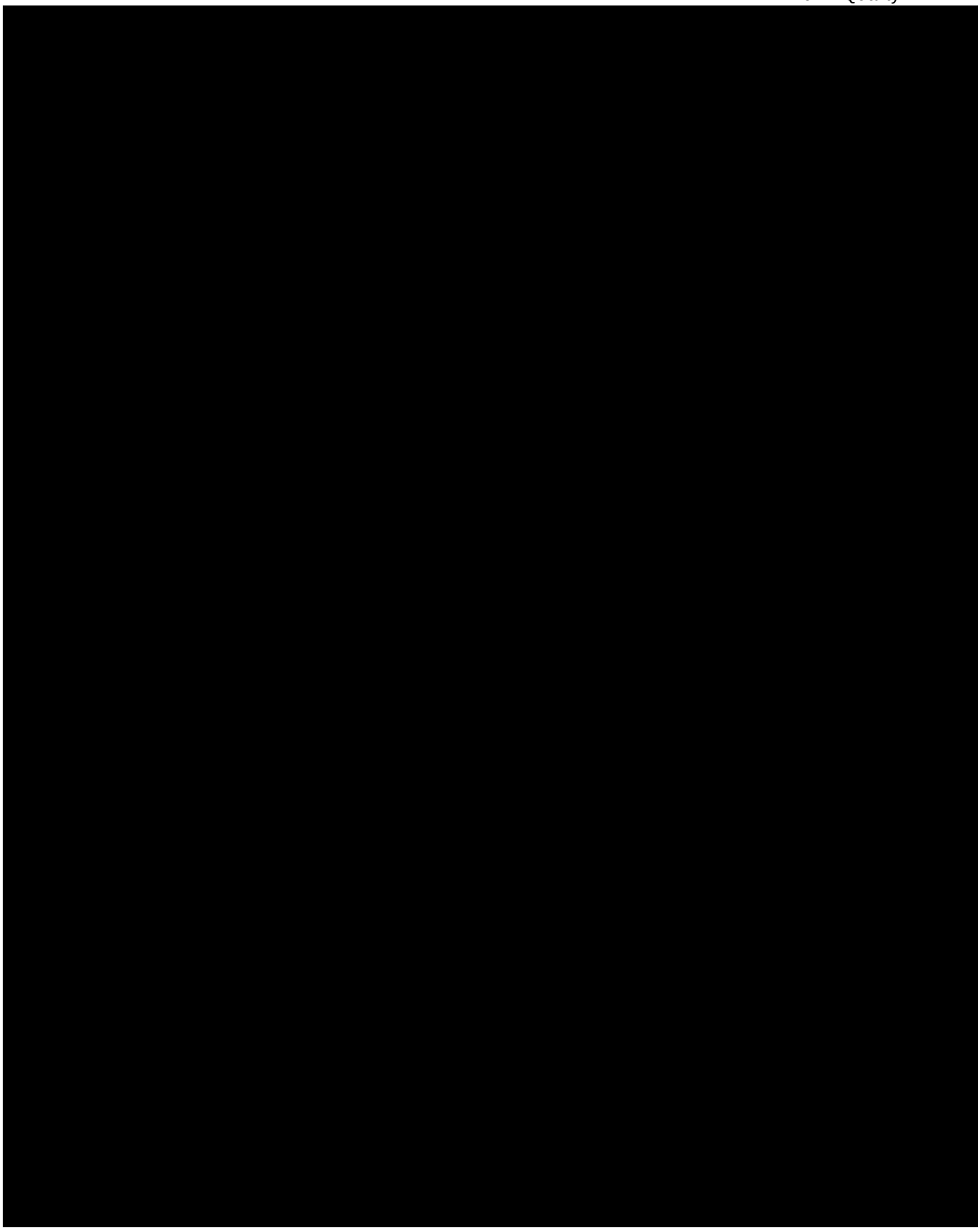
Measure	2017	2018	Percent Improvement
Adolescent Well-Care Visits*	47.24	51.09	↑ 8.15%
Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life*	63.49	68.13	↑ 7.31%
Asthma Medication Ratio (Total)	58.72	61.66	↑ 5.01%
Rating of Health Plan- Child	84.9	87.7	↑ 2.79%
Rating of Health Plan- Adult	75.43	77.59	↑ 2.16%
Use of Multiple Concurrent Antipsychotics in Children and Adolescents (12-17 years): **Inverse Measure**	3.05	2.16	↓ 29.18%
Comprehensive Diabetes Care: Poor HbA1c Control: **Inverse Measure***	61.34	53.53	↓ 12.73%

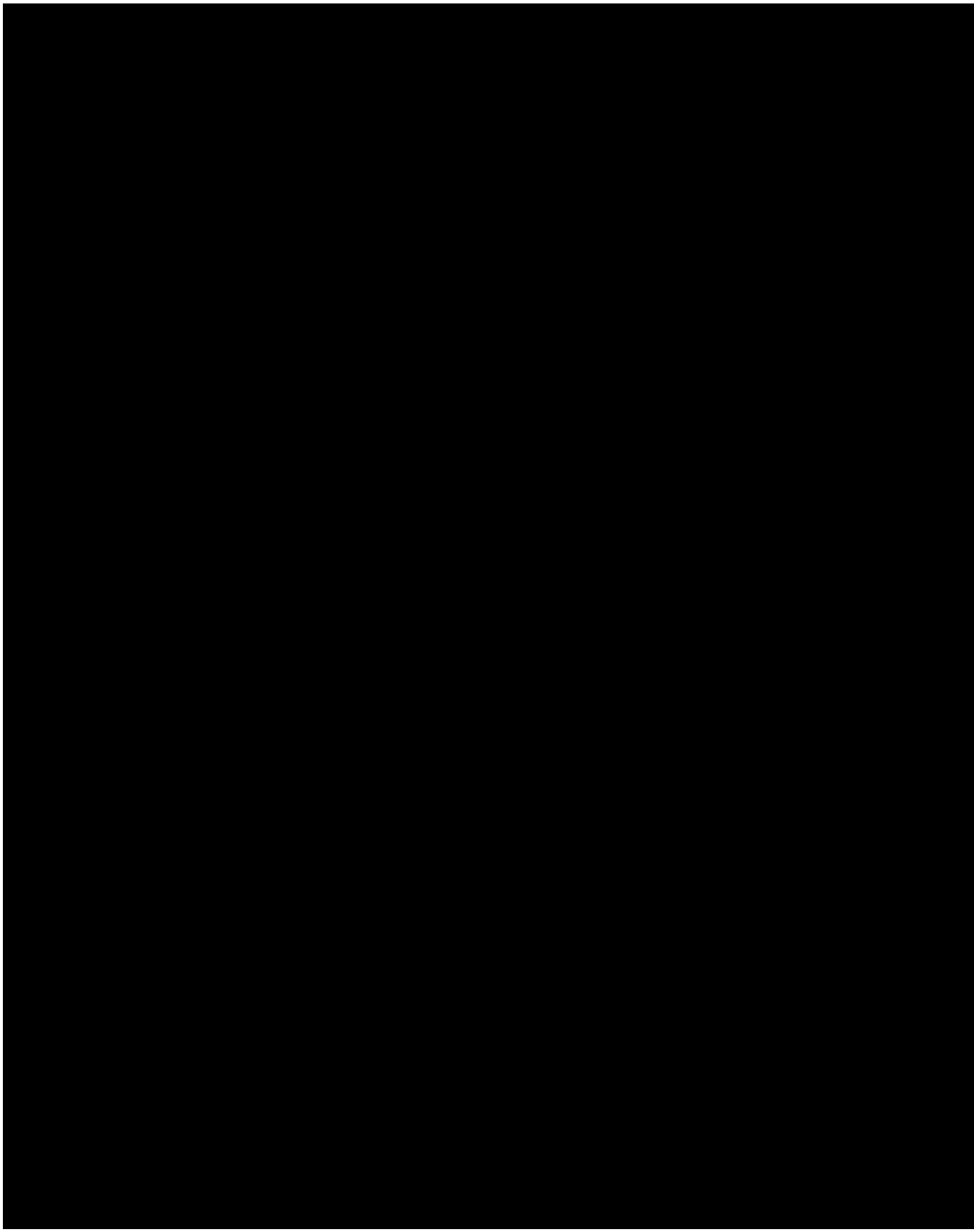
Table 2.10.11.1-2. Additional Sample of High-scoring Quality Measures

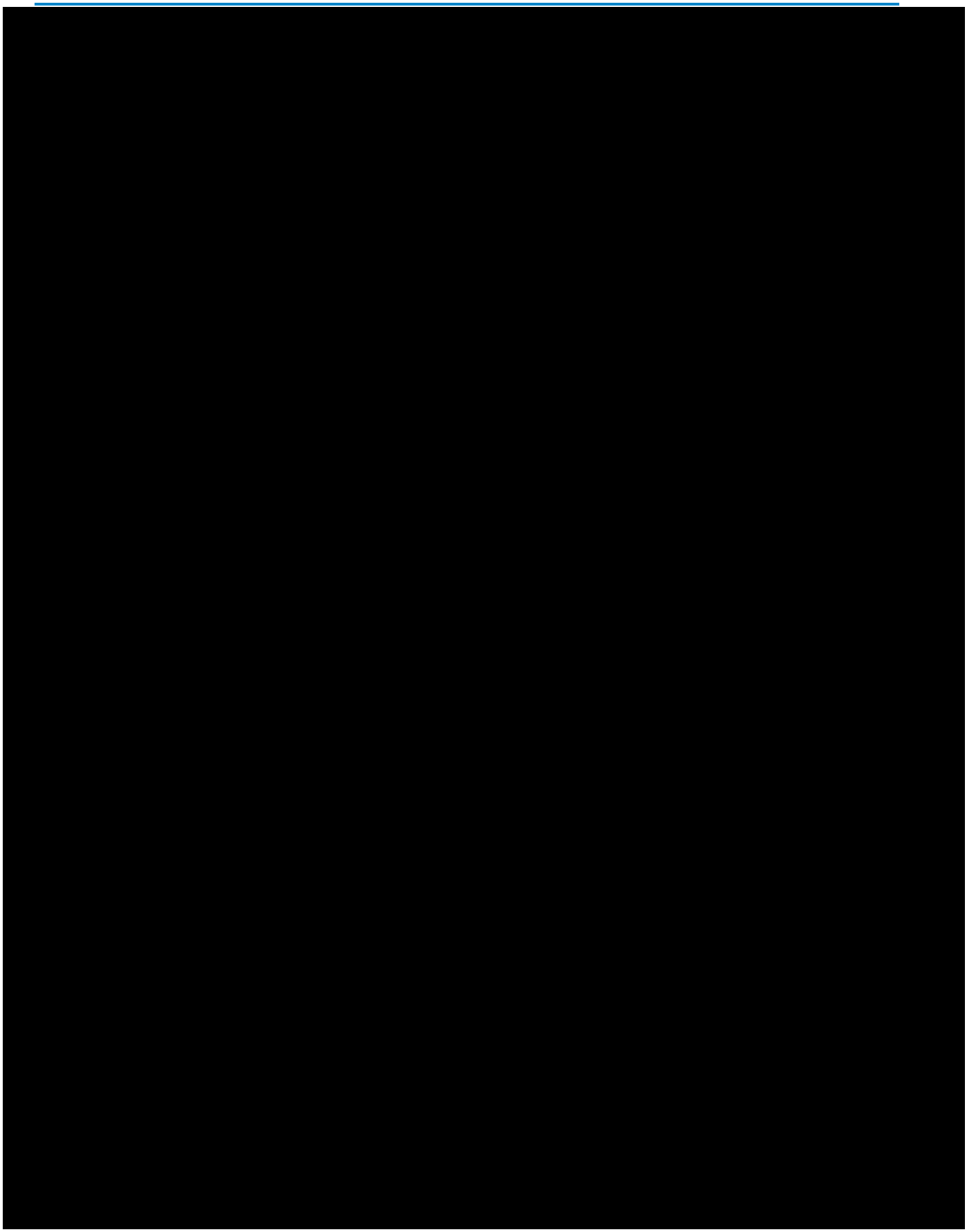
Measure	2018	NCQA Percentile
Initiation & Engagement of Alcohol & Other Drug Dependence Treatment: Initiation (Total)*	54.52	90th
Immunizations for Adolescents: Combination 1*	175.66	75th
Immunizations for Adolescents: Combination 2*	85.16	75th
Initiation & Engagement of Alcohol & Other Drug Dependence Treatment: Engagement (Total)*	18.07	75th
Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics (Total)*	68.05	75th

** Model Contract Quality Performance Measure*

[redacted]





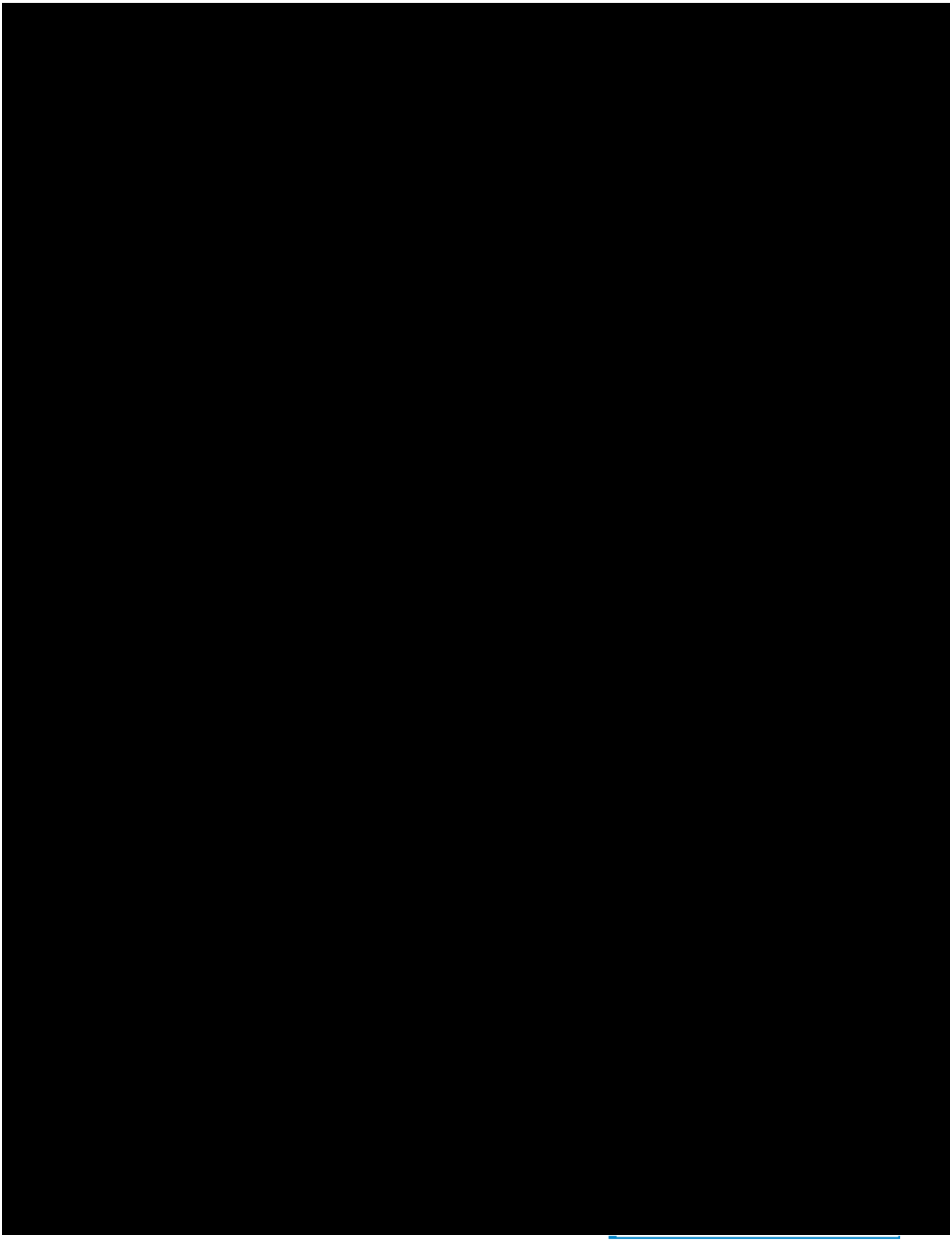


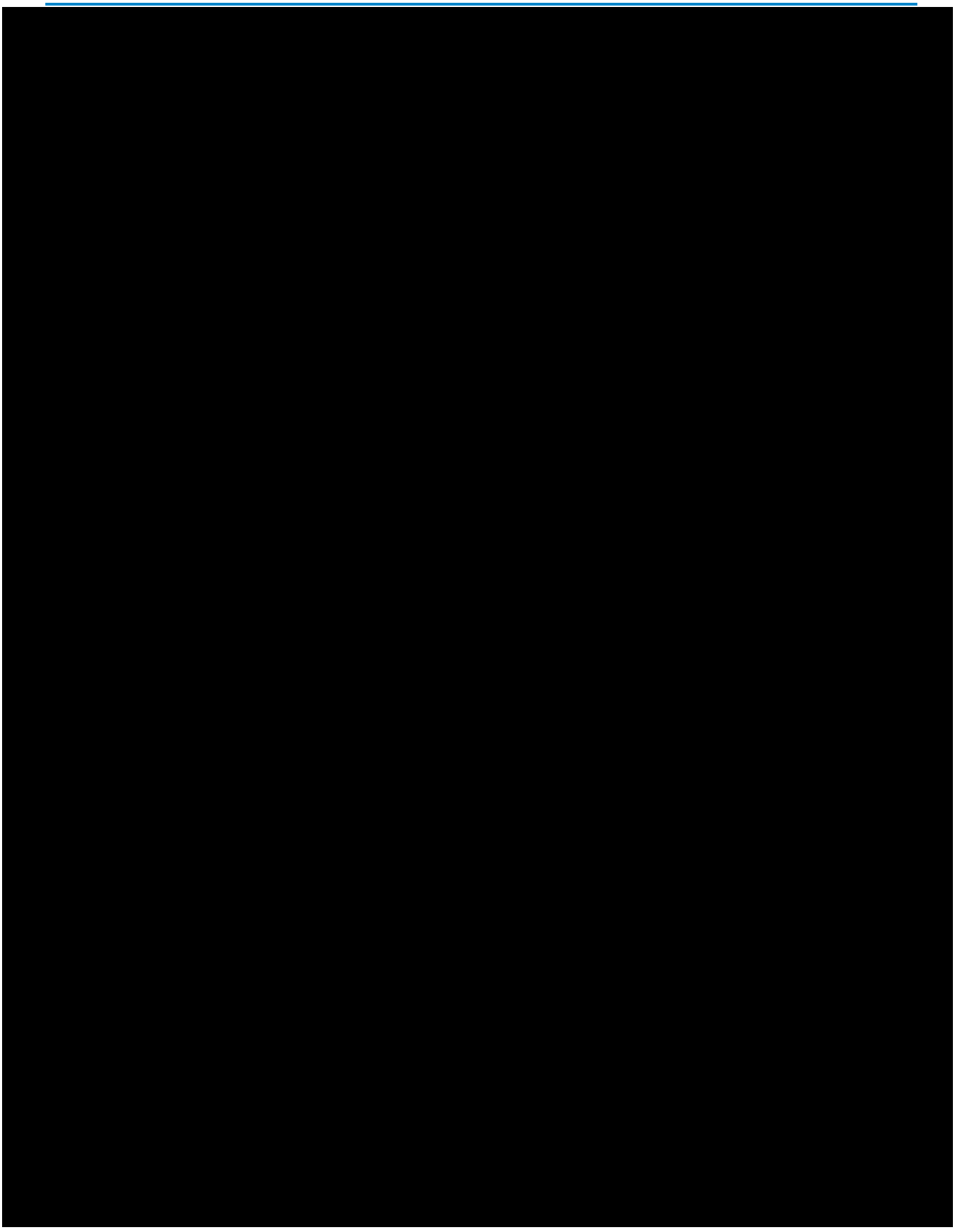
[redacted]

[redacted]

[redacted] Healthy Blue recently performed an analysis of utilization data related to Hospital Outpatient Surgery claims to identify potential opportunities for redirection to a lower, more appropriate level of ambulatory care. We identified an 11.2% increase in cost associated with hospital outpatient surgery visits; therefore, we launched a network expansion of Ambulatory Surgery Centers (ASCs) in an effort to appropriately manage outpatient costs. We were able to reduce our overall cost by 2% for Outpatient Surgery and there has also been a nearly 1% decrease in visits per 1000 for Hospital Outpatient Surgery and an increase of 6.1% in visits per 1000 with ASCs. Additionally, Healthy Blue is implementing an informative prompt to inform physician offices calling for prior authorizations that, if medically appropriate, an ASC could also be utilized.

[redacted]





[redacted]

2.10.11.2.3 Targeting Super-utilizers and Reducing Potentially Preventable Events

We have and will continue to work with LDH, providers, and other MCOs to drive innovation through evidence-based interventions and strategies. This includes reducing program complexity, member and provider administrative burden, and unnecessary costs and improving care coordination, Chronic Care Management, and integrated care.

Increased ED utilization for low-acuity complaints is a growing burden on the health care system. According to a 2013 article in the *Journal of the Society for Academic Emergency Medicine*, "Non-ED Interventions to Reduce ED Utilization: A Systematic Review," the interventions with the greatest number of studies showing reductions in ED use include patient financial incentives and managed care, while the greatest magnitude of reductions were in response to patient education. [redacted]

In addition, Healthy Blue has assessed available data on utilization rates and identified ED utilization as an area for continued improvement. Although utilization rates decreased from 2017 to 2018 (see Table 2.10.11.2-3), we believe there are opportunities for additional improvement. We aim to achieve at least the NCQA 50th percentile for this measure. We are also implementing a process to obtain real-time hospital data feeds, such as admissions, ED visits, and discharges throughout the State. This data assists us in targeting members almost immediately to help in care management and performance measure outcomes.

[redacted]

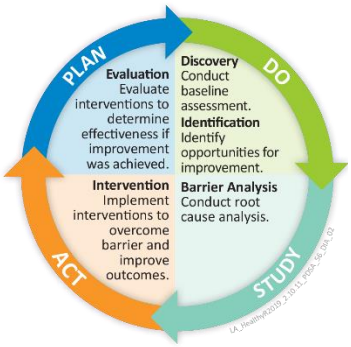
2.10.11.3 Healthy Blue's QAPI Program and Data-driven Clinical Initiative

Our QAPI Program meets current Contract requirements and 42 CFR § 438.330(a)(1). Our QAPI Program clearly defines specific goals and activities to drive results over a 12-month period, representing our road map for the upcoming year's priorities and performance targets.

We use the Plan Do Study Act (PDSA) process to drive performance improvement activities, including designing, implementing, maintaining, monitoring, and adjusting clinical and non-clinical initiatives. We train all employees that report into quality-related committees and the entire Quality team on PDSA and use this process to design, implement, and evaluate Performance Improvement Projects (PIPs).

We use a multifactorial evaluation approach to assess impact over time across multiple interventions and strategies. ***To identify and assess barriers to improvement, we use well-tested tools like Ishikawa or Fishbone Diagrams.*** Using rapid-cycle improvement methodology through the continuous PDSA cycle (see Figure 2.10.11.3-1), we conduct small tests with pilot populations to measure results in real time, facilitating prompt understanding of what works and does not work so we can re-tool, discontinue, or replace interventions that do not yield positive results and expand those showing quantifiable improvement. Lean Six Sigma principles also support and enhance our processes, providing a variety of performance improvement tools to drive lasting change.

Figure 2.10.11.3-1. A Structured Process



[redacted] To achieve our QM/QI goals, our Quality team works closely with our HEDIS data managers and meets weekly to review gaps in care reports to drive outreach and other interventions.

2.10.11.3.1-2.10.11.3.3 Functions to Improve the Health Status of Members

Healthy Blue leverages our sophisticated information technology and data infrastructure to drive consistent, timely, evidence-based decision-making and high-quality member outcomes. We follow best practices in Medicaid data management, utilizing a proven approach verified by national audit firms. [redacted]

Healthy Blue leverages our national Medicaid division's enterprise data warehouse to support operational processes, analytics, and reporting. This real-time data warehouse receives data directly from the system of record to promote quality, control, and consistency. It creates the flexibility needed to support rapid development and deployment of any new data exchange through secure data transfer. Table 2.10.11.3-1 summarizes the tools we deploy to trend performance over time and drive improvements.

Table 2.10.11.3-1. Healthy Blue's Data Tools Support Performance Improvement

NCQA-Certified HEDIS Data Mart and Reporting	• Information exchange across departments and committees to support a holistic QM/QI approach • Identify gaps in care to support member outreach and education during any touchpoint • Provide monthly trends by measure and track disparities across groups • Support provider profiling including quality payment incentive activities
Interactive Analytic Insights	• Visualize patterns in quality results by region, county, and ZIP code • Identify specific communities to target intensive interventions such as Clinic Days, SBHCs, and our other programs to address disparities
Predictive Modeling Tools	• Assess risk for ED visits, admissions and readmissions, high-risk pregnancies, BH issues, and pharmacy indicators with our Chronic Illness Intensity Index (CI^3) predictive modeling and other tools • Identify members with high utilization or at emerging risk, and coordinate services and supports
Health Intech Platform	• Consolidates member data and information from multiple sources into a single record • Delivers a holistic dashboard of utilization, care plan, and gaps in care to appropriate staff

Our staff are trained on the tools available to extract, aggregate, and format data for reporting, and have a thorough and detailed understanding of the data that assists us in meeting reporting needs. This integration continues to improve accuracy, timeliness, and usefulness — and supports data mining that benefits our members and providers as we enhance our ability to understand trends, utilize actionable information, and maximize outcomes.

[redacted]

[redacted]

Identifying and Analyzing Problems in Quality of Care

Our QM team investigates all potential quality of care issues, including provider preventable conditions. We have the capabilities to identify quality of care concerns when conducting utilization review; reviewing or trending provider complaints, member grievances, and appeals; and monitoring physician practice activities.

We may also learn of them from external sources, such as members, providers, CMS, or the State. [redacted]

Identifying Areas for Improvement

We also analyze data to identify areas for improvement, including management of chronic and acute care diseases and conditions. Our heat map capabilities, a tool our QM team uses to drive strategic interventions, include the ability to depict member gaps in care at the local level by zooming into a single parish. Heat maps are also viewable by individual quality measures.

[redacted] We will continue to design and implement new interventions and refine existing ones to address chronic conditions. [redacted]

Results & Successes

Data from our Provider MedReview Note found that in 2017:

- **26%** of eligible members improved medication adherence
- **53%** of eligible members had a decrease in safety risks for potential drug-drug interactions
- **21%** of eligible diabetic members added a statin, closing a gap in care

LA_HealthyR2019_2.10.11_MedReview_49_RESU_01

Reducing Disparities

Our QAPI Program includes an annual Culturally and Linguistically Appropriate Services (CLAS) and Health Disparities Program Description and Evaluation. Our CLAS and Health Disparities program objectives are to: (1) respond to current and projected demographic changes in our membership; (2) identify and address disparities in the health status of persons of diverse racial, ethnic, and cultural backgrounds; (3) improve the quality of services and care outcomes; and (4) meet legislative, regulatory, and accreditation mandates.

We collect, track, and trend member data to identify health care disparities, barriers to treatment, areas of dissatisfaction, and gaps in provider coverage related to cultural or linguistic representation. We educate providers on culturally competent communication and interactions. We collect demographic data on location, age, ethnicity, race, gender identity, sexual orientation, religion, primary language, disability status, and income level, as well as member self-reported demographics, SDOH, and HNA data. We compare this data against prior year performance and against regional and national benchmarks, making sure all potential disparities are identified and addressed.

Addressing disparities and promoting more equitable health outcomes are goals we share with LDH. In April 2019, our ultimate parent organization, Anthem, was awarded the ***Innovation in Advancing Health Equity Award*** from the National Business Group on Health for its efforts to advance health equity by addressing the demographic and socio-economic influences that impact environments where people live, learn, work, and play. We stratify key quality measures to address health disparities through responsive programs that are customized to meet the individual needs and cultural nuances of particular communities. For example, our stratification of Healthy Blue's

HEDIS data revealed unequal outcomes in Antidepressant Medication Adherence (AMM) among African Americans. Disparities continue to exist in health care delivery despite industry-wide efforts to reduce disparate access to and utilization of health care services. Providers are key allies in reducing disparities related to race, ethnicity, disability, BH, sexual orientation, socioeconomic status, and other factors. We offer providers cultural competency training on-demand through our provider website, as part of our orientation program, in monthly newsletters, and through our provider handbook. Our wide-ranging training includes topics such as addressing racial and ethnic disparities in asthma care, creating a LGBTQ-friendly practice, reducing health care stereotypes, and breast cancer screening for African-American women, many of which include free Continuing Medical Education (CME) credit.

[redacted] improvements.

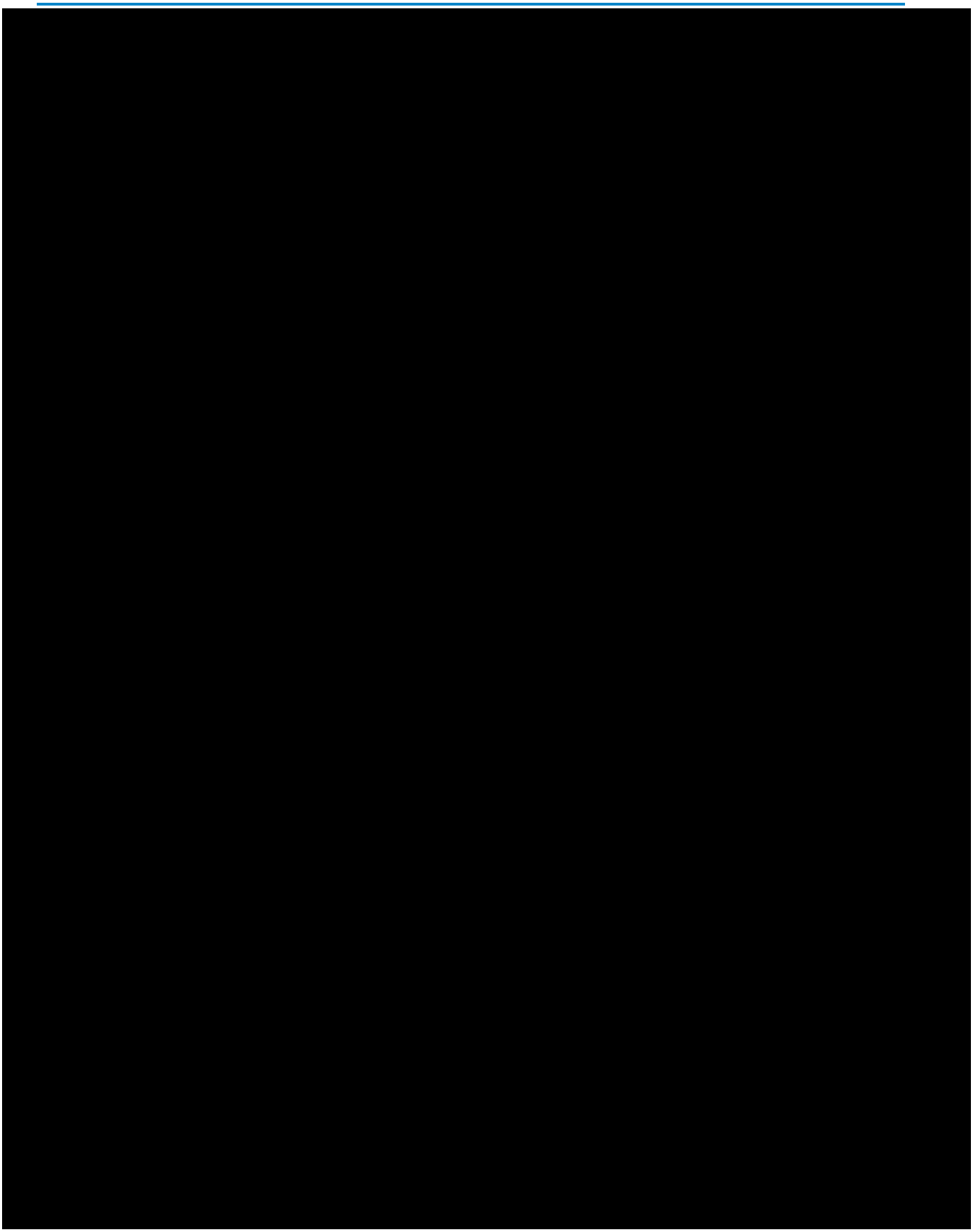
2.10.11.4 Proposed Approach to QM/QI

Healthy Blue's QM/QI organizational and program approach complies with all applicable provisions of 42 CFR Part 438, including, but not limited to, Subparts D and E.

2.10.11.4.1 QM/QI Organizational Plan, Goals, Committees, and Schedule of Activities

We maintain a QAPI Program structure that supports a culture of CQI; reinforces clear accountability and inclusive participation by a wide range of constituents, including providers and members; and blends local and national resources that align with LDH's goals and objectives.

[redacted]



[redacted]

We use our Provider Advisory Committee to advance state goals and objectives. During our February 27, 2019 committee meeting, we discussed Healthy Blue's new Food Insecurity VBP program and our ADHD Toolkit and training to advance evidence-based practices.
LA_HealthyR2019_2.10.11_Committee_56_COB_01

[redacted]

Schedule of QM Activities

Developed and implemented by our QAPI Committee with input from multidisciplinary business owners, our annual QM Work Plan reflects our strategic direction set forth by Healthy Blue's Board and strategy to implement our QAPI Program. As a living document, we continuously review and update our QM Work Plan throughout the year to ensure our program aligns with Healthy Blue, LDH, and State goals with maximum efficiency. Our Work Plan documents our objectives, staffing and staff training, role of providers, scope of activities, processes, systems, and strategies to evaluate the impact and effectiveness of our QAPI Program. We will submit our written QM Work Plan to LDH as part of readiness reviews and annually thereafter, as well as prior to implementation of revisions.

2.10.11.4.2 Staffing and Organizational Chart

We have the organizational infrastructure necessary to provide effective monitoring, reporting, and analysis, and to act on opportunities to improve clinical care and services. [redacted]

[redacted]

2.10.11.4.3 Participating in LDH's HEDIS/Other Measurement and Data-driven Initiatives

Healthy Blue will leverage our successful experience collecting, measuring, and reporting accurate and timely HEDIS data to meet LDH's expectations and Contract requirements. [redacted]

2.10.11.4.4 Example of Recent Successful Quality Improvement Activity

[redacted] highest among our 21 affiliated Medicaid health plans. Employing a data-driven, methodological approach (see Figure 2.10.11.4-3), our Medical Director, QM leadership, BH leadership, care management leadership, BH Liaison, and our Housing Expert began developing a new initiative that we ultimately named *Enhanced Inpatient Member Interaction (EIMI)*. We conducted a comprehensive review of evidence-based programs to shape EIMI. This included Boston University Medical Center's Re-Engineered Discharge (RED) program, an initiative supported by the Agency for Healthcare Research and Quality.

[redacted]

Our team-based model brings together clinical experts to support a person-centered, integrated approach. Each member in our EIMI program is engaged by an EIMI Hospital Coordinator and supported by an EIMI team that includes a UM clinician, Case Managers, and Hospital Coordinator. Our EIMI program includes four phases:
Inpatient Care. Our EIMI team meets daily, reviews daily census logs, and discusses individual member cases. The team focuses on members admitted due to complications of chronic disease processes, which would most likely not require an inpatient stay if managed appropriately using outpatient resources. Upon identification of a member for the EIMI program, our Hospital Coordinator meets face-to-face with the member and performs a Hospital Barrier Assessment. This specially designed tool helps us gather pertinent information (for example, current living situation and feeling safe at home) that could influence a member's ability to successfully transition home and avoid readmission and prompts our development of interventions to address them. The EIMI team addresses SDOH, such as housing and transportation, which might compromise a member's transition.

Approaching Discharge. As a member approaches discharge, our Hospital Coordinator schedules appropriate follow-up appointments for the member. The Hospital Coordinator explains the role of the Care Manager (CM) and the benefits they offer. The Coordinator will introduce the member to their CM via telephone, or a face-to-face meeting, and provides their contact information to them. We assign CMs based on whether the member's primary concern is a PH or BH condition: what the member's primary language is and where the member lives.

Care Management. Members enter our care management program upon discharge. Using a comprehensive HNA, the CM learns about the member's needs and note. CMs note any cognitive or physical limitations, evaluates risk behaviors, and assesses psychosocial and environmental needs to develop a person-centered care plan at the required level of service. The care plan is organized around evidence-based CPGs, which the CM supports by confirming the member is keeping appointments, completing appropriate screenings or lab work, and engaging in self-care measures, such as nutrition and blood glucose testing as outlined in the plan. One business day before any scheduled

[redacted]

2.10.11.4.5 Quality Improvement Plans and Projects

Identifying Projects

Our QM team tracks and trends our HEDIS and State-specified measures through monthly reports, which we share with other Healthy Blue departments and QM committees. Our HEDIS Task Force, PIP Workgroups, and QM staff use this data to identify opportunities for performance improvement, assess the impact of interventions, and monitor our performance relative to LDH performance measures. We select topics for QI plans and projects that reflect our members' needs, LDH's goals and priorities, and offer a meaningful opportunity for measurable improvement.

Potential Topics

[redacted]

2.10.11.5 Clinical Practice Guidelines (CPGs)

[redacted] This includes ADHD, diabetes, high-risk obstetrical, hypertension in adults, hypertension in children and adolescents, and substance use disorders. The guidelines keep providers informed about scientific advances, support consistent delivery of care, and positively impact health outcomes.

We adopt CPGs based on the health care needs of our members and identified opportunities for improvement. CPGs are not a substitute for the professional judgment of health professionals, and we do not use CPGs for medical necessity reviews. Attachment 2.10.11.5-1 includes a list of our CPGs and their source, and a sample guideline for HIV and Adolescents: Guidance for HIV Testing and Counseling and Care for Adolescents Living with HIV.

2.10.11.5.1 Process for Developing and Disseminating CPGs

[redacted]

Healthy Blue is already meeting with LDH MCOs to make sure our BH guidelines are consistent.
LA_HealthyR2019_2.10.11_LDH_56_COB_01

[redacted]

We distribute CPGs and notice of changes to providers through our provider handbook, newsletters, website, fax blast, and special mailings. We introduce providers to our CPGs during initial and ongoing training and our Provider Advisory Committee. We provide links to relevant resources on our provider website, and post new or revised CPGs within 30 days of adoption or revision. We distribute them to members and potential members upon request.

2.10.11.5.2 Incorporating Scientific Evidence and Provider Opinions

Our CPGs are reviewed, revised, and approved annually using nationally recognized, evidenced-based literature and expert opinion from the US Preventive Task Force, medical specialty societies (such as the American Diabetes Association, American Psychological Association, and American Congress of Obstetricians and Gynecologists), and other nationally recognized societies and organizations. These organizations produce evidence-based guidelines using medical literature, professional standards, and/or expert opinions.

We encourage providers to offer recommendations for new guidelines for inclusion in our CPG registry and to provide comments on existing ones. For instance, we may place an article in our provider newsletter or notice on our provider website about the new CPG, encouraging providers to contact Healthy Blue with questions, comments, or concerns. We also offer in-network providers and experts an opportunity to share feedback and opinions on CPGs as part of our Provider Advisory Committee, and we solicit feedback when Healthy Blue is onsite during provider medical record reviews. We will continue to encourage out-of-network providers and experts to share their opinions.

2.10.11.5.3 Evaluating Provider Adherence and Implementing Interventions

[redacted]

[redacted]

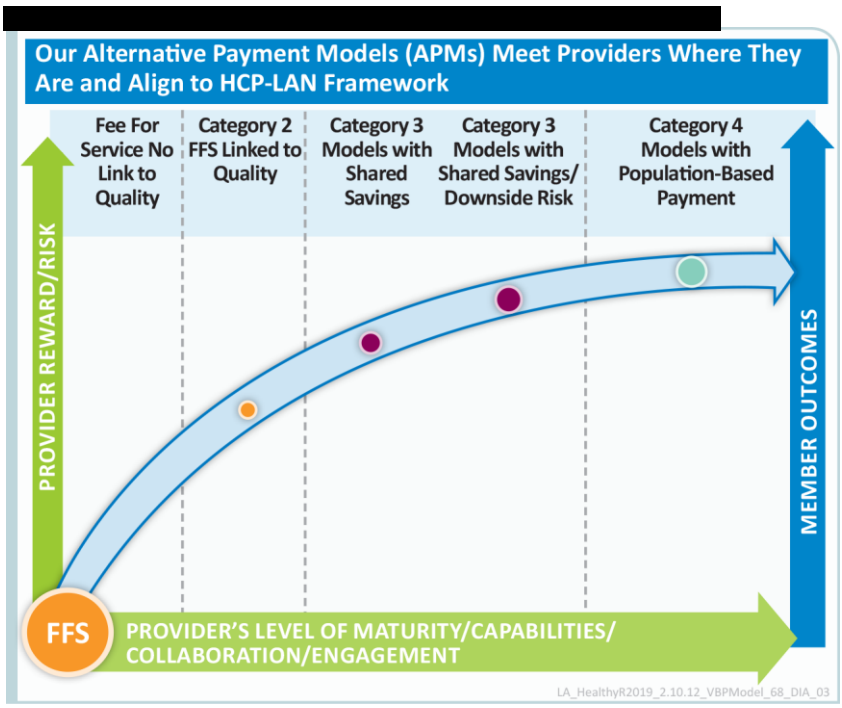
2.10.11.5.4 Updating and Revising CPGs

Board-certified and credentialed network providers and our Medical Director/CMO and BH Medical Director review, revise, and approve CPGs at least every two years using evidence-based literature from medical specialty societies, the U.S. Preventive Services Task Force, and similar entities.

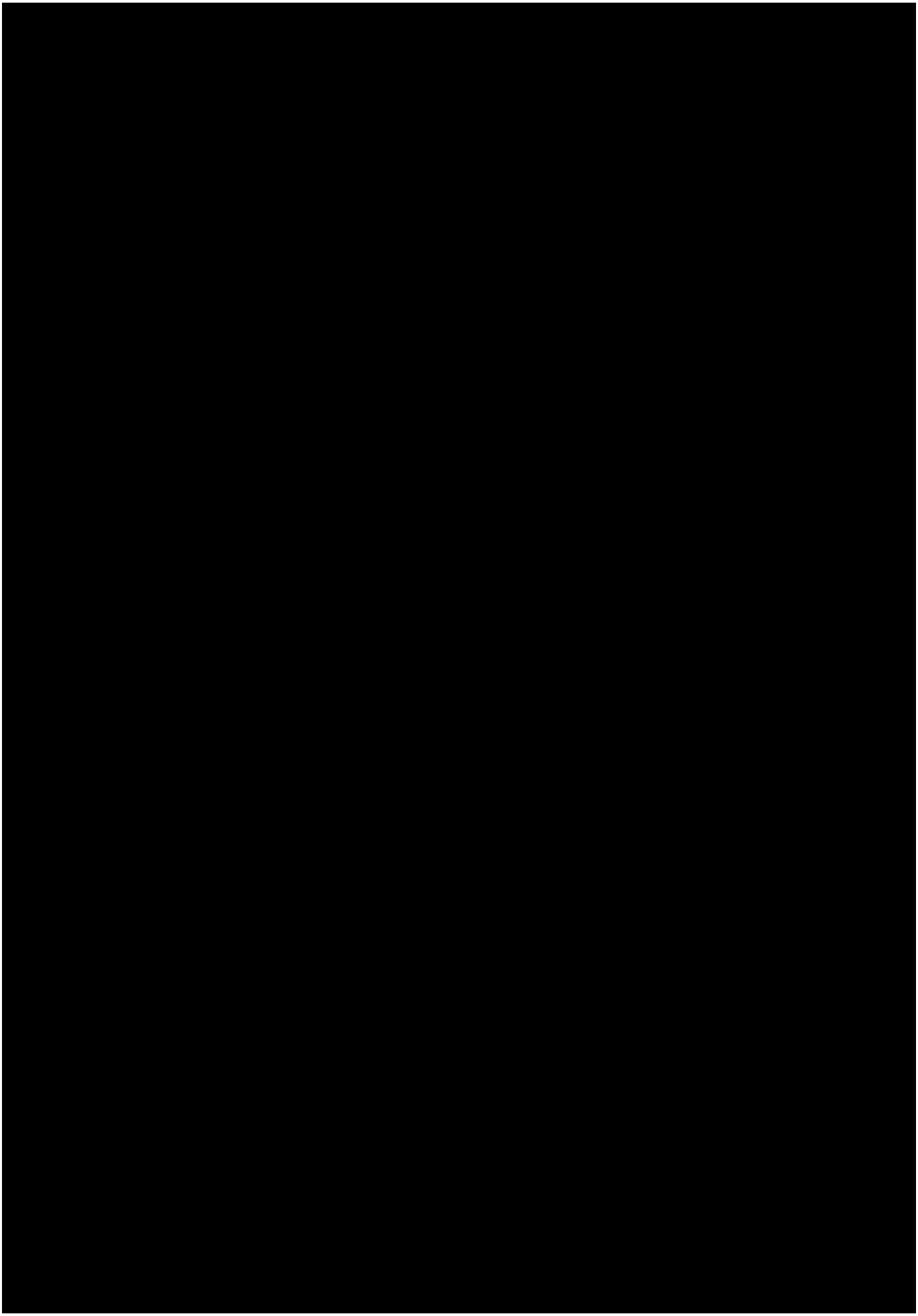
2.10.11.6 Healthy Blue's NCQA Health Insurance Plan Ratings

Attachment 2.10.11.6-1 includes Healthy Blue's NCQA Health Insurance Plan Ratings (2018-2019) for Healthy Blue, our parent organization Anthem, and our affiliate managed care contracts with full NCQA accreditation.

[redacted]


Our Alternative Payment Models (APMs) Meet Providers Where They Are and Align to HCP-LAN Framework
Fee For Service No Link to Quality
Category 2 FFS Linked to Quality
Category 3 Models with Shared Savings
Category 3 Models with Shared Savings/ Downside Risk
Category 4 Models with Population-Based Payment
PROVIDER REWARD/RISK
MEMBER OUTCOMES
FFS
PROVIDER'S LEVEL OF MATURITY/CAPABILITIES/ COLLABORATION/ENGAGEMENT
LA_HealthyR2019_2.10.12_VBPModel_68_DIA_03

This page is intentionally left blank



MIS Diagram/Process Flow Chart	Diagram Reference
Customer Service	Figure 2.10.13.2-8
Care Management	Figure 2.10.13.2-9
Coordination of Member Health Plan Changes	Figures 2.10.13.2-10a & b
Utilization and Quality Management	Figure 2.10.13.2-11
Authorizations	Figure 2.10.13.2-12
Financial Processing	Figure 2.10.13.2-13
Reporting	Figure 2.10.13.2-14
Third Party Liability	Figure 2.10.13.2-15
Data Interactions	Figure 2.10.13.2-16

Member Eligibility and Enrollment Management. We currently process daily and monthly HIPAA-compliant 834 enrollment data files from LDH that identify member additions, deletions, and modifications, as shown in Figure 2.10.13.2-6. The enrollment file load process establishes begin and end dates for members under specific program eligibility categories. A member's eligibility information may change periodically, and that information is captured promptly and accurately while maintaining historical data. This enables us to provide appropriate services and the correct processing of current and delayed claims. Our MIS assigns each Healthy Blue member a unique identifier that is used on all member-specific materials and for all member-related processing. The member ID is cross-referenced to other member-unique numbers, such as social security number. We perform regularly scheduled transmissions of member data to our pharmacy, vision, and transportation subcontractors. Our member enrollment processes maintain the integrity of member information used by the claims and finance subsystems, among others.

Claims Processing. As part of claims processing, our MIS maintains and tracks information on claims and encounters for covered services processed on behalf of our Healthy Louisiana providers. We assign a unique number to each incoming claim and capture and maintain its receipt date. A series of edits (including National Correct Coding Initiative (NCCI)) and business rules validate data on all incoming claims (paper and electronic formats) to verify that claim data is compliant, complete, accurate, appropriate, and for eligible members and providers. The system adjudicates claims with valid data and rejects, suspends, or denies (as appropriate) claims with invalid information. We maintain comprehensive claim and line detail information with processing information, including any applicable interest payments.

Encounters Reporting. Healthy Blue is committed to delivering accurate, complete, and timely encounter data to LDH. We combine claims we process with encounters received from our subcontractors into a complete submission to LDH. We outline the encounter data submission process in Figure 2.10.13.2-7.

Customer Service. We recognize the importance of being available to members and providers whenever they need us. As shown in Figure 2.10.13.2-8, we have implemented a communications platform that ensures calls can be routed to the appropriate site where the caller can receive the help they need. This system allows load balancing across sites where all agents access the same information using the same system to provide consistently great service.

Care Management. The Health Intech care management platform utilizes data of several components of our MIS to support our member and service management efforts. This fully integrated health care management platform leverages information from our care management system and Core Service System, as well as clinical and social determinants of health (SDOH) information collected from referrals, screenings, and assessments conducted by our Care Management team and interactions with our BCBSLA team as seen in Figure 2.10.13.2-9.

Care Coordination. We streamline the sharing of information relative to care management, and coordinate sharing between MCOs. For our members who are transitioning to another MCO, Healthy Blue's MIS is capable of extracting care management data such as service plans, assessments, and active authorizations and providing them to the receiving MCO. We also are able to consume member data from exiting MCOs and load it into our systems, shown in Figures 2.10.13.2-10a and 2.10.13.2-10b.

Utilization and Quality Management. Our utilization and quality management approach incorporates a full range of data sources within the MIS. These data sources are used in a bidirectional manner to identify clinical initiatives and programs directed at efficient and effective service delivery and to guide continuous improvement as seen in Figure 2.10.13.2-11.

Authorizations. We recognize the importance of timely authorizations to ensure appropriate member care. Healthy Blue's MIS supports the intake, clinical review, and outbound communication of authorizations (Figure 2.10.13.2-12).

Financial Processing. Figure 2.10.13.2-13 details the various MIS functions that support critical financial management processes such as capitation reconciliation, fraud, waste, and abuse reviews and audits, medical loss ratio (MLR), and our financial statement and Generally Accepted Accounting Principles (GAAP).

Reporting. Healthy Blue collects and maintains 100% of the data required by LDH in compliance with our Contract reporting requirements. Our reporting process supports the collection and reporting of relevant data through both regulatory and ad hoc reports. Our MIS is modular in design, providing a flexible, configurable, and scalable system that can be expanded to deliver required functionality and information to support our program operations, including clinical and financial data. Our reporting process is show in Figure 2.10.13.2-14.

Third Party Liability (TPL). A strong TPL program is critically important to lowering costs for Louisiana Medicaid. To achieve success, our TPL program employs experienced personnel; automated applications; and consistent, replicable processes. Figure 2.10.13.2-15 shows the processes for documenting OHI and coordinating benefits.

2.10.13.2.5 We Support Medicaid Management Information System (MMIS) Exchanges

As a best practice to support continuity and streamline solutions, the IT team has a number of employees actively engaged in work that supports our Healthy Louisiana business operations. Additionally, our ***Information Technology Director, Braulio Bencosme*** supports Healthy Blue and LDH as an integral part of all technology-based implementations and ongoing operations. ***The Information Technology Director for Louisiana is a seasoned professional with more than 10 years of information technology experience in Medicaid managed care systems.*** He leverages industry, corporate, and health plan knowledge to partner with LDH in developing new system interfaces or resolving operational or system issues. Additionally, our Information Technology Director and representatives from key functional departments, such as enrollment and encounters, will continue as active participants in the MCO Systems Workgroup held by LDH.

Healthy Blue further devotes skilled and experienced resources to support LDH-required data exchanges and meet our operations and management needs, including: 1) onsite Louisiana data analysts and subject matter experts; 2) technical employees embedded in functional departments at both Healthy Blue and our national support areas; and 3) a dedicated Regulatory Reporting team within our IT team that specifically supports our Healthy Louisiana reporting requirements and collaborates closely with other technical teams to ensure alignment.
This staffing structure enables us to leverage employee skills and experience; share best practices and report logic used in other markets; and shift resources, as necessary, to meet changing demands for reporting and analysis.

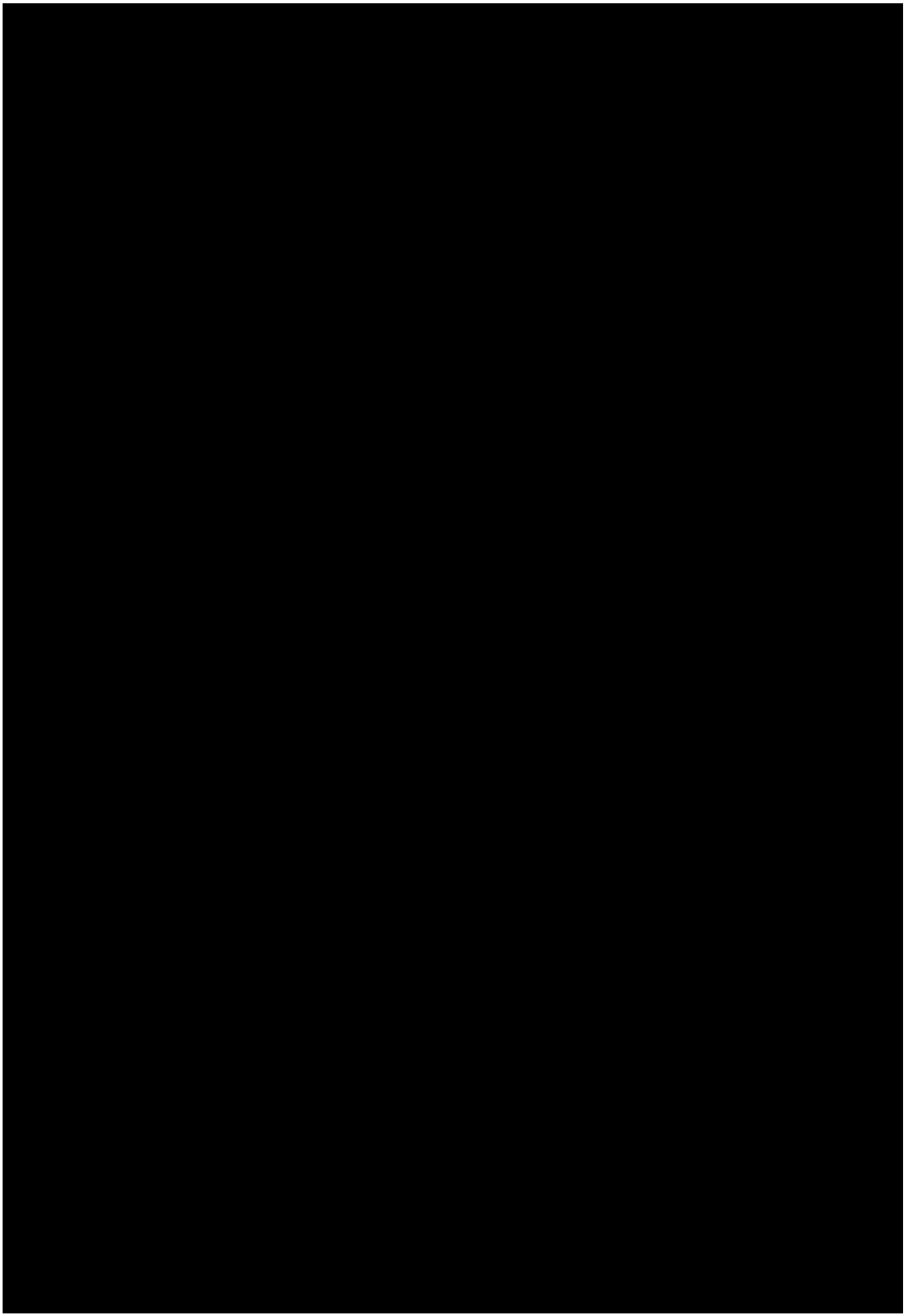
2.10.13.3 Robust Data that Supports Actionable Management Reports

Healthy Blue has collected and maintained 100% of the data required by LDH in compliance with the Model Contract and MCO Manual reporting requirements since the beginning of our work in Louisiana. We attest that our MIS captures and reports all of the data elements necessary to produce required management reports in the format, transmission method, and schedule specified. Our MIS supports generation of management and operational reports and delivers data to support all program analytics.

We apply rigorous edits and controls to preserve the integrity of all data, knowing that accurate operational systems provide a solid foundation for accurate reporting. Our integrated data warehouse consolidates data from internal and external sources to support the ongoing requirement for scheduled reports and specialized ad hoc reporting. Internal data include claims, member, provider, care management, and authorization information. Data from external sources include items such as historical claims data, laboratory results, and subcontractor encounters. The data warehouse is fed directly from source systems to drive data accuracy. Within our MIS, we electronically update data between components on a schedule designed to preserve consistency across systems and support business needs.

Integrating Subcontractor and LDH Information

Several subcontractors deliver critical services to our Healthy Blue members for pharmacy, dental, vision, and transportation, and we integrate data we receive from them into our MIS. By integrating subcontractor data with our own medical and BH service information, we can deliver a holistic view of utilization to providers and Care Managers and support reporting, data analytics, and other processes that promote a population health approach to maximize our members' health. Healthy Blue maintains scheduled data interfaces with each of our subcontractors. We send regularly scheduled member enrollment data to each subcontractor to support member access to services. Healthy Blue loads subcontractor encounter claim data into our data warehouse to support a variety of processes, including care coordination, population health, and fraud, waste, and abuse detection. We generate a series of operational reports against this subcontractor data to help us confirm their compliance with program requirements. In addition, we receive and review other information and reports from subcontractors to monitor performance against Healthy Blue and LDH standards in areas such as network adequacy, call center, and provider appeals. Health Blue reviews this information as part of our Subcontractor Oversight Program, and we include it in our regulatory report submissions to LDH. Through our Subcontractor Oversight Program, we will continue to confirm the ability of our material subcontractors to deliver data to Healthy Blue that enables us to meet LDH reporting requirements.



A Case Study: Applying a System Upgrade to the Core Service System

For system upgrades to our System, we receive notification from the software vendor two to three months prior to scheduled releases — typically twice annually. A project lead is assigned and a plan is built to track all of the key deliverables and checkpoints for the upgrade project, including impact, assessment, program modifications, testing, training, and appropriate internal and external notifications. Details of the release are shared with the technical team and designated system users, who are instructed to review and complete an Impact Assessment form for their areas. A kick-off meeting is also held to discuss the testing timeline and answer questions. The Systems Testing Group creates a test plan and establishes the required test data in Jira, which is used to automate testing and perform defect management.

Once the release is available, it is deployed first to a development environment for initial validation and then to a quality assurance (QA) environment where we run through the full set of test cases, which generally takes about five to six weeks. Any defects found during testing are logged and tracked, working with the software vendor as needed to resolve. Weekly testing meetings are held to make sure that everyone is on track with their assigned testing efforts.

Once testing is complete, we hold a Go/No-Go call with all areas to verify that there are no outstanding issues and we are confident that the release can be moved to production. To minimize impact, the release is scheduled to occur over a maintenance weekend with the designated technical teams actively engaged in all stages of the deployment process. During the process, we maintain an open communication channel with a project lead at the ready to pull the team together to address any issues or concerns. After all deployment tasks are complete, the team holds a final Go/No-Go meeting before releasing the System back into production. Any post-production issues are reported via our incident management process and triaged according to severity and impact. The project lead monitors all logged issues and escalates as needed. If a defect has a significant impact, we escalate to the vendor, who may provide an emergency hot-fix. The hot-fix is then scheduled, deployed, and tested as quickly as possible.

2.10.13.5 Ongoing Support for Data Interfaces

We currently have connectivity with LDH and its fiscal agents, MAXIMUS and DXC Technologies, and support all electronic standard health care transactions that are mandated by LDH, including, but not limited to, X12, NCPDP, XML, and JSON formats. Batch and real-time data exchanges are fully automated, with internal procedures and system-based controls in place to monitor the timing, format, and integrity of all data exchanges. We designed our internal data exchange systems and procedures so that we have the flexibility to work with LDH and other partners to establish mutually agreed-upon data exchange protocols.

Current Data Exchanges

Today, Healthy Blue supports the exchange of all required LDH interface files, conforming to HIPAA compliance standards as well as all State and federal standards for data management and information exchange. We use a system job scheduler to generate data extracts. The process includes regular monitoring of status notifications, extract files, and error logs to verify that each job executes correctly and that the results are consistent with expected record counts and transaction formats. Data extract changes required and outlined with the Louisiana MCO Systems Companion Guide are configured and implemented timely as defined by LDH. Table 2.10.13.5-1 provides a listing of the inbound and outbound data exchanges that are currently supported or will be supported for the Healthy Louisiana program. Figure 2.10.13.5-1 depicts our data interactions with LDH providers and subcontractors. Anthem's systems hardware and software architecture permit scalability of the technology platform and has the capacity to meet Healthy Blue's current and future data interface needs. Healthy Blue works with Anthem to assess system design and architectural framework on an ongoing basis, confirming software vendor upgrades, hardware capacity, security needs, and program operations requirements are met. We closely monitor core systems and have detailed policies and procedures as well as service level agreements on core system availability and connectivity.

Table 2.10.13.5-1. Healthy Blue Data Exchanges

Source	Destination	Data Type	Source	Destination	Data Type
Inbound	MAXIMUS	834	Inbound	DXC	Prior Authorization File
Inbound	DXC	TPL	Inbound	DXC	Prior Authorizations Recon File
Inbound	DXC	TPL FULL	Inbound	DXC	Prior Authorizations Error File
Outbound	DXC	Network Provider and Subcontractor Registry	Inbound	DXC	CPO90
Inbound	DXC	Network Provider and Subcontractor Registry Response – TEXT FILE	Inbound	DXC	Fee Schedule File
Inbound	DXC	Network Provider and Subcontractor Registry Response – PDF	Inbound	DXC	17P Preterm Birth File
Outbound	DXC	Network Provider and Subcontractor Registry Site	Inbound	DXC	Behavioral Health Psychiatric Residential Treatment Facility File

Source	Destination	Data Type	Source	Destination	Data Type
Inbound	DXC	Network Provider and Subcontractor Registry Site Response – TEXT FILE	Inbound	DXC	Magellan Prior Authorization File
Inbound	DXC	Network Provider and Subcontractor Registry Site Response – PDF	Inbound	Arcadia Healthcare Solutions	ADT Registry File
Outbound	DXC	Encounters 837 I, P and NCPDP	Inbound	DXC	Retro Closure File
Inbound	DXC	Encounters; TA1 Interchange Acknowledgement 999 Functional Acknowledgement 835 Payment Advice	Inbound	DXC	MMIS_FQHC_AND_RHC
Inbound	DXC	Master Provider File	Outbound	DXC	Supplemental Encounter Pharmacy File
Inbound	MAXIMUS	Provider Transaction	Inbound	DXC	Supplemental Encounter Pharmacy File
Inbound	DXC	Claims History	Inbound	DXC	Stola_Molina_Chisholm
Inbound	DXC	Prior Authorizations	Inbound	DXC	Supplemental Provider Response File
Inbound	DXC	Provider Attestation	Inbound	DXC	Medicaid Provider Negotiated Rates File
Inbound	DXC	Claim Summary Report	Inbound	DXC	CLIA
Inbound	DXC	Claim Summary Edit Codes	Inbound	DXC	PCP Linkage File
Inbound	DXC	Molina Combined Provider File	Inbound	DXC	LEERS File
Inbound	MAXIMUS	820 – Capitation File	Inbound	DXC	Supplemental Provider File
Inbound	DXC	820 – Medicare Recovery	Inbound	DXC	820 – RETRO Payments
Inbound	DXC	820 – DOD	Inbound	DXC	820 – SSI-ADJ
Inbound	DXC	820 – PMPM Recoups	Inbound	DXC	820 – Kick Payment
Inbound	DXC	820 – LIFT Related	Inbound	DXC	Medicaid Diagnoses that Require Pre-Admission Certification (Precert)

Securely Sharing Information with Providers to Support Medical Management

Healthy Blue uses several secure mechanisms to share information with our providers to support care coordination and care management activities. These include our provider portal, secure FTP, secure email, and in 2019, the Louisiana Health Information Network (LHIN). To further enhance our provider performance data sharing strategy, Healthy Blue will participate in the LHIN Encounter Notification Service (ENS). LHIN ENS is the largest statewide all-payer health information exchange. Through our participation, Healthy Blue will be able to access real-time admission, discharge, and transfer (ADT) information for more effective member care coordination and to quickly identify opportunities such as how to reduce avoidable emergency department (ED) visits. This kind of access to member care issues and needs in near real time creates significant opportunities for proactive member engagement and education, and will help Healthy Blue further the State's goal of decreasing fragmentation and increasing integration across providers and care settings to drive towards more cost effective care.

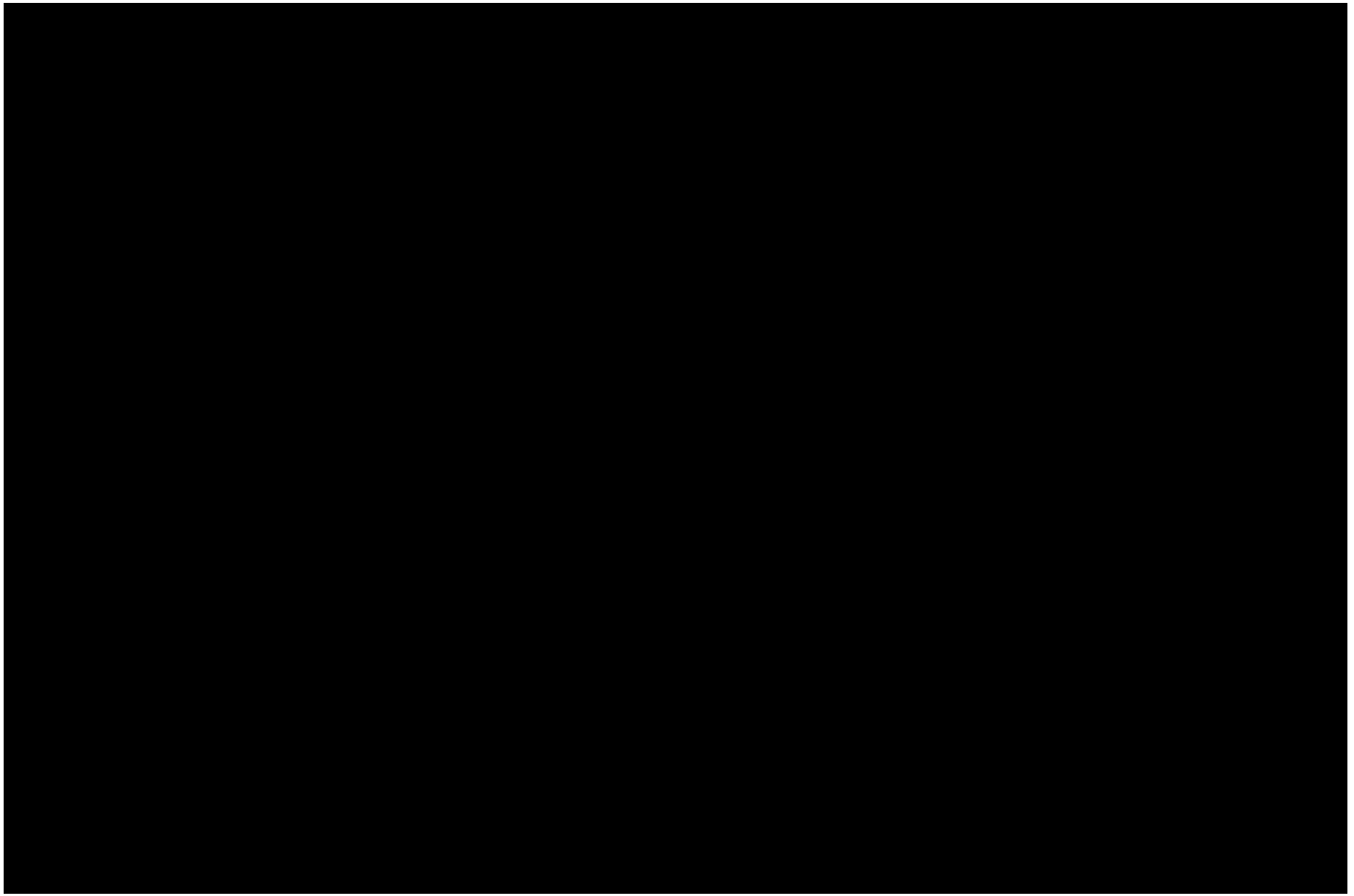
SUPPLEMENTAL PAGES

Supplemental pages for 2.10.13 Claims Management and Systems and Technical Requirements include the following dataflows and charts:

- Figure 2.10.13.5-1. The Healthy Blue MIS System Overview
- Figure 2.10.13.2-1. Detailed Hardware Architecture
- Figure 2.10.13.2-2. Detailed Architectural Framework
- Figure 2.10.13.2-3. Functional System Overview
- Figure 2.10.13.2-4. Functional System Interfaces
- Figure 2.10.13.2-5. Eligibility and Enrollment Management
- Figure 2.10.13.2-6. Claims Processing
- Figure 2.10.13.2-7. Encounters
- Figure 2.10.13.2-8. Customer Service
- Figure 2.10.13.2-9. Care Management
- Figure 2.10.13.2-10a. Coordination of Member Health Plan Changes
- Figure 2.10.13.2-10b. Coordination of Member Health Plan Changes
- Figure 2.10.13.2-11. Utilization and Quality Management
- Figure 2.10.13.2-12. Authorizations
- Figure 2.10.13.2-13. Financial Processing
- Figure 2.10.13.2-14. Reporting
- Figure 2.10.13.2-15. Third Party Liability (TPL)
- Figure 2.10.13.2-16. Data Interactions

[redacted]

This page is intentionally left blank



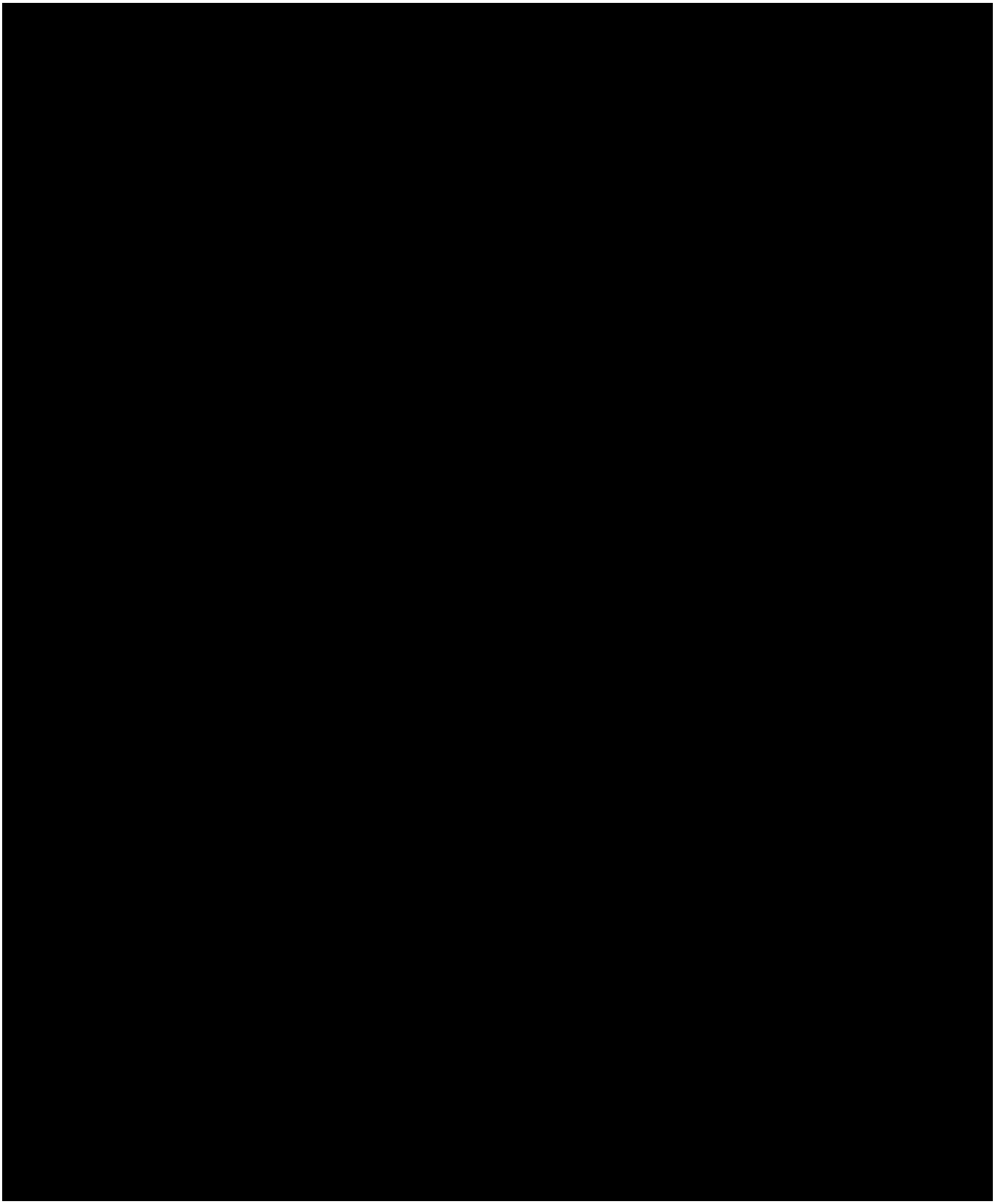
This page is intentionally left blank

[redacted]

This page is intentionally left blank

This page is intentionally left blank

[redacted]



[redacted]

This page is intentionally left blank

[redacted]

This page is intentionally left blank

[redacted]

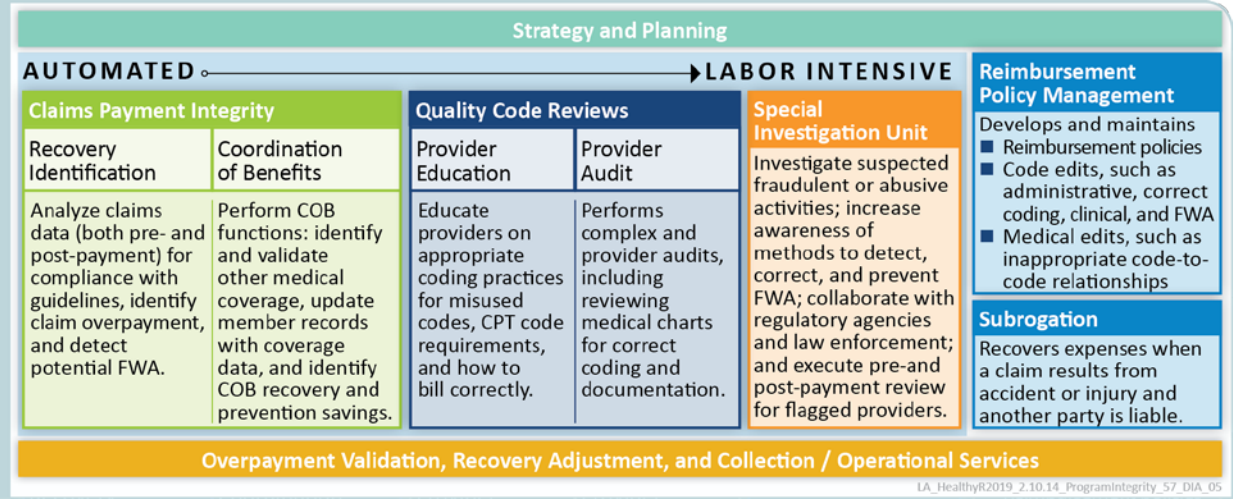
Table 2.10.14.1-1. Our FWA Plan Includes Comprehensive Processes to Prevent, Detect, and Correct FWA

Key Processes to Prevent, Detect, and Correct FWA	
Prevent	• Train employees, subcontractors, providers, and members about FWA • Confirm that credentialed providers have necessary licensure and monitor to make sure excluded providers are not credentialed or paid • Maintain clear provider billing policies and rules and adjudicate claims accurately (clinical and policy coding edits, Coordination of Benefits (COB) and Third Party Liability (TPL) identification and processing, and pre-payment review) • Maintain effective claims processor training and quality audit programs
Detect	• Promote a culture of vigilance among all employees and awareness of our compliance hotline and other FWA reporting mechanisms • Use advanced analytics and data algorithms and collaborate with LDH and the MFCU to identify membership errors, provider billing errors, and payment errors • Maintain a quality and compliance review program for providers • Provide explanation of benefits (EOBs) to a random sample of members to verify receipt of services billed
Correct	• Resolve over- and under-payments • Report suspected cases to LDH and MFCU promptly and in accordance with the Model Contract • Conduct preliminary investigations promptly and provide updates to LDH or the appropriate agency • Implement actions to change behavior, such as education, pre-payment review, and record audits • Flag providers and suspend payment when the State determines a credible allegation of fraud • Apply lock-in for pharmacy benefits • Terminate non-compliant providers, if necessary

Our Comprehensive FWA Organization

Healthy Blue's comprehensive FWA and program integrity efforts incorporate dedicated staff who are empowered by an integrated system of activities, processes, and controls that involve virtually every Healthy Blue department and our national support services team. Our Program Integrity organization (shown in Figure 2.10.14.1-1) includes multiple teams working together to make sure proper payments are being made to legitimate providers for reasonable services rendered to eligible members. The Program Integrity team uses advanced analytics and strong enterprise governance to prevent, detect, and correct FWA.

Figure 2.10.14.1-1. Healthy Blue's Efforts to Prevent FWA Include Multiple Program Integrity Teams



Our Louisiana SIU is a unique and critical part of Program Integrity. Our SIU (which is composed of a manager and six Louisiana-based investigators) includes one accredited health care fraud investigator, two certified fraud examiners, one certified professional coder, and one team member with a clinical certification. In addition, two of our investigators previously worked with MFCU and two have a law enforcement background. In addition to sharing data analytics and best practices with the national team, they leverage the skills of more than 35 pooled resources available to supplement the investigative process. The SIU receives and investigates all allegations of FWA, regardless of their referral source (employees, subcontractors, members, providers, or data mining). We notify LDH and MFCU promptly of all suspected instances of FWA.

Healthy Blue SIU team members collaborate and share information with their counterparts in affiliate health plans, expanding the network of highly skilled, seasoned professionals. This sharing of schemes and investigative techniques provides a valuable and constant supply of best practices and lessons learned from across the country.

The SIU also participates in a number of national initiatives, such as the Federal Healthcare Fraud Prevention Partnership and the National Health Care Anti-Fraud Association (NHCAA). As part of ongoing operations, the SIU interacts regularly with regulators and law enforcement, participating in or hosting task forces with various law enforcement and prosecuting agencies. Our investigators also will continue to attend the fall BCBSLA Law Enforcement/Blue Summit with local, State, and federal law enforcement, prosecutors, and private payors. Louisiana benefits from active and successful collaboration between government entities and health plans.

Healthy Blue's leadership team maintains a close and collaborative relationship with the SIU and the Program Integrity team through ad hoc and regularly scheduled meetings and oversight. Monthly meetings include a review of SIU processes and results, as well as a detailed review of cases and other information. Healthy Blue reviews and approves concepts for provider recovery and often suggests new overpayment concepts. Weekly reports detail recovery efforts, including project concepts and dollars. Monthly reports detail all open cases for members, providers, and payment holds, and we receive ongoing notification from the SIU regarding letters sent to providers.

We Execute Comprehensive Training and Awareness Programs

Protecting against FWA is ingrained in all we do, and we reinforce our organization's commitment through mandatory new hire and annual employee trainings, focused fraud prevention employee education initiatives, provider orientations, our provider handbook, our member handbook, and through well-publicized reporting channels, such as our website and SIU hotline. Employees, subcontractors, providers, and members represent the eyes and ears of Program Integrity and training and education programs create and reinforce awareness on how to identify and report FWA.

Our Healthy Blue Training Academy represents a comprehensive approach to training and incorporates multi-modality delivery processes (in-person, online courses, tailored webinars, and written materials), as well as mechanisms for training on tracking, monitoring, alerting, and reporting compliance and completion.

In addition, we are excited to announce that www.fighthealthcarefraud.com, a new website created and maintained by Anthem, will be linked to our Healthy Blue member and provider websites later this year under "Report Fraud, Waste, and Abuse." Shown in Figure 2.10.14.1-2, this website provides information about the impact of health care FWA on the entire industry. With examples, information on spotting scams, and a universal form for reporting, this website is an important step forward and a differentiator for Healthy Blue and our affiliates in the prevention of FWA.

Figure 2.10.14.1-2. A New Website Will Educate Members, Providers, and Others About the Impact of FWA

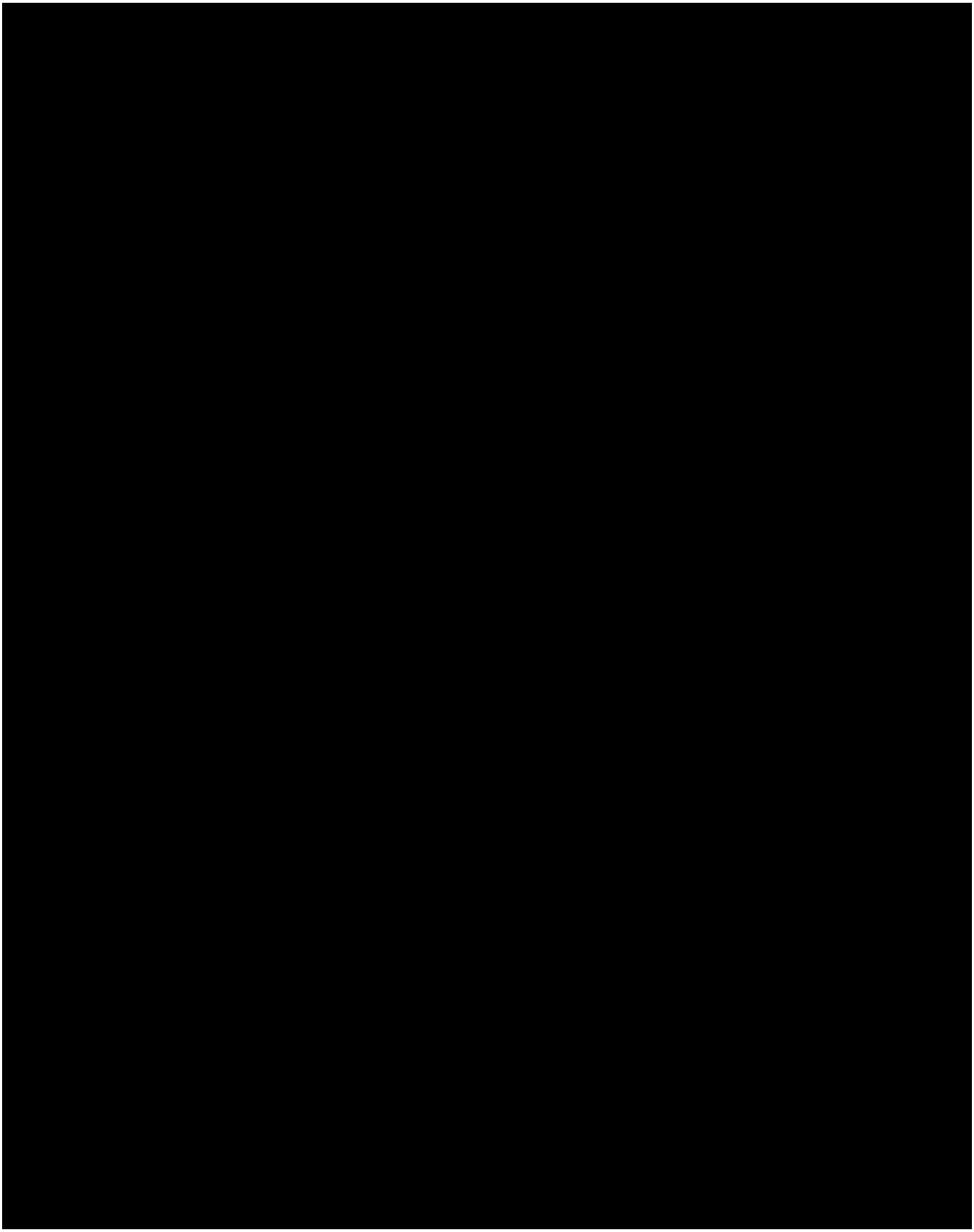
Healthy Blue Employees Receive New Hire and Annual FWA Training

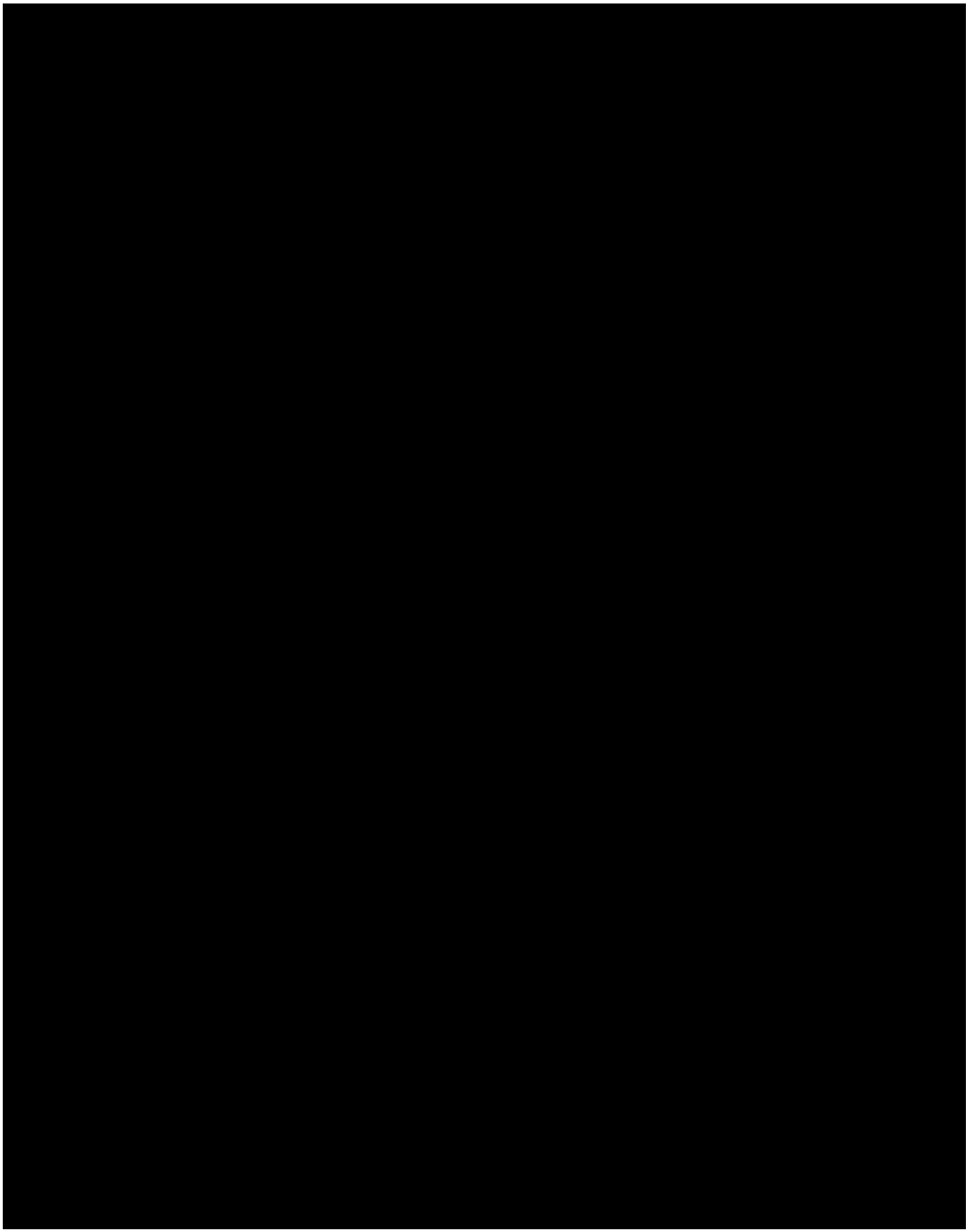
All Healthy Blue employees receive online ethics and compliance training, including modules on FWA, within 30 days of hire and annually thereafter. The new hire module defines FWA and its impact, explains the roles of employees and the SIU, how to submit a referral, and where to find more information. Periodic quizzes within the module measure and reinforce employee understanding. Annual training reviews topics such as how to spot and report suspected FWA and also includes a "Red Flag Checklist" that provides information about how to contact the SIU, along with examples and red flags for identifying provider and member fraud. The document also discusses handling suspicious events, including calls to our call centers. New hire and annual FWA training remind employees that information and resources are always available on the organization-wide intranet page.

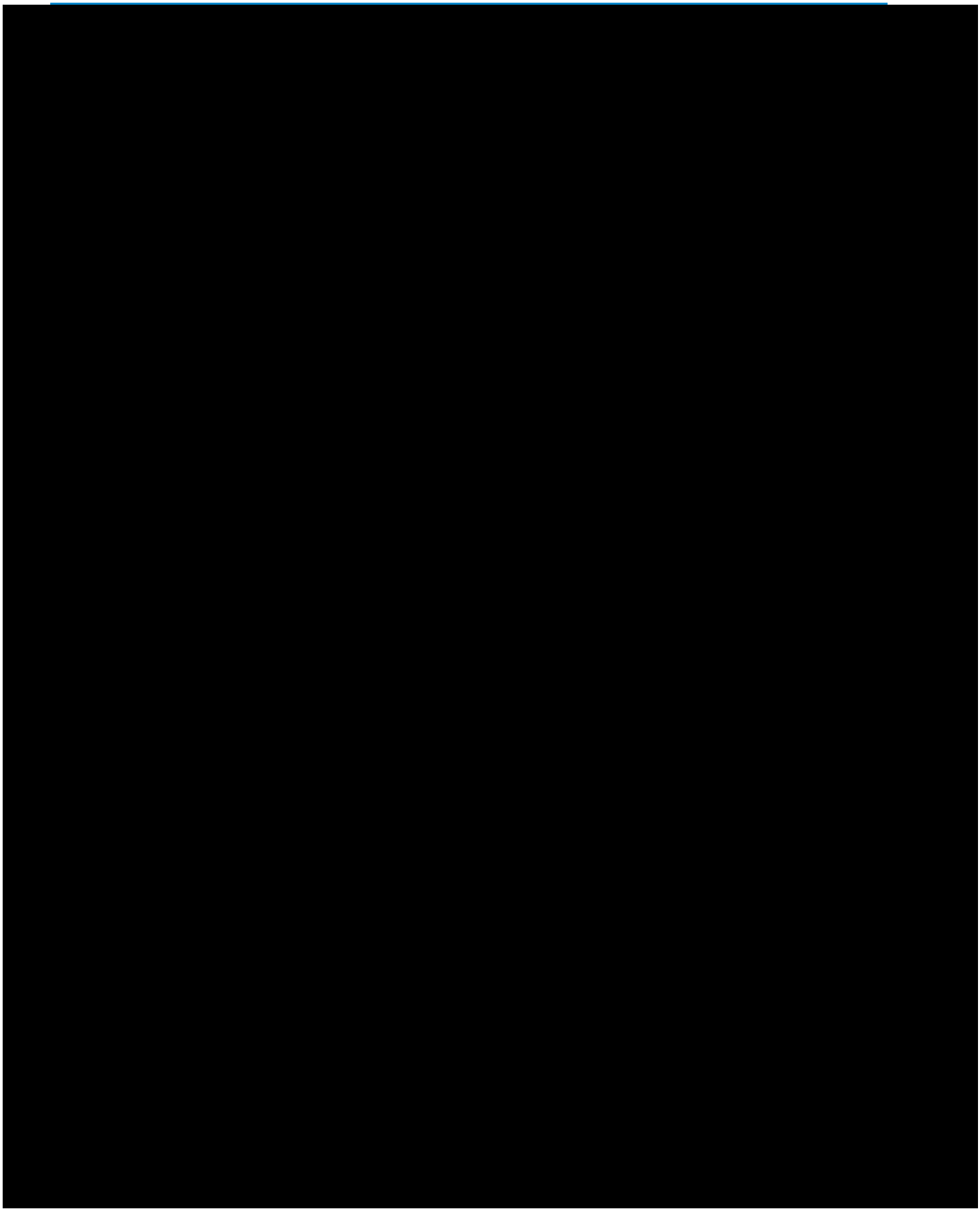
Our Compliance Team conducts a mandatory all-staff training session each fall (in-person and online) that covers a variety of compliance topics. For FWA, topics include organization and roles, provider fraud examples, referrals, information exchange and collaboration with LDH, and the multiple methods (anonymous and not) available to report FWA. Attendance is tracked and the Compliance team follows up with employees who are unable to attend.

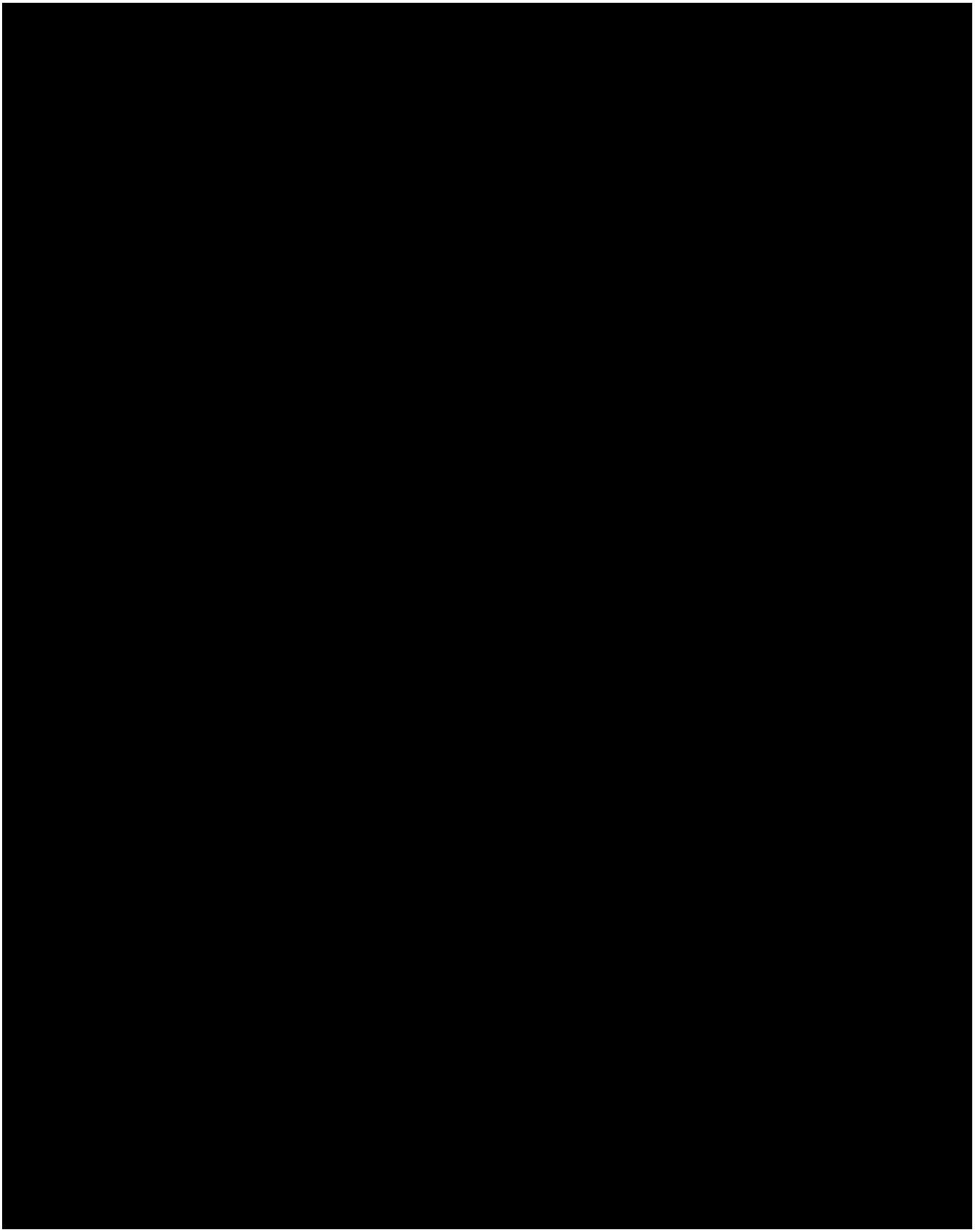
In addition, we use our electronic compliance education series "Did You Know" to maintain consistent awareness and provide information to all Healthy Blue employees. Sent several times each quarter, discussion topics often include FWA prevention, ethics and compliance, protecting member privacy, or a new bulletin issued by LDH.

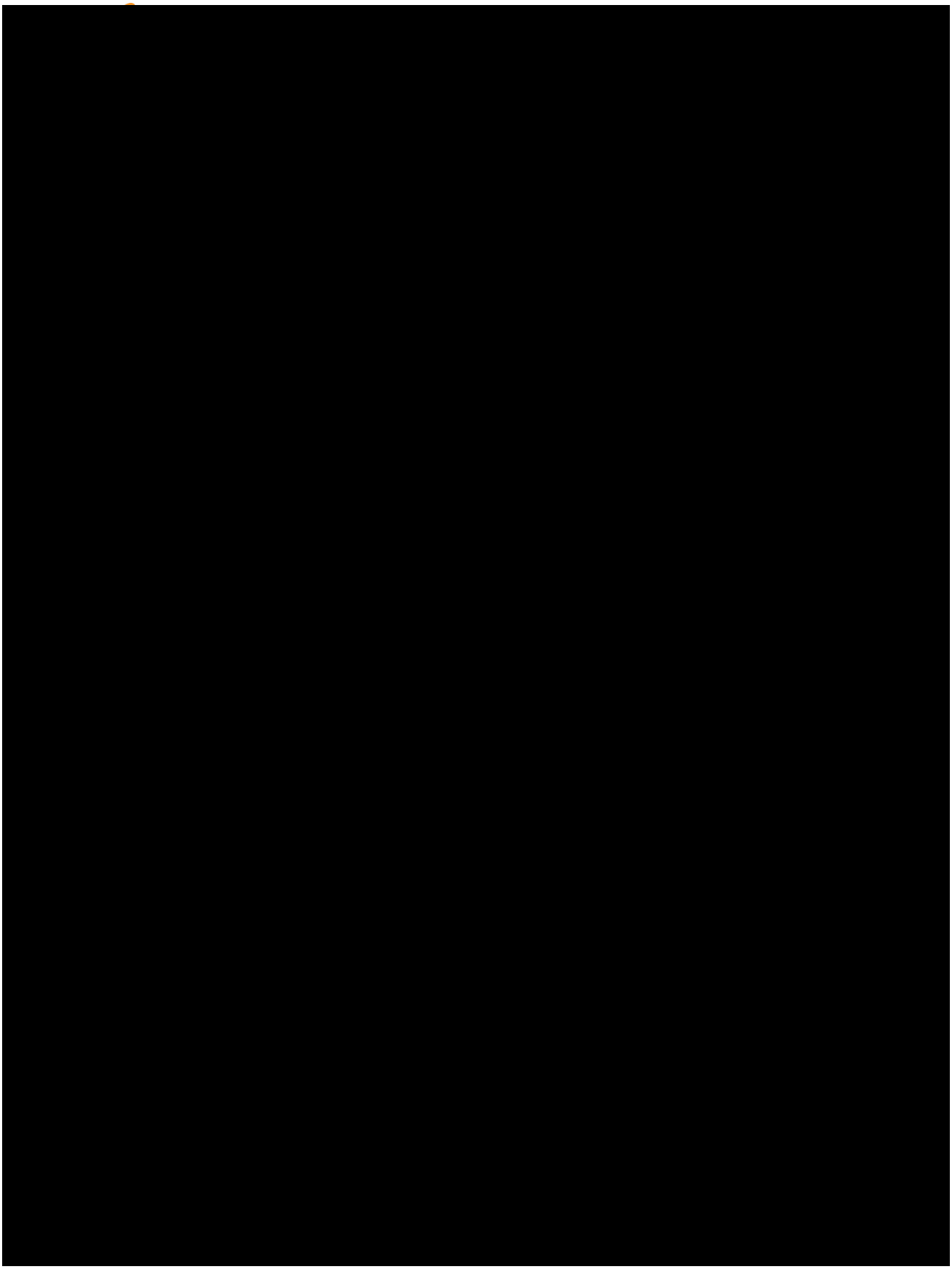
SIU Continuing Education. We understand the importance of adapting our program to evolving risks and monitoring new fraud schemes identified by various organizations. Our SIU staff regularly participate in CMS-











- **Adjust Claims.** If payment is received, we adjust original claim(s). If no payment is received, we adjust the system to recover from new claims payments.
- **System Recovery.** If recovery remains outstanding, the claims payment system will attempt to recover through new claims payments for 60 days.
- **Escalated Recovery.** We intensify internal efforts to resolve the balance through additional calls and letters, transferring the debt to a positive cash flow account under the same TIN, and direct outreach.
- **Third Party Collections.** After 150 days, we assign overpayment recovery efforts to third party collections.

If the provider submits a written response to the recovery notification letter, the sending team carefully reviews the statement and additional information submitted and, within 30 days, determines whether the facts justify recoupment. We mail a written notice of determination to the provider that includes the rationale for the determination. If overturned, recovery efforts cease and any money recovered is reimbursed. If upheld, the provider has the option to file a second appeal and recovery efforts continue.

If recovery collection efforts are unsuccessful in recovering any funds or a negative balance remains after third party collection efforts, we make a decision to close the case or continue recovery.

Regular reports and a monthly meeting help us monitor the status of provider recovery collection efforts, including prior month and year-to-date dollars recovered, as well as pipeline information on cases at each phase of the recovery life cycle. We review providers and associated claims identified for recovery before provider notification. This review step confirms the accuracy of the overpayment and keeps leadership and Provider Relations informed.

2.10.14.2 Capability to Produce Fraud, Waste, and Abuse Reports

As a current MCO, Healthy Blue already has operational processes to meet LDH reporting requirements as listed in the Model Contract, Section 2.20.5, and we will continue to devote the necessary attention and resources to maintain continued compliance. We have an excellent track record of meeting LDH requirements for report timeliness and quality, and will continue to deliver compliant, accurate, and timely reports under the new Contract. Healthy Blue knows that reports provide a critical vehicle for LDH to view the status of program operations and make important decisions. We also know that meeting LDH reporting requirements — for FWA and other operational and program areas — and delivering meaningful information to support LDH review and analysis requires the right combination of capabilities, including access to data and tools, knowledgeable resources, and quality controls.

Healthy Blue's Reporting Capability

We understand LDH reporting requirements and the operational commitment they require. Strong capabilities are critical for maximizing reporting and data analytics and ensuring consistency and accuracy. To that end, Healthy Blue will continue to:

- Promote reporting accuracy by applying consistent edits to incoming data and carefully monitor processing
- Use organized and structured databases and data warehouses to support reporting and analysis
- Provide data analytic tools companywide to help format, aggregate, and report data consistently and accurately
- Leverage the reporting and data analysis experience and resources of national support services and our affiliates to help expedite report deployment and create more meaningful reports

Meeting Reporting Requirements Requires People, Tools, and Data

Program Integrity maintains Business Analysts and technical staff to support our ability to generate FWA reports. Resources understand the data, data warehouses and tracking databases, and available tools, allowing them to meet current requirements and make any changes required under the new Contract. Direct access to resources helps Healthy Blue respond quickly and efficiently to reporting needs and adapt to future changes.

Employees have at their disposal industry-leading software and tools for data access and report development. We believe employees need "the right tool for the right job" and a variety of tools are available to accommodate and support a wide range of skills. Some tools support end-user query and data manipulation and analysis, while others require more advanced skill levels. These tools — combined with access to databases that contain a significant amount of demographic, service, utilization, and quality data — provide powerful reporting and analytic capabilities.

Just as there are multiple tools to support report development, more than one database supports operational and ad hoc reporting. A key resource is the Operational Data Warehouse (ODW). The ODW is a copy of transactional data specifically configured to support complex analytical and ad hoc queries using business intelligence tools. The ODW is an integrated repository fed directly from our Core Service System to deliver data quality, control, and consistency. The data warehouse also houses data from external sources, including encounter data from our pharmacy, transportation, vision, and dental subcontractors. Complementing the ODW, Program Integrity maintains additional systems to track specific activities, including tips, SIU investigations and pre-payment review, provider overpayment recovery collections, and audits.

Documented Processes for Meeting LDH Reporting Requirements

The Model Contract identifies two main types of FWA reporting: notifications to LDH for specific events and submission of regulatory data (including the quarterly program integrity (PI) 145 Fraud, Waste, and Abuse Activity Report). Additionally, Healthy Blue knows that LDH often requests ad hoc reports or data.

Whenever possible, reports are system-generated. System-generated reports or data extracts increase consistency and accuracy. The PI 145 report, for example, is completed with a combination of system-generated data extracts and reports to populate the detailed data tabs and manual analysis and review to complete the summary tab.

Healthy Blue maintains resources to create, maintain, and modify reports to support operational needs (including the analytic algorithms discussed earlier), as well as ad hoc and regulatory reporting. Documented processes and quality control checks help us to deliver consistent, accurate, and compliant reports.

Notifications to LDH. Healthy Blue maintains documented processes to make sure we comply fully with requirements to notify LDH within three business days of discovering suspected FWA or receiving notice of, or notice of actions that could result in exclusion, debarment, or suspension of an employee, network provider, subcontractor, or subcontractor's employee. Processes include accountable employees and departments, sources of notification, specific procedures by department, and tracking methods for LDH notification.

FWA Activity Report. Healthy Blue maintains detailed instructions for FWA Activity Report completion and will update them as necessary under the new Contract to make sure we continue to submit complete and accurate information. This report currently combines detailed information on tips, audits, prepayment review, and terminations with a set of summary totals for detection, recovery, and prevention. Our instructions break down each segment of the report and identify the specific data source, business owner, and specific process for completion. Business owners supply information from their area. For example, the Credentialing team provides the number of positive matches against the List of Excluded Individuals/Entities for the Summary tab, and regulatory compliance assembles the report.

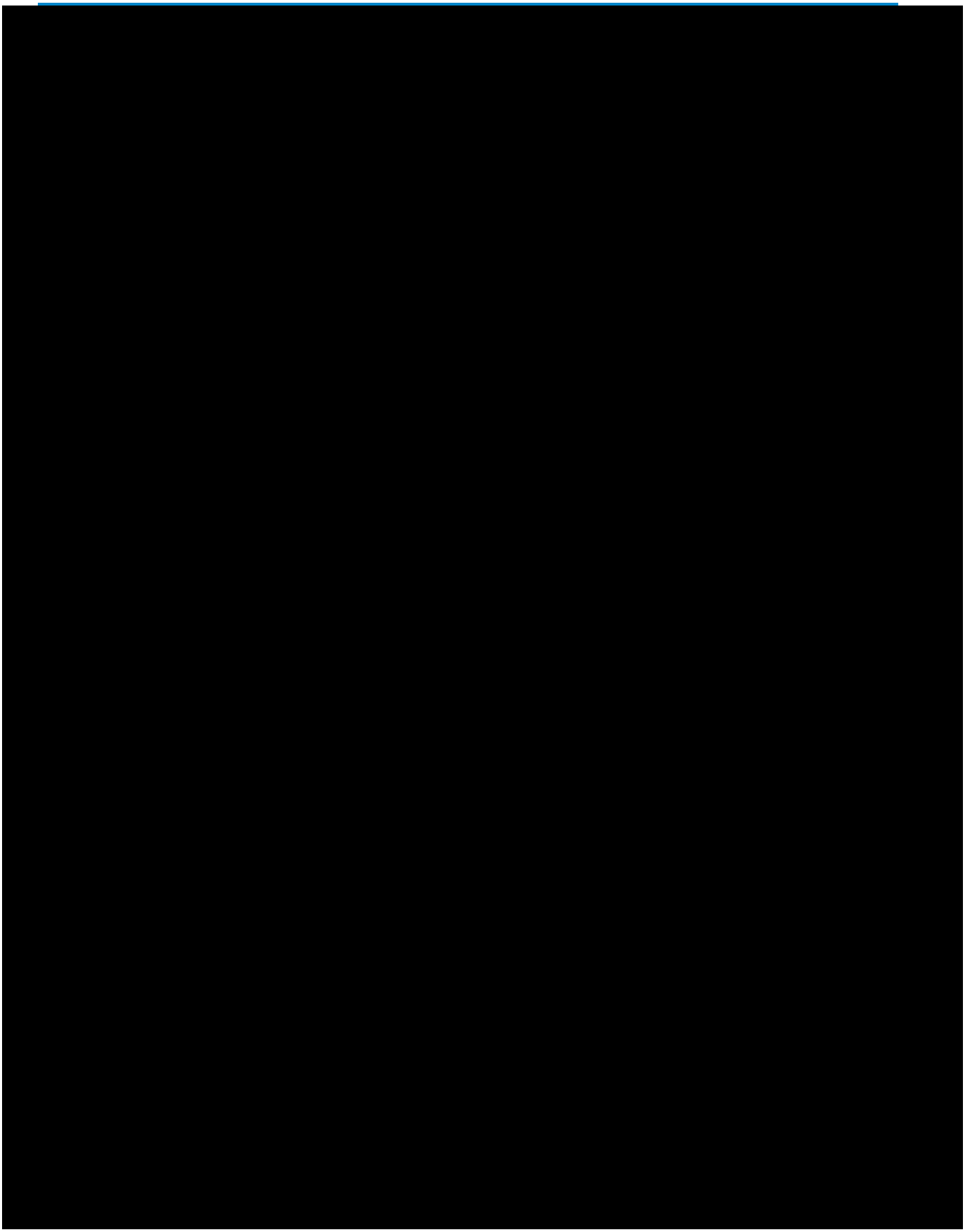
Ad Hoc Requests for Information. Healthy Blue receives ad hoc requests for information from multiple entities, including LDH, MFCU, and the Surveillance Utilization Review System (SURS). We log requests into a tracking system, including the responsible business owner, nature of the request, the due date, and the date of response submission. This centralized approach to deliverable tracking not only drives timely and complete responses, but also streamlines and simplifies communications with LDH and others by creating a "one-stop shop" for any requests. Our Compliance Officer receives a weekly report that identifies requests nearing the due date and conducts outreach, as necessary.

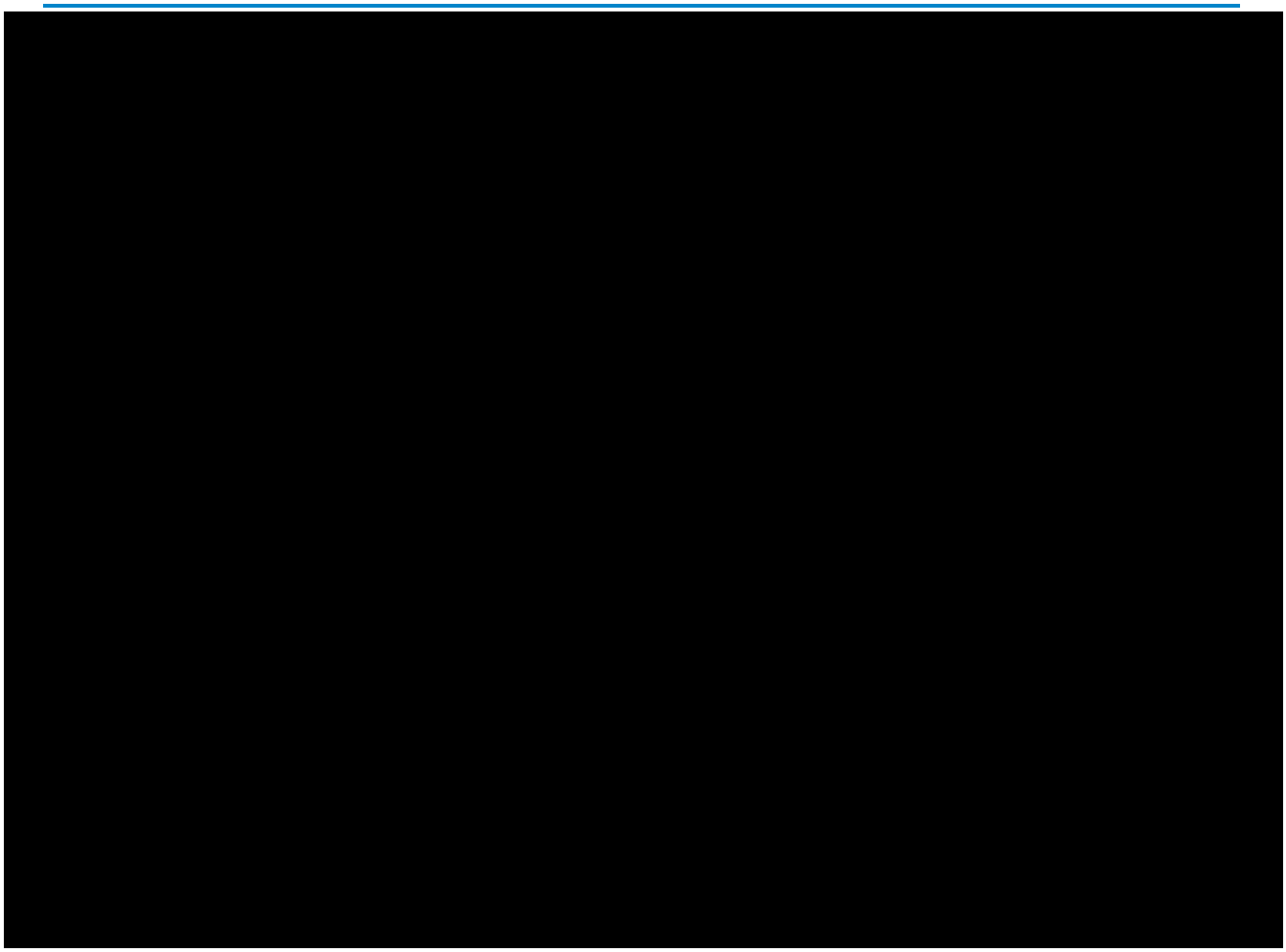
Quality Controls Confirm Compliance and Accuracy

Healthy Blue maintains a defined process and method of quality control to drive reporting accuracy and timeliness. We execute quality reviews on all reports before submission, generating reports in advance of the LDH submission deadline to allow adequate time for a thorough review. Business owners and leadership review reports for completeness and accuracy prior to submitting to the Regulatory team and subsequently, LDH. Our report tracking system generates email alerts to business owners with reminders about upcoming report due dates and notification that a report is ready for review.

Proposed Innovations for Program Integrity Reporting Data

Healthy Blue welcomes the opportunity to collaborate with LDH on PI reporting and to discuss improvements that can further support the State's goal to minimize wasteful spending, abuse, and fraud. During the LDH onsite visit to Baton Rouge in September 2018, we discussed the PI 145 report with LDH, specifically focusing on ideas for improvement. At that time, we recommended the addition of several data fields, including adding a date overpayment identified field that would make it easier to tie the Audits tab back to the Summary tab and a similar field for the Referrals tab. Healthy Blue recommends that LDH move delivery of the PI 145 from quarterly to monthly. In addition, we recommend that the report be modified to increase the sharing of information related to FWA not specific to the Louisiana Medicaid environment. LDH has created an excellent set of FWA reporting requirements and standards for Healthy Louisiana MCOs. At this time, our 21 affiliates submit PI reports to their government partners that are similar to current LDH reports. If we see new reporting in our affiliates that can add value to Louisiana's FWA efforts, we will share it with LDH. With affiliate health plans across the country, Healthy Blue has access to an incredible amount of information on Program Integrity best practices and trends currently being experienced elsewhere. Sharing this information more broadly could help the State more proactively defend against FWA. In addition, our relationship with BCBSLA provides access to similar information related to non-Medicaid FWA occurring within Louisiana.





NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Community Care Health Plan of Louisiana, Inc. d/b/a Healthy Blue

Medicaid HMO

an accreditation status of

Commendable

for service and clinical quality that meet or exceed NCQA's rigorous

requirements for consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS	PRESIDENT	CHAIR, REVIEW OVERSIGHT COMMITTEE

09/19/2016	09/19/2019
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Community Care Health Plan of Louisiana, Inc. d/b/a Healthy Blue

DISTINCTION NCQA MULTICULTURAL HEALTH CARE

the status of

Distinction in Multicultural Health Care

for the delivery of culturally appropriate and quality improvement

interventions serving diverse populations

David Chin, MD
CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

03/18/2019	03/18/2021
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

State Sponsored DM Services, Inc. dba Amerigroup GBD Disease Management and dba Anthem GBD Disease Management Program

ACCREDITED NCQA DISEASE MANAGEMENT

the status of

Patient and Practitioner Oriented Disease Management Accreditation

for the following Disease Management Programs:Asthma, CAD, CHF, COPD, Depression, Diabetes, HIV/AIDS, Schizophrenia, Child/Adolescent Depression

David Chin, MD
CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

09/05/2018	09/05/2021
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality.
Improving health care.

National Committee for Quality Assurance

has awarded

Anthem, Inc. dba Anthem Medicaid Behavioral Health

Medicaid MBHO

the status of

ACCREDITED
NCQA
MANAGED BEHAVIORAL HEALTHCARE ORGANIZATION
FULL

Full Accreditation

for the development and maintenance of a clinically effective
managed behavioral healthcare delivery system
which maintains as its primary objective the delivery of
high quality member care and service.

David Chin, MD
CHAIR, BOARD OF DIRECTORS

Margaret E. O'K
PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

June 5, 2017
DATE GRANTED

June 5, 2020
EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Blue Cross of California Partnership Plan

Medicaid HMO

an accreditation status of

Accredited

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS	PRESIDENT	CHAIR, REVIEW OVERSIGHT COMMITTEE

03/19/2019	03/19/2022
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

AMERIGROUP District of Columbia

Medicaid HMO

ACCREDITED NCQA HEALTH PLAN INTERIM

Interim

for basic structure and processes in place to meet expectations for

consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS	PRESIDENT	CHAIR, REVIEW OVERSIGHT COMMITTEE

07/19/2018	01/19/2020
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Simply Healthcare Plans, Inc.

Medicaid HMO

an accreditation status of

Commendable

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

08/31/2016	07/29/2019
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

AMGP Georgia Managed Care Company, Inc. d/b/a Amerigroup Community Care

ACCREDITED NCQA HEALTH PLAN COMMENDABLE

Medicaid HMO

an accreditation status of

Commendable

for service and clinical quality that meet or exceed NCQA's rigorous

requirements for consumer protection and quality improvement.

David Chin, MD
CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

11/14/2016	11/14/2019
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Amerigroup Iowa Inc.

Medicaid HMO

an accreditation status of

Accredited

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS	PRESIDENT	CHAIR, REVIEW OVERSIGHT COMMITTEE

09/18/2018	09/18/2021
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Anthem Insurance Companies, Inc. dba Anthem Blue Cross and Blue Shield in Indiana

ACCREDITED NCQA HEALTH PLAN COMMENDABLE

Medicaid HMO

an accreditation status of

Commendable

for service and clinical quality that meet or exceed NCQA's rigorous

requirements for consumer protection and quality improvement.

David Chrisman MD
CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

11/06/2018	11/06/2021
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Anthem Kentucky Managed Care Plan, Inc.

Medicaid HMO

an accreditation status of

Accredited

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

04/11/2017	04/11/2020
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

AMERIGROUP Maryland, Inc.

Medicaid HMO

an accreditation status of

Commendable

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS	PRESIDENT	CHAIR, REVIEW OVERSIGHT COMMITTEE

05/13/2016	05/13/2019
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Blue Plus (HMO Minnesota dba Blue Plus)

Medicaid HMO

an accreditation status of

Commendable

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

11/13/2017	11/13/2020
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Amerigroup New Jersey, Inc.

DISTINCTION NCQA LONG-TERM SERVICES & SUPPORTS

Long Term Services and Supports Distinction

for coordinating long-term services and supports that deliver efficient, effective person-centered care.

David Chrisman MD
CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

06/28/2018	06/28/2021
DATE GRANTED	EXPIRATION DATE

NCQA

Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Amerigroup New Jersey, Inc.

Medicaid HMO

an accreditation status of

Commendable

for service and clinical quality that meet or exceed NCQA's rigorous

requirements for consumer protection and quality improvement.

ACCREDITED NCQA HEALTH PLAN COMMENDABLE

CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

06/28/2018

DATE GRANTED

06/28/2021

EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Community Care Health Plan of Nevada, Inc. dba Anthem Blue Cross and Blue Shield Healthcare Solutions

ACCREDITED NCQA HEALTH PLAN ACCREDITED

Medicaid HMO

an accreditation status of

Accredited

for service and clinical quality that meet or exceed NCQA's rigorous

requirements for consumer protection and quality improvement.

David Chin, MD
CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

11/13/2017	11/13/2020
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

HealthPlus HP, LLC

Medicaid HMO

an accreditation status of

Commendable

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

ACCREDITED NCQA HEALTH PLAN COMMENDABLE

David Chin, MD
CHAIR, BOARD OF DIRECTORS

Margaret E. Oj
PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

12/12/2016	12/12/2019
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

BlueChoice HealthPlan of South Carolina

Medicaid HMO

an accreditation status of

Accredited

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS	PRESIDENT	CHAIR, REVIEW OVERSIGHT COMMITTEE

08/22/2017	08/22/2020
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

AMERIGROUP Tennessee, Inc

DISTINCTION NCQA LONG-TERM SERVICES & SUPPORTS

Long Term Services and Supports Distinction

for coordinating long-term services and supports that deliver

efficient, effective person-centered care.

David Chin, MD
CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

09/18/2018	09/18/2021
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

AMERIGROUP Tennessee, Inc

Medicaid HMO

an accreditation status of

Commendable

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS	PRESIDENT	CHAIR, REVIEW OVERSIGHT COMMITTEE

09/18/2018	09/18/2021
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

AMERIGROUP Texas, Inc.

Medicaid HMO

ACCREDITED NCQA HEALTH PLAN COMMENDABLE

an accreditation status of

Commendable

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

David Chin, MD
CHAIR, BOARD OF DIRECTORS

Margaret E. Oj
PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

08/22/2016	08/22/2019
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Amerigroup Insurance Company

Medicaid HMO

an accreditation status of

Commendable

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

ACCREDITED NCQA HEALTH PLAN COMMENDABLE

David Chrisman MD
CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

08/31/2017	08/22/2019
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

HealthKeepers, Inc. (Medicaid)

Medicaid HMO

an accreditation status of

Accredited

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS	PRESIDENT	CHAIR, REVIEW OVERSIGHT COMMITTEE

08/31/2018	03/05/2021
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

AMERIGROUP Washington, Inc.

Medicaid HMO

an accreditation status of

Accredited

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS	PRESIDENT	CHAIR, REVIEW OVERSIGHT COMMITTEE

08/07/2018	08/07/2021
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

Compcare Health Services Insurance Corporation dba Anthem Blue Cross and Blue Shield in Wisconsin

Medicaid HMO

an accreditation status of

Commendable

for service and clinical quality that meet or exceed NCQA's rigorous

requirements for consumer protection and quality improvement.

David Chin, MD
CHAIR, BOARD OF DIRECTORS

PRESIDENT

CHAIR, REVIEW OVERSIGHT COMMITTEE

02/20/2019	02/20/2022
DATE GRANTED	EXPIRATION DATE

NCQA
Measuring quality. Improving health care.

National Committee for Quality Assurance

has awarded

UNICARE Health Plan of West Virginia

Medicaid HMO

an accreditation status of

Accredited

for service and clinical quality that meet or exceed NCQA's rigorous requirements for consumer protection and quality improvement.

CHAIR, BOARD OF DIRECTORS	PRESIDENT	CHAIR, REVIEW OVERSIGHT COMMITTEE

09/05/2018	09/05/2021
DATE GRANTED	EXPIRATION DATE

Attachment 2.10.7.1-1: Provider Network Listing Response

Attachment 2.10.7.1-1 is in excess of 10 pages; therefore, we have included it in our flash drive for electronic submission only per ***Addendum #2, Question 8.***

This page is intentionally left blank

Attachment 2.10.7.2-1: Provider Network Capacity Response

Attachment 2.10.7.2-1 is in excess of 10 pages; therefore, we have included it in our flash drive for electronic submission only per ***Addendum #2, Question 8.***

This page is intentionally left blank

Healthy Blue

Healthy Blue
Medicaid Managed Care

Clinical Practice Guidelines

Condition/disease	Guideline title	Recognized source(s)	URL
Adult behavioral health (child and adolescent behavioral health, with exception of bipolar disorder, located under pediatric and adolescent health)			
Anxiety	*Treatment of Anxiety Disorders*	National Institute of Mental Health	**http://www.nimh.nih.gov/health/publications/anxiety-disorders/treatment-of-anxiety-disorders.shtml**
Alzheimer's/ dementia	*Guideline Watch (October 2014): Practice Guideline for the Treatment of Patients with Alzheimer's Disease and Other Dementias*	American Psychiatric Association (APA)	**http://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/alzheimerwatch.pdf**
	Current Diagnostic Criteria and Guidelines for Alzheimer's Disease	Alzheimer's Association	**https://www.alz.org/research/diagnostic_criteria/overview.asp**
Bipolar disorder* *Addresses diagnosis and treatment of bipolar disorder in special populations such as children and adolescents	*Bipolar Disorder: Assessment and Management (update 2017)*	National Institute for Health and Care Excellence (NICE)	**https://www.nice.org.uk/guidance/cg185/resources/bipolar-disorder-assessment-and-management-pdf-35109814379461**
	Evidence-Based Guidelines for Treating Bipolar Disorder: Revised Third Edition Recommendations from the British Association for Psychopharmacology (2016)	British Association for Psychopharmacology	**https://www.bap.org.uk/pdfs/BAP_Guidelines-Bipolar.pdf**
Behavioral health screening, assessment and treatment	*Practice Guidelines for the Psychiatric Evaluation of Adults, Third Edition (2015)*	Agency for Healthcare Research and Quality	**http://www.guideline.gov/content.aspx?id=49527**

Condition/disease	Guideline title	Recognized source(s)	URL
Behavioral health screening, assessment and treatment	*The American Psychiatric Association Practice Guidelines for the Psychiatric Evaluation of Adults, Third Edition (2015)*	APA	**https://psychiatryonline.org/doi/full/10.1176/appi.books.9780890426760.pe02**
Depression	*Depression in Adults: Screening (2016)*	U.S. Preventive Services Task Force (USPSTF)	**https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/depression-in-adults-screening1**
	Practice Guideline for the Treatment of Patients with Major Depressive Disorder, Third Edition (2010)	APA	**http://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/mdd.pdf**
	Depression: The Treatment and Management of Depression in Adults (Updated Edition) Clinical Practice Guideline 90 (2016)	National Collaborating Centre for Mental Health commissioned by NICE	**https://www.nice.org.uk/guidance/cg90/resources/depression-in-adults-recognition-and-management-pdf-975742636741**
Schizophrenia	*Treatment of Patients with Schizophrenia, Second Edition (2010)*	APA	**http://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/schizophrenia.pdf**
Trauma care	*A Treatment Improvement Protocol: Trauma-Informed Care in Behavioral Health Services (2014)* *Trauma-Informed Care in Behavioral Health Services: Treatment Improvement Protocol (TIP) Series*	Substance Abuse and Mental Health Services Administration (SAMHSA)	**http://store.samhsa.gov/shin/content//SMA14-4816/SMA14-4816.pdf**

Updated:
Commercial/Exchange Quality Improvement Committee
Quality Improvement Committee (GBD)
Behavioral Health National Clinical Advisory Committee
CPGs are applicable to all LOBs

Condition/disease	Guideline title	Recognized source(s)	URL
Substance use			
Substance use	*Screening and Behavioral Counseling Interventions in Primary Care to Reduce Alcohol Misuse (2013)*	USPSTF	**http://www.uspreventiveservicestaskforce.org/uspstf/uspsdrin.htm**
	CDC Guideline for Prescribing Opioids for Chronic Pain — United States (2016)	Centers for Disease Control and Prevention (CDC)	**http://www.cdc.gov/mmwr/volumes/65/rr/rr6501e1.htm**
	Medication-Assisted Treatment (MAT)	SAMHSA	**http://dpt.samhsa.gov**
	Relearn Life without Cigarettes	National Alliance for Tobacco Cessation	**https://www.becomeanex.org/docs/fotonovela_english.pdf**
	Treating Tobacco Use and Dependence (2008 Update)	U.S. Department of Health and Human Services, Public Health Service	**http://www.ncbi.nlm.nih.gov/books/NBK63956/**
	All states offer free smoking cessation. Telephone quit line services dialing 1-800-QUIT-NOW will connect the caller to their state quit line.		
Adult general medicine (child and adolescent health located under pediatric and adolescent health)			
Asthma	*EP Report 3: Guidelines for the Diagnosis and Management of Asthma (2007)*	National Heart, Lung and Blood Institute (NHLBI)	**http://www.nhlbi.nih.gov/health-pro/guidelines/current/asthma-guidelines/full-report.htm**
Coronary artery disease* *An update of the *Treatment of Hypertension in the Prevention and Management of Ischemic Heart Disease*	*AHA/ACCF Secondary Prevention and Risk Reduction Therapy for Patients with Coronary and Other Atherosclerotic Vascular Disease (2011)*	American Heart Association (AHA) and American College of Cardiology Foundation (ACCF)	**http://circ.ahajournals.org/content/124/22/2458**

Updated:
Commercial/Exchange Quality Improvement Committee
Quality Improvement Committee (GBD)
Behavioral Health National Clinical Advisory Committee
CPGs are applicable to all LOBs

Condition/disease	Guideline title	Recognized source(s)	URL
Coronary artery disease	*Treatment of Hypertension in Patients With Coronary Artery Disease (2015)*	AHA, ACCF and American Society of Hypertension (ASH)	**http://hyper.ahajournals.org/content/hypertensionaha/early/2015/03/30/HYP.0000000000000018.full.pdf**
	AHA/ACCF Secondary Prevention and Risk Reduction Therapy for Patients with Coronary and Other Atherosclerotic Vascular Disease (2011)	AHA and ACCF	**http://circ.ahajournals.org/content/124/22/2458**
	Effectiveness-Based Guidelines for the Prevention of Cardiovascular Disease in Women (2011 Update)	AHA	**http://circ.ahajournals.org/content/123/11/1243.full**
Celiac disease	*ACG Clinical Guidelines: Diagnosis and Management of Celiac Disease (2013)*	American College of Gastroenterology	**http://gi.org/wp-content/uploads/2013/05/ACG_Guideline_CeliacDisease_May_2013.pdf**
Chronic kidney disease	*The National Kidney Foundation Kidney Disease Outcomes Quality Initiative (NKF KDOQI)™ Evidence-Based Clinical Practice Guidelines for All Stages of Chronic Kidney Disease (CKD) and Related Complications*	National Kidney Foundation	**https://www.kidney.org/professionals/guidelines/guidelines_commentaries**
	National Chronic Kidney Disease Fact Sheet (2017)	CDC	**https://www.cdc.gov/diabetes/pubs/pdf/kidney_factsheet.pdf**
	KDIGO 2012 Clinical Practice Guideline for The Evaluation and Management of Chronic Kidney Disease (2013)	International Society of Nephrology	**http://www.kdigo.org/clinical_practice_guidelines/pdf/CKD/KDIGO_2012_CKD_GL.pdf**

Updated:
Commercial/Exchange Quality Improvement Committee
Quality Improvement Committee (GBD)
Behavioral Health National Clinical Advisory Committee
CPGs are applicable to all LOBs

Condition/disease	Guideline title	Recognized source(s)	URL
Chronic obstructive pulmonary disease	*Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease (2018)*	Global Initiative for Chronic Obstructive Lung Disease	**http://goldcopd.org/gold-reports**
Diabetes	*Standards of Medical Care in Diabetes (2018)*	American Diabetes Association (ADA)	**http://care.diabetesjournals.org/content/41/Supplement_1**
	Diabetes Care (January 2011; 34 S15, Supplement 1)	ADA	**http://care.diabetesjournals.org/content/34/Supplement_1**
Gender dysphoria/ incongruence	*Endocrine Treatment of Gender Dysphoric/ Gender-Incongruent Persons: An Endocrine Society Clinical Practice Guideline (2017)*	The Endocrine Society	**https://academic.oup.com/jcem/article-lookup/doi/10.1210/jc.2017-01658**
Heart failure	*ACCF/AHA/HFSA Guideline for the Management of Heart Failure (Focused Update 2017)*	ACCF;AHA Task Force on Practice Guidelines;Heart Failure Society of America	**http://www.onlinejacc.org/content/70/6/776?_ga=2.23313085.667318568.1514996759-679389624.1511900706**
Hyperlipidemia	*ACC/AHA Guideline on the Treatment of Blood Cholesterol to Reduce Atherosclerotic Cardiovascular Risk in Adults (2013)*	ACCF/AHA	**http://circ.ahajournals.org/content/129/25_suppl_2/S1**
Hypertension	*2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for The Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults*	ACCF; AHA; American Academy of Physician Assistants; Association of Black Cardiologists; American College of Preventive Medicine; American Geriatrics Society; American Pharmacists Association; ASH; American Society for Preventive Cardiology; National Medical Association; Preventive Cardiovascular Nurses Association	**http://www.onlinejacc.org/content/early/2017/11/04/j.jacc.2017.11.006?sso=1&sso_redirect_count=1&access_token**

Updated:
Commercial/Exchange Quality Improvement Committee
Quality Improvement Committee (GBD)
Behavioral Health National Clinical Advisory Committee
CPGs are applicable to all LOBs

Condition/disease	Guideline title	Recognized source(s)	URL
Obesity	*Obesity in Adults: Screening and Management (2012)*	USPSTF Recommendation Statement	**http://www.uspreventiveservicestaskforce.org/uspstf11/obeseadult/obesers.htm**
Obesity	*AHA; ACC; TOS Guideline for the Management of Overweight and Obesity in Adults (2013)*	ACC; AHA Task Force on Practice Guidelines and The Obesity Society	**http://circ.ahajournals.org/content/early/2013/11/11/01.cir.0000437739.71477.ee**
Sickle cell anemia	*Evidence-Based Management of Sickle Cell Disease: Expert Panel Report (2014)*	NHLBI	**http://www.nhlbi.nih.gov/health-pro/guidelines/sickle-cell-disease-guidelines**
Infectious disease			
Chlamydia/ Human papillomavirus	*2015 Sexually Transmitted Diseases Treatment Guidelines*	CDC	**https://www.cdc.gov/std/tg2015/tg-2015-print.pdf**
Hepatitis B	*AASLD Guidelines for Treatment of Chronic Hepatitis B (2015)*	American Association for the Study of Liver Diseases (AASLD)	**http://www.aasld.org/sites/default/files/guideline_documents/hep28156.pdf**
Hepatitis C	*HCV Guidance: Recommendations for Testing, Managing and Treating Hepatitis C*	Infectious Diseases Society of America (IDSA)/AASLD	**http://www.hcvguidelines.org**
	Guidelines for the Screening, Care and Treatment of Persons with Hepatitis C Infection (2016)	World Health Organization (WHO)	**http://apps.who.int/iris/bitstream/10665/205035/1/9789241549615_eng.pdf?ua=1**
HIV/AIDS	*Primary Care Guidelines for the Management of Persons Infected with HIV: 2013 Update by the HIV Medicine Association of the IDSA (2013)*	HIV Medicine Association of the IDSA	**http://cid.oxfordjournals.org/content/58/1/e1**

Updated:
Commercial/Exchange Quality Improvement Committee
Quality Improvement Committee (GBD)
Behavioral Health National Clinical Advisory Committee
CPGs are applicable to all LOBs

Condition/disease	Guideline title	Recognized source(s)	URL
HIV/AIDS	*Recommendations for HIV Prevention with Adults and Adolescents with HIV in the United States (2014)*	CDC	**http://www.cdc.gov/hiv/guidelines/index.html**
	2017 HIVMA of IDSA Clinical Practice Guideline for the Management of Chronic Pain in Patients Living with HIV	IDSA	**https://academic.oup.com/cid/article/65/10/e1/4157299**
	HIV and Adolescents: Guidance for HIV Testing and Counselling and Care for Adolescents Living with HIV Guidance Document (2013)	WHO	**http://apps.who.int/iris/bitstream/10665/94334/1/9789241506168_eng.pdf?ua=1**
Pediatric/adolescent health (See adult behavioral health for resources for bipolar disorder in the pediatric and adolescent population.)			
ADHD	*Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents (2011)*	American Academy of Pediatrics (AAP)	**http://pediatrics.aappublications.org/content/128/5/1007.full.pdf**
Autism	*Practice Parameter for the Assessment and Treatment of Children and Adolescents With Autism Spectrum Disorder (2014)*	American Academy of Child and Adolescent Psychiatry (AACAP)	**http://www.jaacap.com/article/S0890-8567(13)00819-8/abstract** **http://www.jaacap.com/article/S0890-8567(13)00819-8/pdf**
Celiac disease	*Guideline for the Diagnosis and Treatment of Celiac Disease in Children: Recommendations of the North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (2005)*	North American Society for Pediatric Gastroenterology, Hepatology and Nutrition	**http://www.naspghan.org/files/documents/pdfs/position-papers/celiac_guideline_2004_jpgn.pdf**

Updated:
Commercial/Exchange Quality Improvement Committee
Quality Improvement Committee (GBD)
Behavioral Health National Clinical Advisory Committee
CPGs are applicable to all LOBs

Condition/disease	Guideline title	Recognized source(s)	URL
Depression	*Depression in Children and Adolescents: Screening (2016)*	USPSTF	**https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/depression-in-children-and-adolescents-screening1**
	Depression in Children and Young People: Identification and Management (Updated 2017)	NICE	**https://www.nice.org.uk/guidance/cg28/resources/depression-in-children-and-young-people-identification-and-management-pdf-975332810437**
Hypertension in children and adolescents	*Clinical Practice Guideline for Screening and Management of High Blood Pressure in Children and Adolescents*	AAP	**http://pediatrics.aappublications.org/content/140/3/e20171904**
Obesity	*Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity: Summary Report (2007)*	AAP	**http://pediatrics.aappublications.org/content/120/Supplement_4/S164.full.pdf**
	Clinical Report: The Role of the Pediatrician in Primary Prevention of Obesity (2015)	AAP	**http://pediatrics.aappublications.org/content/early/2015/06/23/peds.2015-1558**
Substance use	*Medication-Assisted Treatment of Adolescents with Opioid Use Disorders (2016)*	AAP	**http://pediatrics.aappublications.org/content/early/2016/08/18/peds.2016-1893**

Updated:
Commercial/Exchange Quality Improvement Committee
Quality Improvement Committee (GBD)
Behavioral Health National Clinical Advisory Committee
CPGs are applicable to all LOBs

Condition/disease	Guideline title	Recognized source(s)	URL
Women's health			
Routine antepartum care	*American Academy of Pediatrics, Guidelines for Perinatal Care, Eighth Edition (2017)*	AAP; American Congress of Obstetricians and Gynecologists (ACOG)	**https://shop.aap.org/guidelines-for-perinatal-care-8th-edition-ebook** (Members only)
Depression in pregnancy	*Screening for Perinatal Depression ACOG Committee Opinion 630 (2015)*	ACOG	**https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Screening-for-Perinatal-Depression**
Preventive care	*Women's Preventive Services Guidelines (2016)*	Health Resources and Services Administration	**https://www.hrsa.gov/womens-guidelines-2016/index.html**
Cancer screening	*Women's Health Care Physicians: Cervical Cancer FAQs (April 2015)*	ACOG	**https://www.acog.org/Patients/FAQs/Cervical-Cancer**
	Cervical Cancer: Screening (2012)	USPSTF	**http://www.uspreventiveservicestaskforce.org/uspstf/uspscerv.htm**
Diabetes and pregnancy	*Trends in the Prevalence of Preexisting Diabetes and Gestational Diabetes Mellitus Among a Racially/Ethnically Diverse Population of Pregnant Women (1999–2005 Diabetes Care 31:899–904, 2008)*	ADA	**http://care.diabetesjournals.org/content/31/5/899.full.pdf+html?sid=1c109ed8-5a01-4e5c-b623-f21bb241f49f**
	Management of Diabetes in Pregnancy (2017)	ADA	**http://care.diabetesjournals.org/content/40/Supplement_1/S114**
	Gestational Diabetes Mellitus, Screening (2014)	USPSTF	**https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/gestational-diabetes-mellitus-screening?ds=1&s=gestational diabetes**
	Gestational Diabetes	ACOG	**http://www.acog.org/Search?Keyword=gestational+diabetes** (This is not a link to a specific document but to the ACOG documents on gestational diabetes.)

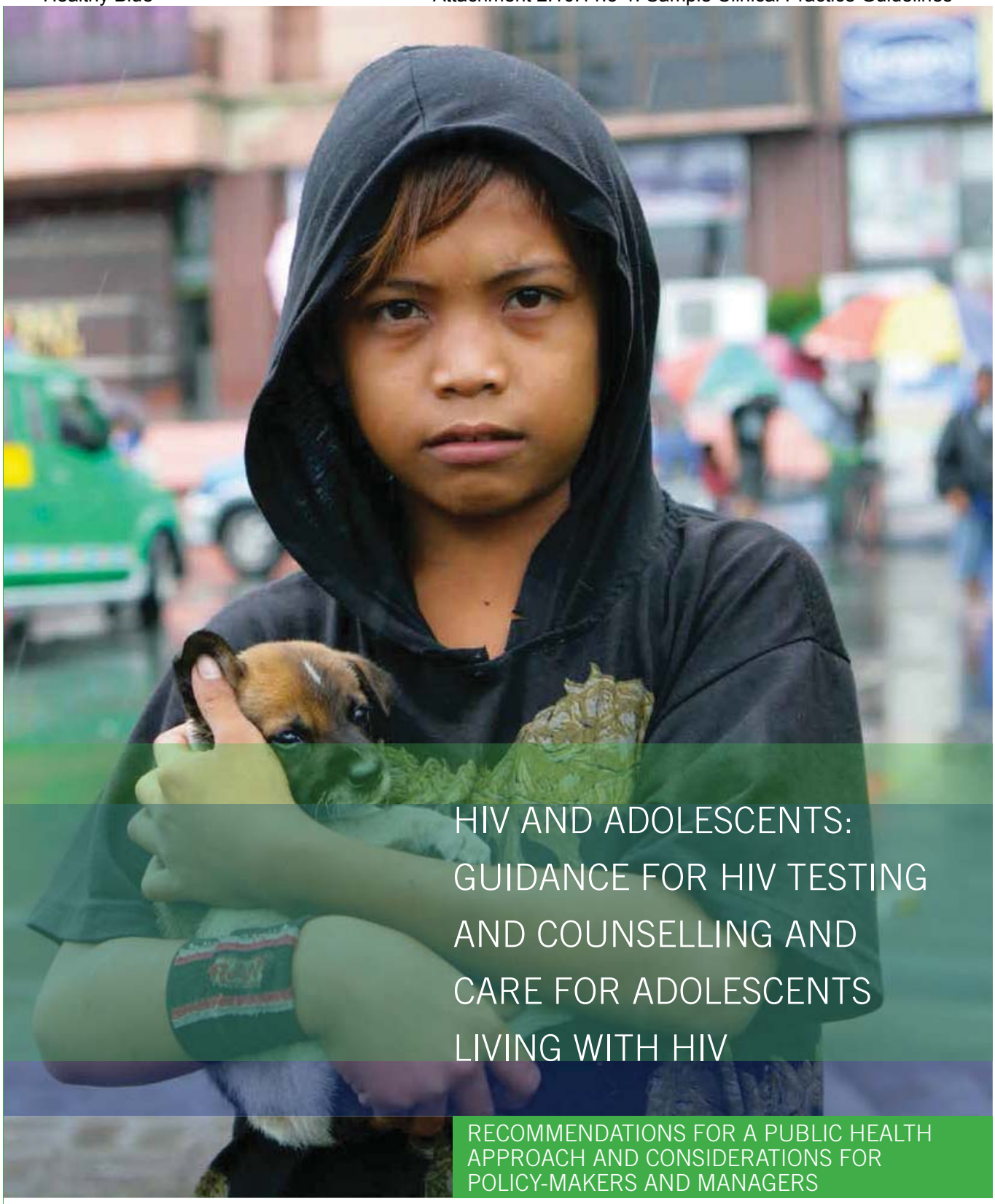
Updated:
Commercial/Exchange Quality Improvement Committee
Quality Improvement Committee (GBD)
Behavioral Health National Clinical Advisory Committee
CPGs are applicable to all LOBs

Condition/disease	Guideline title	Recognized source(s)	URL
Diabetes in pregnancy	*Postpartum Screening for Abnormal Glucose Tolerance in Women Who Had Gestational Diabetes Mellitus*	ACOG	**http://www.acog.org/Search?Keyword=Postpartum+Screening+for+Abnormal+Glucose+Tolerance+in+Women+Who+Had+Gestational+Diabetes+Mellitus&Topics=43d4646b-dc34-4c12-abeb-bb516387312f** (Members only)
Obstetrical care	*Guidelines for Prenatal Care (March 2013)*	ACOG	**http://www.acog.org/Search?Keyword=Antenatal+corticosteroid+therapy+for+fetal+maturation**
	WHO Recommendations for Prevention and Treatment of Pre-Eclampsia and Eclampsia (2011)	WHO	**http://whqlibdoc.who.int/publications/2011/9789241548335_eng.pdf**
	Committee Opinion 455 Magnesium Sulfate before Anticipated Preterm Birth for Neuroprotection (Reaffirmed 2016)	ACOG; Society for Maternal Fetal Health	**https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Magnesium-Sulfate-Before-Anticipated-Preterm-Birth-for-Neuroprotection**
	Clinical Management Guidelines for Obstetrician-Gynecologists Pre-Gestational Diabetes Mellitus Number 60 (Reaffirmed 2016)	ACOG	**https://www.acog.org/Search?Keyword=pregestational+diabetes** (Members only)
	Management of Preterm Labor (Number 174, October 2016)	ACOG	**http://www.acog.org/Search?Keyword=management+of+preterm+labor** (Members only)
	Hypertension in Pregnancy (2013)	ACOG	**http://www.acog.org/Resources-And-Publications/Task-Force-and-Work-Group-Reports/Hypertension-in-Pregnancy**
	Committee Opinion No 633: Alcohol Abuse And Other Substance Use Disorders: Ethical Issues in Obstetric and Gynecologic Practice (2015)	ACOG	**https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Ethics/Alcohol-Abuse-and-Other-Substance-Use-Disorders-Ethical-Issues-in-Obstetric-and-Gynecologic-Practice**

Updated:
Commercial/Exchange Quality Improvement Committee
Quality Improvement Committee (GBD)
Behavioral Health National Clinical Advisory Committee
CPGs are applicable to all LOBs

Condition/disease	Guideline title	Recognized source(s)	URL
Obstetrical care	*Guidelines for the Identification and Management of Substance Use and Substance Use Disorders in Pregnancy (2014)*	WHO	**http://apps.who.int/iris/bitstream/10665/107130/1/9789241548731_eng.pdf?ua=1**
Smoking cessation during pregnancy	*Smoking Cessation during Pregnancy ACOG Committee Opinion 731 (October 2017)*	ACOG	**https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Smoking-Cessation-During-Pregnancy** The guide, pocket reminder card and slide lecture can be ordered by writing to smoking@acog.org.
	Need Help Putting Out That Cigarette?	ACOG	**http://www.tobacco-cessation.org/PDFs/NeedHelpBooklet.pdf**
	Smoking Cessation for Pregnancy and Beyond: Learn Proven Strategies to Help Your Patients Quit	Dartmouth Medical School	**http://www.iml.dartmouth.edu/education/cme/Smoking/Linkpage/index.html**

Updated:
Commercial/Exchange Quality Improvement Committee
Quality Improvement Committee (GBD)
Behavioral Health National Clinical Advisory Committee
CPGs are applicable to all LOBs



HIV AND ADOLESCENTS: GUIDANCE FOR HIV TESTING AND COUNSELLING AND CARE FOR ADOLESCENTS LIVING WITH HIV

RECOMMENDATIONS FOR A PUBLIC HEALTH APPROACH AND CONSIDERATIONS FOR POLICY-MAKERS AND MANAGERS

World Health Organization

HIV AND ADOLESCENTS: GUIDANCE FOR HIV TESTING AND COUNSELLING AND CARE FOR ADOLESCENTS LIVING WITH HIV

RECOMMENDATIONS FOR A PUBLIC HEALTH APPROACH AND CONSIDERATIONS FOR POLICY-MAKERS AND MANAGERS

WHO Library Cataloguing-in-Publication Data

HIV and adolescents: guidance for HIV testing and counselling and care for adolescents living with HIV: recommendations for a public health approach and considerations for policy-makers and managers.

1.HIV infections - diagnosis. 2.HIV infections – prevention and control. 3.Counseling. 4.Adolescent. 5.Adolescent health services. 6.HIV seropositivity – diagnosis. 7.Guideline. I.World Health Organization.

ISBN 978 92 4 150616 8 (NLM classification: WC 503.1)

Layout L'IV Com Sàrl, Villars-sous-Yens, Switzerland.

Printed by the WHO Document Production Services, Geneva, Switzerland.

Content

Annexes available on the WHO web sites:
http://www.who.int/hiv/en
http://www.who.int/maternal_child_adolescent/

Annex 1. Key terms and definitions
Annex 2. PICO questions and references
Annex 3. Systematic review: HTC for adolescents
Annex 4. Systematic review: ALHIV: Disclosure, adherence and retention in care
Annex 5. GRADE notation and language
Annex 6. GRADE evidence profiles
Annex 7. Evidence summaries and findings
Annex 8. Decision-making tables
Annex 9. Search strategies
Annex 10. Values and preferences: HTC
Annex 11. Values and preferences: treatment and care for ALHIV
Annex 12. Literature review: Adolescent HIV testing and counselling
Annex 13. Literature review: Adolescent ARV service delivery
Annex 14. Lessons Learned: Strengthening health services and outcomes for adolescents living with HIV
Annex 15. Adolescent consent to testing: A review of current policies in sub-Saharan African countries
Annex 16. Implementation plan
Annex 17. List of participants: Expert meeting for the development of guidelines on adolescents and HIV, Harare, Zimbabwe, October 2012

Acknowledgements

These guidelines were produced by the World Health Organization (WHO) Department of HIV/AIDS and Department of Maternal, Newborn, Child and Adolescent Health in collaboration with the Global Network of People living with HIV/AIDS (GNP+), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Populations Fund (UNFPA) and the United Nations Children's Fund (UNICEF).

WHO would like to thank the many individuals who contributed to the development of this document. We wish to especially thank the co-chairs of the Guidelines Expert Group meeting, Sabrina Bakeera-Kitaka and Shaffiq Essajee, as well as the Guideline Development Group (listed below).

Rachel Baggaley and Jane Ferguson were responsible for the overall technical coordination of the guidelines development, with the support of Gottfried Hirnschall, Elizabeth Mason and Susan Norris. The guidelines document was compiled by Mary Henderson and edited by Jura Editorial Services; additional technical input provided by Kathleen Fox, Jennifer Hinners, Omar Abdel Mannan, Elizabeth Marum, Katherine Noto, and Amitabh Suthar; Rosewiter Gwatiringa, Nadia Hilal and Claire Ory Scharer provided administrative and logistical support.

Guidelines Development Group

Academic / research

Baylor University – Baylor College of Medicine International Pediatric AIDS Initiative at Texas Children's Hospital (BIPAI), USA – Edward Pettitt; **Centre Hospitalier Universitaire Ibn Rochd, Maroc** – Mehdi Karkouri; **Children's Hospital at Montefiore Einstein College of Medicine, USA** – Donna Futterman; **Instituto de Infectologia, Brazil** – Marinella Della Negra; **Johns Hopkins University, Bloomberg School of Public Health, USA** – Bruce Dick; **London School of Hygiene and Tropical Medicine and Biomedical Research and Training Institute, Zimbabwe** – Rashida Ferrand; **Makerere University, Uganda** – Sabrina Bakeera-Kitaka; **Population Council, Kenya** – Harriet Birungi; **South Africa Medical Research Council and University of Cape Town Adolescent Health Research Unit, South Africa** – Catherine Mathews; **University College London / University of Zimbabwe** – Frances Cowan; **University of Malawi** – Eric Umar; **Witwatersrand University – Wits Reproductive Health and HIV Unit, South Africa** – Henry John Moultrie

National programme managers

Ministry of Health and Child Welfare, Zimbabwe – Gertrude Ncube; **National Department of Health, Papua New Guinea** – Nick Mawe Dala

Programme implementers, civil society and community representatives

Africaid, Zimbabwe – Nicola Jane Willis; **Clinton Health Access Initiative (CHAI), USA** – Shaffiq Essajee; **Children's HIV Association (CHIVA), South Africa** – Alice Armstrong; **Fundación Huésped, Argentina** – Mariana Vasquez; **Global Network of People Living with HIV (GNP+), Netherlands** – Adam Garner; **Global Youth Coalition on HIV/AIDS (GYCA), Ghana** – Sydney Tette Hushie; **HIV/AIDS Alliance, India** – Sonal Mehta; **International Treatment Preparedness Coalition, Thailand** –

Ed Attapon Ngoksin; **Jamaica Youth Advocacy Network** – Jaevion Nelson; **John Snow Inc/AIDSTAR-ONE, USA** – Andrew Fullem; **Pathfinder International, USA** – Gwyn Hainsworth; **Save the Children, Asia Region** – Scott McGill; **TEMWA, Malawi** – Tonderai Manoto; **Youth RISE, United Kingdom** – Anita Krug

Human rights and law

Nelson R. Mandela School of Medicine – Centre for the AIDS Programme of Research in South Africa (CAPRISA) – Jerome Singh

Bilateral organizations

US Agency for International Development (USAID) – Global Health Bureau, Office of HIV/AIDS – Vincent Wong

Multilateral organizations

***UNESCO* Headquarters –** Dhianaraj Chetty; **Regional Support Team for East and Southern Africa** – Patricia Machawira

***UNFPA* Headquarters –** Mary Otieno; **Regional Office, South Africa** – Asha Mohamud

***UNICEF* Headquarters –** Susan Kasedde, Luong Ly Nguyen, Pierre Robert; **East Asia and Pacific Regional Office** – Wing-Sie Cheng; **East and Southern Africa Regional Office** – Rick Olson; **Zimbabwe Country Office** – Judith Sherman

Systematic reviews

Northern Ontario School of Medicine, Canada – Jessica Chan; **University of California, San Francisco, USA** – Ben Ancock, Andrew Anglemyer, Lisa M. Butler, Jane Drake, Tara Horvath (Team Leader), Gail E. Kennedy, Rose Phillips, Jay Rajan, Sarah Royce, George W. Rutherford, Nandi Siegfried, Brett Smith, Gavrilah Wells, Kristen Wendorf; **University of Minnesota School of Public Health, USA** – Alicen Spaulding; **Vanderbilt University, USA** – Mary Lou Lindegren

GRADE methodologists

University of California, San Francisco, USA – Lisa Butler, Nandi Siegfried

Contributors – external to WHO

Academic / research

The Foundation for AIDS Research, USA – Kent Klindera; **Fundacao Ariel Glaser, Mozambique** – Paula Vaz; **Gillings School Of Global Public Health, University of North Carolina, USA** – Audrey Pettifor; **London School of Hygiene and Tropical Medicine, UK** – David Ross; **Nossal Institute for Global Health, Australia** – Emma Brathwaite; **Research Triangle Institute, Asia Region** – David Stephens; **Royal Tropical Institute, Netherlands** – Anke van der Kwaak; **Universidad Peruana Cayetano Heridia, Peru** – Carlos Cáceres

National programme managers

Ministry of Health, Rwanda Biomedical Centre – Simon Pierre Niyonsenga

Programme implementers, civil society and community representatives

FHI 360 – Joy Cunningham; **Global Network of People Living with HIV (GNP+)** – Georgina Caswell; **International Planned Parenthood Federation** – Doortje Braeken, Jon Hopkins; **SONKE, South Africa** – Remmy Shawa

International financing institutions
The Global Fund to Fight AIDS, Tuberculosis and Malaria – Ade Fakoya

Bilateral organizations
US Agency for International Development (USAID) – Ann McCauley

Other multilateral organizations
***UNAIDS* Headquarters –** Martina Brostrom, Mikaela Hildebrand, Jason Sigurdson, Mariângela Simão

***UNICEF* Headquarters –** Rachel Yates; **CEE/CIS Regional Office** – Nina Ferencic; **East Asia and the Pacific Regional Office** – Bettina Schunter

Contributors – internal to WHO

***Headquarters* Department of Maternal, Newborn, Child and Adolescent Health** – Jane Ferguson, Lulu Muhe; **Department of HIV/AIDS** – Rachel Baggaley, Raul Gonzalez-Montero, Gottfried Hirnschall, Eyerusalem Kebede Negussie, Julie Samuelson, Nathan Shaffer, Annette Verster, Marco Vitoria; **Department of Reproductive Health and Research** – Manjula Lusti-Narasimhan

***Regional Office for Africa* Inter-country Support Team for East and Southern Africa** – Teshome Woldehanna Desta, Buhle Ncube, Brian Pazvakavambwa

***Regional Office for the Americas* –** Matilde Maddelano, Freddy Perez

***Regional Office for the Eastern Mediterranean* –** Joumana Hermez

***Regional Office for Europe* –** Valentina Baltag, Lali Khotenashvili

***Regional Office for South-East Asia* –** Rajesh Mehta, Razia Pendse

***Regional Office for the Western Pacific* –** Zhao Pengfei

Abbreviations and acronyms

AFHS	adolescent-friendly health services
AIDS	acquired immune deficiency syndrome
ALHIV	adolescent/s living with HIV
ANC	antenatal care
ART	antiretroviral therapy
ARV	antiretroviral drug
ASRH	adolescent sexual and reproductive health
CBO	community-based organization
CDC	U.S. Centers for Disease Control and Prevention
CQI	continuous quality improvement
CRC	Convention on the Rights of the Child
DAART	directly administered antiretroviral therapy
FGD	focus group discussion
FGM	female genital mutilation
FHI360	Family Health International
GNP+	Global Network of People Living with HIV
HIV	human immunodeficiency virus
HTC	HIV testing and counselling
IDU	injecting drug use
KP	key population
LMIC	low- and middle-income countries
LTFU	loss to follow-up
MCH	maternal and child health
MNCAH	maternal, newborn, child and adolescent health
MNCH	maternal, newborn and child health
M&E	monitoring and evaluation
MSM	men who have sex with men
OST	opioid substitution therapy
PEPFAR	President's Emergency Plan for AIDS Relief
PICO	Problem / Intervention / Comparison / Outcome
PITC	provider-initiated testing and counselling
PLHIV	person/people living with HIV
PMTCT	prevention of mother-to-child transmission of HIV
PWID	people who inject drugs
RCT	randomized controlled trial
SRH	sexual and reproductive health
STI	sexually transmitted infection
TB	tuberculosis
TG	transgender person
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VCT	voluntary counselling and testing
VMMC	voluntary medical male circumcision
WHO	World Health Organization
YFHS	youth-friendly health services

Funding

The funding to support this work – including the systematic reviews of evidence, evidence compilation, convening the expert meeting, development, editing, and printing of the draft guidelines – was provided by Joint United Nations Programme on HIV/AIDS (UNAIDS), United Nations Population Fund (UNFPA) and the United States Agency for International Development (USAID), with additional budget support and staff time from the WHO Department of HIV/AIDS and the WHO Department of Maternal, Newborn, Child and Adolescent Health. We would like to acknowledge the significant financial contribution from the United Nations Children's Fund (UNICEF) towards the systematic review and development of these guidelines.

Declarations of interest by participants were assessed and found to be insufficient to exclude them from full participation.

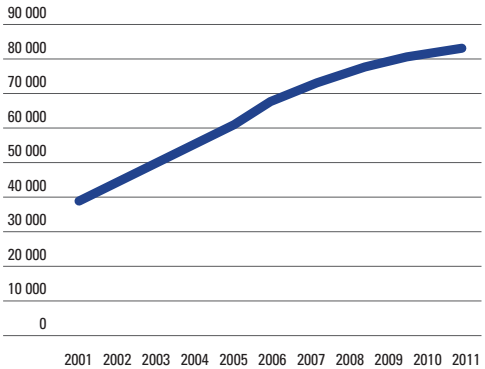
Executive summary

Adolescents (10–19 years) and young people (20–24 years) continue to be vulnerable,[1] both socially and economically, to HIV infection despite efforts to date *(1)*. This is particularly true for adolescents—especially girls—who live in settings with a generalized HIV epidemic or who are members of key populations at higher risk for HIV acquisition or transmission through sexual transmission and injecting drug use. In 2012, there were approximately 2.1 million adolescents living with HIV *(2)*. About one-seventh of all new HIV infections occur during adolescence *(2)*.

Access to and uptake of HIV counselling and testing (HTC) by adolescents is significantly lower than for adults. Survey data collected from sub-Saharan Africa indicate that only 10% of young men and 15% of young women (15–24 years) were aware of their HIV status. However, access and coverage vary considerably across countries and regions.

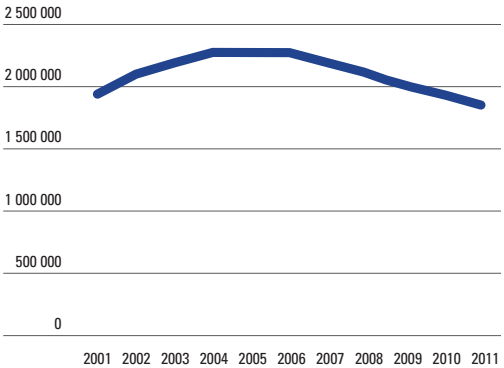
Between 2005 and 2012, HIV-related deaths among adolescents increased by 50%, while the global number of HIV-related deaths fell by 30% *(2)*. This increase in adolescent HIV-related deaths is due primarily to poor prioritization of adolescents in national HIV plans, inadequate provision of accessible and acceptable HTC and treatment services and lack of support for adolescents to remain in care and adhere to antiretroviral therapy (ART).

Total adolescent AIDS-related deaths



Source: Kasedde S et al *(3)*.

Total AIDS-related deaths



Source : UNAIDS *(2)*.

1 This document focuses on adolescents, ages 10–19 years. However, many programmes focus and report on youth, ages 15–24 years. Inconsistency in data collection often leads to overlapping age categories. This problem is compounded by different definitions of "child", "adolescent", "young person" and "young adult". As a result data specific to adolescents often get lost, as the adolescent age group is subsumed in various different age ranges.

Purpose of the guidelines

Guidance for HTC and on care for adolescents living with HIV (ALHIV) is needed that explicitly considers the range of adolescents' needs and issues. The World Health Organization (WHO), in collaboration with the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Global Network of People Living with HIV (GNP+), has developed these guidelines to provide specific recommendations and expert suggestions—for national policy-makers and programme managers and their partners and stakeholders—on prioritizing, planning and providing HIV testing, counselling, treatment and care services for adolescents.

Scope of the guidelines

HIV testing and counselling

Previous WHO guidance on HTC has concentrated on supporting provider-initiated HTC (PITC) for individuals, with recent guidance issued in 2011 focusing on HTC for couples and in 2013 on augmenting these approaches with community-based HTC. United Nations guidance specifically addressing the needs of adolescents and their health-care providers has not been developed at the global level, although some countries and organizations (e.g. FHI 360, U.S. Centers for Disease Control and Prevention (CDC) and amfAR) have developed guidance for testing young people ages 10–24 years. Access to and uptake of HTC by adolescents (especially those who are members of key populations) is lower than for many other groups, leaving them disadvantaged in terms of seeking and being linked to HIV prevention, treatment and care services. Late diagnosis of HIV infection, resulting in delayed initiation of antiretroviral therapy (ART), for perinatally infected adolescents is increasingly being recognized as a significant problem.

Care for adolescents living with HIV

Access to treatment and care for adolescents with HIV also remains inadequate. Following HTC, there are poor linkages to and retention in care for most populations, and ART coverage rates for adolescents are lower than for other age groups. Interventions and support for sustained treatment adherence and retention in care are challenges in many settings, the inability to address these issues has led to treatment failure and the high levels of HIV related morbidity and mortality increasingly being recognised in this group. Addressing these challenges and adapting systems to deliver good quality, effective health care and social support for adolescents are urgently needed. The WHO *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection (hereafter Consolidated ARV guidelines)* provides comprehensive clinical recommendations on the provision of ART for all populations *(4)*, including adolescents, and these adolescent HIV guidelines provide complementary recommendations and operational guidance to support better provision of services to help adolescents remain in care and adhere to ART.

Ways to support better adherence to treatment and retention in care for ALHIV, including **community-based service delivery** and **training for health workers** and a range of other service delivery recommendations from the *Consolidated ARV guidelines* are also discussed, with specific consideration given to these for adolescent service provision.

Key populations

For these guidelines, **key populations** are defined as those populations at higher risk of HIV (those populations disproportionately affected in all regions and epidemic types, specifically sex workers, men who have sex with men, transgender people and people who inject drugs). These guidelines specifically address adolescent key populations, i.e. those aged 10 to 19 years. In addition to the groups mentioned above, other adolescents who are vulnerable to HIV include those who are sexually abused and/or exploited and those in prisons and other closed settings.

Principles guiding the development of the recommendations

- Compulsory or mandatory HIV testing of individuals on public health grounds or for any other purpose is a violation of human rights and counterproductive to accessing acceptable testing, treatment and care services as well as retention in care. Therefore, these guidelines do not support it.
- The heterogeneity of adolescents is recognized and requires flexibility and adaption of services and approaches, in addition to the context and local epidemiology.
- The meaningful involvement of adolescents, particularly ALHIV, as well as those at risk of HIV infection, is critical for developing and delivering effective and acceptable HTC and HIV treatment and care services for adolescents.
- All forms of HTC must adhere to the five Cs: Consent, Confidentiality, Counselling, Correct test results and Connections to treatment, care and prevention services.
- Issues that may be particular to male, female or transgender adolescents must be recognized and addressed when developing, providing, monitoring and evaluating services for adolescents.
- All services must be provided within a robust human rights framework.[1]
- A supportive and conducive legal and policy environment is essential for effective and acceptable service provision.[2]
- For those under 18 years of age, testing and counselling services need to consider the best interests of the child as well as appropriate and safe referrals to child protection services when children have been abused and are at risk of abuse. Referral to legal/social services is also needed for adolescents aged 18–19 years.

This guidance highlights issues relating to adolescent **consent to HTC**. Policies related to age of consent to testing can pose barriers to adolescents' access to HTC and other health services. While policies on age of consent to HIV testing vary among countries, ministries of health are encouraged to revisit these policies in light of the need to uphold adolescents' rights to make choices about their own health and well-being (with consideration for different levels of maturity and understanding). The guidelines strongly encourage consideration of ways to strengthen **support for disclosure** by adolescents.

The guidelines consider **operational approaches** and options and provide a range of programme examples and guidelines principles for implementation. **Research gaps** identified in the course of the expert meeting and guideline development process are also documented.

1 See CRC, General Comment 4 – http://tb.ohchr.org/default.aspx?Symbol=CRC/GC/2003/4; General Comment No. 15 (2013) – The right of the child to the enjoyment of the highest attainable standard of health (Article. 24).

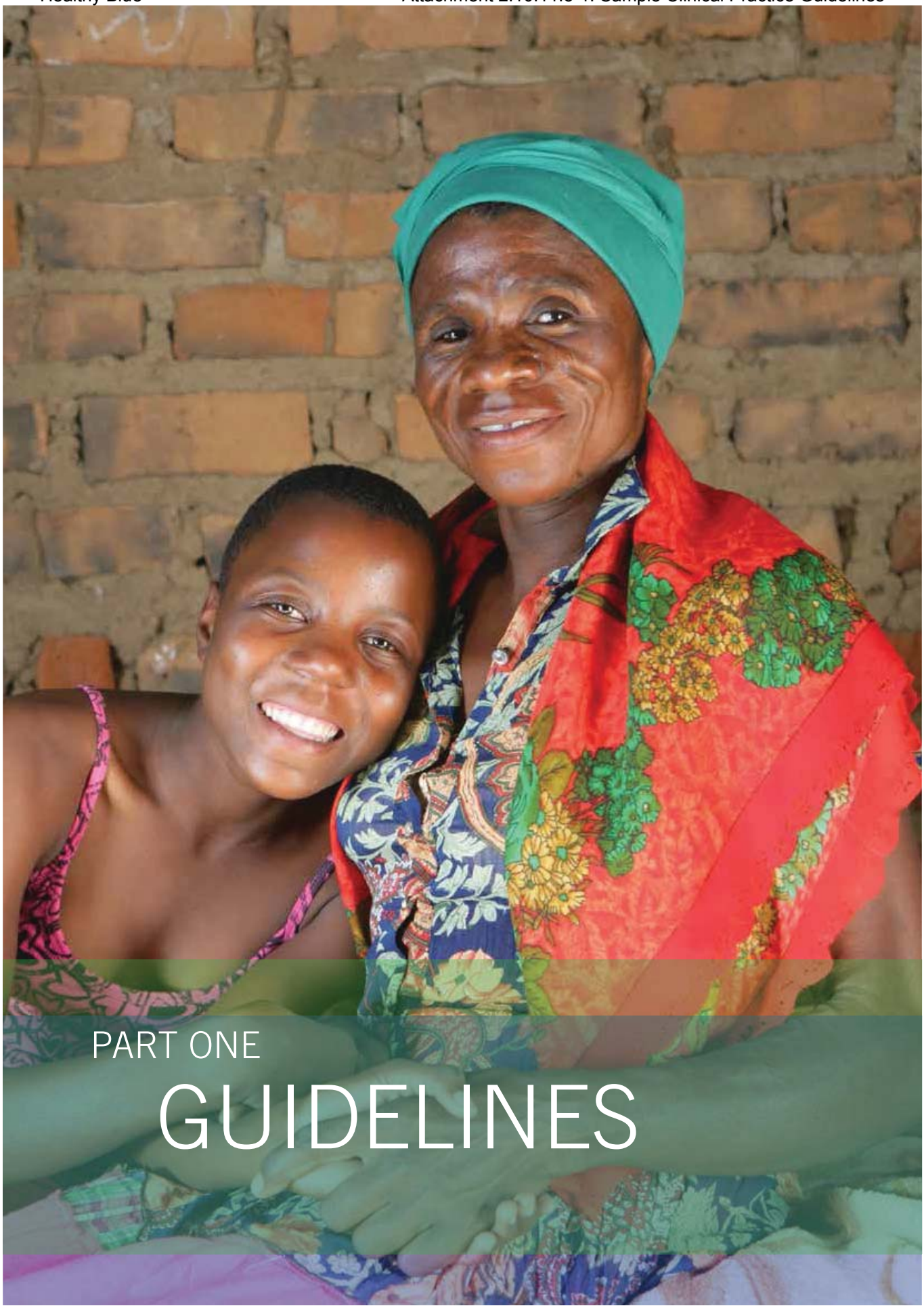
2 A supportive and conducive legal and policy environment is critical for adolescents to access and benefit from HIV testing, counselling and linkage to appropriate treatment and care. The criminalization of HIV transmission, exposure and non-disclosure restricts an adolescent's ability to access and benefit from a range of essential HIV-related services.

RECOMMENDATIONS

1. HIV testing and counselling, with linkages to prevention, treatment and care, is recommended for adolescents from key populations in all settings (generalized, low and concentrated epidemics).
2. In generalized epidemics, HIV testing and counselling with linkage to prevention, treatment and care is recommended for all adolescents.
3. In low and concentrated epidemics, HIV testing and counselling with linkage to prevention, treatment and care is recommended to be made accessible to all adolescents.
4. Adolescents should be counselled about the potential benefits and risks of disclosure of their HIV status to others and empowered and supported to determine if, when, how and to whom to disclose.
5. Community-based approaches can improve treatment adherence and retention in care of adolescents living with HIV.
6. Training of health-care workers can contribute to treatment adherence and improvement in retention in care of adolescents living with HIV.

The recommendations regarding HTC for adolescents, disclosure, community-based approaches and training for health-care workers imply significant benefits for all socio-economic and epidemiological contexts and should be considered as global guidance. At the same time, it is recognized that health services in low-resource settings face the greatest challenges in providing services tailored for adolescents and may benefit most from the guidance presented here. Countries are encouraged to consider this guidance in light of the nature of the HIV epidemic in their setting and their national policies, programmes and resources.

This guidance is informed by human rights considerations, systematic reviews of the published and gray literature, community consultations with adolescents and health workers, field experience and expert opinion. Published evidence in adolescent populations is, however, limited or lacking and considerable weight is given to expert opinion, to the values and preferences of adolescents and their health-care providers and to the field experience of practitioners.



PART ONE

GUIDELINES

1

OVERVIEW

1.1 Background

More than 35.3 million people are currently living with HIV, and 2.1 million (5.9%) of these are adolescents ages 10–19 years *(1, 2)*[1]. In 2012, there were more than 6300 new HIV infections each day worldwide *(2)*. Around 2500 of these new cases were adolescents and youth ages 15–24 *(2, 5)*.

While most of the approximately 712 new cases of HIV that are diagnosed each day in children under 15 years of age were due to vertical transmission, a small percentage were the result of horizontal transmission, including sexual transmission through sexual abuse or coercion, or early sex *(5)*. Adolescents and young people remain extremely vulnerable to acquiring HIV infection, especially girls who live in settings with a generalized HIV epidemic or who are members of populations at high risk for HIV acquisition or transmission. (See Part 1, Section 2.1.2 for discussion of adolescent key populations.)

The last decade witnessed significant progress in scaling up access to HIV treatment and care. By the end of 2012, more than 9.7 million people from low- and middle-income countries (LMIC) were receiving antiretroviral therapy (ART) *(1)*. Corresponding to this effort, HIV-related mortality has declined. However, global ART coverage is still inadequate at 61%[2], and most people living with HIV do not know their serostatus *(2)*.

Early diagnosis and treatment can reduce HIV progression and prevent transmission, but adolescents are less likely than adults to be tested, access care, remain in care and achieve viral suppression *(6, 7, 8, 9, 10)*. Although coverage data on adolescents receiving treatment is limited, adolescents' access to and uptake of treatment is often reported to be lower than for other age groups *(11, 12)*. It is urgent that ALHIV are identified and enrolled in treatment interventions with clear and consistent linkages to care and support.

As of 2012, about 630 000 infants, children, and young adolescents below 15 years had been started on ART, representing a 28% coverage rate among children who need paediatric ART *(1)*. This coverage follows increased emphasis on prevention of mother-to-child transmission (PMTCT) programmes that include early infant diagnosis and early initiation of treatment for infants.[3] Over the next decade, these infants and young children with HIV on ART will become adolescents and face the challenges of adolescence as well as those associated with coping with living with a chronic infection, developing relationships and preventing transmission.

A substantial epidemic of HIV in perinatally infected adolescents is emerging in southern Africa. These adolescents include both those who were started on ART as infants as part of PMTCT programmes and perinatally infected children who were not started on ART either because their mothers were not reached by PMTCT programmes or they were lost to follow-up and have survived into adolescence without ART (often referred to as slow progressors). Data suggest that up to one-third of infants infected with HIV who are not started on ART are slow progressors with a median survival of greater than 10 years *(13)*. The increasing cumulative number of slow progressors and infants and young children on ART (who must be supported to cope with the challenges of being on long-term treatment) highlights

1 See Annex 1 for a glossary of key terms and definitions.

2 Using the WHO 2010 ARV guidelines.

3 Some countries refer to this as prevention of parent-to-child transmission (PPTCT); the more common term, PMTCT, will be used in these guidelines.

the importance of urgently addressing the clinical needs of older children and adolescents with HIV *(14)*. HIV is increasingly being recognized as a common cause of acute admission and in-hospital death among adolescents in high-prevalence, generalized epidemics *(15, 16, 17)*.

Although rapid expansion of HIV treatment has significantly improved survival, life expectancy and quality of life for people living with HIV (PLHIV), delayed ART initiation remains a challenge in many settings, including high-income countries *(18, 19)*. Previous WHO guidelines recommended ART initiation below 350 cells/mm^3, and 42 LMIC had adopted this recommendation in their national ART guidelines *(20)*. WHO now recommends (in the 2013 *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection*) initiation of ART for all PLHIV with a CD4 count of 500 cells/mm^3 and below *(4)*[1]. However, most patients are currently initiated on ART at CD4 counts far below national guideline recommendations. Low CD4 count has a direct adverse impact on HIV treatment outcome and health-care costs associated with management of advanced stages of HIV infection, including hospital admissions.

Multiple factors related to health-care delivery systems contribute to delays in ART initiation and poor adherence to ART and retention in care. These include diagnosis of HIV at an advanced stage, poor linkage to and retention in HIV care after testing positive *(21, 22, 23)* and loss to follow-up (LTFU), which is particularly high in the period between testing and initiation of ART. Additional patient-related factors for delayed initiation of ART include legal and/or familial constraints around disclosure, and lack of emotional and financial support.

All of these issues pose potentially greater challenges to adolescents, who experience more actual or perceived barriers to HIV testing and treatment services than the general population. ALHIV can also face challenges in the transition from paediatric services—where parents and guardians commonly have primary responsibility for their care—to adult ART services, where they will need to take much greater responsibility for their own care. In the case of decentralized services, where there may be only one ART service available, the greatest challenge is not a transition from one set of services to another, but rather a transitioning of health-care responsibilities from parent or guardian to the adolescent. This is generally a longer process during which the adolescent assumes autonomy for specific health-care activities and decisions, as related to their evolving capacity.

1.1.1 HIV testing and counselling for adolescents

HIV testing and counselling (HTC) is an essential component of efforts to achieve universal access to HIV prevention, treatment, care and support. Regardless of HIV acquisition route, underutilization of testing and counselling services results in late diagnosis; increasing uptake of HTC could lead to earlier diagnosis and more effective care.[2] Due to the increasing availability of ART and prevention interventions, early diagnosis can reduce transmission and improve health outcomes, thereby decreasing HIV incidence and HIV-related morbidity and mortality.

HTC for adolescents, as for adults, offers many important benefits. Adolescents who learn that they have been diagnosed with HIV are more likely to obtain emotional

1 Also, to reduce HIV transmission to uninfected partners, WHO recommends that HIV-positive partners in serodiscordant couples should be offered ART, irrespective of their CD4 count.

2 Although data is not available, there is thought to be a significant percentage of adolescents who have been tested and know their status and have not been effectively linked to care and treatment and therefore have not initiated treatment when they need it. (G. Hainsworth, Pathfinder, personal communication, 2013).

support and practice preventive behaviours to reduce the risk of transmitting HIV to others, and more likely to obtain HIV treatment and care, assuming these services are available to them. Early access to care can help them to feel better and to live longer, than if they present for care when their disease is already at an advanced stage. Access to HTC is also important for adolescents who do not have HIV to reinforce prevention messages and facilitate access to prevention services and commodities. Recent data from South Africa suggest that adolescents who had taken a test had a lower incidence of HIV over time compared with those who had not *(24)*. HTC is also an essential component of the package of care included in voluntary medical male circumcision (VMMC) programmes for HIV prevention that are being scaled up in 14 priority countries in sub-Saharan Africa—in which adolescents are a key target group *(25)*.

Access to and uptake of HTC by adolescents is significantly lower than for adults.[1] Survey data collected from 2005 to 2010 in sub-Saharan Africa indicate that only 10% of young men and 15% of young women (15–24 years) were aware of their HIV status *(26)*. However, access and coverage vary considerably across countries and regions. For example, in Malawi and Zimbabwe data on the proportion of HTC clients who are 15–24 years of age show that they account for approximately 40% of all clients. Of these young clients, approximately 60% are females (R. Olson, UNICEF-South Africa, personal communication, 2013).

Because uptake of HTC by adolescents is currently low, and HTC services for adolescents have not been developed in many settings, these guidelines recommend expanding access to HTC for adolescents in different epidemic settings.[2] These guidelines also discuss service delivery approaches that have been acceptable and effective in increasing uptake of HTC among adolescents and highlight operational issues that must be addressed for effective implementation of the recommendations.

1.1.2 HIV treatment and care for adolescents living with HIV

Modes of transmission

Adolescents can acquire HIV infection in two ways—through vertical or horizontal transmission.

Vertical (mother-to-child) transmission

Adolescents living with HIV include long-term survivors of vertical transmission, some who are on treatment, as well as slow progressors (not on treatment). Some of these adolescents are receiving care having been followed through PMTCT programmes. However, a significant proportion has not been diagnosed due to loss to follow-up (LTFU) or poor coverage of PMTCT programmes.

Horizontal transmission

Horizontal transmission occurs in two ways:

Sexual transmission

Sexual activity begins during adolescence in most parts of the world, although age and conditions vary greatly. Risks for acquisition of HIV include sex without safe condom use, early coerced sex and sexual exploitation involving coercion and sometimes violence.

1 In countries where adolescents ages 15–19 years are considered adults, they may only have access to HTC in ANC services, which would exclude male adolescents and therefore reduce access for this group.

2 Expanded access includes making existing services more sensitive to the needs of adolescents.

Parenteral transmission

Non-sexual transmission among adolescents can involve injecting drug use (IDU), traditional practices (e.g. female genital mutilation (FGM), scarification with shared razor blades and traditional treatments requiring cutting of the skin) and certain medical procedures such as unsafe surgical procedures, injections and blood transfusions.

There are social and contextual factors that make adolescents vulnerable to HIV infection through horizontal transmission. These factors include: age and sex, gender, social and cultural norms and value systems about sexual activity, location (where the adolescent lives, learns and earns), economic and educational status and sexual orientation. Adolescents who are particularly vulnerable include those from key populations as well as orphans, migrants and refugees, prisoners and other groups that are socially marginalized and discriminated against, and adolescents affected by humanitarian crises. Conflict, displacement and food insecurity all can heighten risk. The HIV epidemic itself also increases vulnerability; for example, adolescents orphaned by AIDS can be more vulnerable to HIV if their circumstances lead them to engage in sex with older and/or concurrent partners for economic or emotional support.

Optimal HIV care for different groups of adolescents

There are several diverse groups of ALHIV who must be encouraged and able to access ART, care and support, and who will need support to adhere to treatment and remain in care. Optimal HIV care for different groups of ALHIV varies according to mode of transmission, age, sex, gender and social factors. Three broad groups, each with specific needs and challenges, need to be considered.

Adolescents infected vertically, diagnosed early and started on ART

In 2012, vertical transmission accounted for an estimated 260 000 new infections in children *(2)*. Current efforts to optimize PMTCT programmes will not, on their own, eliminate HIV in newborns. Access to maternal and child health services will need to be dramatically improved, as will prevention measures, such as preventing and treating HIV before pregnancy.

Successful early infant diagnosis and links to treatment in some settings has resulted in more than 630 000 children in developing countries being started on ART *(1)*. Intensive efforts will be needed over the next decade to support children with HIV on ART to remain engaged in care and to adhere to treatment as they become adolescents and need to transition to adult services. Health workers, even those experienced in caring for adults with HIV, are often ill-equipped to support the health-care needs of adolescents. In many countries, there is little experience with understanding and providing services for the particular needs of adolescents, and judgemental attitudes toward sexually active adolescents can hamper rapport and subsequent care.

A significant proportion of pregnant women are adolescents (approximately 16 million births per year are to adolescents) *(27)*. Adolescent girls with HIV have less access to PMTCT interventions than adult women, and they need improved access to maternal and other types of health care.

Adolescents infected vertically, not diagnosed early and not started on ART

In generalized epidemics, an increasing proportion of children entering adolescence have acquired HIV infection perinatally and remain undiagnosed *(28)*. These slow progressors have survived into adolescence without being diagnosed and started on ART. They may have chronic medical and developmental delay problems and would benefit from diagnosis and initiation on treatment, as well as long-term care and support.

Although there has been a significant increase in the provision of PMTCT interventions, many mothers still do not have access to antenatal services or PMTCT. In low- and middle-income countries, coverage of effective antiretroviral regimens for PMTCT reached only 57% in 2011 *(2)*. In sub-Saharan Africa, where 92% of the world's pregnant women with HIV live, only 59% received ART or prophylaxis during pregnancy and delivery.

Even where PMTCT services are in place, they are not completely effective in preventing all vertical transmission of HIV. Furthermore, there is significant LTFU in many programmes, resulting in exposed infants not getting tested, and a significant proportion of perinatally infected children not linked to early care. Without ART, these children often will develop HIV-related symptoms early in their lives, requiring urgent HIV treatment and care.

Late diagnosis of HIV infection for perinatally infected adolescents is increasingly being recognized as a significant problem leading to delayed initiation of ART and poor linkages to and retention in care. This can be complicated by the reluctance of some parents to allow children to be diagnosed and/or started on ART for fear of the potential stigma related to implications of their own status or possible revelation of abuse as the cause of infection. In some areas, anecdotal evidence suggests that greater trust in traditional healers and fear of the side effects of ART can cause parents and caregivers to delay diagnosis and treatment for children.

Adolescents acquiring HIV horizontally

The main mode of HIV transmission among male and female adolescents in generalized epidemic settings is unprotected heterosexual sex (sometimes forced or coerced). A growing body of evidence shows that the experience of sexual coercion is fairly prevalent among young people and is associated with high-risk sexual behaviour thereafter *(29)*. A review of nationally representative surveys in Burkina Faso, Ghana, Malawi and Uganda examined the prevalence of sexual coercion at sexual debut among adolescent females (12–19 years of age) *(30)*. Thirty-eight per cent of girls in Malawi said that they were "not willing at all" at their first sexual experience; girls in Ghana (30%), Uganda (23%), and Burkina Faso (15%) responded similarly. In-depth interviews collected in 2003 with the same demographic found that there are four primary types of sexual coercion: forced sex; pressure through money or gifts; flattery, pestering and threatening to have sex with other girls; and passive acceptance.

In many settings, adolescents are also vulnerable to HIV infection through injecting drug use and sexual exploitation—which often involves unprotected heterosexual and homosexual sex *(30)*—as well as a small number of cases of nosocomial transmission due to unsafe medical practices and procedures, or traditional practices.

Diagnosis through expanded access to HTC, with good linkages to treatment and care, will often require different approaches for adolescents infected horizontally than for adolescents infected vertically. These approaches should take into consideration the needs of adolescents who have been infected through early sex or sexual abuse.

Additional Concerns

In many resource-constrained and high-HIV burden settings, limited capacity in health-care delivery systems poses a serious challenge to expansion of HTC, treatment and care services for adolescents. It is essential to minimize inefficiencies across the continuum of HIV care, explore innovative approaches to service delivery, and optimize treatment outcomes through linkages and integration with other services. Additionally, provision of chronic care requires reorganizing service delivery models, which in most settings are designed primarily to provide acute care.

These guidelines also address support for disclosure by ALHIV to others and, as means to improve adherence and retention, community-based service delivery and improved training for health workers. They recognize the urgency of the need to initiate ART when clinically indicated, to support adherence to ART for eligible ALHIV, and to strengthen the retention of these adolescents in care. Age of consent to testing is also discussed as an issue for consideration when planning and providing services for adolescents.

1.2 Objectives

WHO acknowledges the need to give high priority to increased access to HTC for adolescents and to support approaches to improving adherence to treatment and retention in care for ALHIV.

These guidelines are intended to:

- provide recommendations and suggestions for policy-makers and national programme managers, civil society organizations and technical and financial partners on prioritizing, planning and providing HIV testing, counselling, treatment and care services for adolescents in resource-limited settings;
- support the provision of a comprehensive, accessible, appropriate and acceptable range of services for adolescents along the continuum of care (including testing, counselling, treatment and care and referral to sexual and reproductive and mental health services and community support);
- complement and include relevant recommendations from the WHO *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection*. WHO, UN partners, ministries of health and a wide range of other implementers have recognized the need to highlight the importance of effective and accessible services for adolescents living with HIV, to support adherence to ART and retention in care, and to focus specifically on this neglected population;
- provide countries and programmes with evidence-based recommendations together with consideration of related implementation issues.

It is expected that the guidance will support countries and programmes to accomplish the following objectives:[1]

1. **to provide universal access to HIV testing and counselling for adolescents** in generalized epidemics and for adolescents from key populations in all epidemics, with a full understanding of the particular nature, needs and challenges of adolescence;[2]
2. **to improve treatment and care for adolescents living with HIV**. It is essential to make it easier for adolescents to start treatment once they have been diagnosed and to help adolescents already on ART to make a safe and effective transition from paediatric to adult services. This objective also recognizes the need to reduce delayed initiation of ART for ALHIV and to support adherence to ART and retention in care.

It is anticipated that the accomplishment of these objectives will ensure that adolescents are managing their HIV infection effectively to ensure optimal health and survival, and that they are better equipped to take ownership of their health care and their lives as adults living with HIV.

1 These objectives also relate to the service delivery recommendations from the WHO *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection* that are listed in Section 2.3.

2 Achievement of Objective 1 will support ALHIV for ongoing treatment and care as well as support HIV-negative adolescents to remain HIV-negative.

1.3 Target audience

The primary target audiences for these comprehensive guidelines include policy-makers and programme managers. A more streamlined, electronic version of these guidelines will be produced for health workers providing HIV prevention and other health services for adolescents in all HIV epidemic settings, including lay counsellors and community health workers. These guidelines are also intended for governments, non-governmental and civil society organizations, donors, HIV advocacy organizations and patient-support groups that address HIV prevention, treatment and care for adolescents. Adaptation of the guidelines is recommended according to the HIV epidemic profile and country-specific cultural and socio-economic contexts.

1.4 Development of guidelines

The WHO Department of Maternal, Newborn, Child and Adolescent Health and the WHO Department of HIV/AIDS led the development of these guidelines in collaboration with UNICEF, UNFPA, UNESCO and GNP+. The evidence assessment for these guidelines included three complementary areas of work—systematic reviews, descriptive reports of community consultations and supplementary literature reviews of published and unpublished studies not included in the systematic review, and programmatic experience. This document presents a synthesis of the findings of that work as well as the expert opinion of the Guidelines Development Group and peer reviewers.

1.4.1 Systematic reviews of the evidence

Researchers developed search protocols and undertook systematic reviews of the available scientific evidence. Design of the search strategies employed in the systematic reviews, meta-analyses and GRADE profiles followed methodology described in the Cochrane Handbook for Systematic Reviews of Interventions *(31)*.

The systematic searches for studies relevant to the PICO questions were conducted online using common electronic databases (see Annexes 3 and 4). The quality of evidence and the strength of recommendations were assessed using the GRADE methodology *(32, 33)*. The GRADE process was used for all of the PICO questions, but it was not possible to develop relevant GRADE profiles for every question because there was a significant lack of GRADE-able research on the topic of adolescents and HTC, adherence to treatment and retention in care.

1.4.2 Values and preferences, literature reviews and programmatic experience

Commissioned qualitative work explored the values and preferences of adolescents with regard to HTC and of health-care providers who provide HTC services to adolescents. The full report (see Annex 10) documents findings gathered through workshops in two countries with generalized epidemics and one country with a low-level/concentrated epidemic, a multi-regional anonymous e-survey and interviews with selected service providers in the three countries where workshops were conducted. Similarly, a multi-regional anonymous e-survey of ALHIV explored their experiences with ART, disclosure and care and support services as well as their views on the health providers with whom they interact (see Annex 11 for full report).

Literature reviews of published and unpublished studies provided additional detail about HTC, adherence to HIV treatment and retention in HIV care.

Programmatic experience and observational studies have been used to illustrate the operational aspects of the recommendations, highlighting key inputs and processes for improving the access and effectiveness of HTC and treatment and care services for ALHIV. Case studies and programmatic data provide additional detail and value to the guidelines by documenting experiences in real programme and routine care settings, as contrasted with findings from research. They offer some insights into successful implementation of programmes designed specifically for adolescents, explaining why and how they worked and the types of challenges faced during implementation of activities.

1.4.3 Expert consultation and development of recommendations

WHO convened an expert consultation in October 2012 in Harare, Zimbabwe, to make recommendations regarding HTC, treatment adherence and retention in care for adolescents. Participants assessed the evidence for each PICO question, along with the risks and benefits associated with each possible recommendation, and reached consensus on recommendations. Disagreements were resolved through continued debate and revision of the recommendations to provide additional precision or qualifications not included in the original PICO questions.

The final recommendations and advice take into consideration the quality of the evidence, estimated costs, feasibility of implementing the recommendations and the values and preferences of adolescents who represent those whose lives will be affected by the guidelines and of their health-care providers.

Following the consultation, the full draft guidelines were prepared and circulated to the Guidelines Development Group and other international experts for comments that were incorporated into the final draft of the guidelines.

1.4.4 Scope of the guidelines

Health services in low-resource settings face the greatest challenges in providing services tailored for adolescents and may benefit most from the guidance presented here; however, as it is relevant for all HIV epidemic and economic settings, it should be considered global guidance. Regional and national meetings can be conducted to adapt these global recommendations to local needs, HIV epidemic context and existing services to facilitate implementation.

1.5 Evidence assessment

The development of a recommendation is guided by the quality of available evidence. Other factors affect whether recommendations are strong or conditional, especially when available evidence is of insufficient quantity or quality.

How to interpret the quality of evidence

In the GRADE assessment process, the quality of a body of evidence is defined as the extent to which one can be confident that the reported estimates of effect (desirable or undesirable) available from the evidence are close to the actual effects of interest. The usefulness of an estimate of the effect (of an intervention) depends on the level of confidence in that estimate. The higher the quality of evidence, the more likely a strong recommendation can be made. However, it is not always possible to prepare GRADE profiles for all research on interventions because of a lack of data and information to calculate the necessary risk ratios or because the evidence available to the GRADE methodologists is indirect.

The GRADE approach specifies four levels of quality of evidence *(34)*, as shown in Table 1.

Table 1. Significance of the four GRADE levels of evidence

Quality level	Definition
High	We are very confident that the true effect lies close to that of the estimate of the effect.
Moderate	We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.
Low	Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect.
Very low	We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of the effect.

Values and preferences among the groups of interest for the guidance (adolescents) or views of the Guidelines Development Group based on technical expertise or programmatic experience may differ with regard to desired outcomes, or there may be uncertainty about whether the intervention represents a wise use of resources. Despite clear benefits, it may not be feasible to implement a proposed recommendation in a particular setting. A judgment must then be made regarding the strength of the recommendation.

1.6 Strength of recommendations

The strength of a recommendation reflects the degree of confidence of the Guidelines Development Group that the desirable effects of adherence to or implementation of the recommendation outweigh the undesirable effects. Desirable effects may include beneficial health outcomes (e.g. reduced incidence of HIV and reduced morbidity and mortality); benefits from service delivery (e.g. increased uptake of HIV prevention services, improved uptake of and retention in treatment and care services and increased adherence to treatment); less burden on the individual and/or health services; and potential cost savings for the individual, programme and/or health system. Undesirable effects can affect health services, individuals or families. Additional burdens include the costs of implementing the recommendations that programmes, care providers or patients have to bear, such as infrastructure modifications, increased training requirements for providers working with adolescents, relationship difficulties for adolescents receiving a positive diagnosis or legal complications where certain practices are criminalized.

A strong recommendation (for or against) is one for which there is confidence that the desirable effects of adherence to the recommendation clearly outweigh the undesirable effects, or clearly do not.

A conditional recommendation (for or against) is one for which the quality of evidence is low or may apply only to specific groups or settings; or the panel concludes that the desirable effects of adherence to the recommendation probably outweigh the undesirable effects or are closely balanced, but the panel is not confident about these trade-offs in all situations. Reasons for not being confident can include: absence of high quality evidence, presence of imprecise estimates of benefits or harms, uncertainty or variation regarding how different individuals value the outcomes, small benefits and benefits that may not be worth the

costs (including the cost of implementing the recommendation). ***A conditional recommendation is not a recommendation against doing something.*** Instead, interventions based on these recommendations should be monitored closely and evaluated rigorously. Further research is needed to address the uncertainties and is likely to provide new evidence that may change the calculation of the balance of trade-offs.

Table 2. Additional domains considered in assessing the strength of recommendations

Domain	Rationale
Benefits and risks	When a new recommendation is developed, desirable effects (benefits) need to be weighed against undesirable effects (risks), considering any previous recommendation or an alternative. The larger the gap or gradient in favour of the benefits compared with the risks, the more likely that a strong recommendation will be made.
Values and preferences (acceptability)	If the recommendation is likely to be widely accepted or valued highly, it is likely that a strong recommendation will be made. If there is a great deal of variability or strong reasons that the recommended course of action is unlikely to be accepted, it is more likely that a conditional recommendation will be made.
Costs/financial implications	Lower costs (monetary, infrastructure, equipment or human resources) or greater cost-effectiveness will more likely result in a strong recommendation.
Feasibility	If an intervention is achievable in a setting where the greatest impact is expected, a strong recommendation is called for.

2

RECOMMENDATIONS AND RATIONALES[1]

2.1 HTC for adolescents

Two topics crosscut all issues addressed by these guidelines: the age of consent to testing and the recognition that adolescents from key populations must be a particular focus for increasing the accessibility and acceptability of HTC services for this age group.

The three recommendations on HTC and adolescents are then presented along with a summary of the evidence and a summary of the Guideline Development Group's discussion and other considerations. The evidence includes the systematic GRADE review of selected studies and the values and preferences obtained from community consultations and the e-surveys with adolescents and service providers. The summary of the discussion at the expert meeting in Harare is complemented by the findings of a review of published and unpublished studies and reports related to HTC and adolescents as well as contributions from peer reviewers.

2.1.1 Consent to HIV testing

Health-care decision-making requires individuals to exercise their right to independent decision-making. In most settings, however, adolescents' rights are limited, although the exact nature of this limitation varies considerably from country to country. In some settings, a regulatory framework on informed consent does not exist, while in other settings, the adolescent's rights are governed by a regulatory patchwork.

AGES OF CONSENT IN SOUTH AFRICA

In South Africa, different threshold ages of consent apply to HIV-related services such as treatment, surgery, voluntary medical male circumcision, provision of pharmaceutical drugs, contraception, and HIV testing. Consent for an HIV test on a child (defined in South Africa as an individual who is less than 18 years of age) may be given by (a) the child, if the child is either (i) 12 years of age or older or (ii) under the age of 12 years and of sufficient maturity to understand the benefits, risks and social implications of such a test; (b) the parent or caregiver, if the child is under the age of 12 years and is not of sufficient maturity to understand the benefits, risks and social implications of such a test. Thus, the child's legal capacity to consent to an HIV test depends upon the child satisfying particular biological (physical age) and cognitive ("sufficient maturity") criteria. Similarly, other countries consider both biological and cognitive criteria under "stage of development" assessments, and recognize the child's autonomy if the child demonstrates qualities implicit in a "mature minor" or "emancipated minor" (See Annex 15).

While stipulation of different ages of consent and qualifying criteria are intended to protect adolescents, policy-makers must carefully consider whether and how such pre-qualifying criteria could affect their access to health services. To this end, policy-makers should review their existing regulatory frameworks governing adolescent health care with a view to ensuring regulatory harmonization and facilitating linkage to care. For example, an adolescent who possesses the legal right to access HTC should have autonomous access to HIV prevention and treatment modalities as part of linkage to comprehensive care. Authorities should also consider especially how to facilitate access to HTC and linkage to care for orphans and vulnerable adolescents, including those living on the streets, adolescents in child-headed households, and particularly vulnerable adolescents from key populations, girls engaged in sex with older men and in multiple or concurrent sexual partnerships, and adolescent girls affected by sexual exploitation.

1 Decision-making tables in Annex 8 summarize the basis upon which the recommendations and suggestions are made.

Authorities should also consider the role of surrogate decision-makers in HTC. In some settings only parents or guardians may consent to a child accessing HTC. In contrast, in settings such as South Africa (see box on previous page), a child may self-consent to HIV testing if he or she is 12 years of age and above, or, if under 12 years of age, the child is of sufficient maturity to understand the benefits, risks, and social implications of a HIV test. However, for children under the age of 12 with insufficient maturity to understand the benefits, risks, and social implications of a HIV test, a parent or caregiver must give consent for the test. The recognition of a caregiver as a surrogate decision-maker for children in relation to HIV testing recognizes that the absence of a parent or guardian should not serve as a barrier to a child accessing HTC, if the child has a caregiver (a caregiver is defined in South African law as any person other than a parent or guardian who factually cares for a child).

Authorities should also bear in mind their legally binding obligations in respect of children under international law. In particular, Article 3 of the 1989 Convention on the Rights of the Child (CRC) states:

> In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interests of the child shall be a primary consideration.

Article 24 of CRC states:

> 1. States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health-care services.
>
> 2. States Parties shall pursue full implementation of this right and, in particular, shall take appropriate measures:
> … (b) To ensure the provision of necessary medical assistance and health care to all children with emphasis on the development of primary health care.

Respecting these obligations entails facilitating adolescent access to HTC and linkage to care.

2.1.2 Key populations

In the context of these guidelines, **key populations** are defined as those populations at higher risk of HIV (those populations disproportionately affected in all regions and epidemic types, including sex workers, men who have sex with men, transgender people and people who inject drugs).

These guidelines specifically address adolescent key populations, ages 10–19 years. In addition to the groups mentioned above, other adolescents who are vulnerable to HIV include adolescents who are sexually abused and/or exploited and those in prisons and other closed settings.

Sex work by definition involves only adults. The involvement of children and adolescents under 18 in sex work is classified as sexual exploitation by and engagement in commercial sex.

There has been little explicit focus on the particular needs of adolescents within the groups considered most at risk for HIV. Four groups of adolescents considered to be most at risk for HIV (referred to as adolescents from key populations) are adolescent males who have sex with men (MSM), adolescents who are sexually exploited (and those ages 18 years and over engaged in sex work), adolescents who inject drugs (PWID) and transgender (TG) adolescents (male and female). Other groups of adolescents, especially in generalized epidemics, are also at higher risk of infection. These include adolescents affected by AIDS (orphans and children of chronically ill caregivers) *(35)*, clients of sex workers, the partners of these clients, HIV-negative partners in serodiscordant couples and, in high-prevalence settings, girls who are being sexually exploited by older men or having sex with adolescent MSM *(36)*. Programmes need to find ways to reach out to sexually active adolescents (whose STIs and unintended pregnancies indicate unsafe sexual practices) through tighter integration of HIV screening with sexual and reproductive health (SRH) services. Programmes also need to take into consideration the differing age-related capacities of adolescent members of key populations to access services.

Often there are policy and legal barriers to providing services for young key populations. In some cases certain behaviours and sexual orientations are criminalized, and in other cases restrictive education policies or conditions such as requirements for schools to disclose the HIV status of learners or lack of educators with training to provide counselling or support need to be reviewed and amended.

Given their marginalized social position and their reluctance to attend diagnostic and treatment services due to fears of stigma including possible legal consequences, increased access to HTC for adolescents from key populations is a priority in all epidemic settings.

2.1.3 Recommendations—HTC for adolescents

❶ HIV testing and counselling *with linkage to prevention, treatment and care* is recommended for adolescents from key populations in all settings (generalized, low and concentrated epidemics). *Strong recommendation, very low quality evidence*

❷ In generalized epidemics, HIV testing and counselling *with linkage to prevention, treatment, and care* is recommended for all adolescents. *Strong recommendation, very low quality evidence*

❸ In low and concentrated epidemics, HIV testing and counselling *with linkage to prevention, treatment and care* is recommended to be made accessible to all adolescents. *Conditional recommendation, very low quality evidence*

All three recommendations pointedly emphasize *linkage to prevention, treatment and care*. Health workers will likely face greater challenges ensuring adolescents are appropriately linked to services following HIV testing, than they face working with children who are accompanied by caregivers or when working with adult patients—who usually have more ability, experience and maturity to seek out and take responsibility for their care.

Any intervention related to counselling, care and support for adolescents must include elements of sexuality education. Furthermore, adolescent sexuality should be treated in a positive, non-judgmental way with all adolescents, regardless of their HIV status *(37, 38, 39)*.

Expansion of HTC for adolescents will identify greater numbers of horizontally infected individuals; even if many of them do not immediately require treatment, health services will be challenged to make sure that this group consistently accesses prevention, care and support services over the long term. For all ALHIV who are enrolled in treatment, linkage to services for adherence support and for retention in prevention, care and support will be essential.

Summary of the evidence

The particular characteristics and needs of adolescents often cannot be addressed by applying guidelines based on evidence and recommendations relating to paediatric or adult populations. Furthermore, adolescents themselves are not a homogeneous group. Physical and psychological (cognitive and emotional) development varies among adolescents, and differing social and cultural factors as well as their evolving capacities can affect both their ability to make important personal decisions and their access to services. For these reasons guidance should take into consideration the range of adolescents' needs and issues. As little research has been conducted related to HTC among adolescents and adolescents living with HIV to date, these guidelines have given considerable weight to expert opinion, the values and preferences of adolescents and health-care providers, and the field experience of practitioners.

Systematic review: summary of main results

See Annex 3 for the full report of the systematic review related to HTC for preventing HIV transmission and improving uptake of HIV treatment and care in adolescents.

Few randomized controlled trials (RCT) were found examining the impact of HIV testing on outcomes important to adolescents and young adults in either generalized epidemic settings or high-risk populations in low-level epidemics.

Generalized epidemic settings

In generalized epidemic settings there are no randomized trials conducted specifically among adolescent populations. However, indirect evidence, from RCTs conducted among adults, found that HTC is effective at reducing unprotected sexual intercourse with non-primary partners and reducing STI incidence among those at risk for HIV infection. Additionally, enhanced post-test counselling that includes community support agents is effective at improving uptake of pre-ART care among patients with HIV.

With new evidence to support treatment as prevention and the potential of potent antiretroviral regimens to reduce HIV-related morbidity and mortality, more data are needed on the impact of different HTC strategies on HIV incidence and linkage to HIV care for adolescents with HIV. Most data on the effectiveness of HTC are based on a voluntary counselling and testing (VCT) model that includes personalized risk assessment and development of a personalized risk reduction plan for each client. Interventions using brief discussions instead of such personalized counselling need further evaluation. Furthermore, data are needed on the most cost-effective strategies for testing adolescent populations, whether in facilities or in the community. Data are needed also on effective strategies to link adolescents who test positive to HIV treatment and care, and those who test negative to prevention services and commodities.

Low-level or concentrated epidemic settings

HTC has demonstrated efficacy in generalized settings among adults. In low-level epidemic settings among high-risk youth, sub-analysis of one RCT found that HTC reduced the incidence of STIs among heterosexual adolescents attending STI clinics. This interactive risk reduction counselling includes personalized risk assessment and risk reduction plans. This intervention has not been studied, however, in several important high-risk populations, including young MSM and

homeless and substance-abusing youth. The applicability of these data to such key populations of adolescents in low-level epidemic settings is unclear; there may be a need for specialized counselling and community outreach due to higher risk behaviours and lack of HIV knowledge. Data from another RCT among youth in community-based substance abuse services support the effectiveness of rapid, oral, point-of-care testing technologies in improving the uptake of HIV, HBV, and HCV testing. This may prove a model for high-risk populations. No studies evaluated the impact of HIV testing among adolescent populations in low-level epidemics on HIV incidence, morbidity and mortality. More data are needed from and about young MSM and other adolescent key populations on the efficacy of HTC interventions on outcomes important to patients and on linkage to care.

Quality of evidence

In this analysis the quality of evidence from RCTs varied from very low to moderate in generalized epidemic settings and from low to very low in low-level epidemics. The quality of evidence was moderate for the outcome of STI incidence, based on one RCT *(40)*, which was downgraded only for indirectness due to a largely adult population. However, for all other outcomes in both generalized and low-level epidemics, evidence from RCTs was either of low or very low quality, downgraded for imprecision (few participants and events) and indirectness (evidence from largely adult populations, or self-reported behavioural outcomes). Additionally, one study was also downgraded for indirectness, as the population was sick, hospitalized inpatients *(41)*.

In this analysis the quality of evidence from the observational studies was very low, downgraded for serious study design limitations (no comparator), imprecision (few participants and events), and indirectness (self-reported behavioural outcomes, or evidence from largely adult populations).

Values and preferences: HTC

A study of the values and preferences of adolescents and service providers facilitated the participation of those who will be most affected by improved access to HTC and to ensure that their perspectives were included in the guidelines development process (see full report in Annex 10). A series of 10 workshops, involving 98 participants (ages 15–24 years) was conducted in the Philippines, South Africa and Zimbabwe. An online survey was also conducted in four languages to ensure a broader geographical representation of the values and preferences of adolescents regarding HTC; 655 respondents from 92 countries completed the survey. Interviews with 16 service providers from various health-care settings in three countries were also conducted.

Motivations for and deterrents to testing

In community consultations in the Philippines, South Africa and Zimbabwe, young people (15–29 years) reported that, in spite of various barriers to testing, they recognize the benefits of testing and knowing their HIV status, including the autonomy it demonstrates in taking decisions about their own health and survival. They talked about taking control of their lives, the importance of looking after their own health, the need to *"take the right steps"* when receiving a positive diagnosis and, if the result is negative, being able to get the support and advice that they need to remain negative. Many participants mentioned a sense of responsibility to themselves, their partners, their families and society as a motivation for testing. Starting a new relationship was mentioned as a motivation by 15% of respondents of the survey, and 40% found that being offered HTC while seeking other health services was a useful motivator to testing. One of every six survey respondents indicated that encouragement from others was an important motivation for seeking a test.

At the same time, a number of participants talked about feeling pressured or required to test by parents or partners, while one participant made a stronger statement about pressure from heath providers: *"They don't treat you if you don't get tested when you are sick."*

The greatest barrier to testing for all participants is fear—of the process, of the result, of their parents' reactions, of disruption to their educations, of death. Almost 9% of young MSM and who had taken a test reported that they live with considerable fear that their parents will be informed; this was twice the rate of other male respondents. In contrast to findings from other countries, South African participants were very specific about the burden of living with HIV in terms of the changes to one's lifestyle: having to use condoms, adhere to ART, eat healthy foods and regularly attend clinic. Filipino participants observed, *"HTC seems so burdened with negatives"*, which can be a considerable deterrent to testing.

One of the main deterrents to testing is the potential to experience stigma and discrimination. Workshop participants repeatedly mentioned the expected consequence of being rejected, if the result is positive, by friends, family and the community as a reason for reluctance to seek a test. Concerns about stigma and its consequences were also evident in e-survey responses: 16% of tested respondents listed being afraid of what others may think as a concern when deciding to test. This concern was more evident (27%) for those who identified as MSM.

All workshop participants agreed that the lack of testing facilities is a barrier to access. Specific issues included location, costs, long waiting times and limited hours of operation. Some felt that there were not enough health staff and other resources to tend to all those who needed assistance. Regarding access, 27% of online respondents reported that they would like to get tested but did not know where to get tested or had not had the opportunity to test (34%). Only 17% of the 351 online respondents who had taken an HIV test reported referral and linkage to care following the test (regardless of test result), while 70% received no onward referrals and 13% did not answer the question.

Adolescents and young adults: improving access to and uptake of HTC for adolescents

Workshop participants and survey respondents offered suggestions for improving access to and uptake of HTC by adolescents. They proposed options for consideration at four different levels:

- **Engaging the community.** It is important to *"captivate young people"* in their own environment and to *"make testing less scary"*. Awareness-raising events and activities can be designed specifically for adolescents in places that are comfortable for them, such as schools, nightclubs, sporting venues and churches. Other suggestions for engaging the community included the involvement of celebrities and peers living with HIV as public role models and advocates for testing. This strategy depends significantly on the availability and accessibility of accurate and complete information and optimal use of social media, libraries and mass communication channels. "Normalization" was often mentioned as an essential step toward increasing understanding and decreasing stigma related to HIV and HTC.
- **The role of health service providers.** Adolescents consider it very important to be able to relate to the person providing HTC. In ideal situations this might mean engaging adolescent and ALHIV peers as health educators and HTC providers, thus bridging the gap between adolescents and health services. Above all, there is a need for respectful, accepting, friendly, understanding and supportive providers to encourage adolescents to test.
- **HTC service delivery.** Participants in the workshops consider the service environment as very important for adolescents seeking HTC. This includes several components: a youth-friendly atmosphere, flexible hours, separate waiting areas for adolescents, alternative service delivery settings (e.g. schools,

social centres and mobile services) and the assurance of confidentiality, which might include the option for self-testing.
- **Improvements to the health system.** These included increasing the number of testing sites (addressing capacity as well as issues of proximity/rural access), reducing fees and other costs of testing and strengthening referrals from community organizations and rural health clinics.

Service providers: improving access to and uptake of HTC for adolescents

Service providers recognize that adolescents in many settings can be at high risk of HIV infection, and they consider effective and accessible services for adolescents a high priority. At the same time providers note that policies and services concerning HTC often are not geared specifically towards adolescents, and the needs of this group are underserved.

Providers acknowledge that interactions with adolescents are challenging and emotionally draining. They attribute some of this to cultural norms or societal views concerning HIV and sex, the influence of religious restrictions and widespread stigma and discrimination. Many providers also note a lack of appropriate training in specific skills needed for working with adolescents. Additionally, understaffing is considered a problem in many places, preventing providers from spending the time required to address adolescents' particular needs and often resulting in long queues and waiting times that could discourage adolescents from testing. Expanding access to HTC through decentralization and greater involvement of community-based organizations could help to alleviate the pressure of workforce shortages in formal health facilities. Adolescent-friendly approaches that are centred on adolescents' own particular communities could increase the acceptability of services for adolescents, (especially for key populations). This might be easier to deliver through community-based organization than in larger or more formal facilities.

Many service providers raised the issue of age of consent. Inconsistencies in the practical application of consent laws emerged as significant concerns, even in South Africa where adolescents can get tested at age 12. Some providers noted that age of consent in their facilities was higher than that of the national law, while others admitted acting in defiance of the law *"to do what is best for the adolescent"*. There are concerns about having to choose between complying with the law and testing an underage adolescent, and facing the possible consequences of either choice. Some adolescents have no parent or guardian, while some seek services with an adult claiming to be their parent. Laws must be clarified and providers must be trained to adhere to laws or official guidelines while acting in the best interest of their adolescent clients.

Service providers suggested some strategies for improving access to and uptake of HTC for adolescents, including:
- **education** of adolescents to increase awareness and reduce the fear surrounding testing
- **adolescent-friendly testing environments**
- **involving adolescents** in the design and delivery of services
- **clarification of legal issues**, especially with regard to consent.

Summary of the expert panel discussion and other considerations

This section documents the key points raised during the discussion on HTC at the expert meeting in Harare as well as feedback and inputs provided as part of the review process.

Adolescence

Adolescents are less likely than adults to be tested and less likely to be linked to services if they test positive. Also, HIV-negative adolescents who have been tested

are frequently not actively linked to prevention services supporting them to remain HIV-negative.

People responsible for HIV programming need to understand that the changes that take place during adolescence affect:

- how adolescents understand information;
- what information and which channels of information influence their behaviour;
- how they think about the future and make decisions in the present;
- how they perceive risk in a period of experimentation and first-time experiences;
- how they perceive sex, which is common during late adolescence;
- how they form relationships, respond to the social values and norms that surround them, and are influenced by the attitudes (or perceived attitudes) of their peers and others.

It will be important for programme managers to ensure that interventions are modified as necessary to reflect the particular range of characteristics of adolescence and different sub-populations within the adolescent population, e.g. younger/older, male/female, and adolescents from key populations.

The "ecology" of the adolescent is, for most adolescents, the family and the community. Schools are especially important as educators have an important role to play in promoting HTC. Parents and guardians must be educated and be willing to support their child being tested (and accompanying the adolescent for testing if she or he chooses). The broader community needs a better understanding of the importance of testing as well as the importance of respecting the rights of adolescents, including the right to confidentiality. However, while efforts to enlist the support of parents are important, parents' involvement is not always beneficial and some adolescents will need additional support. This is especially true for adolescents from key populations who may be estranged from their families and who define their family and community very differently from other adolescents.

HIV testing

Testing should not be viewed as an end in itself. There need to be clearly defined linkages to post-test support services for both adolescents with and without HIV. Tracking and monitoring of service provision are also important.

Lack of linkages between testing and subsequent care discourages adolescents from seeking HIV testing in the first place. Post-test support is particularly important for adolescents, and standards for quality post-test counselling are needed. The potential adverse outcomes of inadequate or poor quality post-test counselling must be avoided. More guidance is needed on effective approaches to counselling (pre- and post-test), testing, links and pathways to prevention, treatment, care and protection.

Cost-effectiveness is important to deciding how to implement these guidelines. Expanding access to HTC is the overarching goal, but this does not imply that all adolescents should be tested regularly. Programmes should be informed by context-specific epidemiology to facilitate optimal use of resources. In all settings, HTC should be available to any adolescent who wishes to test. In settings with generalized epidemics, efforts should be made to increase access to HTC for all adolescents, and in all settings priority should go to providing services for adolescents from key populations. In settings with low-level or concentrated epidemics, it is important to understand groups that are disproportionately affected by or more vulnerable to HIV and encourage them to create demand for the uptake of HTC amongst their communities. "Test-for-the-test" risk assessments

and other screening tools are available to identify adolescents who may be at risk *(42)*. However, some adolescents, particularly those who are homeless or orphans, may have been sexually abused; they may not consider this abuse to be "sex", or they may be unable or reluctant to talk about it. This can make effective and predictive risk screening difficult. For all who test, consistent follow-up is necessary, including systems to track those lost to follow-up. It is also important to promote better integration of HTC with SRH services, especially for adolescents whose STIs and unintended pregnancies indicate their high-risk sexual behaviour. A better understanding of the extent of forced sexual activity among adolescents is needed, and better linkages between HTC and protection services are needed to refer those who have been the victims of violence and sexual abuse. When HTC uncovers issues of sexual abuse, there must be mechanisms to alert protective services to ensure that adolescents do not return to abusive settings.

Offering routine testing in clinical settings in generalized epidemics—that is, provider-initiated testing and counselling (PITC)—is particularly important for 10–14 year old adolescents so as to identify both slow progressors and symptomatic adolescents who have not yet been diagnosed despite clinical contacts. Both groups urgently need to be diagnosed so that they can be linked to treatment and care. However, providers must take care to avoid the misinterpretation of PITC as mandatory testing and to facilitate adolescents' ability to opt out of testing.

Ministries of health need to develop standards, guidance, models, monitoring and supervision protocols and accountability and recourse mechanisms.

Consent to testing

Studies have shown that requiring parental consent to HTC services might reduce adolescent access because of perceived negative reactions from parents/guardians or health-care providers and the fear of HIV-related stigma *(43, 44)*. Adolescents may opt not to seek care because they want to avoid telling their parents about their health problems and sexual activity *(45)*.

Some caution is advised: if the legal age of consent to HTC is too definitive and prescriptive, it may be more difficult for health workers to use their judgment when dealing with individual cases, as many currently do. Furthermore, the advantages of parental involvement and parental consent to facilitate psychological support—that is helpful for treatment adherence and retention in care—must be balanced with the negative aspects of required parental consent when parents/guardians are not supportive or when adolescents fear abuse or other adverse outcomes with regard to parents/guardians.

Current consent policies are a key barrier to uptake of services by adolescents.[1] Countries should consider how best to address these issues within their own legal and social context and how, in general, to lower the age of consent for HTC. A range of issues need to be considered, including options for which persons can provide consent on behalf of a minor, e.g. an older sibling or relative.[2] Where countries have lowered the age of consent to 12 years (e.g. Lesotho and South Africa), access to and uptake of HTC by adolescents has increased without adverse consequences (South African Ministry of Health, personal communication, 2013).

Countries are encouraged to examine their current consent policies and consider revising them to reduce age-related barriers to access and uptake of HTC and to linkages to prevention, treatment and care following testing.

1 See Annex 15 for a review of the current situation with regard to consent in sub-Saharan Africa.

2 In the case of parental death, guardianship is often not legally conferred, but tends to be the head of the household with whom the adolescent is living at that time.

Directness of evidence

Some experience with adults regarding expansion of access to HTC could be applicable to adolescents, with appropriate modifications made to adult-oriented services. However, certain issues, especially concerning age of consent, will require careful consideration and policy review to ensure that the needs of adolescents are being met and that their rights are being protected.

Benefits of HTC

Adolescents are underserved, and changes in the systems that deliver HTC, treatment and care services are needed to prioritize appropriate and acceptable care for adolescents. It is expected that increased uptake of improved services—including linkages to prevention, treatment and care—by adolescents will have benefits for the individual as well as for public health.

Increasing uptake of HTC by adolescents

Routine PITC, home-based HTC and rapid testing may help to increase uptake of HTC services among adolescents, especially for slow progressors and pregnant adolescents. In low-prevalence settings, where infection is often acquired sexually and is concentrated in key populations, outreach or special venue-based HTC services may better serve these adolescents who may be socially marginalized and have limited access to conventional clinic services as well as potentially facing considerable risk of discrimination and legal consequences.

Many adolescent women, who make up a high percentage of the pregnant population, are already being tested in PMTCT programmes.[1] Lessons from the successful scale-up of HTC in antenatal care (ANC) programmes can be applied to the development of routine testing programmes for adolescents, particularly in sub-Saharan Africa (in the Asian context, low coverage of PMTCT and ANC limit these opportunities). Some data suggests that adolescents are more likely to drop out of care after delivery than adult women. This should be addressed through youth-friendly linkages and retention-in-care programmes. PMTCT services often find it a challenge to provide referral and adequate preventive services to adolescents testing negative (G. Hainsworth, Pathfinder, personal communication, 2013).

Adolescents consistently indicate preferences for compassionate, friendly, and competent staff; counselling linked with testing and other services along the continuum of HIV care; and rapid testing free of charge.

The main barriers to testing include stigma and discrimination, perception of low HIV risk, fear of knowing one's HIV status and of living with HIV.

Approaches to increasing uptake of HTC that require further research include pre-test risk reduction education, social networking, computerized testing prompts, adolescent-friendly services, and outreach HTC services accompanied by motivational interviewing. Self-testing kits also may expand options for adolescents who are reluctant to seek any type of HTC services; research will also be needed to determine the effectiveness of this approach with this population.

1 About 16 million women 15–19 years of age give birth each year—about 11% of all births worldwide. See http://www.who.int/maternal_child_adolescent/topics/maternal/adolescent_pregnancy/en/index.html

Key populations

In all epidemic settings, accessible and acceptable HTC services must be available for adolescent key populations, and provided to them in ways that do not put them at risk.

Although the emphasis in low- and concentrated epidemics should be on providing acceptable HTC for adolescents from key populations, HTC services should be available to any adolescent who wishes to test. In low-level and concentrated epidemics, key populations are the most at risk, but it is important to ensure that they do not feel set apart or vulnerable to marginalization. Among the different epidemic settings, the delivery of testing and other services should take into consideration the social and legal environment of key populations, other socio-cultural factors for adolescents in general, and cost-effectiveness in different settings. Interventions to adapt delivery of services include outreach to places where adolescents from key populations congregate, social networking, and snowballing techniques to contact these adolescents in safe and acceptable ways.

Some countries have heterogeneous or mixed epidemics—where in some regions of a country the HIV epidemic is generalized, while in others it is concentrated. In many countries with generalized epidemics, there are also significant, more acute epidemics among adolescents from key populations. In resource-constrained countries it will be especially important to distinguish among sub-national epidemics to avoid misallocation of scarce resources. At the same time, targeting key populations can be extremely stigmatizing. For this reason it is essential that everyone has access to testing. In concentrated epidemics, testing should be available to any adolescent who requests a test; however, it is usually not cost-effective in these settings to conduct campaigns promoting testing to the general public.

Adolescents from key populations are frequently among the most underserved groups in society. Few health workers, or policy-makers in particular, address the needs of these groups—and most fail to acknowledge these adolescents at all—thus limiting services and policies to people 18 years of age and above.

Although key populations commonly refers to MSM, transgender people, sexually exploited adolescents, MSM and PWID, in many settings, particularly in generalized epidemics, other population groups such as adolescent girls and orphans should be prioritized and included in programme planning because of their increased vulnerability to HIV.[1]

It is essential for each country to understand the epidemiology of its own epidemic, i.e. which groups are most likely to be infected or at risk of infection and face the greatest barriers to accessing health services. These groups will require prioritization for accessible and acceptable testing and additional support.

Operational guidance in this area is urgently needed.

Agreement on the recommendations

Many countries have accreditation processes that require HTC services to provide good referrals/linkages to follow-up prevention, treatment and care, yet most referral systems are inconsistently implemented and rely on passive referrals from HTC sites, and adolescents in particular are not benefiting from appropriate referrals. All recommendations addressing HTC, therefore, include specific mention of

1 Orphans may face particular barriers when caregivers are unaware of the HIV status of a child they have taken responsibility for, or may be reluctant to disclose the status of the child if they do know.

linkages to prevention, treatment and care as an essential component of effective HTC services for adolescents.

For the first two recommendations, the WHO Guidelines Development Group considered the benefits and cost-effectiveness of HTC for all age groups and the urgent need to identify adolescents who require initiation of ART or more effective support for prevention. For that reason, there are strong recommendations regarding expanded access for key populations in all settings and for all adolescents in generalized epidemic settings.

For the third recommendation, there is uncertainty about resource availability and use for HTC interventions in concentrated epidemic settings. Still, the recommendation is considered important to enable adolescents who want to know their HIV status to receive support to do so.

2.2 Adolescents living with HIV: disclosure, adherence and retention

This section covers recommendations regarding support for disclosure by adolescents to others and approaches to strengthen support for adherence to treatment and retention in care, specifically through community-based interventions and training of health workers.

In these guidelines, disclosure refers to disclosure by adolescents to others to facilitate support for managing with a positive diagnosis, retention in care and adherence to treatment, and to reduce the likelihood of new infections.

The issue of disclosure of HIV status to children and adolescents by providers and parents is addressed in the WHO guidelines on HIV disclosure to children. These recommend that children of school age should be told their HIV status and that of their parent/s or caregiver/s; younger children should be told their status incrementally to accommodate their cognitive skills and emotional maturity, in preparation for full disclosure *(46)*. These WHO recommendations therefore apply to adolescents, as full disclosure is recommended for all primary school age children. However, in many settings, adolescents are often not aware of their own HIV status, and this non-disclosure is associated with significantly lower retention in HIV care *(47)*.

For ART to be effective in the long term, it is important that adolescents are supported to adhere to treatment and remain in care. These guidelines examine whether training of care providers can support better adherence and retention. They also review a wide range of community-based approaches and highlight operational issues, which are recommended in the WHO *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection (4)*. The recommendation concerning disclosure by adolescents and the two recommendations for improving adherence and retention are presented along with summaries of the evidence and summaries of the Guidelines Development Group discussions. The evidence includes the systematic GRADE review of selected studies and the values and preferences derived from an e-survey of adolescents living with HIV. The summaries of the Guidelines Development Group discussions are accompanied by complementary findings of a literature review of published and unpublished studies and reports related to ARV service delivery for adolescents as well as contributions from peer reviewers. The 13 service delivery recommendations presented in the WHO *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection* are also included *(4)*.

2.2.1 Recommendation—Disclosure

❹ Adolescents should be counselled about the potential health benefits and risks of disclosure of their HIV status to others and empowered and supported to determine if, when, how and to whom to disclose. *Conditional recommendation, very low quality evidence*

Summary of the evidence

Systematic review: summary of main results

See Annex 4 for a full report of the systematic review related to disclosure of HIV status by adolescents to others.

Overall, studies of adolescents have found that disclosure was associated with improved clinical outcomes as measured by increased CD4 cell counts *(48)*, decreased number of partners (but not with decreases in unprotected sex) *(49)* and increased distress when disclosure was to acquaintances, but with no statistically significant association with mental health symptoms with disclosure to family or close friends *(50)*.

Seven studies of adults showed disclosure was associated with better linkage to care and ART adherence *(51, 52, 53, 54, 55, 56, 57)*, only one found no association *(58)*. Other studies showed disclosure was associated with higher CD4 counts *(59)*, and nondisclosure was associated with virologic failure at 48 weeks *(60)*. Disclosure was associated with better HIV testing and nevirapine adherence in the infants of mothers who disclosed their positive HIV status to their partners *(61, 62)*, while nondisclosure was associated with suboptimal PMTCT outcomes *(63)*.

Other studies of adults reported on additional outcomes. Disclosure to sexual partners was associated with increased frequency of condom use and reduced number of sexual partners; those who disclosed to HIV-negative partners were significantly less likely to engage in unprotected anal sex compared with those who did not disclose their HIV status *(64, 65, 66, 67, 68, 69, 70)*. One study of adult women of three ethnic groups in the United States of America found no association between disclosure and depressed mood or health-related psychological distress except among Latinas, in whom a modest association was found *(71)*. In four studies of adults, disclosure was associated with higher levels of HIV stigma; women who disclosed to sexual partners reported negative experiences such as anger and blame, including one study where women reported that partners reacted with violence and terminated the relationship *(66, 72, 73, 74)*.

Small group discussions or group counselling supporting disclosure was shown in a trial of adolescents with HIV in the USA to significantly decrease the adolescents' report of unprotected sex, but there was no statistically significant difference in disclosure of HIV status to sexual partners *(75)*. In other studies in the USA, when small group discussions were used to support disclosure by parents with HIV *(75)*, there was no significant increase in disclosure to their adolescent children, and the parents had significantly higher mean depression scores at three months (but no significant difference at 15 or 24 months). Adult MSM living with HIV were no more likely to disclose to a higher number of family members (statistically non-significant) than was the control group *(76)*.

Structured support groups or workshops in Africa were shown to significantly increase disclosure by pregnant women with HIV at two and eight months of follow-up; there was no statistically significant difference in reported depression *(77)*. Another study *(78)* found no significant difference one week after women with HIV participated in empowerment workshops to help them deal with the emotional consequences of keeping their HIV status a secret.

One-on-one counselling significantly increased disclosure by mothers with HIV to their young children in one study *(79)*, but the quality of the evidence is very low.

Peer-led behavioural interventions were shown to significantly increase adult MSM's self-reported motivation to inform sexual partners *(80)*.

Nine additional studies were included, but were not amenable to GRADE analysis because of inadequate data. One study was a disclosure-only intervention *(81)*; the remaining were more comprehensive interventions designed to address multiple issues relating to HIV infection, but included disclosure as part of the intervention.

Small group discussions (adolescents). There was limited evidence from the one adolescent study *(82)* that professionally led small group sessions had a positive effect on the adolescents' mental health.

Small group discussions (adults). A cluster randomized controlled trial of pregnant women with HIV found small group teaching by peer mentors resulted in increased preventive behaviours, decreased maternal depression, and better infant outcomes; no significant effects of the intervention were observed with respect to disclosure of the women's HIV status to their children *(83)*. A randomized controlled trial found professional and peer-led support groups for low-income women with HIV increased condom use but not disclosure of HIV status to sexual partners *(84)*.

Community-based interventions with disclosure component. One study found less loss to follow-up, improved retention in care and improved community-wide promotion of disclosure among adults with HIV who received community-level support from case managers, adherence counsellors and community volunteers, as measured against facility baseline data *(85)*. Another study found that adults with HIV, with support from community health workers, were significantly more likely to disclose their serostatus to family members *(86)*.

Individual counselling-based interventions. One study found that adults with newly diagnosed HIV infection had a significant decrease in depression scores four weeks after assessment and a significant increase in their intention to disclose their status *(87)*. Another study found that adults with HIV who reported unprotected sex with a partner of negative or unknown serostatus all reduced unprotected sex, regardless of their randomized assignment to intervention or control group *(88)*.

Online, computer-based interventions. One study found no difference in the rate of HIV disclosure among MSM (both with and without HIV) after viewing an online intervention designed to promote critical thinking about HIV risk, but were less likely to report a new or casual sexual partner or unprotected anal intercourse than before the intervention *(89)*. Another study found that disclosure behaviours improved in terms of intentions and attitudes among MSM living with HIV after facilitated administration of an intervention tailored for disclosure to casual sexual partners *(81)*.

Values and preferences: disclosure

A study of the values and preferences of young people living with HIV (10–24 years of age) was conducted to obtain the views of those who will be most affected by HIV treatment and care services for ALHIV and to ensure the inclusion of their voices in the guidelines development process (see Part 1, Section 2.2.2 for summary and Annex 11 for full report).

A scoping review indicated that disclosure of HIV status was correlated with increased social support, social self-confidence and decreased problem behaviour. In some studies reviewed it was observed that disclosure of one's positive status to others is a skill that takes time to develop and can be improved through support and instruction by health workers.

The online, anonymous survey did not explore the issue of disclosure specifically, but some of the respondents' comments suggest that support for disclosure may be needed and beneficial for adolescents.

"Privacy is an issue . . . Not all of us are ready to disclose . . . When we queue at a window [labelled with a sign] 'ARVs' . . . everyone can see that we are HIV-positive and that makes the stigma to be worse. . .My family doesn't know yet . . . Teach us how to discuss [our HIV status] with family."

During the workshops in South Africa and Zimbabwe (part of the values and preferences work related to HTC, see Part 1, Section 2.1.3), participants agreed that disclosing one's HIV status is the decision or right of an individual. Opinions were divided, however, regarding whether one should share one's status and with whom. Some participants felt that *"you should share your status with those you can trust"*, as this provided a *"necessary means of support"*, especially for accepting a positive diagnosis. Other participants, notably those in the Philippines and South Africa, felt that "it was better to keep it [HIV status) to yourself". This view reflected concerns that *"someone could use your status against you in the future"* or *"spread it around to others without your permission"*, or that disclosure could result in rejection and loss of relationships.

Service providers interviewed during the community consultations on HTC expressed a more complex perspective than the adolescents. Many admitted that disclosure is very challenging to discuss and is often not adequately addressed with adolescents in pre- or post-test counselling. In the Philippines, some providers felt that guidance or policy on how to address disclosure was unclear or non-existent. While most providers asserted that disclosure was the adolescent's decision, a number of providers advocated disclosure to parents by providers. This was seen as essential for the practical support that most ALHIV will need. Others highlighted the need to take into account the willingness and readiness of each adolescent to disclose.

Summary of the expert panel discussion and other considerations

This section documents the key points raised during the discussion on disclosure among the participants at the expert meeting in Harare as well as feedback and inputs provided as part of the peer review process.

Benefits and risks of disclosure

Support from family and close friends can be particularly important for adolescents who may lack the maturity, experience or resources to cope with a positive diagnosis by themselves. They will be able to access this support only if trusted family members and close friends know their HIV status. From a public health perspective, disclosure is important for prevention of onward transmission.

However, adolescents who disclose their positive status face the potential of stigma, violence and abandonment, often at the hands of the people closest to them. Young married women and adolescent members of key populations may experience this more often and/or intensely than others.

It is important to emphasize that disclosure also comes with different degrees of risk, depending on who is disclosing to whom. Implications of disclosure by an adolescent to others, can include the risk of violence from sexual partners and risk of legal repercussions due to laws that criminalise HIV non-disclosure, exposure and transmission. For members of key populations in particular, disclosure may entail risk of persecution or other legal consequences if it suggests illegal behaviour or practices.

Disclosure to different people

Disclosure to sexual partners and disclosure to parents, friends, peers and others are very different processes, carried out for different reasons with very different implications. The possible support that can be gained from disclosing to a friend or family member can be a critical component of an adolescent's care and is a principle reason that an adolescent may choose to disclose. Disclosure to a sexual partner (either past or future) could provide support, but it could instead have significant negative implications for self-esteem and confidence in one's sexuality and for sexual and reproductive rights, and it is often done from a sense of responsibility.

Prevention of onward transmission

The primary benefits of disclosure should be to maximize support for the adolescent. Disclosure to sexual partners for the sake of their own health should be seen as only one of the ways that an adolescent could choose to prevent onward transmission and, therefore, is not explicitly part of the recommendation. The creation of safe environments for disclosure is the paramount for this recommendation. At the same time and to the extent possible, WHO recognizes that honesty in terms of disclosure to partners is a good stance and part of an adolescent's ethical development. Adolescents should be encouraged to take responsibility for onward transmission in some way, e.g. always using condoms, and partners should have access to post-exposure prophylaxis and emergency contraception if a condom breaks.

Operational guidance is needed for disclosure by adolescents specifically to their sexual partners. This should be considered within a "prevention package" including condom use, PMTCT and attention to legal frameworks and implications.

In general, disclosure to sexual partners is different for adolescents than for adults. Adolescents are often not in long-term stable relationships, and they may not have the knowledge and emotional skills to deal with the difficult issues raised by disclosure to partners, including dissolution of the relationship. Unequal power dynamics that are common among adolescents (e.g. between adolescent women and older partners) may also come into play, leaving the adolescent partner more vulnerable to isolation or abuse following disclosure. Moreover, there are major challenges with ensuring that ALHIV protect themselves and their partners from HIV transmission; e.g. poor or inconsistent condom use is a common problem. Alcohol, drug use, and other high-risk behaviours that often begin during adolescence also may constrain effective disclosure and safe sexual behaviour. Providers need to understand all the issues and dynamics involved with disclosure by adolescents in order to focus on the safety of the individual who is disclosing.

Support for disclosure from health-care providers

Disclosure of one's positive serostatus may involve disclosure about many other aspects of life (particularly for members of key populations). Health workers and peer counsellors need operational guidance on how to support adolescents to make decisions about disclosure, including their right to disclose and *not* to disclose. For adolescents, it is especially important to ensure that anonymous reporting systems are in place to ensure confidentiality and protection. Obligatory disclosure by health workers to authorities can be a powerful deterrent to HTC for members of key populations and other ALHIV. Also, it can lead to loss to follow-up among individuals who have not yet enrolled in treatment and care services, and it can also undermine retention in care for individuals who have already been enrolled in treatment and care. As part of HTC, service providers can discuss the issue of shared responsibility for prevention as well as disclosure of a positive diagnosis if an adolescent with HIV chooses to do this.

Disclosure by adolescents to others requires that they are aware of their own HIV status (see Part 1, Section 2.1.3 for discussion on the importance of HTC). In some cases adolescents may not know that they are living with HIV, even though they may have been diagnosed and may even be on treatment. When parents or other caregivers have not informed a vertically infected adolescent that he or she has HIV, it is possible that the parents may be more concerned about disclosure of their own HIV status than about their adolescent's health and well-being. All adolescents should be informed of their own HIV status, as this has significant benefits. Countries need to ensure that good policies, tools, training and programme support are in place to help health workers inform adolescents of their status when they have not already been told.

In situations where health workers are uncomfortable providing disclosure advice and support, or where there are health workforce shortages or other constraints on health staff, peer educators and community-based organizations could provide valuable support about disclosure.

Legal considerations

The Guidelines Development Group expressed considerable concern regarding the adoption and application of criminal law in relation to HIV and the potential implications of these laws for adolescents living with HIV. Safe and supportive disclosure is possible only in a legal and policy environment where adolescents do not risk harassment or arrest by police due to decisions to disclose or not to disclose their HIV status.

Adolescents are less knowledgeable about the law than their older counterparts. They may have a poor understanding of the legal environment in which they live and lack capacity to obtain legal support. The growing trend to introduce new laws that criminalize HIV transmission and exposure, and the use of existing laws to prosecute people living with HIV, could significantly deter adolescents from disclosing or from accessing services in the first place. An adolescent living with HIV can be much less inclined to disclose if they fear accusation by previous "disgruntled" sexual partners, followed by criminal prosecution. To avoid legal repercussions, individuals can elect not to disclose, denying themselves access to sources of support and links to vital treatment and care services. In such contexts the law continues to hinder access to essential HTC services and, in particular, to deter young people whose understanding of the law is limited. Where non-disclosure of HIV status is criminalized, the safest legal defence is ignorance of one's own serostatus, which is ultimately counterproductive to public health interventions and an individual's right to health and survival.

Other issues

Failure to disclose can be a particular problem among adolescents who are pregnant or delivering. If her partner or supportive family members do not know that a young woman has HIV, she will not have their support for safe infant feeding and uptake of PMTCT interventions and HIV care.

A scoping literature review (Annex 11) emphasized the notion of "skills" for disclosure. Developing these skills requires instruction and support from health-care providers and others. Some of the studies and reports reviewed suggest that disclosure may result in increased social support, self-confidence, and decreased risk-taking behaviour.

Some field practitioners and adolescents have noted that the notion "HIV stops with me" is gaining more importance and acceptability among people living with HIV, where individuals with HIV assume the responsibility to avoid putting someone else

at risk.[1] However, adolescents need to feel safe and protected from discrimination and other adverse consequences following disclosure. Legal, ethical and social issues therefore need to be considered in the context of this recommendation. Where relevant and acceptable, partners/couples counselling and mutual disclosure of serostatus should be considered (including in ANC) *(90)*.

Agreement on the recommendation

Although there was limited evidence on which to base a recommendation, the Guidelines Development Group felt that counselling and support for disclosure are extremely important and are represented in the guidance as a recommendation based on the best judgment of practitioners and advocates working in the field. The recommendation serves as the basis to support further operational research to evaluate approaches to implementation.

2.2.2 Recommendations—Adherence to treatment and retention in care

❺ Community-based approaches can improve treatment adherence and retention in care of adolescents living with HIV. *Conditional recommendation, very low quality evidence*

❻ Training of health-care workers can contribute to treatment adherence and improvement in retention in care of adolescents living with HIV. *Conditional recommendation, very low quality evidence*

Two key types of interventions that could support adherence to ART and retention in care—training of health workers and a range of community-based approaches—were specifically reviewed by the Guidelines Development Group for these guidelines in addition to the interventions recommended in the WHO *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection* (i.e. service integration, decentralization, task shifting and mobile text messages) as they related to adolescents.

Summary of evidence

Systematic review: summary of main results

See Annex 4 for full report of systematic reviews related to community-based approaches and training for improved adherence to treatment and retention in care for ALHIV.

Community-based approaches

Overall, findings were a mixture of positive effects and no effects attributable to a range of community-based approaches in different populations and contexts.

Sixteen of the 17 studies amenable to GRADE analysis included adult populations, and one involved only children less than 16 years old. Therefore, the findings of this review may not be generalizable to populations of adolescents. Other concerns are the financial costs of community-based strategies for improving health outcomes of populations with HIV, as well as how to optimize adherence to programme protocols and quality of care provided by community health workers. Also, there may be significant challenges to scaling up community-based programmes for supporting adherence where there is limited infrastructure for monitoring or supporting community health workers.

1 Adolescents in the focus group discussions (FGD) in Zimbabwe expressed this attitude, mentioning a sense of responsibility to themselves, their partners, their families and society (see Section 2.1.3, regarding motivations and deterrents to testing).

The 10 RCTs analysed provided low- to very low-quality evidence for the benefits of community-based interventions and very low-quality evidence for most outcomes due to the observational nature of the studies, the small number of events reported, and indirectness of the populations studied (i.e. adults or children less than 10 years old).

Home-based health assessment, education and support by community health workers. Community-based interventions that included home-based health assessment, education and support by community health workers were associated with better levels of ART adherence in one of three studies *(91)*, with viral suppression in one of three studies *(92)* and reduced mortality rates in two of four studies *(92, 93)*.

mHealth support intervention used by peer health workers at home visits. All studies involved adult populations. Exposure to an intervention delivered by peers and supported by mHealth was associated with greater viral suppression at 96 weeks after initiation of treatment in one study *(94)*. However, no significant association between exposure to an mHealth intervention and virologic suppression was observed at earlier time points *(94, 95, 96)*. None of four studies of mHealth-supported interventions showed an association with ART adherence *(94, 95, 96, 97)*. None of three mHealth studies that examined mortality showed differences in mortality rates between intervention and control groups *(94, 95, 96)*. Although the available evidence suggests that mHealth interventions for peer health workers may have a role in supporting patient adherence and retention in some settings, there is insufficient consistent evidence to give clear guidance on when and how these should be used to best effect. Further research on the impact of mHealth/peer health workers is needed.

With regard to mHealth interventions provided to patients, the WHO *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection* provides a strong recommendation to consider mobile phone text messages to adult patients reminding them to take their ART medications. This intervention holds considerable promise for adolescents, too, as mobile phone use is often widespread in low- and middle-income settings. However, careful monitoring and evaluation of this approach for adolescents is needed to ascertain acceptable and effective implementation.

Peer-support interventions. One of three peer-support interventions showed an association with better adherence *(98)*. One study of a peer-support intervention that examined the effect of the intervention on mortality showed no effect *(98)*. One study that examined the effect of an intervention on keeping follow-up appointments found no effect *(99)*.

Socioeconomic support. The one study of a socioeconomic support intervention showed a reduction in mortality *(100)*.

Community-based Directly Administered Antiretroviral Therapy (DAART). Neither of two studies of community-based DAART showed an association with better adherence *(101, 102)*. A study of community-based DAART that examined mortality did not show an intervention effect on mortality *(102)*. However, one of two studies showed an association between receipt of DAART and reduced mean viral load *(103)*. One study that examined community-based DAART showed no effect on retention on the first-line ART regimen *(103)*.

Ten studies were identified for inclusion in this review but presented insufficient information for GRADE analysis; they lacked regression parameters *(104)*, had no comparator or the comparator was not the comparator of interest (i.e. standard care) *(104, 105, 106, 107, 108, 109, 110, 111, 112)* or reported only odds ratios without numerators *(113)*. Therefore, associations are described only briefly below.

Mortality

One observational prospective cohort study of adolescents and adults with HIV (>15 years) at a community-based ART clinic in South Africa reported the probability of death in the first year of ART (7.9%, 95% CI 7.0%-8.9%) and the cumulative probability of death after six years (15.2%, 95% CI 13.1%-17.6%) *(110)*. Male sex, lower baseline CD4 cell count, and WHO stage III and IV were associated with higher mortality risk.

One observational study comparing adolescents with HIV (9–19 years) and young adults with HIV (20–28 years) at a public sector community-based ART programme in South Africa reported similar overall mortality rates—1.2 (95% CI 0.3–4.8) deaths per 100 person-years among adolescents and 3.1 (95% CI 2.4–3.9) deaths per 100 person-years among young adults *(111)*.

One observational retrospective cohort study conducted in Rwanda reported a low mortality rate (5%) at two years following ART initiation among adults with HIV in care at a community-based ART programme *(112)*.

One non-randomized prospective cohort study conducted in Uganda compared treatment outcomes and mortality in a rural community-based ART programme with those in a hospital-based programme in the same district *(108)*. In this study mortality at six months was not significantly different between the cohorts (11.9% versus 9.0%).

Viral failure or viral suppression

One observational study that evaluated outcomes of patients enrolled to a community-based, comprehensive ARV programme in Uganda staffed by peer health workers and nurses reported 86% of active patients (211 of 246 tested) to have a viral load of <400 copies/mL *(107)*. Virologic failure was significantly associated with lack of CD4 response and any history of prior ARV use. No external comparator was included in the study.

One observational retrospective cohort study of patients with HIV in government HIV treatment sites in South Africa found that a significantly higher proportion of patients with a community-based adherence supporter maintained a suppressed viral load of <400 copies/mL at six months of treatment compared with patients without a treatment supporter *(104)*. Also, a significantly greater proportion of patients in care at sites with a community-based adherence supporter services maintained a suppressed viral load and for a longer period compared with patients in care at clinics without a community-based adherence supporter service.

One observational prospective cohort study of adolescents and adults with HIV (i.e. >15 years) at a community-based ART clinic in South Africa reported high rates of virological suppression by 16 weeks after ART initiation and no significant variation between successive years of recruitment *(110)*. Lack of virological suppression was associated with younger age (<25 years) and high baseline viral load (>5 $\log_{10}$ copies/mL).

One observational study comparing adolescents with HIV (9–19 years) and young adults with HIV (20–28 years) at a public sector community-based ART programme in South Africa reported adolescents to have significantly lower rates of virological suppression at 48 weeks than did young adults *(111)*. In addition, adolescents had significantly higher risk of virological failure than young adults, although the association was not significant when the comparison was limited to those perinatally infected.

One observational retrospective cohort study conducted in Rwanda reported a high rate of virologic suppression at two years after ART initiation (97.5% with <500 copies/mL) among adults with HIV in a community-based ART programme *(112)*.

One observational prospective cohort study conducted in South Africa reported high and sustained rates of virologic suppression (<400 copies/mL) over a 3-year period (100%, 92% and 98% for 2002, 2003 and 2004 cohorts) among adults with HIV in care at a public sector community-based ART clinic *(106)*.

One observational retrospective cohort study conducted in Kenya reported that time to treatment failure was significantly longer in patients who participated in peer support groups and/or received home visits than in those who did not *(105)*. Further, risk of treatment failure was significantly lower among patients who participated in support groups than among those who did not.

One non-randomized prospective cohort study conducted in Uganda reported that virologic suppression at six months was not significantly different between patients enrolled in a rural community-based ART programme and patients in care at a hospital-based programme in the same district (90.1% versus 89.3%) *(108)*. However, in a later report *(109)* the authors reported that patients enrolled in the rural community-based ART programme were more likely to achieve viral suppression at two years of follow-up compared with patients in care at the hospital-based programme.

ART adherence

One observational retrospective cohort study of patients with HIV receiving care in government HIV treatment sites in South Africa showed that a significantly higher proportion of patients with a community-based adherence supporter attained a treatment pickup rate of over 95% than patients without a treatment supporter *(104)*.

One observational retrospective cohort study conducted in Mozambique reported that patients who had a treatment partner had significantly higher levels of adherence than patients who had no treatment partner *(113)*. No differences in adherence were observed between patients with community-based treatment partners and patients with self-selected treatment partners.

One observational retrospective cohort study conducted in Kenya reported that a significantly greater proportion of patients who participated in support groups achieved higher mean adherence than patients who did not participate in support groups *(105)*.

Retention in care

One observational retrospective cohort study of patients with HIV receiving care in government HIV treatment sites in South Africa showed that the median retention in care was significantly longer for patients in care at sites with community-based adherence supporter services than for patients at clinics without a community-based adherence supporter service *(104)*.

One observational retrospective cohort study conducted in Rwanda reported a high rate of retention in care two years after ART initiation (92.3%) among adults with HIV in care at a community-based ART programme *(112)*. In multivariate analysis attrition was associated with older age (>50 years). An interaction existed between WHO clinical stage at baseline and sex. Men, but not women, with WHO stage 3 or 4 disease at baseline were more likely to drop out of care than those with WHO stage 1 or 2 disease at baseline.

One observational prospective cohort study conducted in South Africa reported low rates of loss to follow-up over a 3-year period (2.9%) among adults with HIV in care at a public sector community-based ART clinic *(106)*.

Training of health workers

No studies were found evaluating the training of health workers who provide treatment and care to adolescents living with HIV and the effect of this training on adolescent adherence to treatment and retention in care. However, one study using a quasi-experimental design was identified. It evaluated the use of a set of tools to build the capacity of health workers to respond to their adolescent clients effectively and with sensitivity. As there was such limited available published literature in this field, the reviewers also considered studies relating to health workers providing other chronic care to adolescents. Two randomized control trials were found that evaluated the training of health workers providing care to adolescents with other chronic conditions and the effect of this training on quality of care and adolescent health outcomes.

The overall goal of an evaluation in Gujarat, India, *(114)* was to determine whether, for selected reproductive health services in primary health centres, the WHO *Orientation programme on adolescent health for health-care providers* and the WHO *Adolescent job aid* tools would improve the quality of service provision and experiences of care for young female clients, ages 15–25 years. The findings indicated a number of positive outcomes of training including:

- improving health-care providers' understanding of the need to ensure privacy for young female clients;
- improvements in the attitudes of health-care providers at the intervention site towards young female clients;
- increased adherence to recommended procedures for assessment, pre-examination explanations, examination and treatment;
- improved client perceptions of the quality of consultations and satisfaction with services.

The RCT results of the intervention "Talking Diabetes" was published in two papers *(115, 116)*. The intervention involved training providers in agenda-setting, communication style and a flexible menu of consultation strategies to support patient-led behaviour change. It found that training diabetes care teams had no effect on HbA1c levels (a marker for diabetes control) or on self-reported adherence to diabetic medications. The authors reported that improving glycaemic control in children attending specialist diabetes clinics might not be possible through brief, team-wide training in consultation skills.

The RCT results of a second intervention, in this case involving children with asthma, were published in one paper *(117)*. The study randomized children and adolescents, ages 3–17 years, living with asthma in the US to a "planned care" intervention arm (n=213), a "peer leader" intervention arm (n=226) or a control arm of standard care (n=199). The peer leader intervention consisted of training one physician per practice in asthma guidelines and peer teaching methods. The planned care arm combined the peer leader intervention supported by a nurse, planned visits with assessments, care planning and self-management support in collaboration with physicians. The planned care intervention had a significant effect on the number of asthma symptom days compared with the control arm and a non-significant trend favouring the peer leader intervention compared with the control arm. Both intervention arms had lower oral use than the control arm. The authors concluded that planned care is an effective model for improving asthma care in the primary care setting, and, while peer leader education on its own may also work, it is much less comprehensive than planned care.

Values and preferences: treatment and care

A survey and a comprehensive literature review of qualitative research on the treatment and care of ALHIV were conducted to better understand the significant facilitators of and barriers to accessing services and remaining in care and treatment services and to gain an adolescent perspective of HIV care and treatment services (Annex 11).

Survey

The survey consisted of two phases:

- **A scoping review of published and gray literature** identified key issues to include in the development of the anonymous global survey.
- **A survey of ALHIV** (in both electronic and paper form) was conducted to understand the range and depth of perspectives of respondents regarding the care they receive to treat and manage HIV as well as other health needs. The final survey comprised 36 questions, 33 close-ended and three open-ended, and it was translated into five languages in addition to English.

The survey of ALHIV was completed by 447 young people (10–24 years old)—215 female, 213 male, and 19 transgender, other, or undisclosed—from 57 countries. Adolescents already actively engaged in HIV care and treatment provided the highest number of responses. For this reason, the survey results were limited and not representative of all adolescents living with HIV who may not be linked to networks or receiving care.

Ease of access. For most of the adolescents and young people who took the survey, access to care and attending health-care appointments were either very easy or not a significant challenge. Twenty-six per cent of those who responded to the open-ended question asking what they liked the most about the care they receive, stated that it was access to treatment – from availability and cost of regular health check-ups and drug treatment (ART) services to proximity of services, short lines/queues, and specialized health workers. Several mentioned the importance of NGOs in supporting the provision of life-saving drugs and services.

Those who found access somewhat or very difficult identified barriers to access to services such as cost, ARV stock outs, lack of doctors or adequately trained health-care professionals, lack of HIV services in many (especially rural) areas, lack of youth-friendly services, and poor treatment and stigma by health-care providers.

Transition to adult services. The survey revealed that a majority of adolescents and young people either do not receive paediatric or adolescent services, or, if they do, have never discussed transitioning to adult services. Of the respondents who said they are currently receiving paediatric or adolescent services (n=282), 38% had discussed a transition to adult care with their provider on at least one occasion, 40% had discussed it two to three times with their provider, and 22% had discussed it more than three times with their provider.

Interactions with providers. Most survey respondents indicated they had good experiences interacting with health-care providers. Eighty-five per cent of respondents reported moderately good (51%) to very good (34%) interactions with their providers in terms of comfort in asking general health-related questions, while 15% reported less favourable interactions with their providers. Eighty-eight per cent of respondents reported moderately good (51%) to very good (38%) interactions with their providers in terms of comfort in asking HIV-related questions. Thirty-five per cent reported that a provider contacts them if they miss an appointment.

Autonomy. Responses regarding the extent to which respondents took responsibility for their health care suggest a high level of autonomy among the group surveyed. Autonomy was gauged by respondents' indications that they took responsibility for

a range of activities around seeking care and making appointments, interacting with providers and treatment adherence.

The most positive aspects of care reported by respondents included sensitive and caring treatment by health-care providers; home visits; opportunities for meeting other ALHIV to share experiences and to feel empathy with others; and interactions with providers who preserve a sense of optimism and hope. Twenty-three per cent of respondents to an open-ended question asking what they liked most about the care they receive, valued the support the received from peer groups, teen clubs, and peer mentors.

Suggestions for improvements in services for ALHIV included age-appropriate support,[1] material support (clothing, food, support for orphans), more protection from the damaging effects of stigma and discrimination, more comprehensive information about all the ways that HIV is transmitted, dedicated spaces and activities for ALHIV where they can be with peers who understand what it is like to live with HIV, and with educational opportunities for those who do not attend school.

Literature review

A comprehensive review of published literature examined the findings of a wide range of studies including randomized controlled trials, quasi-experimental, and descriptive research in order to gain insight into the values, preferences, perceptions, and attitudes of adolescents and young people regarding HIV treatment and care.

Confidentiality and disclosure. For ALHIV, privacy and confidentiality are major concerns in the provision of care. Those adolescents studied indicated that they are particularly sensitive to the stigma associated with HIV, and felt it is important for health-care providers to offer a safe environment that ensures the privacy of young patients or clients and confidentiality of their discussions, decisions, test results, and treatment. Disclosure best practice was articulated as a gradual process that should be based on the adolescent's development and readiness to reveal their HIV status to others, and that this process requires a wide range of support – from health-care providers, caregivers, peers, and the community – and skills development to increase self-confidence, self-efficacy, and empowerment. The major barriers to disclosure were fear of unintended or unwanted disclosure by teachers, parents, or friends, or because of inadequate privacy in clinics or pharmacies; and fear of negative reactions from family, friends, and the community.

Accessing care. Access to care is broadly defined to include physical access to treatment and care, as well as financial and social support. Those adolescents studied wanted universal access to care, as well as care designed specifically for their needs and provided in a youth-friendly atmosphere. Trusting relationships with and between parents or guardians and health-care providers, and the availability of counselling and support were the primary facilitators for adolescents accessing care. Provider and community stigma, and inadequate or incorrect information about HIV were considered major barriers to utilization of available services.

Adherence to ART. High adherence to ART by ALHIV was linked to psychological adjustment, effective coping mechanisms and adoption of explicit medication routines. ALHIV identified both positive and negative factors as facilitators for adherence to ART: positive – e.g. free or low-cost medications, electronic reminders, family and peer support, self-esteem and empowerment skills building and support; and negative – e.g. taking medication regularly so 'people won't know I'm sick', fear of consequences, and fear of re-infection or superinfection. Depression, regimen

1 E.g. the separation of adolescent and adult services by location, day, or time, to the provision of peer support in the forms of groups, mentoring, teen clubs, or camps.

fatigue, weak health-care systems, lack of youth-friendly services or privacy, and misinformation were articulated as the primary barriers to adherence to ART for ALHIV.

All health-care facilities or delivery sites should be safe spaces where adolescents can freely express their emotions and concerns, and where providers demonstrate patience, understanding, acceptance and knowledge about the choices and services available to the adolescent.

Retention in care. Also important was the strength of the relationship between the health-care provider and adolescent (and parent or guardian depending on the age and readiness of the adolescent). Like the other key findings, an ALHIV's level of self-esteem and feeling of empowerment to make decisions improved retention, as did supportive family or family-like environments and peer support. Similarly, barriers to retention in care included the lack of youth-focused services and privacy, poor communication with health-care providers, misinformation, and anxiety or depression.

Successful transition to adult services. It is vital that an adolescent has a clearly defined pathway into adult care and that the transition is carefully managed. Abrupt changes can be destabilizing and confusing; continuity of care and the transition to adult services should be a joint effort involving the adolescent, their parent or guardian, and the health-care provider, the balance of which should be determined by rights, readiness, and willingness of the adolescent to assume responsibility for various health-seeking and maintenance activities—e.g. taking medication, making appointments, asking questions of health-care providers, and helping to choose their own treatment plans. Facilitators for ALHIV taking responsibility for these types of activities included family-centred and peer support and counselling; self-esteem, empowerment, and coping skills-building activities and support; and a gradual developmental approach that takes into consideration the individual's particular needs. The greatest barriers to successful transition for ALHIV included the poor evaluation of adolescents' abilities to receive and process information, and the lack of or poor communication with health-care providers. The loss of a good relationship with a paediatric provider was also a major barrier to ALHIV successfully moving to adult services when developmentally appropriate.

Summary of the expert panel discussion and other considerations

This section documents the key points raised during the discussion on community-based approaches and training among the participants at the consultation in Harare as well as feedback and inputs provided as part of the draft review process. It also presents the main findings of a literature review exploring the facilitators and barriers to retention in care and adherence to treatment.

Literature review: retention and adherence considerations

A separate literature review of published and unpublished studies and reports was conducted to look specifically at facilitators and barriers to adolescents' adherence to treatment and retention in care (Annex 13).

Several of the studies and reports included in this review suggested that continuity of care in the transition from childhood to adulthood should be a focus for policy-makers and programme managers. Continuity of care and the transitions between different stages should be joint efforts involving the adolescent, service providers, families/caregivers, health facilities, schools and the broader community.[1]

1 The challenge of transition to adult care is common to the management of many chronic illnesses in adolescents; providers of services for ALHIV can link with and learn from health care workers treating adolescents for other chronic illnesses.

Attitudes of health-care providers are an important consideration in services for ALHIV. All service provision settings should be safe spaces, where patients can express anger, frustration, fear and confusion. Providers need to take time to answer questions, validate feelings, explain choices, identify and organize support and express unconditional acceptance.

Some aspects of clinic structure and the availability of tools and resources may help adolescents to access care, support, prevention and treatment when and as they wish. There are ways to make services more accessible and acceptable for adolescent clients. These include adolescent-only days or evening hours with flexible appointments or walk-in options as well as linkage to other supportive services and activities off-site.

Community-based interventions

Community-based service delivery is important for adolescents; it can minimize logistical and financial constraints and offer services in familiar and easily accessible settings. Community-based settings can refer to proximity to where adolescents live as well as services that are delivered in a specific community of adolescents with common characteristics or challenges, such as a key population. Nearby, accessible services can support adherence to treatment and retention in care for ALHIV and minimize risk behaviours and, when an individual tests negative, facilitate timely and low-cost referrals to further prevention support.

As with management of other chronic illnesses during adolescence, ALHIV have serious problems with adherence. Most research shows that this is a greater challenge for adolescents than for adults.

Community-based services can mitigate some of the burden faced by adolescents who need accessible and free/low-cost services to support adherence. Greater accessibility, acceptability and affordability also can help increase retention in care and reduce loss to follow-up.

However, in some cases, the “familiarity” of community-based services may be a disincentive for adolescents due to concerns about confidentiality. More research will be needed to determine how to address this issue.

Depending on the setting, one of the key challenges with decentralization and reliance on community-based services will be developing some degree of capacity at peripheral facilities to handle the array of HIV-related services required by adolescents. In some cases, particularly with vertically infected adolescents, complex health issues are likely to be harder to address in community-based settings, e.g. cardiac, lung, cognitive and pubertal delay issues. Additionally, adolescents on ART need to be monitored annually for long-term toxicity and co-morbidities; there may be limitations to the scope of services that community-based providers can offer.

Given the diversity of community-based approaches, it is important to note that there are aspects of some current programmes that may have no benefit, may increase stigma and discrimination or are considered to be harmful (e.g. in which patients are advised to suspend their medication). These concerns and lack of consensus resulted in a conditional recommendation.

Common elements or conditions needed for effective community-based interventions:

1. Adolescents should be involved in the design and implementation of community-based interventions so that these programmes reflect their knowledge, motivation and skills.

2. Community-based services should be considered an integral part of the continuum of care, with formal linkage to facility-based services.

3. Flexibility should be designed into community-based services for adolescents to accommodate the needs of diverse groups, especially young members of key populations and adolescents of various ages who were vertically infected and have been living with HIV for many years.[1]

4. There should be clearly defined selection criteria for community-based workers/agents as well as routine supervision and monitoring.

5. Careful monitoring and evaluation of community-based approaches as they are implemented remains a priority to assess acceptability, cost-effectiveness and efficacy.

Topics that are well-suited to collaboration between the community and health sectors include addressing myths about HIV and adherence, feelings associated with coping with HIV and seeking support for disclosure.

Training health workers

Although no studies were found evaluating the training of health workers providing services to ALHIV and the effect of this training on adherence to treatment and retention in care, there was consensus among the Guidelines Development Group that training is required for providing health services for adolescents. In the same way that health workers need training to deal with the range of issues faced and presented by adolescents, they also need training to support adherence to care and to retain patients in care.

Adolescents often find it difficult to think about the future consequences of today's actions. With emerging abilities to think about themselves and their social environment, they challenge authority, and seek new experiences, some involving risks. This behaviour has implications for the information and support that adolescents require and how they respond to advice. Adolescents are receptive to peer influence and to concerns about body image. They often have less structured lives than adults, which may make treatment adherence more difficult. Unemployment and poverty make it more likely that they have to rely on parents for financial and other support. These factors limit their ability to make independent decisions about using health care and other services.

Because of the ways that adolescents think and react—the ways in which they are influenced; their changing capacity and autonomy; their relative lack of information, skills and resources; and the values and norms that surround them (which influence how communities and health workers react to them)—there is a need to mobilize and train service providers at many levels if adolescents are to access and be retained by services.

Some adolescents who were vertically infected and diagnosed early may have already been on treatment for 10 or more years. They may have been started on sub-optimal HIV regimens or faced treatment interruptions. They may have complex HIV disease with various drug-resistance mutations, and they may face a variety of chronic illnesses and developmental delays as well as depression. Special skills are required for management of the complex health profiles of these adolescents.

1 Community-based interventions are essential for identifying and reaching adolescents in key populations, who may not seek facility-based services due to fears of stigma and/or legal consequences.

Health workers need training to help them understand and address the barriers to adherence that many adolescents with HIV on treatment have.

Assessment of these adolescent adherence barriers include consideration of the adolescent's cognitive skills, their buy-in to medication regimes, their home and family support situation, the adolescent's routines and when they are most likely to miss doses and ways to simplify regimens, including reducing the number of times a day medications must be taken.

Patients' transition from childhood to adolescence can be challenging for health workers. They often do not feel prepared to deal with the new issues this transition presents—sex and sexuality, a range of developmental issues. It is important that health workers are sensitized to how adolescents differ from adults and from small children and to know what resources in their communities are available to support adolescents. Health workers need to be able to link with a wide range of other practitioners and organizations that can help (e.g. community health workers, NGOs, community-based organizations (CBOs), ALHIV peer support groups).

At the same time, it is not necessary—and usually not feasible—to create a separate cadre of health workers specializing in the needs of ALHIV. While it would be ideal if there were more specialists and centres of excellence, it is of primary importance that health workers providing services to PLHIV in general are able to respond adequately to the needs of ALHIV in a decentralized and integrated way. For example, a retrospective cohort study in Zimbabwe found that involving adolescents in the planning and introduction of additional medical and social services for adolescents in a public sector ART clinic resulted in significant increases in initiation of ART and retention in care as well as lower mortality compared with data on other adolescent patient populations in the country *(118)*.

As summarized by one member of the Guidelines Development Group:

> *Training by itself rarely results in large changes in the quality of services or in provider attitudes. Rather, training needs to be part of a continuous quality improvement (CQI) process that includes a range of elements at the provider level such as job aids, supportive supervision, training follow-up and mentorship. At the facility level, CQI might include a range of actions including small infrastructure changes, modified admittance procedures or signage for increased privacy and confidentiality for adolescent clients. Informational materials and visual aids can help providers to be better able to communicate with ALHIV around their treatment and care needs; having the necessary equipment and commodities on hand facilitates appropriate and timely delivery of services. The involvement of peer educators and lay health workers can alleviate the workload of health workers and provide additional support.*

Negative attitudes of health workers affect adolescents more than adults, and they affect young people in key populations more than other adolescents. In this regard health-care providers must have the skills to listen attentively, speak clearly and be aware of adolescents reticence and uneasiness in communicating with providers. Training may be needed for health-care providers to better understand how to provide such care.

Health worker training on HIV-related services for adolescents needs urgent attention, especially regarding how to link it with and build on existing training. For example, adolescent-specific content can be integrated into existing HIV training on adults, or HIV-related content can be integrated into existing training on adolescent

health or adolescent-friendly health services. Attention is also needed to pre-service training (adolescent health, ALHIV, adolescent sexual and reproductive health, young key populations). Further, other professionals, e.g. social workers, play key roles in the support of ALHIV; their involvement needs to be taken into consideration when planning the strengthening of human resources.

Training of health workers should focus particularly on:

- **Primary care:** Chronic illnesses in ALHIV, psychological and emotional illness, contraception and sexual and reproductive health issues, nutrition;
- **Prevention:** Condoms, prevention of high-risk behaviours (e.g. alcohol and substance use), harm-reduction (for PWID) and communication skills;
- **HIV treatment and care:** Adherence, retention, self-management;
- **Mental health:** Positive and negative coping styles, depression and mental health issues, dealing with a history of abuse, dealing with history of parental death;
- **Disclosure:** Supporting adolescents to disclose (a) to others in order to obtain the support they need and (b) to sexual partners in order to contribute to safer sex/HIV prevention (although the priority for individuals should be adherence to treatment and correct, consistent condom use).

Other topics of particular importance to adolescents include:

- Learning about and coping with their feelings;
- Finding support;
- Learning about the impact of HIV on their bodies, how to live a healthy life and when and why ART and adherence are important;
- Learning about safer sex, relationships and fertility choices (i.e. whether or not to have children and being supported in either choice) and making plans for the future, including education and employment.

To some extent training health workers is about attitude and behaviour change, which is not likely to occur due to a single training event. However, the recommendation for training is a starting point and one component of working toward increased adherence to treatment and retention in care. Ongoing supervision and professional support are essential as part of the change process.

Agreement on the recommendations

With regard to support for treatment adherence and retention in care through community-based interventions and training of health workers, there was insufficient evidence in the systematic reviews or the review of the published descriptive and gray literature upon which to base recommendations. However, the interventions in question are important enough that they are represented in this guidance as the best judgment of practitioners and advocates and as the impetus for further research focused on implementation.

Both of the recommendations have weak evidence bases, but meet the criteria for conditional recommendations.

2.3 General service delivery recommendations

The WHO *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection* present a number of service delivery recommendations, as shown in Table 3.[1] When GRADE reviews for the consolidated ARV guidelines —that led to these service delivery recommendations—were commissioned, the researchers were expressly tasked with identifying studies that were specific to

1 For background to these recommendations, please see the report on the Operational and Service Delivery Guideline Development Group Meeting, Geneva, Switzerland, 6–8 November 2012.

adolescents or had adolescent participants. However, they identified no studies of adolescent populations. These recommendations were also discussed at the adolescent expert meeting and specific considerations for adolescents were raised for each area, as follows.

Table 3. Service delivery recommendations from the WHO *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection*

Community-based HIV testing and counselling	In generalized HIV epidemic settings, WHO recommends community-based HIV testing and counselling with linkage to prevention, care, and treatment services in addition to provider-initiated testing and counselling. (Strong recommendation, low quality evidence) In all HIV epidemic settings, WHO recommends community-based HIV testing and counselling with linkage to prevention, care, and treatment services for key populations in addition to provider-initiated testing and counselling. (Strong recommendation, low quality evidence)
Service integration and linkage	In generalized epidemic settings, ART should be initiated and maintained in eligible pregnant and postpartum women and in infants at maternal, newborn and child health-care settings, with linkage/referral to ongoing HIV care and ART, where appropriate. (Strong recommendation, very low quality evidence) In settings with a high HIV prevalence (≥5%) among TB patients, ART should be initiated for HIV-positive individuals with TB in TB treatment settings, with linkage to ongoing HIV care and ART. (Strong recommendation, very low quality evidence) In settings with a high burden of HIV and TB, TB treatment should be provided for individuals with HIV in HIV care settings where TB diagnosis has also been made. (Strong recommendation, very low quality evidence) In settings in which opioid substitution therapy is provided, ART should be initiated and maintained in people with HIV who are eligible for ART. (Strong recommendation, very low quality evidence)
Decentralization of treatment and care	The following options should be considered for decentralization of ART initiation and maintenance: • Initiation of ART in hospitals, with maintenance of ART in peripheral health facilities. (Strong recommendation, low quality evidence) • Initiation of ART with maintenance of ART in peripheral health facilities. (Strong recommendation, low quality evidence) • Initiation of ART at peripheral health facilities, with maintenance at the community level between regular clinical visits (i.e. outside of health facilities in settings such as outreach sites, health posts, home-based services or community-based organizations). (Strong recommendation, low quality evidence)
Task-shifting	Trained non-physician clinicians, midwives and nurses can initiate first-line ART. (Strong recommendation, moderate quality evidence) Trained non-physician clinicians, midwives and nurses can maintain ART. (Strong recommendation, moderate quality evidence) Trained and supervised community health workers can dispense ART between regular clinical visits. (Strong recommendation, moderate quality evidence)
Interventions to optimize ART adherence	Mobile phone text messages could be considered as a reminder tool for promoting adherence to ART. (Strong recommendation, moderate quality of evidence)

2.3.1 Community-based HTC[1]

The provision of HTC is very important for all adolescents, and all affordable, feasible and acceptable approaches for increasing the likelihood of adolescents being tested should be explored. It is particularly important for horizontally infected older adolescents, as this group is very inadequately tested in generalized epidemics.[2] However, while increasing HIV testing of adolescents is important, it is essential to also give adequate attention to:

- post-test counselling, links to services (prevention, treatment and care) and consent/confidentiality are major concerns for adolescents;
- understanding that adolescents testing positive for HIV may not yet require treatment, but do need care and retention by the health system;
- special issues for adolescents from key populations accessing testing and adequate counselling.

2.3.2 Integration of HIV treatment with TB, ANC/MNCH and IDU services

Integration of HIV services into other clinical settings may also be considered for adolescents, but these services will need to:

- have ways to encourage adolescents to enrol early for PMTCT/ANC (currently, late enrolment in ANC is a significant problem for adolescent pregnant women) and to support them through their pregnancy, including: access to ART and adherence counselling for PMTCT and ART for their own health; and support for making safe infant feeding choices, making post-delivery contraception choices, and involving the father of the child/partner(s) and supportive family members;
- consider linking to efforts to make all health services more responsive to the needs of adolescents (not just maternal, newborn and child health (MNCH), but MNC**A**H);
- understand that, for all aspects of programmes and policy, adolescents in key populations need specific consideration. For example, most young injecting drug users are less likely to use routine health services, so HIV treatment needs to be integrated into services that are provided for injecting drug users;
- ensure that national plans/strategies explicitly cover adolescents.

2.3.3 Decentralization of HIV treatment and care

Providing services near home can be important for adolescents, as this is likely to make their access to services easier. At the same time it is important to ensure that:

- service providers have at least minimal training to: respond to the specific needs of adolescents; support disclosure and adherence by adolescents; provide prevention education and support to adolescents (e.g. safe condom use); and link with others (e.g. community groups and community workers) who may be better able to support the particular needs and complex challenges that adolescents face;
- support groups for ALHIV are also decentralized, where appropriate (depending on the type of epidemic and context);
- special considerations are made for adolescents in key populations;
- there is adequate age (and sex) disaggregation of routinely collected data for monitoring and planning;
- there are effective systems of referral for other health issues (e.g. chronic illnesses, depression, sexual and reproductive health).

1 "Community-based" in this context refers to services (including HTC services provided by NGOs and CBOs) available within communities where adolescents live, with links to the formal health system.

2 Slow progressors are more likely to be diagnosed through PITC.

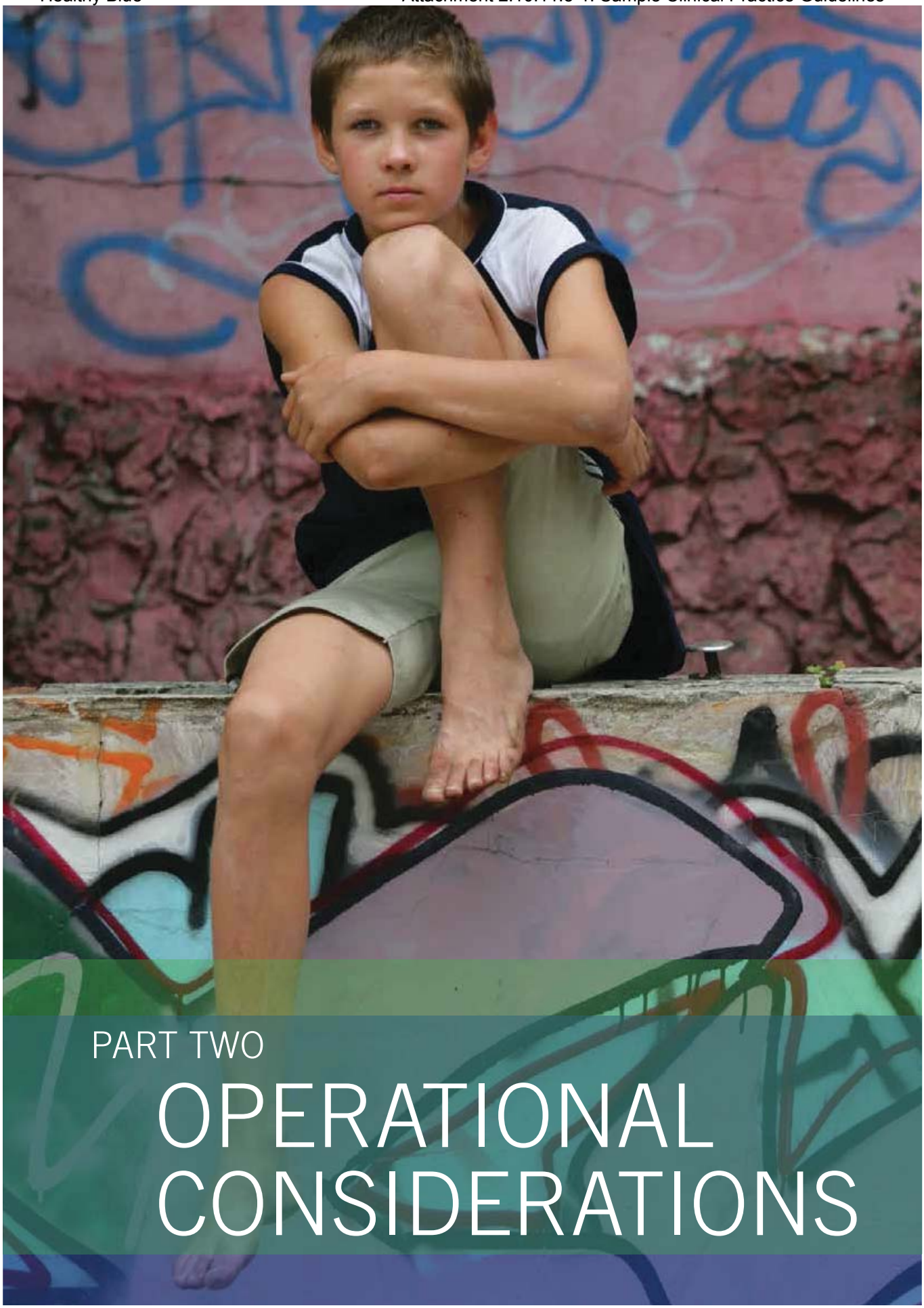
2.3.4 Task-shifting for HIV care and treatment

This could be considered for adolescents, but:

- The people to whom the tasks are shifted need to be trained to respond to the needs of adolescents.
- There must be strong linkages to NGOs and community groups working with adolescents/ALHIV that can support disclosure, adherence, etc.

2.3.5 Use of mobile technologies for adherence support and social support for PLHIV

Mobile technologies have been used successfully for other chronic illnesses among adolescents, and this is a technology that they are familiar with. Its use potentially can improve adherence and support, but it is essential that ALHIV are involved in the development of the programmes.



PART TWO

OPERATIONAL CONSIDERATIONS

1 GUIDING PRINCIPLES FOR IMPLEMENTATION

The following guiding principles should underpin the design, development, implementation, monitoring and evaluation of HTC and treatment and care services for adolescents.

1.1 Voluntary testing

While testing should be routinely offered and available, it should not be mandatory. National HTC policies and practices should be reviewed to eliminate all non-voluntary forms of testing. There should be no compulsory or mandatory testing of members of key populations at higher risk of HIV infection and other vulnerable populations, including pregnant women, people who inject drugs and their sexual partners, men who have sex with men, sex workers, prisoners, migrants, refugees and internally displaced persons, and transgender people.[1]

1.2 Heterogeneity of adolescents

Adolescents are not all the same. The heterogeneity of adolescents needs to be recognized, from the modes of their infection (vertical/horizontal) to their age, sex, sexual orientation, and from their roles and responsibilities in the family and community to the variability of their transitions to adulthood. Service delivery responses need to reflect this heterogeneity of adolescents as well as context-specific aspects of their lives.

1.3 Meaningful involvement of adolescents

Adolescents, including adolescents living with HIV and those from key populations, must be involved in the development and implementation of acceptable and appropriate programmes and in supporting country processes for development of policy.

1.4 HTC minimum standards: The 5 Cs

The following are key principles of HTC and apply to services for adolescents in all circumstances:

- Adolescents receiving HTC must give informed **consent** to be tested and counselled (see discussion in Part 1, Section 2.1.1 and guidance on consent as an operational issue in Part 2, Section 2.1). Adolescents should be informed of the process and understand the implications of learning their HIV status.
- Adolescent services must be **confidential**, meaning that what the HTC provider and the individual discuss will not be disclosed to anyone else without the express consent of the adolescent being tested. Decisions concerning to whom to disclose test results should be made with the support of the provider or counsellor and a family member or friend if possible. While confidentiality must be respected, it should not be allowed to reinforce secrecy, stigma or shame. Counsellors should raise the issue of whether the adolescent may wish to disclose to others, how she or he would like this to be done, etc.

1 See "Statement on HIV testing and counselling: WHO, UNAIDS re-affirm opposition to mandatory HIV testing." http://www.who.int/hiv/events/2012/world_aids_day/hiv_testing_counselling/en/index.html

- Adolescent HTC services must be accompanied by appropriate and high-quality pre-test information and post-test **counselling** (ensured by quality assurance mechanisms and supportive supervision systems).
- Programmes for adolescents should strive to assure the high quality of testing services, and quality assurance mechanisms should be in place to ensure the provision of **correct test results**. Quality assurance may include both internal and external measures and should include support from the National Reference Laboratory as needed.
- HTC services for adolescents must provide effective referrals for **connections/ linkage to appropriate care** and follow-up services as indicated, including long-term prevention and treatment support.

1.5 Gender issues

Gender issues must be considered in the implementation of all the recommendations, considering the specific needs of adolescent men, adolescent women and transgender adolescents.

1.6 Human rights perspective

A human rights perspective will ensure that all actions taken with respect to delivery of HTC, treatment and care services will be in the best interest of the adolescent. As specified in the Convention on the Rights of the Child, adolescents have:

- the right to non-discrimination;
- the right to privacy and confidentiality, including with respect to advice and counselling on health matters;
- the right to express views freely and to have them duly taken into account;
- the right to participate in decision-making processes that are relevant in adolescents' lives and to influence decisions taken on their behalf;
- the right to health and development, including the right to choose to have an HIV test and to use an array of HIV-related services;
- the right to a safe environment;
- the right to access to appropriate information, with particular regard to numerous health-related situations;
- the right to be free from disease and ill health;
- the right to be free from harm, and that children must have protection from all forms of sexual exploitation and sexual abuse;
- the best interests of the child should guide all actions concerning children.

These principles apply to all children, irrespective of their circumstances and the behaviours they practice (sell sex or use injectable drug), and entitle them to the protections and services (including harm-reduction), they need in order to avoid acquiring HIV and other infections, and to protect and improve their health and wellbeing.

1.7 Developmental appropriateness

Services must reflect developmentally appropriate considerations for a range of stages of cognitive and physical development. A continuum of care will respond to the evolving capacity of adolescents. While these guidelines focus on adolescence, service providers will need to consider the various transitions into appropriate types of care before and beyond adolescence and the importance of preparing adolescents to manage their lives and health needs as adults.

1.8 Supportive and conducive legal and policy environment

A supportive and conducive legal and policy environment is critical for adolescents to access and benefit from HIV testing, counselling and linkage to appropriate treatment and care. The criminalization of HIV transmission, exposure, non-disclosure and specific behaviours such as same sex relations, injecting drug use and involvement in commercial sexual exploitation significantly restricts an adolescent's ability to access and benefit from a range of essential HIV-related services.

1.9 Legal protection

In cases of sexual exploitation and violence, adolescents need referral to appropriate child protection services. Such services may be specialized legal and protection services that have experience with counselling adolescents—for example, police services and/or specialized child protection services and post-rape care services dealing with sexual abuse.

2

PROGRAMMATIC EXPERIENCE AND LESSONS LEARNED

There is strong consensus on the need to expand access to and uptake of HTC by adolescents in all settings, to improve the quality of health services for adolescents living with HIV, to scale them up and to increase adolescents' access to and use of available services. However, answers are needed to operational questions on:

- how best to deliver HTC services for adolescents and to increase uptake and linkages to appropriate care?
- how best to deliver interventions and services for adolescents living with HIV?
- how to integrate lessons learnt and best practices into existing systems, given limited resources and capacity?
- how to increase the quality, coverage and equity of services for adolescents living with HIV in a resource-constrained operating environment?
- how to increase cost-effectiveness and sustainability?

To shed light on these questions and to highlight relevant work being done in resource-poor settings, UNICEF has initiated the UNICEF ALHIV Lessons Learned project, developing a living document—with an emphasis on "how it was done"—that is intended as a repository for experiences that will stimulate and guide accelerated action to meet the needs of ALHIV (see Annex 14). In emerging areas of programming, while there is not always a substantive base of research evidence to develop programme guidelines, the experiences of pioneers can provide examples for others. The preliminary report on this project presents summaries of successful or promising programmes that are being or have the potential to be taken to scale. These programmes focus on testing, entry to and retention in treatment and care, adherence, prevention for ALHIV (e.g. avoidance of high-risk behaviours) and primary care for ALHIV (e.g. care for chronic illnesses and sexual and reproductive health).

This section examines the conditions and approaches that will facilitate effective expansion of HTC for adolescents and support adherence to treatment and retention in care. It draws on many of the examples and discussion points included in the UNICEF Lessons Learned report, as well as other programmatic experiences contributed by members of the Guidelines Development Group and other contributors.

Operational issues are often context-specific. WHO, UNESCO, UNICEF, UNFPA and GNP+ recognize the heterogeneity of adolescent populations, differences in epidemiology and social context and the diversity of health-care delivery systems across and within countries. Additional considerations are resource levels, disease burden and local health sector priorities. Policies regarding consent to test, disclosure and confidentiality also vary widely across countries and influence the implementation of a range of interventions. Adaptation of these operational options must take into consideration all of the context-specific realities.

2.1 HTC

2.1.1 Consent to HIV testing

A specific challenge that has implications for many aspects of programming, and for research, is the issue of consent. Obtaining the necessary informed consent can take significant time; it needs to be built into the planning of the programme. Informed consent needs to be based on human rights principles (e.g. the best interests of the child, the evolving capacity of the child) and involve ALHIV, parents, caregivers and health-care providers.

LOWERING THE AGE OF CONSENT FOR TESTING (SOUTH AFRICA)

Since July 2007, adolescents aged 12 years and older in South Africa have had the right to consent for an HIV test, if it is considered to be in his/her best interest—so long as s/he is of sufficient maturity to understand the benefits, risks and social implications of the test. According to South African HIV counselling and testing guidelines, an HIV test is in the best interests of a child if the test will result in access to the continuum of care and support for their physical and emotional welfare.

The age of consent for HIV testing was determined as part of a larger process. South Africa commenced a period of intense legislative review and reform shortly after the end of Apartheid. In 1997 the South African Law Commission was mandated to review the old Child Care Act (which allowed children above the age of 14 to consent to medical treatment and children above the age of 18 to consent to surgical procedures). The commission elicited comments and held public consultations between 1998 and 2002. As a result of the review and public consultations coinciding with the height of the Mbeki AIDS denialism era, the constitutional protection of children's rights in the face of the HIV/AIDS epidemic was prioritized. Notably, the Commission actively sought input from children themselves.

The outcome of the process was a progressive new Children's Act that removes age-related barriers to children's access to health care. The age of consent for medical interventions, including HTC, was at least partly informed by the age of sexual debut, rates of STI in adolescents and the realisation that the age threshold needed to be lowered to allow children younger than 14 years to access sexual and reproductive health services. In addition, however, the decision was informed by the desire to recognise and support the growing autonomy of adolescents.

The impact of the age of consent for HTC is difficult to quantify. Firstly, the change was relatively minor, having previously been set at 14 years of age. Secondly, routine health information data, including HTC data, are aggregated in a manner that precludes the assessment of adolescent health-care utilisation. Anecdotal reports from health-care providers indicate that 12–14 year old adolescents do request and receive HTC at health facilities, usually after having undergone schools-based HIV education. There are no documented instances of serious adverse consequences in those who test positive, with health workers indicating that adolescents undergo CD4 testing and commence ART if indicated.

✉ For more information contact Henry John Moultrie: hmoultrie@wrhi.ac.za

2.1.2 Linking testing with prevention, treatment and care

The recommendations of these guidelines related to HTC explicitly note the importance of linkages to prevention, treatment and care. All adolescents should have access to testing, but it is essential to ensure that those who are most vulnerable and those with high-risk behaviours are supported to access testing that is linked with adequate post-test counselling (something that is particularly important for adolescents) and prevention and/or treatment and care, depending on

the results of the test. Another important consideration is the role of counselling prior to HIV testing and how it encourages or discourages access among adolescents.

While specific programmes may be developed to test adolescents (e.g. through schools), all strategies directed to adults, such as community-based counselling/testing, PMTCT and PITC, need to take into equal consideration the particular needs of adolescents.

GROUP PROGRAMME FOR NEWLY DIAGNOSED ALHIV USING LAY COUNSELLORS (SOUTH AFRICA)

Hlanganani is an interactive modular (3–6 modules) group programme that equips newly diagnosed adolescents to link to care. Lay counsellors facilitate the group session, and a training module for them has been designed. Adolescents who took part really enjoyed the experience, and it seems from preliminary data that the adolescents who participated in the programme were more likely to commence ART if eligible than adolescents who did not participate.

While the group approach to counselling is not for everyone, for those who did join the group sessions the programme has been a great support. Longer follow-up will tell whether the adolescents who took part will have better outcomes and retention that those who do not. The plan is to adapt the programme for adolescents infected perinatally when transitioning into adolescent care, and subsequently into adult care.

With support from the Desmond Tutu HIV/AIDS Foundation (DTHF) and the Adolescent AIDS Programme in the Bronx, NY with funding from PEPFAR/CDC (SA).

✉ For more information contact Linda-Gail Bekker: linda-gail.bekker@hiv-research.org.za or Donna Futterman: dfutterman@adolescentaids.org

2.1.3 Increasing uptake of services by adolescents

STRENGTHENING HTC AND REFERRAL FOR ADOLESCENTS (SUB-SAHARAN AFRICA)

UNICEF is supporting a multi-country initiative in sub-Saharan Africa aimed at strengthening HTC uptake and referral for adolescents. The work takes innovative approaches to communication and engagement with adolescents—through TV, radio, mobile phones, social media and a graphic novel (online, print and serial newspaper insert)—to provide adolescents with critical information and link them to services. This work is engaging with adolescents and young people in six sub-Saharan African countries with an extremely high burden of HIV to improve HIV knowledge and attitudes, to build demand for HTC, to help improve planning, coordination and referral systems for adolescents and young people and to monitor delivery of HIV services and referrals for this age group.

Preliminary data show good levels of knowledge regarding the benefits of condoms, but there is a persistence of attitudes among adolescents and young people that may constrain efforts to increase uptake of HTC. There is reluctance to request partners to test due to fear of raising suspicions and accusations of infidelity or negative past behaviour. It also seems that adolescent males with HIV have less favourable views of HTC and related services, and they are less likely to disclose, report experiences or seek help following rape or sexual violence.

There are a number of legal, logistical and administrative issues that need to be addressed in order to expand access and improve uptake of HTC among adolescents. Age of consent in many countries remains a significant barrier to uptake of HTC, as adolescents are often reluctant or afraid to seek services that require the consent of a parent or guardian. There are numerous system bottlenecks and inefficiencies such as supply chain challenges,

human resources capacity related to working with adolescents, and loopholes in patient management and follow-up, reflected in incomplete or parallel data records. Referrals for those testing positive are too reliant on self-motivation; for those testing negative, follow-up and referrals are weak to non-existent.

✉ For more information contact Susan Kasedde: skasedde@unicef.org

2.2 Disclosure

Adolescent sexual and reproductive health (ASRH) services for ALHIV need to have a strong focus on disclosure and building self-esteem. Many young people living with HIV are sexually active and make the choice to have children, and ASRH programmes need to stress their responsibilities for their own (and their partners') sexual health. Balancing positive living against sexual needs is a real challenge for this age group, particularly in terms of disclosure, due to fear that a potential partner may be put off by their HIV-positive status. Like other adolescents, ALHIV have rights to a pleasurable and healthy sexual and reproductive life and to programmes that respond to their different needs and challenges (e.g. can an HIV serodiscordant couple get access to post-exposure prophylaxis if a condom breaks?).

2.2.1 Support for disclosure and adherence to treatment

ADHERENCE AND DISCLOSURE FOR ADOLESCENT MOTHERS: THE "EVE FOR LIFE" EXPERIENCE (JAMAICA)

"Eve for Life", a local NGO, has been working with the Ministry of Health to provide a comprehensive approach to support and care for adolescent mothers who are living with HIV. Currently, the NGO is working to deliver services in support of adherence and disclosure in the three parishes with the highest rates of HIV infection.

Recruitment: Adolescents are recruited into the programme through antenatal or HIV treatment programmes. Adherence counsellors or social workers refer clients deemed especially vulnerable and in need of additional support. In this way, the Eve for Life Programme has grown increasingly collaborative with the public health sector.

Assessment: Upon recruitment, a needs assessment identifies issues that must be addressed to improve outcomes for the adolescents and their children. Additional data collected include demographic information, knowledge and attitudes around HIV primary and secondary prevention and treatment literacy, as well as emotional wellness, sexual health and history in terms of forced sex and other gender-based violence. Clients are then referred to other relevant educational, psychosocial and social security programmes to address their needs.

Engendering trust: The overall approach that the public sector has employed to encourage support for adherence among PLHIV is applied in this programme. This is done through the engagement of older women with HIV called "life coaches", and programme "graduates" called "mentor moms." These women form a key part of the care and support team. In the event of a breach of confidentiality, a reporting and redress system is in place, and the adolescents involved are informed when action is taken.

Support groups: Clients are able to discuss their challenges and successes in a safe environment, free of stigma, discrimination and judgment. Life skills are also reinforced in the support groups.

Adherence support: A team approach is taken to adherence. With the consent of clients, mentor moms liaise with adherence counsellors and social workers to monitor adherence and

assist in addressing the relevant barriers. Attention to psychosocial issues has led to good adherence, and less than 1% of the girls in the programme have repeat teen pregnancies.

Support for disclosure to parents/guardians and partners: Disclosure is viewed as a critical component of successful adherence, as it opens up an environment of trust and support. Disclosure to a loved one is an indicator used to measure success in the programme. It is encouraged throughout the programme, and as such, disclosure is treated as a life skill. Girls are walked through a process of disclosure and role-play discussions with their loved ones. The discussions address selection of the partner(s), family member(s) or friend(s) to whom the clients will disclose, how and whether they require the assistance of a life coach, mentor mom or trained counsellor. Each coach must have disclosed to their partner or a family member so they can be of optimal assistance to the girls in this area.

Strategy for scale-up: Increased cooperation with the MOH includes capacity building of health workers to improve their skills in service delivery for ALHIV. Additionally,

adolescents who have completed the programme are engaged as peer support links for adolescent mothers attending antenatal or HIV treatment programmes in the public health sector.

Factors contributing to the success of this work
- Close collaboration with government
- A team approach to adherence
- Peer-to-peer approaches to support
- Engagement of older women living with HIV as lay counsellors/mentors
- Disclosure of HIV status as a key component of the programme.

Challenges facing the programme
- Limited scope of the programme (it is present in only three parishes and targeted towards ALHIV who are mothers)
- Limited funding threatens sustainability.

✉ For more information contact Novia Condell: ncondell@unicef.org

2.3 Community-based approaches

When an adolescent tests negative, community-based service delivery can help to minimize risky behaviours and facilitate timely and low-cost referrals to further prevention support. The following are examples of approaches to assist those adolescents who test positive.

2.3.1 Support for adherence

As for treatment of other chronic diseases, ensuring adherence to ART is a challenge; support is needed from a variety of people to help adolescents adhere to their medications and care regimens. Various approaches involve home visits by health workers, lay counsellors and ALHIV peers to support the ALHIV and their families, and working to ensure that there are ongoing long-term relationships with health staff, establishing partnerships with the patients' guardians and the adolescents themselves and developing support groups for ALHIV.

COMMUNITY-BASED ADHERENCE SUPPORT THROUGH LAY COUNSELLORS (SOUTH AFRICA)

In this intervention, lay community-based adherence support (CBAS) workers provide regular adherence and psychosocial support for patients and undertake home visits to address household challenges affecting adherence. Family and household members are assessed

together with patients, and issues are discussed at clinic multidisciplinary team meetings.

The project was evaluated through a multicentre cohort study using routinely collected clinical data at public ART sites supported by Kheth'Impilo, a local NGO. ART-naïve adolescents and youth (ages 10–25 years) starting ART between 2004 and 2010 were included. All the parameters that were assessed were improved in the adolescents who received the CBAS intervention: patient retention, mortality, loss to follow-up and viral suppression.

Factors that contribute to the success of this work
- Relationships that are developed between adherence workers and adolescents, reinforcing positive adherence behaviours
- Long-term follow-up to encourage long-term treatment success
- Cost-efficiency for resource-poor settings.

Challenges facing the project
- Long-term funding in the face of the global economic downturn
- A database specific for community workers is still under development
- Serving patients who live far from clinics.

✉ For more information contact Nontuthuzelo Manjezi: Nontuthuzelo.Manjezi@khethimpilo.org

2.3.2 Strengthening the continuum of care for children and adolescents with HIV and improving retention in care

IN GENERALIZED EPIDEMICS: THE BOTSWANA-BAYLOR CHILDREN'S CLINICAL CENTRE OF EXCELLENCE (BOTSWANA)

The entry point into the Centre of Excellence (COE) is the HTC or Screening Clinic. For those testing positive for HIV, the goal is optimisation of treatment and adherence, retention in care, avoidance of high-risk behaviours and deliberate and seamless transition to adult care. Opened in 2003, the main clinic in Gaborone, with over 2300 child and adolescent patients, is able to reach an additional 4000 patients through its decentralized countrywide outreach and mentoring services. Thus, the COE is impacting over two-thirds of all paediatric patients who are receiving ART in the country.

Each patient is provided various multi-faceted but linked interventions that include: a simplified and sequential disclosure process; adherence classes for the primary caregiver and at least one other member of the household; nutritional support and counselling; home visits; morning play group; remedial classes for students having difficulty with schoolwork; a week-long annual camp; adolescent support; services centred around teen clubs (recreation, life skills and SRH); and a structured transitioning programme to usher adolescents into adult care. For pregnant adolescents there is a support group that teaches parenting skills and encourages them to return to school; for those who are unable or unwilling to return to school, there are income-generating activities available.

Key factors that have contributed to the success of this project
- HIV is the main focus of the COE
- Innovative and responsive staff
- The COE is an NGO working in partnership with the government.

Key challenges that have been met

- Reaching out to as many children as possible through outreach mentoring and the establishment of outreach teen clubs in partnership with local community service organizations and ART clinics (Airborne Lifeline, an international NGO has provided free flights to remote parts of the country for COE staff)
- Achieving excellent levels of retention in care through home visits and caregiver training.

✉ For more information on programme support tools, visit http://botswanateenclub.wordpress.com/
✉ For more general information contact the COE: ganabwani@baylorbotswana.org.bw

WORKING WITH ALHIV: THE EXPERIENCE OF UZBEKISTAN

The overall aim of the work with ALHIV is to improve their quality of life through the provision of information (about HIV/AIDS, modes of HIV transmission, ART, adherence to treatment, CD4 count, viral load, prevention and treatment of opportunistic infections, nutrition, hygiene, reproductive health, mental health); education (prevention for positives, life skills development, leadership/volunteering, the development of skills relating to specific interests); and comprehensive psychosocial support for disclosure of HIV-positive status.

Services for ALHIV have been integrated into the existing system of services for children with HIV and their families through the day-care centres (DCC) for children and families affected by HIV in Uzbekistan. More than 100 ALHIV are now attending the DCC, although only about 40 of them have received full disclosure about their HIV status.

Objectives of the services

- Provide psychosocial support for ALHIV and their families at all stages of disclosure of HIV-positive status;
- Create an enabling environment for the transition of adolescents into medical and non-medical services for adult PLHIV and coordination of the various types of care for ALHIV;
- Strengthen the connection between ALHIV in different regions of Uzbekistan to exchange experiences and provide mutual support.

Core strategies/activities include

- Psychological/social counselling, especially to support disclosure
- Regular self-support groups for adolescents who know their HIV status, activity groups for adolescents who know their HIV status, including knitting, beading, computer, and languages (Russian, English)
- Information materials for ALHIV (personal diary entries, art calendars, HIV/AIDS booklets), education activities for parents of ALHIV
- Development of an online platform to enhance the relationship between ALHIV from different regions of the country.

An additional activity that has only partially been carried out is camps/schools for ALHIV to build their capacity, leadership and ability to independently defend their rights at various levels. This involves training ALHIV on a number of themes, including:

- Promoting a healthy lifestyle
- Development of a broad range of life skills including combating stigma and discrimination
- Skills for responsible health maintenance
- Prevention for positives support trainings (training of trainers).

Planned activities include
- Implementation of the system for transitioning of ALHIV from paediatric AIDS services to adult AIDS services (using services of AIDS Centres, Maternal and Child Department of the MOH)
- Regulatory support of HIV disclosure for ALHIV
- Adaptation and adoption of WHO guidelines/protocols on disclosure of HIV status for children.

Reasons the programme is considered to be a success
- On a regular basis, support groups have been developed for ALHIV who know their HIV status in the DCCs in Tashkent and Andijan
- All parents report changes for the better among ALHIV who worked with DCC staff, including taking responsibility for their health and treatment adherence, greater interest in life, less conflict with parents and better communication skills with peers
- Partnerships for work with ALHIV (AIDS Centres, UNDP, GFATM Project, UNAIDS, UNFPA).

Factors that contributed to success
- Availability of a team of qualified professionals—social workers, psychologists, paediatricians and infectious disease specialists
- Financial support for support groups, trainings, office supplies, office equipment
- Mobilization of ALHIV, who have become leaders and volunteers to work with new adolescents whose status has not yet been disclosed.

Challenges facing the programme
- Lack of an enabling environment for ALHIV (misunderstanding in the public sector of the importance of working with adolescents, regulatory constraints or lack of regulatory framework for adolescents with HIV)
- Growth in the number of HIV cases among adolescents, poor health of the adolescent and delayed entry into care due to lack of disclosure to adolescent and denial among parents, and the related family stresses
- Lack of a support system for ALHIV after HIV diagnosis.

✉ For more information contact the Day-care Centre for Children and Families Affected by HIV - "Qaldirgoch" Tashkent, Uzbekistan: qaldirgoch@gmail.com or Kamila Fatikhova: kfatikhova@unicef.org

2.3.3 Involvement of adolescents and integration of services

THE ZVANDIRI MODEL OF INTEGRATED, ADOLESCENT-LED PREVENTION, TREATMENT, CARE AND SUPPORT (ZIMBABWE)

Africaid, a Zimbabwean NGO, is committed to helping children, adolescents and young people living with HIV from 5–24 years to develop the knowledge, skills and confidence to cope with their HIV status and to live happy, healthy, fulfilled lives. It is achieving this through the innovative "Zvandiri" programme that provides community-based treatment, care, support and prevention services that are integrated with government and private-sector clinical care services. This integration creates a robust continuum of care for children and young people with HIV and their families and aims to promote good health and psychosocial outcomes.

Zvandiri (meaning "as I am") is led by adolescents with HIV who are trained and mentored as service providers. Through community support groups, community outreach and clinic-based Zvandiri Centres, ALHIV identify children for HIV testing, link children living with HIV to treatment and care, provide sustained counselling for children, adolescents and their families and life skills training for their peers. Community Adolescent Treatment Supporters (CATS) are adolescents with HIV who provide adherence monitoring and support in clinics and homes, trace treatment defaulters and assist in identifying adolescents at risk of treatment failure. Zvandiri's SRH programme ensures young people living with HIV have the

knowledge, skills and confidence to make informed prevention decisions and that they are linked to care including STI, family planning services, PMTCT and Zvandiri's young parents support groups. Adolescents with HIV also provide training and counselling as caregivers and training of health workers, teachers, social welfare officers, church leaders and community members.

Zvandiri is being scaled up across Zimbabwe under the Government of Zimbabwe's National Action Plan for OVC. Zvandiri has been recognized as a highly effective, innovative model for the provision of sustainable treatment, care, support and prevention services for children and adolescents with HIV. It was documented by SADC [Southern African Development Community] in 2012 as a regional best practice and a national best practice by Zimbabwe's National Action Plan for OVC in 2009.

Key challenges that have been met

- Improving access through decentralization to the community level
- Meeting demand for scale-up of services by making it a national programme through the Government of Zimbabwe's National Action Plan for OVC
- Ensuring quality through robust coordination systems and standardized materials (e.g. weekly meetings with youth service providers for planning and supportive supervision, and training manuals and standard operating procedures in line with national and international guidelines for consistent delivery of quality services.

✉ For more information contact info@africaid-zvandiri.org or Nicola Willis: nicola@maruva.org

2.4 Training

2.4.1 Support for adherence to treatment and retention in care

An important aspect of counselling once ART has been initiated is support for adherence. In many places where the formal health workforce is insufficient to meet local needs, lay counsellors provide adherence counselling. Thus, one approach to supporting adherence to treatment involves ongoing training and supervision for lay adherence counsellors.

TRAINING AND SUPERVISION FOR BEHAVIOUR CHANGE COUNSELLING (SOUTH AFRICA)

An evaluation of standard-care ARV adherence in Western Cape, South Africa, found that the lay counsellors were not following international standards of client-centred, problem-management counselling that results in personalized plans for behaviour change *(119)*. Instead, they were mainly employing directive and health-advising techniques, assuming the role of "expert" in their sessions with clients. The study concluded that, at a minimum, counsellors should be provided with regular supervision focusing on micro-counselling skills and the avoidance of inappropriate strategies such as moralising, warning and confrontation. Supervision should also include case management, where the accepted counselling model, and problem-management techniques in particular, are revised and applied. The extent to which lay counsellors could adopt and implement more evidence-based models of adherence counselling was unclear.

Options for Health is a behaviour change intervention based on an approach called Motivational Interviewing (MI) *(120)*. Thirty-nine ARV adherence lay counsellors in the Western Cape were trained to deliver "Options" to their patients to help them optimize ART adherence. An assessment of counsellors' ability to deliver the intervention effectively after 35 hours of training revealed that counsellors failed to achieve proficiency in MI *(121)*. A follow-up study examined the impact of refresher training and supervision on the counsellors' proficiency in the intervention; it found that the recommendations of the assessment had been applied with promising results *(122)*. Over a 12-month period, with

18 hours of refresher training and supervision, lay counsellors were able to improve on basic counselling communication skills and therapeutic approaches. When compared to a group of control counsellors, their counselling was more collaborative, supportive, empathetic, and it featured more problem-solving… *(123)*. This study demonstrates the importance of ongoing training and supervision in achieving and maintaining the delivery of good quality service by lay health workers.

As large-scale lay health worker interventions involve considerable financial investment *(124)*, more research is needed—especially in contexts where lay health workers are a necessary and integral part of service delivery—to understand how the most benefit from such a significant investment can be achieved.

✉ For more information contact Cathy Mathews: cathy.mathews@mrc.ac.za

The establishment of peer support groups can reinforce and extend the efforts of lay counsellors to ensure that adolescents adhere to treatment.

TRAINING AND SUPPORT GROUPS TO IMPROVE ADHERENCE (MOZAMBIQUE)

Fundação Ariel Glaser supports the Ministry of Health to provide clinical care in all districts in Maputo and Cabo Delgado provinces, where HIV shows the characteristics of a generalized epidemic. In order to improve adherence to ART by the adolescents and improve retention of this group in care and treatment services, the Ariel Glaser Foundation staff, in collaboration with staff from the provincial health directorate, have conducted specific training on paediatric and adolescent psychosocial support for lay counsellors, psychologists and psychiatry medical officers, including an explicit focus on adherence reinforcement and HIV disclosure (to the adolescents). At the same time, staff received training and improved skills in creating and supporting child and adolescent support groups. The groups are now fully active in seven out of eight districts, with each group consisting of about 20 adolescents (10–19 years). To support the training, the participants were provided with a range of materials, including job aids, an adherence flip chart and a manual on support groups.

There are differences in adherence among adolescents attending the support groups, and the reasons for non-attendance need further exploration (sometimes related to distance, family and/or psychosocial issues). The support groups seem to positively influence not just adherence but also self-esteem and coping with HIV more generally.

From 2013, F. Ariel Glaser will be supporting youth- and adolescent-friendly services, known as SAAJ, now in the process of revitalization by the Ministry of Health, and there are plans to build on and link with the experiences of working with ALHIV.

✉ For more information contact Paula Vaz: pvaz@arielglaser.org.mz

2.5 Other important considerations

2.5.1 Key populations

The most vulnerable adolescents, especially those in key populations living with HIV, must be reached and their needs must be met. This section highlights issues that may affect all adolescents but may be particularly important to adolescent members of key populations.

Young MSM

Research has found that among young MSM factors such as stigma, discrimination *(125)*, less condom use, more alcohol and drug use, and having sex with older partners *(126)* contribute to even higher risk than older MSM for HIV acquisition.

This analysis found that young MSM were significantly less likely to use condoms during last sexual intercourse, more likely to drink alcohol or use drugs before last sexual intercourse, and more likely to have had four or more partners during their lifetimes than young men who had sexual intercourse only with females. These behaviours are associated with substantial risk for infection. In one study among MSM the attributable risk for new HIV infection was 29% for using alcohol or drugs before sex and 32% for having had four to nine sex partners *(127)*. Further, in a study of primarily young MSM, 75% of those with acute HIV infection reported sex under the influence of drugs or alcohol, compared with 31% of HIV-negative MSM. The risk for HIV infection doubled for MSM with a sex partner five years older and quadrupled with a sex partner ten years older *(3, 126)*.

Role of peers

The role of peer support or peer counselling is important for all adolescents living with HIV but particularly for young people in key populations.

Disclosure and confidentiality

There is a risk for adolescents in key populations of being "revealed" by undertaking certain necessary activities (e.g. collecting medications at primary health-care clinics). Similarly, some activities at the community level can pose significant personal safety and legal risks to these adolescents. Forced disclosure of HIV status or disclosure without the consent of the individual often drives those in key populations, and ALHIV in general, away from HTC services and discourages retention in care.

In settings where counsellors are uneasy about providing support for disclosure, peer educators and CBOs can provide valuable support to offset some of the risks, and anonymous reporting can be established as a routine practice. All services must establish a system of unique identifier codes, as name-based reporting for national requirements and donor reporting risks violating confidentiality.

Laws and legal environments

Laws governing access to opiate substitution treatment (OST) for young drug users and access to ART need to be harmonized with other policies, e.g. needle and syringe programmes. Eligibility requirements for these programmes also need to be clarified.

Policy and legal barriers to providing services need to be reviewed and amended. In some cases certain behaviours and sexual orientations are criminalized. In other cases, educational institutions require applicants to disclose their HIV status as a pre-condition for admission. Until such laws and practices are changed, many adolescents with HIV in key populations may need legal support following HTC.

2.5.2 Education sector response

Access to education must in no way be linked to health status. The education sector has an important role to play in the continuing development of ALHIV in their school environments and potentially in the actual delivery of HTC.[1] There are five essential components of a comprehensive education sector response to HIV and AIDS *(128)*:

1. **quality education**: Access to educational opportunities is widely recognized as an effective means for reducing the vulnerability of children and young people to HIV;
2. **content, curriculum and learning materials** that are evidence-based, that build knowledge and skills for protective behaviour, and that start early and are sequenced and appropriate for the age and development stage of the learner;

1 The potential involvement of the education sector in the delivery of HTC needs to be explored although currently there is not significant evidence for this.

3. **educator training and support** that includes pre- and in-service training on HIV knowledge, confidence and communication skills and supervision and that addresses educators' own vulnerabilities to HIV, especially those living with HIV themselves;
4. **policy, management and systems** that include workplace policies to ensure zero tolerance of violence, abuse and discrimination, and strategic plans that are funded to implement, enforce and monitor these policies;
5. **approaches and entry points** including school health programmes, peer education, communication and media interventions, and life skills education.

Practical recommendations for the education sector to address the needs and aspirations of ALHIV include *(129)*:

- **Know your epidemic** in order to recognize trends and appreciate the nature and implications of its impact on the education system and upon learners in relation to access, retention and achievement in school.
- **Recognize the presence of students living with HIV.** Some may know their status and others may not. Some will want to disclose and others may not. ALHIV have the same needs as other learners as well as needs that are HIV-specific.[1]
- **Establish and reinforce links with other sectors** to help ensure the education sector's participation in HIV response planning and resource allocation.
- **Review, adapt and reinvigorate existing policies and practices** in order that they benefit ALHIV. In particular, policies related to privacy and confidentiality in education contexts need to be reinforced.
- **Develop and set up monitoring and evaluation systems.**
- **Continue to improve knowledge about HIV** among teaching, management and administration staff.
- **Encourage and support the provision of non-formal education.**
- **Recognize the value of teachers, staff, parents and community members living with HIV** as part of the response and contact trade unions, support groups and PLHIV networks.

Treatment education is a sectoral initiative with a broader reach than school-based activities. It is a critical component of efforts to ensure universal access to prevention, treatment and care *(130)*. Treatment education engages communities and individuals to learn about ART in order to:

- encourage increased uptake of HTC
- improve understanding of ART and drug regimens
- understand and be prepared for treatment-related costs
- advocate greater and more equitable access to treatment (including gender equity)
- support adherence to treatment
- encourage protective behaviours and healthy living
- reduce stigma and discrimination against PLHIV
- link testing, prevention, care and treatment initiatives for a comprehensive response to HIV.

2.5.3 Involvement of adolescents

Involving ALHIV is important for programmes: Nobody understands their problems better than they do. Involvement also contributes to their personal development. Empowering young people living with HIV to serve as peer educators and play a key role in the programme, as counsellors, trainers and advocates, not only improves programmes, thanks to their enthusiasm and creativity, but also provides ALHIV with new skills, power, and knowledge. Furthermore, providing adolescents with a physical space that belongs to them helps to build a supportive long-term

1 Orientation for staff (e.g. at residential facilities particularly) is important for sensitivity to the needs of students who are on ART and who may be subjected to harassment (about medical supplies, personal behaviour, etc.), which can discourage adherence.

relationship, and demonstrates that the community is interested in addressing their health needs. Ministries of health need to ensure that adolescents' contributions to service delivery are formally included and recognized in national plans.

Meaningful and proactive involvement of adolescents in the programmes that provide services as well as in their own health care requires sustained patient education designed specifically for adolescents, accompanied by acceptable and effective support.

Adolescents must also be empowered and supported to make decisions about their own health care, with the ultimate goal of self-management, as part of the transition to adulthood.

2.5.4 Increasing acceptability and uptake of services

To increase the acceptability and uptake of services among adolescents while reducing direct and indirect costs to patients, there are a number of approaches to consider:

- minimizing the number of required facility visits;
- providing services at times when adolescents can attend without interfering with their education;
- reducing waiting times for all visits;
- providing separate waiting areas for adolescents that offer separation from adult waiting areas and of peer supporters and adolescent-friendly materials and activities.

Coordination of facility visits across services—e.g. clinical care, laboratory services, and pharmacy pickup—or across different points of care, when care is provided at different locations, are important to reduce the burden of care to patients and their care providers.

2.5.5 Living positively

BAYLOR TEEN CLUB (SWAZILAND)

Swaziland has the highest rate of HIV in the world. The Teen Club was born out of a desire to help adolescents living with HIV become powerful agents of change. Since starting in 2006, Teen Club has grown to include one monthly meeting in each of the four regions of Swaziland. There are currently four teen club centres—Mbabane, Manzini, Hlathikulu and Siphofaneni.

The mission of Teen Clubs is to empower adolescents with HIV in Swaziland to live positively and successfully transition into adulthood. Services offered at the clubs include emotional and educational support through structured activities designed to teach life skills, foster relationships, and build confidence. The clubs provide a forum for adolescents to constructively express themselves and discuss issues regarding their condition without the threat of stigma.

Each month more than 350 ALHIV attend the support groups on Saturday mornings. Every meeting begins with games and icebreakers that help new members quickly feel comfortable while making new friends. Teen Club members then participate in educational and empowering activities from the Baylor life skills curriculum. During their meetings the teens are split into different age groups, allowing the younger adolescents to participate in activity-based lessons, while the older teens engage in in-depth conversations with a more mature focus. With the help of adult Teen Club coordinators, the lessons are conducted by Teen Leaders, older members of Teen Club who have successfully completed the Teen Leadership Training programme. Topics include advocacy, body changes, disclosure, peer

pressure, self-expression, safer sex practices, grief and bereavement, self-expression and realizing your dreams. To help ease the financial burden on our members, each teen is provided a snack and travel reimbursement for public transportation.

Strong leadership, partnerships and ongoing training of adult volunteers and Teen Leaders ensure the sustainability of the Teen Club activities. With the expansion of support groups and the addition of a Teen Club office and a dedicated staff, Baylor has been able to increase participation of teens while decreasing average costs. Despite the accomplishments made over the past six years, there are still several challenges facing implementation of teen clubs.

Is it a success?
When adolescents living with HIV are given a voice and supported to overcome obstacles to good health, their strength, creativity and passion can engender hope, even in the most desperate situations. Teen Club helps build the capacity of Swaziland's civil society to support Swaziland's adolescents in the battle against HIV. A recent evaluation of the Teen Clubs has shown that adolescents with HIV appreciate the services provided through the clubs, and they provide a forum in which adolescents with HIV can come together to share their personal experiences and provide one another the much-needed psychological and emotional support. The teen club members benefit from being able to speak openly and freely without fear, stigma and discrimination. Restricting Teen Club membership to teens with HIV is believed to be one of the main reasons for the success of the clubs.

While there are many benefits of attending Teen Club, … what is accomplished is best described by the Teen Club members themselves: "I am not alone and I can help other teens living with HIV". "I want to learn life skills and how to improve my health". "I am going to be a leader".

Challenges facing the programme
- How best to provide nutritious food within a constrained budget?
- How best to decentralize Teen Club so that more adolescents living with HIV are able to get the vital support they need?
- How to empower the adolescents to successfully transition to adult health care and services?

✉ For more information contact Dr Hailu, Country Director, Baylor Swaziland: hailun@baylorswaziland.org.sz or Dr Sarah (in charge of the UNICEF-supported activities including the Teen Club): sarah_h_banner@yahoo.com or Makhosini A. Mamba: mmamba@unicef.org

2.5.6 Importance of parents and caregivers

It is important to give adequate attention to supporting the parents and caregivers of ALHIV, so that they in turn are better able to support their adolescents. A sense of partnership between health-care providers and the parents and caregivers of ALHIV can facilitate adherence to treatment and retention in care. It is also important for providers to recognize and resolve conflicts that may exist between parent/caregivers and ALHIV (and even with peer educators and counsellors) on issues such as how and when adolescents disclose their status to others, and what to do if an ALHIV becomes sexually active, is not adhering to treatment or care regimens, or becomes pregnant. Continuous support counselling and education for the caregivers of ALHIV is critical to the success of programmes. At the same time it is important to acknowledge the tension between autonomy and protection; the best interests of the adolescent and the adolescent's needs and rights may have to take precedence over the opinions of parents and caregivers.

Programmes will serve the interests of adolescents when they consider the challenges facing caregivers—especially in the case of those caring for orphans or other vulnerable children—who often are not compensated and who are caring for other family members as well.

Some adolescents do not have parents or have unsupportive or abusive parents. This may be a particular issue for adolescents in key populations and has important implications for the ability and the right of adolescents to provide informed consent for themselves. If a parent is unavailable, it is important to encourage the adolescent to identify another supportive adult.

THE IMPORTANCE OF RELATIONSHIPS BETWEEN HEALTH-CARE PROVIDERS AND FAMILIES—INSTITUTO DE INFECTOLOGIA EMILIO RIBAS (BRAZIL)

The HIV clinical group was created in 1985, the beginning of the HIV epidemic in Brazil, when the first child with HIV was referred to the hospital. The team is composed of infectious diseases specialists, paediatricians, nurses, social workers and psychologists.

Expertise was initially developed through research of medical literature, exchanging experiences with other groups worldwide and day-to-day learning through success and frustrations with patients. This learning approach helped staff respond to issues such as disclosure of the diagnosis, HIV testing, treatment adherence and social inclusion. Solutions were sought as the problems arose; as the first team in the country to deal with HIV infection in the paediatric population, creativity, innovation and patience were important.

The team now meets on a daily basis and all the emerging problems are fully discussed within the team. Furthermore, the same team works together on clinical research and on training young professionals, so everyone is always in contact with the most recent publications and experts from all over the world.

Key factor for success
The team has changed very little since 1985, and it has therefore been possible to establish good partnerships with the patients' guardians and the children and adolescents themselves.

✉ For more information contact Marinella Della Negra: aacphiv@uol.com.br

2.5.7 Integration of services

HIV prevention, diagnosis, treatment and care interventions for adolescents should, as far as possible, be integrated with those for adults and for children.[1] At the same time, the health sector must able to respond effectively to the specific needs of adolescents in general (e.g. adolescent-friendly health services) by utilizing non-judgemental staff who like and understand adolescents and by addressing issues such as accessibility of care and confidentiality.

Integration also needs to take place between community-based health, education and social welfare services and government services, staff and other local stakeholders. Partnerships and collaborations between state and civil society/communities are essential to expanding access to services and assuring the quality of services and a continuum of care at every level. State health systems must be closely linked to community-based services and providers. There must be established connections and referral systems along the continuum of care and in both directions—from the community to the formal health system and from the formal health system back to the community.

1 Some ALHIV need particular sensitivity with respect to physical appearance. The physical immaturity of many vertically infected adolescents may make them stand out more in adult clinics, and providers should be prepared to make accommodations that will put these individuals at ease if necessary.

SERVICES AND SUPPORT FOR ALHIV (NAMIBIA)

The programme focuses on adolescents aged 10–19 years in the Caprivi and Khomas regions of Namibia, including ALHIV, with the aim of strengthening the design, development and implementation of service delivery mechanisms for increased uptake and quality of HTC for adolescents and young people, including Post Test Support Services (PTSS), and improving service provision for ALHIV.

Activities include baseline data collection, collation and analysis; the development of training materials; training of adolescent facilitators who are living with HIV and their parents, caregivers and health-care providers; the establishment of peer support groups and spaces for them to meet; and the use of a disclosure tool with all adolescents with HIV attending the paediatric ART target site.

In addition, HTC is emphasized as an entry point to prevention as well as care, treatment and support services through: PTSS to support all adolescents and young people (with HIV or not); strengthened referral linkages between HTC, PTSS and other prevention, care and treatment, and support services; and community-based mobilization mechanisms, including interpersonal and mass media communication to reach out to adolescents and young people.

Reasons for success

- Initiated in one of the hospitals where there was already a functional teen club
- Establishment of a project steering committee to oversee the project implementation
- Technical assistance and funding for capacity building of ALHIV, parent/caregivers, and health-care providers
- Incorporating the teen club from the beginning
- "Ownership" of the project by ART site and hospital management
- Wider stakeholder involvement in the development of the national guidelines
- Adoption of the Adolescent-Friendly Health Services (AFHS)-ALHIV curriculum by the national health training centre within the MOH
- Engagement of NGOs working with children and adolescents on HIV and SRH matters in the projects.

Factors that contributed to the success of the project:

- Exposure of staff and ALHIV to a global consultation on programming for ALHIV
- Committed and dedicated staff
- Availability of space and incentives for participation (e.g. the provision of refreshments by the implementing site for teen club activities).

Challenges facing the programme

- Confidentiality: consent from parents and caregivers to health-care providers to allow them to introduce the paediatric disclosure tool to the children and adolescents; consent from parents and caregivers to allow health-care providers to engage an NGO to provide training to ALHIV and their caregivers; and consent for ALHIV to voluntarily enrol in the teen club. This took a long time, and delayed project implementation.
- Funding: the funding came to an end at a time when the need for resources was greater than when the project started (for training and for electronic devices for defaulter tracing);
- Unfriendly space: the space provided for the teen club corner in the implementing facility needs refurbishment, painting and extra equipment.

✉ For more information contact Gloria M. Siseho: gsiseho@unicef.org

LINKS WITH ADOLESCENT-FRIENDLY SEXUAL AND REPRODUCTIVE HEALTH SERVICES (MOZAMBIQUE)

In 2004, the World Bank launched a pilot HIV/AIDS Treatment Acceleration Project (TAP) in Mozambique, Burkina Faso, and Ghana aimed at slowing the epidemic by increasing access to voluntary testing and counselling (VCT) and adherence to care and treatment. In Mozambique the four-year US$1.25 million Treatment Acceleration Project (TAP) was implemented by Pathfinder International in collaboration with the Government of Mozambique and with additional technical and financial support from UNFPA. TAP built and expanded on the successes of the national Geraçao Biz Programme. TAP was implemented in two provincial hospitals that offered youth-friendly SRH services (YFS) in Maputo and Xai-Xai in Gaza Province.

Through TAP, HIV counselling and testing, ART, and PMTCT were integrated into the YFS service delivery package for the first time. Young people testing positive were provided immediate support and counselling, given a CD4 test, and linked to treatment if needed. Pregnant adolescents who tested positive were linked to PMTCT services. In addition, a trained psychologist spent several hours a day at the YFS offering counselling and support for disclosure as well as positive and healthy living. Young people testing positive were immediately linked with a peer educator with HIV who had been trained to provide care and support and "sheltering".[1] Finally, all youth clients testing positive for HIV were urged to join a weekly support group at the YFS facility led by peer educators with support from providers and the psychologist. Over the course of the project, about 12, 000 young people were tested for HIV, with about 25% testing positive, and 656 young people began ART. The programme had high levels of retention for ART clients, with only 11% and 16% of ART clients dropping out over the course of the project in Maputo and Xai-Xai, respectively.

The programme was considered to be highly successful by the MOH and other partners in the country. It was a catalyst for the scale-up of HIV counselling and testing within all YFS sites in Mozambique. HIV counselling and testing is now offered at 335 Geraçao Biz YFS sites nationwide, and approximately 153 000 young people were tested in 2011. In addition, peer educators living with HIV remain active in the Geraçao Biz Programme, and in 2011 the Ministry of Health issued guidelines that all YFS facilities should have support groups for young people living with HIV. This is a big step in scaling up some of the key elements of TAP, but it has yet to be fully operationalized in the country.

Factors that contributed to the success of TAP

- Building on an existing national programme with well-known and successful youth-friendly services allowed young people to be aware of the services and increased participation of young people in the programme.
- Empowering young people living with HIV to serve as peer educators and play a key role in the programme not only improved the programme, but also equipped young people living with HIV with skills, power, and knowledge to improve their health and that of their peers.
- Support groups and "sheltering", including home visits, were crucial to adherence to treatment and maintaining follow-up care with young people living with HIV.

Challenges facing the programme

Psychologists play a key role in the programme, but there are few in Mozambique, especially in remote areas. Peer educators can be trained to fulfil some of these duties, but supervision is required to ensure quality.

✉ For more information contact Rita Badiani: rbadiani@pathfinder.org or Gwyn Hainsworth: ghainsworth@pathfinder.org

1 In this project "sheltering" refers to the role of the peer educator in providing support to newly diagnosed young people by accompanying him/her through counselling and medical appointments, providing insight and support related to treatment (including adherence), and offering social support inside and outside of the clinic walls. Sheltering also includes the role that the peer educator served in providing home visits to young clients and their families once the young person chooses to disclose.

IN CONCENTRATED EPIDEMICS: INTEGRATION OF SERVICES—SERVIÇO DE IMUNOLOGIA CLÍNICA E HOSPITAL-DIA DO IMIP, INSTITUTO DE MEDICINA INTEGRAL PROF. FERNANDO FIGUEIRA (BRAZIL)

The programme started in 1987, when the first paediatric AIDS case was diagnosed in the Northeast region of Brazil. In 1988, the service became a national reference centre for HIV infection among children and had started to train health professionals locally and from other regions of Brazil, expanding to incorporate the testing of all pregnant women for HIV, becoming Mother-Child HIV clinics. In 1998, treatment for other adults was added, and in 2003 the move to new facilities made it possible to put together a multi-professional team to offer comprehensive care and day-care services for adolescents and children.

Currently, IMIP´s complex provides an HIV reference service, with paediatricians, immunologists, infectious disease specialists, gynaecologists, rheumatologists, psychologists, dentists, nursing staff and social health assistance. Approximately 450 children and adolescents living with HIV have been registered with the service, of which 300 are alive and in follow-up. In addition, the clinic is following up 10 children born to mothers with HIV who themselves were perinatally infected; only one of these children has HIV.

Lessons learned

- Improving the skills of health workers is essential so that they can better understand and treat adolescents, who need strict adherence to antiretroviral drugs
- Flexible approaches to transitioning to adult services are important (at the same clinic)
- Since the beginning of the programme, the "AIDS clinic" was called the Immunodeficiency Outpatient Department and later the Clinical Immunological Service for HIV and Non-HIV Patients (including primary immunodeficiency, allergy and rheumatology). It is important to call the services something that helps to decrease stigma and discrimination (the day-care hospital is used mostly by non-HIV patients).

✉ For more information contact Edvaldo Souza: edvaldo.es@gmail.com or visit www.imip.org.br

2.5.8 Scaling up interventions

If programmes are to be scaled up in a sustainable way, it is important to work with and through the existing systems and structures, including the development of training materials and guidelines. Government health systems provide facilities through which services can be delivered, and integration helps to ensure that those with other chronic illnesses and vulnerable groups can benefit from the efforts to strengthen services for ALHIV. One of the challenges that have been mentioned in several programmes is the absence of relevant policies—for example, the lack of a formal policy for adolescents living with HIV, or more specifically the lack of a policy on disclosure of HIV status to children and adolescents who have HIV. Furthermore, there is a lack of specific standards and guidelines relating to adolescents—e.g. for adherence and psychosocial support. It is important to note that while many countries now have such guidance for small children, these documents are often not relevant to adolescents, especially older adolescents.

Programmes for/with ALHIV should link and integrate with programmes that provide health services to young people more generally, including services for other chronic illnesses, programmes for ASRH, and prevention interventions for young people. Building on existing and successful national programmes helps young people to be aware of, have confidence in, and increase the uptake of services. It can also engage NGOs that are focusing on adolescents to contribute to efforts to improve services for ALHIV as well. Providing services for ALHIV within general adolescent-friendly services (including HIV services) may help to decrease stigma that may be attached to going to an "HIV clinic".

In Asia, services for key populations are provided largely by NGOs and CBOs. These services need to be scaled up to include adolescent members of key populations (which involves issues of consent). By providing clear guidance, governments will support and legitimize NGOs in this work. In concentrated epidemic settings this approach may be more effective than services provided by public institutions.

Decentralization is also important to scaling up interventions for adolescents, as it takes services closer to the client, an important aspect in reducing barriers to adolescents' use of services. Successful decentralization of services for adolescents will require health worker training, decentralization of support groups to community venues or local health centres, monitoring systems that include data disaggregated by age, and robust referral systems for a range of problems affecting adolescents. Young people in key populations will require special attention.

Quality control

Although decentralization and scaling up improve ALHIV's access to support, it is also essential to ensure quality. Coordinated rollout of services has been achieved through robust coordination systems and standardized materials—e.g. weekly meetings with youth service providers for planning and supportive supervision; training manuals and standard operating procedures in line with national and international guidelines for consistent delivery of quality services. Continuous monitoring and evaluation allows the programme to evolve over time, continually adapting to meet the changing needs of the target population. At the same time it is essential to have mechanisms in place to check that the established standards are actually being observed (quality assurance).

Sustainability

CBOs and community-based service delivery are vulnerable to inconsistent funding and reliance on volunteers. Compensation and sustainability issues must be considered when expanding access to HTC and other services at the community level.

2.5.9 Messaging

Public health communication should address specific adolescent populations using non-traditional approaches that identify particular locations and activities for dissemination of information and key messages, e.g. sports clubs, bars, youth centres, vocational centres, markets, schools. Ideally, messages should be formulated by or with the involvement of adolescents themselves, ensuring that their perspectives are reflected; this is particularly true for adolescent members of key populations.

Other approaches for effective communication with adolescents involve social marketing of key products and services and peer role models, especially those living openly and positively with HIV. The role of new technology may be especially powerful for communication initiatives addressing adolescents. Online social networks, mobile technologies and related innovations can contribute to the increased connectedness of adolescents around the world and facilitate rapid and effective dissemination of life-saving information. Private–public partnerships can facilitate messaging and promotion of services for adolescents; these partnerships will have different purposes and channels of communication in different settings.

2.5.10 National-level issues

HIV as an opportunity to move the adolescent health agenda

As health systems dedicate new energy and resources to the needs of adolescents, every effort should be made to maximize the opportunities that treating ALHIV

provides to focus more generally on strengthening national efforts on behalf of adolescents with chronic illness and provision of services for adolescents more generally (e.g. SRH). National data collection and analysis by health management information systems (HMIS) will need improvement to gather and assess information specific to adolescents.

Disaggregation of data

There are gaps in the collection and analysis of strategic Information regarding ALHIV and adolescent members of key populations.

Disaggregation of data remains a challenge (or in many cases avoiding the aggregation of data as it moves up the reporting chain). There is still minimal knowledge about ALHIV because of the way in which data are aggregated: More generally, data are aggregated in broader groups (15–49 years or just greater than 15 years), or more specifically, younger adolescents are grouped with infants and children (0–14 years) and middle and late adolescents are grouped with young adults (15–24).

To strengthen services for adolescents, national health management systems will need to stratify data more appropriately into clear adolescent age groups (10–19 years) or sub-groups (10–14, 15–19 years), as well as by sex. This will advance a better understanding of the needs and practices of adolescents, allow for more effective monitoring and evaluation (M&E) for this age group (e.g. programme performance in relation to better serving ALHIV as well as exposing gaps in the continuum of care) and facilitate refinements to overall supply, procurement and distribution planning. Key indicators specific to adolescents include uptake of testing, linkages with treatment and care, and trends in LTFU.

To assess how well the needs of adolescents in key populations are addressed, several questions need answers:

- How do existing national data collection systems support addressing and monitoring those who need HIV services most?
- What are the characteristics of marginalized individuals who do not fit into key populations as currently understood?
- How best can M&E identify and document successful models and best practice of community-based delivery of services for key populations?

Policies and legislation addressing adolescent-specific issues

There are a number of policies that require attention—in particular, policies and legislation relating to informed consent by adolescents (without parental consent) and laws that criminalize the behaviours of adolescents in key populations.

2.5.11 Advocacy

EAST EUROPEAN AND CENTRAL ASIAN UNION OF PEOPLE LIVING WITH HIV (ECUO): MOBILIZATION OF ADOLESCENTS AFFECTED BY HIV/AIDS IN THE EECA REGION

The goal of the ECUO project was to ensure that the needs and concerns of adolescents living with HIV (ALHIV) would be better articulated and heard by adult PLWH, community leaders, local authorities, service providers, governments and other stakeholders. Project objectives included strengthening advocacy skills, increasing knowledge about issues relevant to ALHIV (including adherence, rights to health, education and other social services), and building networks to empower adolescents to advocate their rights in Ukraine, Russia, Kazakhstan, Uzbekistan, Kyrgyzstan and Belarus. The project included the development and monitoring of social networking platforms, advocacy events where adolescents promoted the rights of ALHIV among national and regional leaders, and strengthening psychosocial and other services. The project also included "mapping" of organizations that provide health and social services available to ALHIV in and beyond the project countries.

Lessons learned from the project

- Despite numerous trainings on advocacy skills, participation in local and regional events, support groups, etc., many adolescents still have not accepted their HIV diagnosis. Not all adolescents are ready to talk about their feelings related to HIV, let alone speak about their lives openly. Most of them still operate only with basic information about HIV/AIDS, ARV medications and adherence.
- HIV issues are often not a priority in the lives of adolescents affected by HIV since they are too busy coping with numerous other difficult life situations, including poverty, not attending school and not having a stable place to live due to termination of parental rights—many parents are drug users and they often do not care for their children.
- Adolescents are constantly living in stress and experiencing stigma and discrimination, all of which often lead them to stop taking their ARV medication.
- Weak government support reduces access to critical social services, such as placing ALHIV in foster families or boarding schools. Coordinators of projects and other initiatives end up dealing with the kinds of social issues that the government should be handling.
- By providing social assistance (either from community-based projects or sometimes from state social services), adolescents affected by HIV/AIDS receive help in solving issues that are not directly connected to HIV/AIDS, but their quality of life still improves.

✉ For more information visit http://old.ecuo.org/for_about/About_mission_goal/Listovka_A4_eng_final_150.pdf

2.5.12 Research

There is no single solution that responds to the needs of all ALHIV. Several of the programmes highlighted in this guidance emphasize being innovative and flexible and thinking outside the box. This is often easier for NGOs than for government health systems—which has implications for subsequent integration, decentralization and scaling up. NGOs can be testing grounds on behalf of government, and governments can be supported to implement demonstration projects with the intention from the beginning of scaling them up.

RESEARCH TO SUPPORT SERVICE PROVIDERS (ZIMBABWE) *(131)*

Objective: To develop an algorithm for primary-care health workers for identifying adolescents with HIV in populations at high risk through mother-to-child transmission.

Methods: Five hundred and six adolescent (10–18 years) attendees at two primary care clinics in Harare, Zimbabwe, were recruited. A randomly extracted "training" data set (n = 251) was used to generate an algorithm using variables identified as being associated with HIV through multivariable logistic regression. Performance characteristics of the algorithm were evaluated in the remaining ("test") records (n = 255) at different HIV prevalence rates.

Results: HIV prevalence was 17%, and infection was independently associated with client-reported orphanhood, past hospitalization, skin problems, presenting with sexually transmitted infection and poor functional ability. Classifying adolescents as requiring HIV testing if they reported >1 of these five criteria had 74% sensitivity and 80% specificity for HIV, with the algorithm correctly predicting the HIV status of 79% of participants. Even in low HIV prevalence settings (<2%), the algorithm would have a high negative predictive value (≥99.5%) and result in an estimated 60% decrease in the number of people needing to test to identify one individual with HIV, compared with universal testing.

Conclusions: The simple algorithm that was developed can identify which individuals are likely to be exposed to or infected with HIV with sufficient accuracy to provide a screening tool for use in settings not already implementing universal testing policies among this age group, for example, immigrants to low HIV prevalence countries.

✉ For more information contact Rashida Ferrand: rashida.ferrand@lshtm.ac.uk

3

ADAPTING THE GUIDELINES

Countries will have to adapt these guidelines for their particular contexts, taking into account explicit considerations of:

- the **heterogeneity of adolescents** (age, sex, marital status, different responsibilities in the family and community);
- the **rapid physical, cognitive and social development** that are features of this stage of life;
- the particular vulnerabilities of **adolescents in key populations**;
- the ways in which adolescent members of key populations **self-identify, form communities, and follow community norms and where they can be found**;
- the particular country-specific (national or sub-national) **characteristics of the epidemic** as well as the general characteristics of adolescents in the country in terms of age of sexual debut, how many are out of school, not in training, out of work, etc.

WHO normative guidelines are developed for a global audience; it is expected that each country will adapt the recommendations to suit its own circumstances. The implementation of some recommendations may be challenging in some settings in view of the differing prevalence of HIV and of limited available and promised resources. The new recommendations have the potential to increase substantially the number of people seeking HTC, treatment and care services and thus to increase the total cost of delivering services. Immediate and full implementation of these recommendations may not be practicable, feasible or affordable. However, country-level strategic planning should be directed towards eventually implementing these recommendations and achieving national universal access to HIV testing, treatment and care for adolescents.

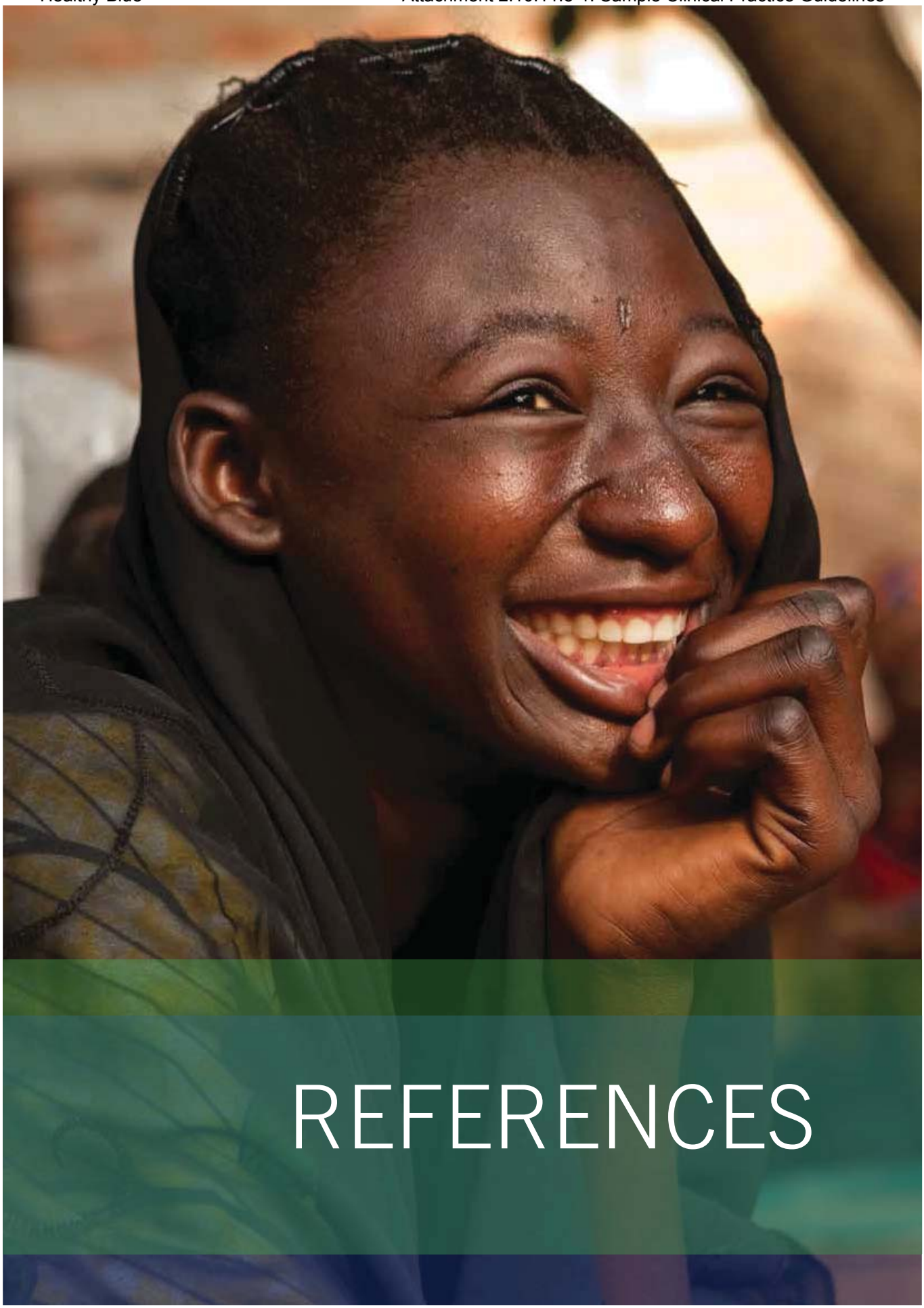
4 RESEARCH GAPS

Research concerning interventions specifically addressing adolescents has not yet been prioritized. Urgent attention should be given to the increasing numbers of perinatally exposed infants and children on ART who are surviving into adolescence and adulthood—with evolving needs for care—and adolescent slow progressors who need diagnosis, treatment and care. Table 4 highlights areas identified by the Guidelines Development Group and other contributors as priorities for the research agenda on adolescents and ALHIV.

Table 4. Needs for research on HTC for adolescents and treatment and care for adolescents living with HIV

Theme	Reearch areas
General	• Implement programmes in a way that maximizes the evidence output; should include comparative effectiveness studies • Programmes need to strengthen M&E systems and disseminate data generated by these systems • Development of culturally specific and valid measures of mental health, stigma and adherence outcomes for adolescents • Research on the magnitude of the issues under consideration in these guidelines • Pragmatic RCTs • Consider applications for interventions for adolescents within paediatric as well as adult research.
HTC	• Cost-effectiveness of routine HTC in generalized epidemics • Innovative strategies for adolescent in key populations • In generalized epidemics understanding how HCT affects girls' and young women's behaviour • Pre-HIV testing "Screening questions/ tests" (risk screens) • Comparative effectiveness and cost-effectiveness of interventions to improve access to HTC and linkage to care in different settings • Feasibility, acceptability, ethics, effectiveness of self-testing • Feasibility, acceptability, ethics of school-based testing • HTC and effectiveness, e.g. one outcome would be individual-level impacts and behaviour change following testing for all adolescents (with HIV or not) • Investigation of interventions that successfully promote HTC for adolescent members of key populations • Research is needed in countries where the age of consent has been lowered to determine that this has not led to riskier behaviour among young people; there is already a framework to build upon with the work that has been done demonstrating that sex education does not lead to increases in risky behaviour. **Outcomes** a. Number needed to test and — linked to care/ANC — linked to prevention interventions (circumcision, contraception, preventive behavioural interventions) b. Cost-effectiveness data c. Cost per person with HIV identified and linked to prevention and care using different approaches.

Theme	Reearch areas
Access and linkage to care	• Magnitude of attrition and reasons for attrition at each step along the treatment cascade • Interventions (rigorously evaluated) to link adolescents to and retain them in HIV care • Interventions to link and retain young people in key populations in care • Gender-related barriers to retention in care • Integration of care into school-based settings • Feasibility/cost-effectiveness/outcomes of decentralization • Optimal pre-ART retention strategies (systematic review of models of pre-ART care for adolescents) • Integration with SRH services for youth with STI or other indicators of unsafe sex. **Outcomes** a. Access to care b. Linkage to care c. Retention in care
Disclosure	• Interventions to help parents/guardians support disclosure • Supportive interventions to help adolescents' decision-making about beneficial disclosure • Training of providers. **Outcomes** a. Short- and long-term psychosocial outcomes
Adherence	• Effective interventions for sustained adherence • Training of providers.
Community-based Interventions	• Identify effective components and combinations of community-based interventions that improve adherence, linkage and retention in care as well as proximal outcomes • Identify what aspects of community-based approaches work (e.g. psychosocial, economic, treatment literacy); not all community-based initiatives are effective.
Decentralization	• Clinical outcomes and patient preferences, especially in the age group considered. (There are data that suggests that retention in care might be better.)



REFERENCES

1. WHO, UNICEF, UNAIDS. *Global update on HIV treatment 2013: results, impact and opportunities.* Geneva, World Health Organization, 2013. http://www.who.int/hiv/pub/progressreports/update2013/en/index.html
2. *Global report: UNAIDS report on the global AIDS epidemic 2013.* Geneva, Joint United Nations Programme on HIV/AIDS, 2013. http://www.unaids.org/en/media/unaids/contentassets/documents/epidemiology/2013/gr2013/UNAIDS_Global_Report_2013_en.pdf
3. Kasedde S et al. Reducing HIV and AIDS in adolescents: opportunities and challenges. *Current HIV/AIDS Report*, 2013, 10:159–168.
4. *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection.* Geneva, World Health Organization, 2013.
5. *UNAIDS World AIDS Day report—Results.* World AIDS Day Report. Geneva, Joint United Nations Programme on HIV and AIDS, 2012. http://www.unaids.org/en/resources/publications/2012/name,76120,en.asp
6. Nachega JB et al. Antiretroviral therapy adherence, virologic and immunologic outcomes in adolescents compared with adults in southern Africa. *Journal of Acquired Immune Deficiency Syndromes*, 2009, 51(1):65–71.
7. Lindsey JC et al. Early patterns of adherence in adolescents initiating highly active antiretroviral therapy predict long-term adherence, virologic, and immunologic control. *AIDS Patient Care and STDs*, 2009, 23(10):799–801.
8. Hall HI et al. Continuum of HIV care: differences in treatment and care by sex and race/ethnicity in the United States [abstract FRLBX05]. 19th International AIDS Conference; Washington DC, 2012.
9. Schouten EJ et al. More HIV positive infants and mothers identified through HIV testing in immunization clinics [abstract THAC0102]. 19th International AIDS Conference; Washington DC, 2012.
10. Matson CA et al. Integration of infant HIV testing at nine month immunisation visit in South Africa: a proposed model of service delivery [abstract WEPE661]. 19th International AIDS Conference, Washington DC, 2012.
11. *Children and AIDS Fifth stocktaking report.* New York, United Nations Children's Fund, 2010. http://www.unicef.org/publications/files/Children_and_AIDSFifth_Stocktaking_Report_2010_EN.pdf
12. Wringe A et al. Antiretroviral therapy uptake and coverage in four HIV com*munity cohort studies in sub-Saharan Africa.* Tropical Medicine & International Health, 2012, August; 17(8):e38–e48.
13. Bygrave H et al. Antiretroviral therapy outcomes among adolescents and youth in rural Zimbabwe. *PLoS ONE*, 2012, 7(12):e52856.
14. Ferrand RA et al. AIDS among older children and adolescents in Southern Africa: projecting the time course and magnitude of the epidemic. *AIDS*, 2009, 23(15):2039–2046.
15. Ferrand RA et al. Causes of acute hospitalization in adolescence: Burden and spectrum of HIV-related morbidity in a country with an early-onset and severe HIV epidemic: a prospective survey. *PLoS Medicine*, 2010, 7(2):e1000178.
16. Ferrand RA et al. Undiagnosed HIV infection among adolescents seeking primary health care in Zimbabwe. *Clinical Infectious Diseases*, 2010, 51:844–851.
17. Ramirez-AL et al. Routine HIV testing in adolescents and young adults presenting to an outpatient clinic in Durban, South Africa. *PLoS ONE*, 2012, 7(9):e45507.
18. May M et al. Impact of late diagnosis and treatment on life expectancy in people with HIV-1: UK collaborative HIV cohort (UK CHIC) study. *British Medical Journal*, 2011, 343:d6016.
19. The Antiretroviral Therapy Cohort Collaboration. Mortality of HIV-infected patients starting potent antiretroviral therapy: comparison with the general population in nine industrialized countries. *International Journal of Epidemiology*, 2009, 38(6):1624–1633.
20. Renaud-Théry F. Annual 2010 survey on ARV use and trends in implementation of WHO 2010 ART recommendations. WHO survey on ARV use. December, 2010. Presented at the WHO & UNAIDS Annual Consultation with Pharmaceutical Companies—Global Forecasts of Antiretroviral Demand 2011-2012, Geneva, 9&10 December 2010 (version 15 February 2011). http://www.who.int/hiv/amds/who_arv_trends_f_renaud.pdf

21. Kranzer K et al. Quantifying and addressing losses along the continuum of care for people living with HIV infection in sub-Saharan Africa: a systematic review. *Journal of the International AIDS Society*, 2012, 15(2):17383.

22. Rosen S, Fox MP. Retention in HIV care between testing and treatment in sub-Saharan Africa: a systematic review. *PLoS Medicine*, 2011, 8(7):e1001056.

23. Mugglin C et al. Loss to programme between HIV diagnosis and initiation of antiretroviral therapy in sub-Saharan Africa: systematic review and meta-analysis. *Tropical Medicine & International Health*, 2012, 17(12):1509–1520.

24. Rosenberg N et al. The effect of HIV counseling and testing on HIV acquisition among South African youth: a protective association [abstract 1084]. 20th Conference on Retroviruses and Opportunistic Infections (CROI); Atlanta,2013. http://www.retroconference.org/2013b/Abstracts/46309.htm

25. *Voluntary medical male circumcision for HIV prevention*. Geneva, World Health Organization, 2012 (http://www.who.int/hiv/topics/malecircumcision/fact_sheet/en/index.html, accessed 4 April 2013).

26. *Promoting equity for children living in a world with HIV and AIDS*. New York, United Nations Children's Fund, 2012. http://www.unicef.org/aids/files/PromotingEquity_Final.pdf

27. *Preventing early pregnancy and poor reproductive outcomes among adolescents in developing countries*. Geneva, World Health Organization, 2011. http://www.who.int/maternal_child_adolescent/documents/preventing_early_pregnancy/en/

28. Ferrand R et al. Survey of children accessing HIV services in a high prevalence setting: time for adolescents to count? *Bulletin of the World Health Organization*, 2010, 88(6):428–34.

29. Agardh et al. Experience of sexual coercion and risky sexual behavior among Ugandan university students. *BMC Public Health*, 2011, 11:527.

30. Moore AM et al. Coerced first sex among adolescent girls in sub-Saharan Africa: prevalence and context. *African Journal of Reproductive Health*, 2007, 11(3):62–82.

31. Higgins JPT et al, eds. *Cochrane handbook for systematic reviews of interventions*. Chichester, England, John Wiley & Sons Ltd., 2008.

32. Atkins D et al. Grading quality of evidence and strength of recommendations. *British Medical Journal*, 2004, 328:1490.

33. Guyatt GH et al. GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. *British Medical Journal*, 2008, 336(7650):924–926.

34. Balshem H et al. GRADE guidelines: 3. Rating the quality of evidence. *Journal of Clinical Epidemiology*, 2011, 64(4):401–406.

35. Cluver L et al. AIDS-orphanhood and caregiver HIV/AIDS sickness status: effects on psychological symptoms in South African youth. *Journal of Pediatric Psychology*, 2012, 37(8):857–867.

36. Interagency Youth Working Group. *Young People Most at Risk of HIV: A Meeting Report and Discussion Paper from the Interagency Youth Working Group, U.S. Agency for International Development, Joint United Nations Programme on HIV and AIDS Inter-Agency Task Team on HIV and Young People, and FHI*. Research Triangle Park, NC, FHI, 2010. http://aidsdatahub.org/reference-librarycols2/hiv-prevention/item/15895-young-people-most-at-risk-of-hiv-unaids-and-fhi-2010?lang=en

37. *International technical guidance on sexuality education: an evidence-informed approach for schools, teachers and health educators. Volume 1: the rationale for sexuality education*. Paris, United Nations Educational, Scientific and Cultural Organization, 2009. http://unesdoc.unesco.org/images/0018/001832/183281e.pdf

38. *Healthy, Happy and Hot. A young person's guide to their rights, sexuality and living with HIV*. London, International Planned Parenthood Federation, 2010. http://ippf.org/sites/default/files/healthy_happy_hot.pdf

39. *It's all one curriculum. Volume 1: guidelines for a unified approach to sexuality, gender, HIV and human rights education*. New York, USA, Population Council, 2011. http://www.popcouncil.org/pdfs/2011PGY_ItsAllOneGuidelines_en.pdf

40. Coates TJ. Efficacy of voluntary HIV-1 counselling and testing in individuals and couples in Kenya, Tanzania, and Trinidad: a randomized trial. *Lancet*, 2000, 356 (9224):103–112.

41. Wanyenze RK et al. Linkage to HIV care and survival following inpatient HIV counselling and testing. *AIDS and Behavior*, 2011, 15:751–760.
42. Ferrand RA et al. A primary-care level algorithm for identifying HIV infected adolescents among populations at risk of long-term survival following mother-to-child transmission. *Tropical Medicine and International Health*, 2011, 16:349–355.
43. Denison J et al. Social relationships and adolescents' HIV counselling and testing decisions in Zambia. New York, Population Council, 2006. http://www.popcouncil.org/pdfs/horizons/zambvctyth.pdf
44. Ho WW et al. Complexities in HIV consent in adolescents. *Clinical Pediatrics*, 2005, 44(6):473–478.
45. Klein JD et al. Access to medical care for adolescents: results from the 1997 Commonwealth Fund Survey of the Health of Adolescent Girls. *Journal of Adolescent Health*, 1999, 25(2):120–130.
46. *HIV disclosure counselling for children up to 12 years*. Geneva, World Health Organization, 2011. http://www.who.int/hiv/pub/hiv_disclosure/en/index.html
47. Arrivé E et al. HIV status disclosure and retention in care in HIV-infected adolescents on antiretroviral therapy (ART) in West Africa. *PLoS One*, 2012, 7(3):e33690.
48. Sherman BF et al. When children tell their friends they have AIDS: possible consequences for psychological well-being and disease progression. *Psychosomatic Medicine*, 2000, 62(2):238–247.
49. Dempsey AG et al. Patterns of disclosure among youth who are HIV-positive: a multisite study. *Journal of Adolescent Health*, 2012, 50(3):315–317.
50. Lam PK et al. Social support and disclosure as predictors of mental health in HIV-positive youth. *AIDS Patient Care and STDs*, 2007, 21(1):20–29.
51. Sayles JN et al. The inability to take medications openly at home: does it help explain gender disparities in HAART use? *Journal of Women's Health*, 2006, 15(2):173–181.
52. Beyene KA et al. Highly active antiretroviral therapy adherence and its determinants in selected hospitals from south and central Ethiopia. *Pharmacoepidemiology and Drug Safety*, 2009, 18(11):1007–1015.
53. Ochieng-Ooko V et al. Influence of gender on loss to follow-up in a large HIV treatment programme in western Kenya. *Bulletin of the World Health Organization*, 2010, 88:681–688.
54. Rotheram-Borus MJ et al. Benefits of family and social relationships for Thai parents living with HIV. *Prevention Science*, 2010, 11(3):298–307.
55. Abaynew Y, Deribew A, Deribe K. Factors associated with late presentation to HIV/AIDS care in South Wollo Zone Ethiopia: a case-control study. *AIDS Research and Therapy*, 2011, 8(1):8.
56. Ding Y et al. HIV disclosure in rural China: predictors and relationship to access to care. *AIDS Care*, 2011, 23(9):1059–1066.
57. Hatcher AM et al. Predictors of linkage to care following community-based HIV counseling and testing in rural Kenya. *AIDS and Behavior*, 2012, 16(5):1295–1307.
58. Skogmar S et al. Effect of antiretroviral treatment and counselling on disclosure of HIV-serostatus in Johannesburg, South Africa. *AIDS Care*, 2006, 18(7):725–730.
59. Strachan ED et al. Disclosure of HIV status and sexual orientation independently predicts increased absolute CD4 cell counts over time for psychiatric patients. *Psychosomatic Medicine*, 2007, 69(1):74–80.
60. Chepkurui NH et al. *Non-disclosure of HIV status among patients with advanced HIV starting antiretroviral therapy (ART) is associated with virologic failure: the Kericho IRIS study* [abstract THPE450]. 19th International AIDS Conference, Washington DC, 2012.
61. Peltzer K, Mlambo G. Factors determining HIV viral testing of infants in the context of mother-to-child transmission. *Acta Paediatrica*, 2010, 99(4):590–596.
62. Peltzer K, Sikwane E, Majaja M. Factors associated with short-course antiretroviral prophylaxis (dual therapy) adherence for PMTCT in Nkangala district, South Africa. *Acta Paediatrica*, 2011, 100(9):1253–1257.
63. Jasseron C et al. Non-disclosure of a pregnant woman's HIV status to her partner is associated with non-optimal prevention of mother-to-child transmission. *AIDS and Behavior*, 2013, 2:488–497.

64. Sigxashe TA et al. Attitudes to disclosure of HIV status to sexual partners. *South African Medical Journal*, 2001, 91(11):908–909.

65. Crepaz N et al. Serostatus disclosure, sexual communication and safer sex in HIV-positive men. *AIDS Care*, 2003, 15(3):379–387.

66. Kassaye KD et al.Determinants and outcomes of disclosing HIV seropositive status to sexual partners among women in Mettu and Gore towns, Illubabor Zone southwest Ethiopia. *Ethiopian Journal of Health and Development*, 2005, 19(2):126–131.

67. Parsons JT et al. Consistent, inconsistent, and non-disclosure to casual sexual partners among HIV-seropositive gay and bisexual men. *AIDS*, 2005, 19(Suppl. 1):S87–S97.

68. Wong LH et al. Test and tell: correlates and consequences of testing and disclosure of HIV status in South Africa (HPTN 043 Project Accept). *Journal of Acquired Immune Deficiency Syndromes*, 2009, 50(2):215–222.

69. Bird JD et al. Ethnic differences in HIV-disclosure and sexual risk. *AIDS Care*, 2011, 23(4):444–448.

70. Seid M et al. Disclosure of HIV positive result to a sexual partner among adult clinical service users in Kemissie district, northeast Ethiopia. *African Journal of Reproductive Health*, 2012, 16(1):97–104.

71. Comer LK et al. Illness disclosure and mental health among women with HIV/AIDS. *Journal of Community & Applied Social Psychology*, 2000, 10(6):449–464.

72. Kilewo C et al. HIV counseling and testing of pregnant women in sub-Saharan Africa: experiences from a study on prevention of mother-to-child HIV-1 transmission in Dar es Salaam, Tanzania. *Journal of Acquired Immune Deficiency Syndromes*, 2001, 28(5):458–62.

73. Gari T, Habte D, Markos E. HIV positive status disclosure among women attending art clinic at Hawassa University Referral Hospital, South Ethiopia. *East African Journal of Public Health*, 2010, 7(1):87–91.

74. Holzemer WL, et al. Impact of HIV stigma on disclosure of HIV status [abstract THPE437]. 19th International AIDS Conference, Washington DC, 2012.

75. Rotheram-Borus MJ et al. An intervention for parents with AIDS and their adolescent children. *American Journal of Public Health*, 2001, 91:1294–1302.

76. Serovich JM et al. An intervention to assist men who have sex with men disclose their serostatus to family members: results from a pilot study. *AIDS and Behaviour*, 2011, 15(8):1647–1653.

77. Mundell JP et al. The impact of structured support groups for pregnant South African women recently diagnosed HIV positive. *Women's Health*, 2011, 51(6):546–565.

78. Otis J et al. Effects of an empowerment programme on the ability of women living with HIV in Mali to manage decisions regarding whether or not to disclose HIV status [abstract MOPE502]. 19th International AIDS Conference, Washington DC, 2012.

79. Murphy DA et al. Pilot trial of a disclosure intervention for HIV+ mothers: the TRACK programme. *Journal of Consultative Clinical Psychology*, 2011, 79(2):203–214.

80. Wolitski RJ, Gomez CA, Parsons JT. Effects of a peer-led behavioral intervention to reduce HIV transmission and promote serostatus disclosure among HIV-seropositive gay and bisexual men. *AIDS*, 2005, 19(Suppl. 1):S99–S109.

81. Serovich JM et al. An intervention to assist men who have sex with men disclose their serostatus to casual sex partners: results from a pilot study. *AIDS Education and Prevention*, 2009, 21(3):207–219.

82. Smith-Fawzi MC et al. Psychosocial support intervention for HIV-affected families in Haiti: implications for programmes and policies for orphans and vulnerable children. *Social Science & Medicine*, 2012, 74(10):1494–503.

83. Rotheram-Borus MJ et al. *Masihambisane: an HIV+ peer community health worker intervention for South African mothers living with HIV improves longitudinal maternal and infant outcomes*. Presented to the 2012 International AIDS Conference, District of Columbia, July 22–27, 2012, abstract WEPE680.

84. Teti M et al. A mixed methods evaluation of the effect of the protect and respect intervention on the condom use and disclosure practices of women living with HIV/AIDS. *AIDS and Behavior*, 2010, 14(3):567–579.

85. Dewo Z et al. Strengthening treatment, care and support to people living with HIV through community-based treatment services [abstract TUAD0202]. 19th International AIDS Conference, Washington DC, 2012.

86. Wouters E et al. Community support and disclosure of HIV serostatus to family members by public-sector antiretroviral treatment patients in the Free State Province of South Africa. *AIDS Patient Care and STDs*, 2009, 23(5):357–364.

87. Olley BO. Improving well-being through psycho-education among voluntary counseling and testing seekers in Nigeria: a controlled outcome study. *AIDS Care*, 2006, 18(8):1025–1031.

88. Patterson TL, Shaw WS, Semple SJ. Reducing the sexual risk behaviors of HIV+ individuals: outcome of a randomized controlled trial. *Annals of Behavioral Medicine*, 2003, 25(2):137–145.

89. Chiasson MA et al. Increased HIV disclosure three months after an online video intervention for men who have sex with men (MSM). *AIDS Care*, 2009, 21(9):1081–1089.

90. *Guidance on couples HIV testing and counselling including antiretroviral therapy for treatment and prevention in serodiscordant couples: recommendations for a public health approach*. Geneva, World Health Organization, 2012. http://www.who.int/hiv/pub/guidelines/9789241501972/en/

91. Kabore I et al. The effect of community-based support services on clinical efficacy and health-related quality of life in HIV/AIDS patients in resource-limited settings in sub-Saharan Africa. *AIDS Patient Care and STDs*, 2010, 24(9):581–594.

92. Fatti G et al. Improved survival and antiretroviral treatment outcomes in adults receiving community-based adherence support: 5-year results from a multicenter cohort study in South Africa. *Journal of Acquired Immune Deficiency Syndromes*, 2012, 61(4):e50–e58.

93. Grimwood A et al. Community adherence support improves programme retention in children on antiretroviral treatment: a multicentre cohort study in South Africa. *Journal of the International AIDS Society*, 2012, 15(2):17381.

94. Chang LW et al. Effect of peer health workers on AIDS care in Rakai, Uganda: a cluster-randomized trial. *PLoS One*, 2010, 5(6):e10923.

95. Chang LW et al. Impact of a mHealth intervention for peer health workers on AIDS care in rural Uganda: a mixed methods evaluation of a cluster-randomized trial. *AIDS and Behavior*, 2011, 15(8):1776–1784.

96. Selke HM et al. Task-shifting of antiretroviral delivery from health care workers to persons living with HIVAIDS: clinical outcomes of a community-based programme in Kenya. *Journal of Acquired Immune Deficiency Syndromes*, 2010, 55(4):483–490.

97. Simoni JM et al. Peer support and pager messaging to promote antiretroviral modifying therapy in Seattle: a randomized controlled trial. *Journal of Acquired Immune Deficiency Syndromes*, 2009, 52(4):465–473.

98. Taiwo BO et al. Assessing the viorologic and adherence benefits of patient-selected HIV treatment partners in a resource-limited setting. *Journal of Acquired Immune Deficiency Syndromes*, 2010, 54(1):85–92.

99. Futterman D et al. Mamekhaya: a pilot study combining a cognitive-behavioral intervention and mentor mothers with PMTCT services in South Africa. *AIDS Care*, 2010, 22(9):1093–1100.

100. Talisuna-Alamo S et al. Socioeconomic support reduces nonretention in a comprehensive, community-based antiretroviral therapy programme in Uganda. *Journal of Acquired Immune Deficiency Syndromes*, 2012, 59(4):e52–e59.

101. Altice FL et al. Superiority of directly administered antiretroviral therapy over self-administered therapy among HIV-infected drug users: a prospective, randomized, controlled trial. *Clinical Infectious Diseases*, 2007, 45(6):770–778.

102. Pearson CR et al. Randomized control trial of peer-delivered, modified directly observed therapy for HAART in Mozambique. *Journal of Acquired Immune Deficiency Syndromes*, 2007, 46(2):238–244.

103. Macalino GE et al. A randomized clinical trial of community-based directly observed therapy as an adherence intervention for HAART among substance users. *AIDS*, 2007, 21(11):1473–1477.

104. Igumbor JO et al. An evaluation of the impact of a community-based adherence support programme on ART outcomes in selected government HIV treatment sites in South Africa. *AIDS Care*, 2011, 23(2):231–236.

105. Achieng L et al. An observational cohort comparison of facilitators of retention in care and adherence to anti-retroviral therapy at an HIV treatment center in Kenya. *PLoS One*, 2012, 7(3):e32727.

106. Bekker LG et al. Rapid scale-up of a community-based HIV treatment service: programme performance over 3 consecutive years in Guguletu, South Africa. *South African Medical Journal*, 2006, 96(4):315–320.

107. Chang LW et al. Two-year virologic outcomes of an alternative AIDS care model: evaluation of a peer health worker and nurse-staffed community-based programme in Uganda. *Journal of Acquired Immune Deficiency Syndromes*, 2009, 50(3):276–282.

108. Kipp W et al. Results of a community-based antiretroviral treatment programme for HIV-1 infection in Western Uganda. *Current HIV Research*, 2010, 8(2):179–185.

109. Kipp W et al. Comparing antiretroviral treatment outcomes between a prospective community-based and hospital-based cohort of HIV patients in rural Uganda. *BMC International Health and Human Rights*, 2011, 11(Suppl. 2):S12.

110. Nglazi MD et al. Changes in programmatic outcomes during 7 years of scale-up at a community-based antiretroviral treatment service in South Africa. *Journal of Acquired Immune Deficiency Syndromes*, 2011, 56(1):e1–8.

111. Nglazi MD et al. Treatment outcomes in HIV-infected adolescents attending a community-based antiretroviral therapy clinic in South Africa. *BMC Infectious Diseases*, 2012, 12(1):21.

112. Rich ML et al. Excellent clinical outcomes and high retention in care among adults in a community-based HIV treatment programme in rural Rwanda. *Journal of Acquired Immune Deficiency Syndromes*, 2012, 59(3):e35–e42.

113. Stubbs BA et al. Treatment partners and adherence to HAART in Central Mozambique. *AIDS Care*, 2009, 21(11):1412–1419.

114. Nanda P et al. *A study to evaluate the effectiveness of WHO tools—Orientation programme on adolescent health care providers and adolescent job aid—in improving the quality of health services provided by health workers to their female clients in India*. Geneva, World Health Organization, 2012. http://www.icrw.org/publications/study-evaluate-effectiveness-who-tools

115. Robling M et al. The effect of the Talking Diabetes consulting skills intervention on glycaemic control and quality of life in children with type 1 diabetes: cluster randomised controlled trial (DEPICTED study). *British Medical Journal*, 2012, Apr 26;344:e2359.

116. Gregory J et al. Development and evaluation by a cluster randomised trial of a psychosocial intervention in children and teenagers experiencing diabetes: the DEPICTED study. *Health Technology Assessment*, 2011, 15(29):1–202.

117. Lozano P et al. A multisite randomized trial of the effects of physician education and organizational change in chronic-asthma care: health outcomes of the Pediatric Asthma Care Patient Outcomes Research Team II Study. *Archives of Pediatrics & Adolescent Medicine*, 2004, 158(9):9,875–883.

118. Shroufi A et al. HIV-infected adolescents in Southern Africa can achieve good treatment outcomes: Results from a retrospective cohort study. *AIDS*, 2013, 27:1971–1978.

119. Dewing S et al. "It's important to take your medication everyday ok?" An evaluation of counselling by lay counsellors for ARV adherence support in the Western Cape, South Africa. *AIDS and Behaviour*, 2012, 17(1):203–212.

120. Fisher JD et al. Clinician-delivered intervention during routine clinical care reduces unprotected sexual behaviour among HIV-infected patients. Journal of Acquired Immune Deficiency Syndromes, 2006, 41(1):44–52.

121. Dewing S et al. From research to practice: lay counsellors' fidelity to an evidence-based intervention for promoting antiretroviral adherence in the Western Cape, South Africa. [Manuscript submitted for publication.]

122. Dewing S et al. Lay counsellors' ability to deliver counselling for behaviour change. [Manuscript submitted for publication.]

123. Dewing S et al. Improving the counseling skills of lay counselors in antiretroviral adherence settings: A cluster randomized control trial in the Western Cape, South Africa. [Manuscript in preparation.]

124. Lewin SA et al. Lay health workers in primary and community health care for maternal and child health and the management of infectious diseases. *Cochrane Database of Systematic Reviews*, 2010, CD004015.

125. Wong CF et al. Harassment, discrimination, violence, and illicit drug use among young men who have sex with men. *AIDS Education and Prevention*, 2010, 22:286–298.

126. Hurt CB et al. Sex with older partners is associated with primary HIV infection among men who have sex with men in North Carolina. *Journal of Acquired Immune Deficiency Syndromes*, 2010, 54:185–190.

127. Koblin BA et al. Risk factors for HIV infection among men who have sex with men. *AIDS*, 2006, 20:731–739.

128. EDUCAIDS: *A comprehensive education sector response*. Paris, United Nations Educational, Scientific and Cultural Organization, 2013 (http://www.unesco.org/new/en/hiv-and-aids/our-priorities-in-hiv/educaids/, accessed 11 April 2013).

129. *Positive Learning: Meeting the needs of young people living with HIV (YPLHIV) in the education sector*. Paris and Amsterdam, United Nations Educational, Scientific and Cultural Organization and the Global Network for People Living with HIV, 2012. http://unesdoc.unesco.org/images/0021/002164/216485E.pdf

130. UNAIDS Inter-Agency Task Team on Education. HIV and AIDS treatment education: a critical component of efforts to ensure universal access to prevention, treatment and care. Paris, United Nations Educational, Scientific and Cultural Organization, 2006. http://unesdoc.unesco.org/images/0014/001461/146114e.pdf

131. Ferrand RA et al. A primary care level algorithm for identifying HIV infected adolescents in populations at high risk through mother-to-child transmission. *Tropical Medicine and International Health*, 2011, 16:349–355.

Photo credits

UNICEF, with its partners, works to advocate for and support effective HIV prevention, treatment and care in adolescents. This involves efforts to overcome stigma and discrimination against people affected by the HIV and AIDS pandemic as well as efforts to strengthen national responses so that they respond comprehensively in order to fulfil the rights of the most vulnerable adolescents. We recognize, however, that stigma persists, and we take active steps to ensure that our communications work safeguards the identities of subjects in accordance with their wishes and with global standards of child rights and protection. We obtain written consent from people living with the virus before identifying them as such in photographs and other media. Unless otherwise noted, those depicted in images provided by UNICEF should not be assumed to be living with HIV. Any adolescents and young people shown have been reached through HIV prevention and adolescent development programmes, or are living in situations significant to an effective global HIV response.

Front cover
Boy holding puppy, Philippines, 2011
© UNICEF/Giacomo Pirozzi
Amsani, 12, is selling puppies in the streets of Manila, Philippines. In June 2011 in the Philippines, an estimated 250,000 children lived and worked on the streets, at increased risk of being trafficked, enduring abuse and sexual exploitation, forming dependence on illegal drugs and other harmful substances or coming into conflict with the law.

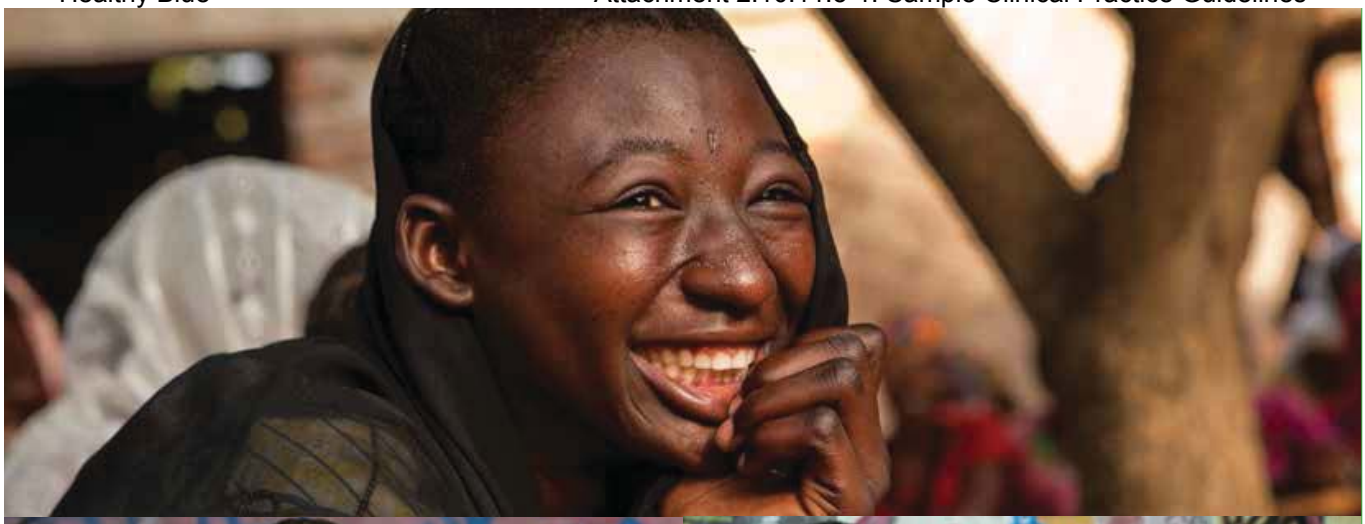
Top back cover and page 69
Girl in black, smiling, Chad, 2011
© UNICEF/Patricia Esteve
A girl laughs during a skit on the prevention of HIV, at a youth centre in Moundou, Chad. The centre teaches adolescents how to prevent the transmission of HIV and offers free HIV testing. The centre also has a small library and game centre and hosts a drama club and other extracurricular activities.

Centre left back cover and page 43
Boy from Ukraine sitting on a wall
© UNICEF/Giacomo Pirozzi
Artem, 14, sits on a wall outside 'Way Home', the shelter where he lives in the city of Odessa, Ukraine. The UNICEF-assisted shelter provides food, accommodation, literacy training and HIV/AIDS-awareness and prevention outreach programmes for children who live or work on the streets. Because of unsafe sex and injecting drug use, street adolescents are one of the groups most at risk of contracting HIV in Ukraine.

Centre right back
Indian girls
© UNICEF/Prashanth Vishwanathan
In Youth Information Centers located in Gujarat, India, engaged adolescents are trained to disseminate information on HIV/AIDS and other health issues.

Bottom back cover and page 1
Grandmother and Granddaughter, Zimbabwe, 2011
© UNICEF/Giacomo Pirozzi
HIV positive Monica and her granddaughter, Sympathy, 14, sitting at home on a bed in the village of Makuzeze, Zimbabwe.

Notes



For more information, contact:

- World Health Organization
  20, avenue Appia
  CH–1211 Geneva 27
  Switzerland
- Department of HIV/AIDS
  E-mail: hiv-aids@who.int
  http://www.who.int/hiv/en/
- Department of Maternal, Newborn, Child and Adolescent Health
  Email: mncah@who.int
  http://www.who.int/maternal_child_adolescent/en/

ISBN 978 92 4 150616 8

unicef

GNP+ GLOBAL NETWORK OF PEOPLE LIVING WITH HIV

UNESCO United Nations Educational, Scientific and Cultural Organization

UNFPA

UNAIDS

This page is intentionally left blank

HEDIS Response Template: [Community Care Health Plan of Louisiana, Inc., dba Healthy Blue]

Community Care Health Plan of Louisiana, Inc., dba Healthy Blue

						2018-2019 NCQA Star Rating Summary (Medicaid)			
Number	State	Medicaid "HMO" Plan Name	Medicaid Enrollment in December 2018	Populations included (e.g., ABD, TANF, Expansion, LTSS)	Benefits provided (e.g., full benefits, behavioral health only, Medicare/Medicaid integrated)	Overall	Consumer Satisfaction	Prevention	Treatment
1	LA	Community Care Health Plan of Louisiana, Inc. dba Healthy Blue	268,431	Medicaid (TANF, ABD/SPD/SSI, Expansion), CHIP	Full Benefits	3.0	3.0	2.5	2.0
2	NY	HealthNow New York, Inc.	36,000	Medicaid (TANF, ABD/SPD/SSI), CHIP	Full Benefits	4.0	3.0	3.5	3.5
3	NY	HealthPlus HP, LLC	435,000	Medicaid (TANF, ABD/SPD/SSI), CHIP	Full Benefits	3.5	2.0	4.0	3.0
4	MD	Amerigroup Maryland, Inc.	275,245	Medicaid (TANF, ABD/SPD/SSI), CHIP	Full Benefits	3.5	3.0	4.0	3.0
5	NJ	Amerigroup New Jersey, Inc.	168,379	Medicaid (TANF, ABD/SPD/SSI, Expansion), CHIP	Full Benefits	3.5	2.5	3.0	3.0
6	TN	Amerigroup Tennessee, Inc. (Middle TN)	369,000	Medicaid (TANF, ABD/SPD/SSI)	Full Benefits	3.5	3.0	3.0	3.0
7	TN	Amerigroup Tennessee, Inc. (East TN)			Full Benefits	3.0	3.0	2.0	2.5
8	TN	Amerigroup Tennessee, Inc. (West TN)			Full Benefits	2.5	3.0	2.0	2.0
9	TX	Amerigroup Texas, Inc.	613,000	Medicaid (TANF, ABD/SPD/SSI), CHIP	Full Benefits	3.5	3.0	3.0	2.5
10	TX	Amerigroup Insurance Company	152,000	Medicaid (TANF, ABD/SPD/SSI)	Full Benefits	3.0	3.5	2.0	2.5
11	GA	AMGP Georgia Managed Care Company, Inc., dba Amerigroup Community Care	384,902	Medicaid (TANF), CHIP	Full Benefits	3.5	3.0	3.5	2.5
12	IN	Anthem Insurance Companies, Inc. ,dba Anthem Blue Cross and Blue Shield of Indiana	432,741	Medicaid (TANF, ABD/SPD/SSI, Expansion), CHIP	Full Benefits	3.5	3.0	3.5	3.0
13	SC	BlueChoice Health Plan of South Carolina	100,706	Medicaid (TANF, ABD/SPD/SSI)	Full Benefits	3.5	4.0	3.0	2.5
14	WI	Compcare Health Services Insurance Corporation, dba Anthem Blue Cross and Blue Shield in Wisconsin	90,423	Medicaid (TANF, ABD/SPD/SSI)	Full Benefits	3.5	3.0	3.5	2.5
15	VA	HealthKeepers, Inc.	321,208	Medicaid (TANF, ABD/SPD/SSI), CHIP	Full Benefits	3.5	2.0	3.0	3.0
16	FL	Simply Healthcare Plans, Inc., dba Amerigroup Florida	254,000	Medicaid (TANF, ABD/SPD/SSI), CHIP	Full Benefits	3.5	2.5	3.5	3.0
17	FL	Simply Healthcare Plans, Inc.	277,000	Medicaid (TANF, ABD/SPD/SSI), CHIP	Full Benefits	3.0	4.0	3.5	2.5
18	WV	UNICARE Health Plan of West Virginia	137,088	Medicaid (TANF, ABD/SPD/SSI, Expansion)	Full Benefits	3.5	3.0	2.5	3.5
19	WA	Amerigroup Washington, Inc.	152,738	Medicaid (TANF, ABD/SPD/SSI, Expansion), CHIP	Full Benefits	3.0	1.5	2.5	3.0
20	KY	Anthem Kentucky Managed Care Plan, Inc.	131,310	Medicaid (TANF, ABD/SPD/SSI, Expansion), CHIP	Full Benefits	3.0	2.0	2.0	2.5
21	CA	Blue Cross of California Partnership Plan	1,209,737	Medicaid (TANF, ABD/SPD/SSI, Expansion)	Full Benefits	3.0	1.5	3.0	3.0
22	NV	Community Care Health Plan of Nevada, Inc., dba Anthem Blue Cross and Blue Shield Healthcare Solutions	187,438	Medicaid (TANF, Expansion), CHIP	Full Benefits	3.0	3.0	3.0	2.5

This page is intentionally left blank